



ACCELERATING CONTROL

An ethnographic account of the impact of micro-economic reform on the work of health professionals

By

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ABSTRACT

This thesis is a sociological study that examines the way in which *time* is used to exert control over the work of health professionals. The thesis explores political, bureaucratic and managerial attempts to control the labour time of nurses and doctors in one public hospital in South Australia. The period covered is 1992–2000, a time characterised by Federal government bi-partisan initiatives to wind back the welfare state.

The study shows how political control was attempted through micro-economic strategies built into enterprise bargaining and the performance management strategies incorporated into Medicare, and casemix models of funding. Bureaucratic attempts at control are illustrated by the imposition of benchmarks for productivity, efficiency, quality and access, while managerial control is evident in the processes of constant workplace change. The account offered here draws on document analysis and focused ethnography to understand the impact of these changes on the work of nurses and doctors.

The response of hospital managers and health professionals to the ‘reforms’ introduced by the Commonwealth and State governments between 1992 and 2000 was to introduce a number of changes aimed at saving time. The thesis presents four case studies of five time-saving innovations introduced at Westernvale Hospital. These were: (1) a program to change the culture to up-skill, and intensifying the work; (2) the implementation of ‘Excelcare’, a computerised nursing workload product; (3) a nurse-managed clinical pathway program; (4) a Fast Track Surgery Project controlled by surgeons; and (5) the utilisation of the resource allocation tool: Program Budget and Marginal Analysis.

These attempts to control the labour time of health professionals were rarely completely successful. Resistance was evident through organised union activity via enterprise bargaining, through the use of evidence-based medicine and through gendered differences in responses to the innovations. It was also organised along professional lines. As a consequence the traditional doctor/nurse division of labour and associated medical dominance remained largely intact.

This exploration of the re-organisation of working time reveals much about the nature of time itself in capitalist society. It suggests that in human service workplaces in capitalist societies, subject as they are to budgetary constraints, time is predominantly abstract and empty. The

monetary value of the worker's hour is repeatedly reduced in order to create surplus value and to ensure continuous productivity and efficiency gains. The cultural predispositions supporting this approach to time can be found in the historical origins of capitalism: firstly in the Roman Catholic invention of Purgatory and later in the Protestant work ethic. Embedded in Purgatory and the Protestant ethic is the origin of a secular psychological predisposition, or *purgatorial complex*. This is a profound anxiety towards time in everyday life.

STATEMENT OF ORIGINALITY

Accelerating control: An ethnographic account of the impact of micro-economic reform on the work of health professionals

Eileen Mary Willis

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of the thesis, when deposited in the University Library, being available for loan and photocopying.

Eileen Mary Willis

30th January 2004

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How beautiful it is to do nothing and then rest afterwards (Spanish proverb)

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PREPARATORY NOTATION

Acronyms and abbreviations

The following acronyms and abbreviations are used throughout the thesis.

A & E	Accident and Emergency Department
ABS	Australian Bureau of Statistics
ACEM	Australasian College of Emergency Medicine
ACIRRT	Australian Centre for Industrial Relations, Research and Training
ACHCS	Australian Council of Health Care Standards
ADON	Assistant Director of Nursing
AHMC	Australian Health Ministers' Conference
AHWAC	Australian Health Workforce Advisory Committee
AIHW	Australian Institute of Health and Welfare
AIRC	Australian Industrial Relations Commission
AMA	Australian Medical Association
AMWAC	Australian Medical Workforce Advisory Committee
AN-DRG	Australian Diagnosis Related Groups
ANF	Australian Nursing Federation
APTT	Activated Partial Thromboplastin Time
ARCHI	Australian Resource Centre for Hospital Innovations
AR-DRG	Australian Refined Diagnosis Related Groups
BGL	Blood Glucose Level
BP	Blood Pressure
CABG	Coronary Artery Bypass Graft
CAL	Chronic Airway Limitation disease
CCCC	Commonwealth Clinical Casemix Committee
CC	Complications and Co-morbidities
Cath Lab	Catheterization Laboratory
CEO	Chief Executive Officer
COAD	Chronic Obstructive Airway Disease
D/C	Discharge
DHAC	Department of Health and Aged Care (Commonwealth)
DHS	Department of Human Services (State)
DON	Director of Nursing
DOSA	Day of Surgery Admission
EB	Enterprise Bargaining
FBT	Fringe Benefit Tax
ECG	Electrocardiogram
ED	Emergency Department
FBE	Full Blood Electrolytes

FBC	Fluid Balance Chart
EBM	Evidence-Based Medicine
GP	General Practitioner
HOCI	Hospital Output Cost Index
ICD-10	International Classification of Diseases - Version 10
MI	Myocardial Infarction
MOU	Memorandum of Understanding
MRSA	Multiresistant Staphylococcus Aureus
NASP	Nursing Automated Systems Project
NDHP	National Demonstration Hospital Program
NHMBWG	National Health Ministers' Benchmarking Working Group
NPM	New Public Management
NHCDC	National Hospital Cost Data Collection
NIS	Nursing Information Systems
NP	Nurse Practitioner
Obs	Observations of vital signs
PAIS	Patient Assessment Information System
PBMA	Program Budget and Marginal Analysis
PRN	As Necessary
PSAs	Personal Service Attendants
QID	6 Hourly (4 times a day)
RACGP	Royal Australian College of General Practitioners
RCT	Randomised controlled trial
RMO	Resident Medical Officer
SAHC	South Australian Health Commission
SASMOA	South Australian Salaried Medical Officers Association
TQM	Total Quality Management
TPR	Temperature, Pulse, Respiration
UDAGs	Urgency, Disposition and Age Groups
URGs	Urgency Related Groups

Management and industrial relations glossary

The following terms are used throughout the thesis.

Term	Definition
Benchmarking	'Ongoing, systematic process to search for, and introduce international best practice into an organisation' (NHMBWG 1996:92).
Best Practice	The cooperative way in which organisations and their employees undertake business activities in all key processes—the use of benchmarking—that can be expected to lead to sustainable world-class outcomes (NHMBWG 1996:93)
Contestability	The term used in South Australia that allowed for the outsourcing of government services to the private sector (SAHC 1995a). For example pathology and radiology departments in public hospitals could be privatised.
Enterprise bargaining (EB)	'Direct negotiations that take place between an employer and employees (or their union) in an organisation. The bargaining process and its outcomes may take place within guidelines established by the AIRC or a State tribunal or may occur independently of the institutions of industrial relations' (Sutcliffe & Callus 1994:60).
Efficiency	'The relationship between the cost of various inputs and the output produced' (NHMBWG 1996: 21).
Flexible specialisation	'A theory concerned with the links between the product market of an organisation, its technological processes and the tasks and jobs performed by its employees. It is suggested that an increasingly dynamic market and rapid technological changes require the organisation of work to become more flexible. This in turn requires the traditional pattern of labour utilisation and rigid divisions between types of labour to be broken down in order to permit the organisation to respond to its changing environment' (Sutcliffe & Callus 1994:67).
Fordism	'Extreme division of labour, mass-produced technology, low trust employment practices, including strict supervision and control and the absence of a career structure for workers...' (Sutcliffe & Callus 1994:68)
Full-time equivalent staff (FTE)	'Full-time equivalent staff units are the on-job hours paid for, and hours of paid leave of any type, for a staff member, divided by the number of ordinary hours normally paid for a full-time staff member when on the job under the relevant award or agreement' (AIHW 2001: 226)
Functional flexibility	'Adjusting work practices and skills to fit the organisation; eg up-skilling, multi-skilling' (Sutcliffe & Callus 1994:71).
H R Nicholls Society	An association of employers, politicians, professionals and academics that was formed for the purposes of advocating the policy of the deregulation of the labour market (adapted from Sutcliffe & Callus 1994:75).
Incentive	'A reward offered for increased productivity' (adapted Sutcliffe & Callus 1994:81)
Internal markets	A situation where an organisation has the capacity to purchase goods and services or recruit staff from within own ranks (internal labour market). (adapted from Sutcliffe & Callus 1994:95).
Labour market flexibility	'A term used to describe the removal of inefficient and restrictive work practices... such as standard hours and timing of meal breaks' (Sutcliffe & Callus 1994:67).
Micro-economic reform	'An economic policy that is designed to increase the competitiveness of organisations through the reform of work practices, productivity bargaining, or technological changes... In Australia the policy has been the cornerstone of award restructuring, structural efficiency, and enterprise bargaining – reform at the level of the workplace' (Sutcliffe & Callus 1994:118-119).

Neo-Fordism	The application of human resource theories and policies in an attempt to overcome some of the more obvious disadvantages of Fordism is referred to as post-Fordism. Critics of post-Fordism argue that the significance of the changes has been overestimated and that the changes have merely amounted to thinly disguised neo-Fordism' (Sutcliffe & Callus 1994).
New public management (NPM)	The principles of the market are applied to public institutions and as a consequence to the working conditions of those employed in these institutions (Cairney 2002).
Numerical flexibility	Adjusting working hours to suit the needs of the industry; eg casualised hours, part-time, split shifts etc.
Outsourcing	See contestability.
Pattern bargaining	Strategy used by unions across different companies, industries and State boundaries to ensure the wages and conditions of all workers in a particular category are standardised.
Post-Fordism	'A theory regarding the possible transformation of modern industrial societies from one in which production and jobs are organised according to Taylorist principles, to one in which they are organised according to more humanistic principles. They include job security, career structures, group based work and assessment.....' (Sutcliffe & Callus 1994:145).
Productivity	'Productivity is defined as the relationship between the mix of inputs and outputs (NHMBWG 1996: 34).
Quality	'Quality...in general it relates to the clinician's and patient's perception that care was of a high standard and resulted in desirable outcomes' (NHMBWG 1996:40).
Scientific management	Scientific management proposes two major transformations of industry simultaneously: the removal of manual skills and organizational autonomy from the work of lower-level employees; and the establishment of managing as a role distinct from ownership, with a set of technical functions to do with organizations. (Abercrombie, Hill & Turner 2000: 308).
Taylorism	Derived from F. W. Taylor who put forward three principles of reorganization. (1) Greater division of labour...lead(ing) to greater efficiency, while de-skilling...would allow cheaper, unskilled labour to be hired. (2) Full management control and (3) Cost accounting based on systematic time-and-motion stud(ies) (Abercrombie, Hill & Turner 2000:308).

Health care system glossary

Access	'Access relates to the capacity of the health system to provide appropriate, affordable and timely care according to need' (NHMBWG 1996:48).
Acute admitted	'Time at which an admitted patient commences an episode of care expressed in minutes and hours and used to calculate waiting time and length of stay' (AIHW 2001:286)
Acute care hospital	'Establishments which provide at least minimal medical, surgical or obstetric services for inpatient treatment and /or care, and which provide round-the-clock comprehensive qualified nursing services as well as other necessary professional services. They must be licensed by the State health department, or controlled by government departments' (AIHW 2001:188).
Acute event	'An acute illness-related life event experienced by a person. For example, the diagnosis of a disease' (AIHW 2001:454).
Admission date/ time	'The date on which an admitted patient commences an episode of care' (AIHW 2001:285).
Allied health professionals	In Australia, allied health professionals are distinguished from nurses and doctors and include physiotherapists, occupational therapists, speech pathologists, social workers, podiatrists, dieticians, psychologists, pharmacists, medical scientists, health information managers, radiographers, audiologists, dental therapists, health librarians, nuclear medicine technologists, medical illustrators, and the professions of orthoptics, orthotics and prosthetics (adapted from DIHS Tasmania 2003).
Allocative efficiency	A condition achieved when resources are allocated in a way that allows the maximum possible net benefit from their use. When an efficient allocation of the resources has been attained, it is impossible to increase the well-being of anyone person without harming another person (Boutiaga 2002).
Australian Health Care Agreements (AHCA)	Bilateral agreements between the Commonwealth and the State/Territory governments about funding and delivery of health services. Agreements are made on a five yearly basis, eg 1998-2003 and 2003-2008) (adapted from AIHW 2001:1). Previous agreements were referred to as the Medicare Agreement, eg 1993-1998, 1998-2003.
Average Length of stay (ALOS)	'The average of the lengths of stay for all admitted patients in a hospital or group of hospitals. The length of stay for a patient is the difference between the date of separation and date of admission, less any leave days. For same-day patients, the length of stay is attributed a value of 1 day' (NHMBWG 1996:92).
Australian Refined Diagnosis Related Groups. (ANR- DRG)	See DRG. The <i>AN</i> indicates Commonwealth of Australia. There have been 4 versions since 1992. <i>R</i> denotes refined up-dates (AIHW 2001:148).
Casemix	'The number and type of patients treated by a hospital or group of hospitals' (NHMBWG 1996:93).
Casemix-adjusted separations	'The number of separations for a hospital or group of hospitals multiplied by the average case weight. The product is often termed the units of care' (NHMBWG 1996:93).
Cath lab	A radiology laboratory where certain radiology tests and procedures are performed, eg., angiograms and angioplasties.
Census date	'Date on which the hospital takes a point-in-time count of patients on the waiting list' (AIHW 2001:368).
Cheat sheets	Informal written list of tasks to be done by a nurse during the shift.
Chest pain assessment unit (CPAU)	A specialised facility dedicated to assessing patients within the first 24 hours of presenting with chest pain (adapted page AIHW 2001:193).

Clearance times	'A prospective measure of the capacity of the system to remove patients from the waiting list. It is calculated as the number of patients waiting at a point in time (census point) divided by the mean number of patients cleared (admitted or removed) from the waiting list per month' (NHMBWG 1996:93).
Clinical Nurse Consultant (CNC)	Level 3 registered nurse in South Australia. Usually in charge of a ward.
Clinical pathways	'Pre-planned pathways or algorithms, aimed at reducing treatment variability and cost, and increasing efficiency and ultimately improving patient care. Clinical pathways document the steps in diagnosis and treatment of a particular condition' (American Academy of Physical Medicine & Rehabilitation 2003).
Clinical review	'The examination of a patient by a clinician after the patient has been added to the waiting list. This examination may result in the patient being assigned a different urgency rating from the initial classification' (AIHW 2001:393)
Clinical urgency	'A clinical assessment of the urgency with which a patient requires elective hospital care' (AIHW 2001:394). There are three categories of urgency defined by the severity of the illness, and the speed in which the patient should be accessed and treated by a doctor.
Co-morbidity	Morbidity refers to the details of conditions and treatments related to a patient. Co-morbidity is a situation where patient has more than one condition. (adapted NHMBWG 1999:71)
Coronary care unit (CCU)	'A specialised facility dedicated to acute care services for patients with cardiac disease' (AIHW 2001:193).
Cost weights	'The set of cost weights is a relative value scale for all AN-DRGs, calculated so that the average cost weight across all episodes used to produce the set of weights is 1.00' (NHMBWG 1996:22-23).
Cover	Doctor assigned to work between 5pm and 7am across a division such as the medical or surgical division.
Diagnosis related groups (DRG)	A patient classification scheme which provides a means of relating the number and types of patients treated in a hospital to the resources required by the hospital (adapted from AIHW 2001:148). Usually measured through length of stay and resource allocation.
Discharge prescription D/S	List of pharmaceuticals ordered for patient on the day they are discharged. Under the 1998-2003 Australian Health Care Agreements, prescriptions were to cover a two week period post discharge.
Elective admission	'An elective admission is an admission of a patient for care or treatment which, in the opinion of the treating clinician, is necessary and admission for which can be delayed for at least 24 hours' (AIHW 2001:404).
Elective surgery	'Comprises surgery where the procedure required by patients are listed in the surgical operations section of the Medicare Benefits Schedule, with the exclusion of specific procedures frequently done by non-surgical clinician surgery that in the opinion of the treating clinician is necessary and admission for which can be delayed for at least twenty-four hours' (AIHW 2001:315).
Elective surgery waiting times	The length of time waited by patients on waiting lists on census dates (Adapted from AIHW 2001:12).
Emergency admission	'An emergency admission is defined as a patient needing to be admitted into hospital and treated within 24 hours' (NHMBWG 1996:92).
Emergency Department waiting time	'The time elapsed for each patient from presentation to the Emergency Department to admission to hospital' (AIHW 2001:412).
Enrolled Nurse (EN)	A second level nurse who is enrolled in all states except Victoria where they are registered by the State Registration Board to practise in this capacity (AIHW 2001:463). In South Australia an EN must work under the direction of an RN.
Episode of care	'The period of admitted patient care between a formal or statistical admission and a formal or statistical separation, characterised by only one care type' (AIHW 2001:337)

EQuIP	Evaluation and Quality Improvement Program. The EQuIP Framework meets the target standards for health services under the National Health Standards as prescribed by the Commonwealth Government of Australia and provides national accreditation with the Australian Council on Healthcare Standards. (Community Connections Victoria 2003).
Excelcare	A computerised nursing care product interfaced with the rostering program, ProAct and the accounting program, Trendstar. Measures nursing tasks in minutes.
Exceptional hierarchies	High cost, low volume DRGs such as transplants where there is a lack of 'fit' between time and cost.
Extended waits	A patient with the lowest level of clinical urgency for a procedure who has been on the waiting list for elective surgery for more than one year (AIHW 2001:414).
Gaming	Manipulating patient data in order to receive a higher casemix payment.
Graduate Nurse (GNP)	First year registered nurse (RN) doing internship. These nurses are usually assigned to the ward for a 3 month rotation.
Hospital @ Home (H@H)	Provision of care to hospital admitted patients in their place of residence as a substitute for hospital accommodation. (AIHW 2001:339). In calculating days in H @ H, the date of admission to H @H is counted if the patient was at home at the end of the day (AIHW 2001:379)
Intensive care unit (ICU)	A designated ward of a hospital which is specially staffed and equipped to provide observation, care and treatment to patients with actual or life-threatening illnesses, injuries or complications, from which recovery is possible- patients who need support with vital functions (AIHW 2001:207)
Incident report	A formal report of an adverse event to do with a patient such as administering a patient incorrect medication or failing to give them their medication.
Inlier	A patient whose length of stay is within the designated number of days
Inpatient fraction (IFRAC)	The IFRAC is an expression of the ratio of inpatient costs to total hospital costs' (NHMBWG 1999:71). In 1996 the fraction was calculated at 7.1 outpatients to one inpatient bed day.
Johns Hopkins model	The Johns Hopkins model of clinical governance organises hospital divisional structures according to the casemix classification system. Hence the two major divisions are Surgical and Medical- as the first two divisions within the casemix DRG classification system.
Length of stay (LOS)	LOS is measured in patient days. A same-day patient should be allocated a length of one patient day. The LOS of an overnight stay patient is calculated by subtracting the date the patient is admitted from the date of separation and deducting the total leave days (AIHW 2001:415).
Long waits	<i>Long waits</i> in A & E refer to situations where a patient has waited for medical care longer than is clinically appropriate.
Major Diagnostic Category (MDC)	23 mutually exclusive categories for the purposes of diagnoses. Each MDC corresponds to a single body system or organ. Each category is partitioned according to whether or not a surgical procedure was performed and is assigned before the DRG (Adapted from AIHW 2001:153).
Managed care	The body of clinical, financial and organizational activities designed to ensure the provision of appropriate health care services in a cost-efficient manner (Pohly 2003).
Median waits	A median wait is the mid-point, meaning half the patients waited more and half waited less than the benchmarked time.
Medibank	National health insurance scheme introduced under the 1973-1975 Federal Labor Government.
Medical Officer (MO)	Medical officers are employed by hospitals on a full-time or part-time salaried basis. This excludes visiting medical officers engaged on an honorary, sessional or fee-for-service basis (AIHW 2001:463)

Medicare	National health insurance scheme introduced by the Federal Labor government in 1983. Medicare agreements are bilateral agreements between the States/ Territories and the Federal government for financing of health care.
Minutes of operating theatre use	Total time spent by a patient in operating theatres during current episode of hospitalisation... assists in costing DRGs (AIHW 2001:346)
Morbidity	Any departure from a state of physiological or psychological well-being (NHMBWG 1996:93)
National minimum data set	Indicators which are to be collected nationally in the forthcoming collection period and are determined under the Medicare agreements and published in the National Health Dictionary (Queensland Health 1996).
Non-admitted patient	A patient who does not undergo a hospital's formal admission process. There are three categories of non-admitted patients: Emergency department patients, outpatients and other non-admitted patients... eg outreach services (adapted from AIHW 2001:255).
Nursing home type (NHTP)	An eligible person admitted as a nursing home type patient, or a patient whose length of stay exceeds 35 days and who is not certified as an acute patient. The care provided is consistent with that normally provided in a nursing home (NHMBWG 1996:94)
Opportunity costs	'The value of the next best alternative that is sacrificed by retaining an asset or a course of action' (NHMBWG 1999:72).
Outlier	The term 'outlier' has two distinct meanings. (1) Patient episodes with untypical length of stay: either very long or very short stays (adapted from NHMBWG 1996:23), or (2) A patient with a specific condition allocated to a ward other than the one designated to care for patients with this condition.
Palliative care	'Is care in which the clinical intent or treatment goal is primarily quality of life for a patient with an active, progressive disease with little or no prospect of cure' (AIHW 2001:324)
PBMA	Program Budget and Marginal Analysis: a resource allocation decision-making process used by health care planners that identifies what intervention will produce the best outcome for the largest population group. It incorporates EBM and financial and population modelling.
Peer group hospitals	All hospitals in Australia of similar size and casemix are allocated to a specific peer group. Categorisation also includes identifying whether the hospital is the major one for the region, in the Central Business District or suburbs and its relationship to other major public hospitals in the state (Commonwealth Department of Health and Aged Care 1999).
Perverse incentive	A financial incentive or penalty. For example in Australia, Medicare provides perverse financial incentives for doctors to treat more patients rather than less, as the doctors' incomes is based on the number of patients seen, not on a set income as is the case in countries with national health services such as Britain.
ProAct	Computerised rostering program interfaced with Excelcare and Trendstar
Proximal call/cover	Refers to a shift when the doctor is on-call, not engaged in direct patient care, but must be available for care. The doctor must be within a 30 minute radius of the hospital and able to be contacted by mobile phone (Adapted page AIHW 2001:68). These hours are included in the FTE staff rates. The doctor on this shift is the 'proximal cover'.
Ramp time	The time a patient waits in an Ambulance to be admitted into A & E.
Readmission (emergency)	The indicator is defined by the following expression: EMERGE READMD/TOTAL ADM during the collection period where the EMERG is the number of readmissions within 28 days of the previous separation and the TOTAL ADM is the number of admissions (NHMBWG 1996:40).
Recovery room	Following a surgical procedure patients are transferred to the recovery room to be monitored by a nurse until they regain consciousness.

Registered Nurse (RN)	Includes persons with at least a three-year training certificate and nurses holding postgraduate qualifications. Registered nurses must be registered with the State/Territory registration board (AIHW 2001:463).
Rehabilitation	'Care in which the clinical intent or treatment goal is to improve the functional status of a patient with an impairment, disability or handicap....negotiated goals and indicative time-frames which are evaluated by a periodic assessment using a recognized functional assessment measure' (AIHW 2001:324).
Remote call	A working shift in which the doctor is on call but able to leave the hospital. Must be able to return to hospital within 30 minutes—proximal call.
Resident Classification Scales (RCS)	'Instrument for measuring number of hours of direct care for nursing home type patients, ranging from A= for additional attention, B = 0.5 hours of direct attention per day; C = 0.5 to 1.5 hours of attention, to D = more than 1.5 hours of individual care per day' (AIHW 2001:134).
Salaried medical officer	A medical practitioner engaged by a hospital on a full-time or part-time salaried basis (NHMBWG 1996:94).
Same-day patient/surgery	'A patient who is admitted and separates on the same-day receiving either medical or surgical services' (AIHW 2001:259).
Separation	'The process by which a hospital records the cessation of treatment and /or care and/or accommodation of a patient' (AIHW 2001:387). 'Patient may be discharged, transferred to another hospital or die. Separation time is expressed in minutes using the 24 hour clock' (AIHW 2001:389).
Step-down bed	A bed in a unit one level of care down from the previous unit; eg from intensive care to critical care bed; or from critical care bed to ward bed.
Technical efficiency	'Obtaining the greatest possible production of goods and services from available resources and the existing organisation of the work. In other words, resources are not wasted in the production process' (AMOS Web Pedia 2003).
Throughput data	Includes the number of patients added to, or removed from, waiting lists and the length of time waited before admission by patients admitted during a specific period of time (Queensland Health 1996).
Time of triage	Time at which patient is triaged—relates to emergency waiting times (AIHW 2001:401). See chapter 5 for Emergency waiting times.
Transfer lounge	Ward in hospital where patients are housed awaiting a bed on a ward after leaving A & E
Transit lounge	Discharged patients wait in the transit lounge for their medications to arrive from the pharmacy. By transferring patients to the transit lounge a bed is freed up in the ward for incoming patients.
Trendstar	Computerised accounting and human resource package integrated with Excelcare and ProAct and used in the 15 public hospitals in South Australia
Trim point	The number or point at which long or short stay patients are removed from the calculation. Long and short stay trim points are 3 times the ALOS for all states except Queensland, which is 5 times the ALOS for long trim points (NHMBWG 1996)..
Units of care (UOC)	Each nursing activity described and measured on Excelcare. Also used to describe the product of the number of separations and the average case weight for a hospital or group of hospitals (NHMBWG 1996:94)
Universal precautions	'Universal precautions are infection control guidelines designed to protect workers from exposure to diseases spread by blood and certain body fluids' (Canadian Centre for Occupational Health and Safety 2002).
Urgency of admission	'An admission of a patient which, in the opinion of the treating clinician, is necessary and admission which should occur within 24 hours' (AIHW 2001:404).
Visiting Medical Officer (VMO)	'A medical practitioner appointed by the hospital board to provide medical services for hospital public patients on an honorary, sessional or hourly paid, or fee for service basis' (NHMBWG 1996:94).

Waiting list	'A register which contains essential details about patients who have been assessed as needing elective hospital care' (NHMBWG 1996:94).
Waiting time at census date	'The time elapsed for a patient on the elective surgery waiting list from the date they were added to the waiting list for the procedure to a designated census date (AIHW 2001:439).
Weighted separation	The average cost per casemix weighted separation is derived by dividing the total cost for the hospital by the total casemix weighted separations (NSW Health 2003).
Wired bed	Wired beds are those where the patient is attached to cardiac monitor. Information on the patient's heart is relayed back to the nurses' station.
Without co-morbidities W/O	Diagnostic category used within AN-DRGs for a patient with a condition who does not have another medical condition; eg a cardiac patient with diabetes would have a co-morbidity and would be assigned a different casemix number to a cardiac patient without diabetes.

Medical and nursing glossary

Acopia	A patient deemed to be unable to cope at home by themselves will be assigned a colloquial diagnosis of acopia
Activities of daily living (ADLs)	Activities of daily living such as mobility, toileting, bathing, dressing, eating, bed mobility, bladder and bowel continence (AIHW 2001:178)
Amitriptylines	A tricyclic antidepressant drug that has a mild tranquilizer action (Pocket Dictionary for Nurses 1989)
Angiogram	X-ray results of angiography examination where a dye that is opaque is injected into the artery and rapid series of X-rays (angiograms) is taken.
Angioplasty	Surgical reshaping or reconstruction of blood vessel (Pocket Dictionary for Nurses 1989)
Anginine	Medication taken for dilating heart blood vessels and angina attacks
Aperients	A mild laxative (Pocket Dictionary for Nurses 1989)
APTT line	APTT (partial thromboplastin time, activated) is a blood test taken while patients are on anticoagulants. It records or paces what dosage the patient needs or length of time needed to get to the point where blood clots.
Auricular fibrillation (AF)	AF: auricular fibrillation is a rapid and chaotic beating of the heart muscles
Beta Blocker	A drug such as oxprenolol that prevents stimulation of the beta-adrenergic receptors of the nerves of the sympathetic nervous system and therefore decreases activity of the heart (Pocket Dictionary for Nurses 1989)
CREST syndrome	Calcinosis Raynaud's Esophagus Sclerodactyly Telangiectasias
Extubation	Withdrawing a tube from a part of the body used for either diagnoses or treatment. Done when the patient can manage independently.
Fentanyl	Analgesic
Jelco	Jelco is the trade name for an intravenous cannula which is inserted into a vein for the purposes of giving fluids and drugs. As the 'Jelco' company was the first one nurses became familiar with, all cannulas are referred to as jelcos irrespective of the manufacturer.
Infarct	Infarction: the death of all or part of an organ that occurs when the artery carrying the blood supply is obstructed by a blood clot or an embolus (Pocket Dictionary for Nurses 1989)
Intubation	The introduction of a tube into part of the body for the purposes of diagnoses or treatment (Pocket Dictionary for Nurses 1989).
Ischaemic heart disease	Inadequate flow of blood to the heart (Pocket Dictionary for Nurses 1989)
Oesophageal reflux	Inflammation of the oesophagus caused by frequent regurgitation of acid and peptic juices from the stomach (Pocket Dictionary for Nurses 1989)
Peptic ulcer	Ulcer in the digestive tract, a result of the presence of unusually high concentrates of acid (Pocket Dictionary for Nurses 1989)
Sufentanil	Opiate used in pain control. An analog of fentanyl with similar properties, but more potent (Chance 1994).
Urinalysis	Analysis of urine for purposes of diagnosis of disease or in pregnancy tests (Pocket Dictionary for Nurses 1989)
Warfarin	Anticoagulant used mainly in the treatment of coronary or venous thrombosis to reduce the risk of embolism—given by mouth or injections (Pocket Dictionary for Nurses 1989)

CHAPTER ONE

TIME TO START

I wasted time and now doth time waste me (Shakespeare's Richard 2nd Act v, Scene: 3).

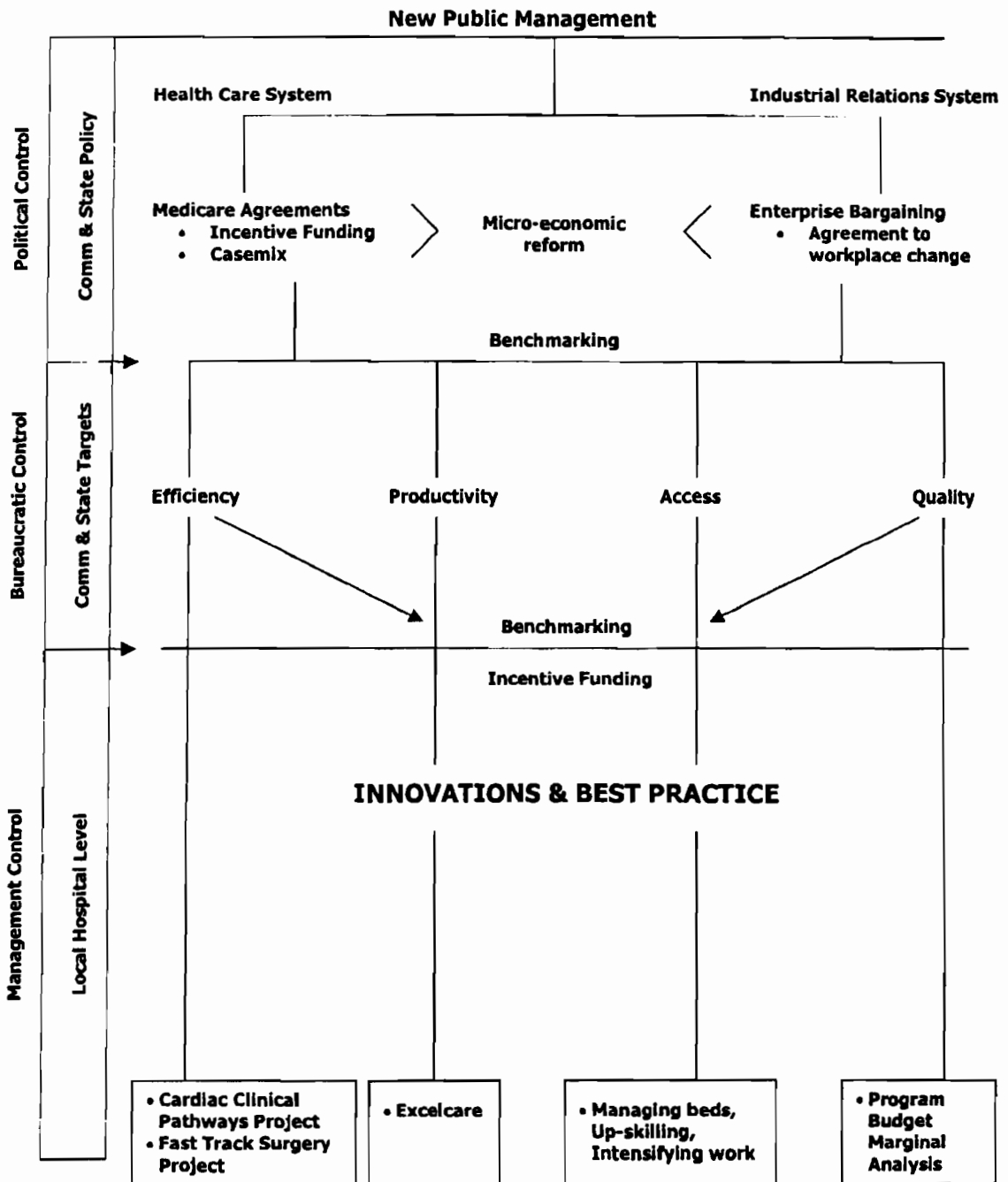
Introduction: time and the control of health professionals

This thesis is a sociological study that seeks to discover how time is used as a technique of control over the labour of health professionals, specifically nurses and early career doctors in a large public hospital in South Australia I have called Westernvale Hospital. Drawing on ethnographic data, supported by document analysis, I show how politicians, bureaucrats and managers at the Federal, State and local hospital level use *time as the unit of account* to control and shape the labour of health professionals through a process of work intensification and intrusion into the way clinical decisions are made. This is achieved through micro-economic 'reform' broadly defined under the New Public Management (NPM) as 'labour market flexibility' and 'performance management systems' (Ferlie 1998; Cairney 2002) supported by enterprise bargaining. While I use the common term 'reform' to describe these policies and strategies for re-structuring the health sector, the findings of this study lead me to question the capacity of these changes to improve the care provided to patients by health professionals (Ferlie 1998:2).

The 'reforms' introduced into the health care system as part of labour market flexibility are: the industrial relations strategy of enterprise bargaining (EB), first introduced into the public health care system in South Australia in 1995 and the performance management strategies of incentive funding, built into the 1993-1998 and 1998-2003 Medicare and Australian Health Care Agreements and casemix funding, specifically diagnosis related groups (DRGs). Enterprise bargaining operates independently of the New Public Management, but I have included it here as a key strategy in enhancing labour market flexibility. EB and performance management systems are the first level of the 'reform' process illustrated in Figure 1 (p2). The bureaucratic implementation of these 'reforms' is transformed into benchmarks aimed at increasing efficiency, productivity, access and quality in health care. This is represented at the second level in Figure 1. The third step in the process occurs at the

local hospital level where managers use ‘best practice’ innovations to ensure a hospital achieves the benchmarks. Success is achieved when the time patients spend in hospital, or waiting for elective surgery, is reduced or when the time between readmissions is extended. As this study shows, the result is usually work intensification, long hours of work, and increased bureaucratic control over the labour processes of nurses and early career doctors.

Figure 1.1 Levels of micro-economic reform in the health care sector



To illustrate these points I develop four case studies presented in chapters 6,7,8 and 9 that detail the outcome of five innovations implemented on two wards at Westernvale Hospital. One ward is a cardiac ward I have called Mawson, the other a respiratory ward called Hartley. I detail the changes in the organisation of work by examining five time-saving innovations introduced onto these two wards between 1992 and 2000. These innovations aimed at streamlining the work processes through: (1) a program to change the work culture that attempted to get nurses to take personal responsibility for up-skilling and intensifying the work on Mawson ward; (2) the implementation of 'Excelcare', a computerised nursing workload product on both wards; (3) a nurse-driven clinical pathway program on the cardiac ward on Mawson; (4) a Fast Track Surgery Project on Mawson, but under the direction of the cardiac surgeons; and (5) the utilisation of the resource allocation tool, Program Budget and Marginal Analysis, in re-designing the hospital's nursing Respiratory Outreach Program on Hartley. The innovation aimed at changing the work culture (1) was instigated by nurse managers, Excelcare (2) was a State government initiative, while the other innovations (3), (4) and (5), were funded through a Federal Government innovation program competitively won by the Director of Nursing (DON) of Westernvale (Silent reference No 1 2000).¹ The study explores the impact of workplace change from the perspective of those health professionals who work on the wards. It makes no claim to represent the views of managers, bureaucrats or politicians, except on the few occasions where I was able to observe and interact with them or they offered an opinion on events occurring at Westernvale.

The analysis offered here differs from Alford's (1975) classic account of health care systems in countries where the market prevails, such as the United States of America. Alford suggested that 'reform' within the health care sector was a tussle within a pluralistic society between the *dominant* and *challenging structural interests*. In his account the dominant structural interest or professional monopoliser is organised medicine, while the challenging structural interest is the corporate rationalisers of the state and private, for-profit organisations such as insurers and private hospitals. The state's interest is to reduce costs; private, for-profit organisations wish to reduce costs, but also maximise profits. According to Alford the repressed structural interests of citizens as patients play only a small part in influencing health care policy, whether the system serves private, for-profit or welfare state interests. In this thesis I accept Alford's assessment that citizens have minimal influence on health policy, however I argue that in Australia, by contrast, at the present time the state is

¹ Throughout the thesis there are cited a number of publications produced by Westernvale Hospital. Their details are provided in a separate silent reference section for the examiners, but not for the public because of the ethical requirement to maintain anonymity.

the dominant structural interest; control has become increasingly centralised and this has been achieved through the techniques of the New Public Management and to a lesser extent enterprise bargaining. As a consequence, control goes beyond budgetary constraint to impact on the very way health professionals organise their work. I position organised medicine as part of the challenging structural interest, although they should not be seen as a group working in tandem with other health professionals. The actions of organised medicine indicate doctors are under challenge from the state, but this does not mean they collaborate with other health professionals in resisting state-imposed 'reforms'.

In this thesis I argue that control over the labour of health professionals through the systematic and rationalised use of time is not complete, and is characterised by resistance. How health professionals resist control over their work time, as well as how they resist succumbing to the innovations and benchmarks defined through time, is also explored in this thesis. In examining resistance I argue that when it is formally organised by professional associations and unions, or where professional groups join forces, it is successful. At other times when it is expressed in covert or ineffectual action or by individuals, it is often not successful. I also argue that the 'reform' process provides opportunities for some professional groups to shore up control over their own labour or the labour of others. This is especially so for the profession of medicine. The study makes it clear that political, bureaucratic and managerial control over the labour of health professionals has not disrupted the traditional division of labour in health care. Medical dominance prevails.

Exploring the use of 'time' as one of the central organising factors in the control of health professionals reveals much about the nature of time itself, including its possibilities for illuminating resistance. Consequently this thesis is also about modes of and relations to time: specifically; abstract, bodily, and gendered time. I argue that the implementation of the techniques of the New Public Management into the public hospital sector reinforces the abstract nature of time. Abstract time is best understood through analogy; it is the treadmill whereby the worker's labour time is constantly redetermined back to its previous value (Postone 1996). Abstract time results in work intensification and extended, chaotic and fragmented working hours. In public hospitals, it is used with apparent rationality to measure the duration of such diverse 'events or objects' as patient recovery, waiting times, or the monetary value of a building. However, other modes of, and relations to time, provide opportunities for resistance and for health professionals to use their time in the care of the sick. These include natured/bodily and gendered/caring time. How these other modes of, and relations to time, are played out on the wards provide insights into how individuals and groups resist. More importantly I demonstrate how the Australian Nursing Federation (ANF) used EB as a vehicle for resistance. In effect the *cure became the disease; the disease*

became the cure (Fenn 1995). These issues are detailed in the ethnographic accounts in Chapters 6 through to 9.

Why research on controlling health professionals?

Considerable research has been conducted in Australia on relations of power between medicine and the state (Willis 1989; Crichton 1990; Daniel 1990; White 2000, 2001). Scholars have also analysed the attempts of nurses and various allied health professionals to shore up their power base, vis á vis the state, in the light of an enduring medical dominance (Willis 1989; Shoebridge 1989; Wicks 1999). In recent years these studies have explored the impact of gender both on the care offered and on the work of female health professionals—particularly nurses but also doctors (Russell and Schofield 1996; Pringle 1998; Wicks 1999; Guillemin 2001). Likewise, researchers have been interested to examine the attempts of consumers to engage as equal partners in their health care (Hughes 2001).

Despite these accounts, sociologists of health and illness have paid little attention to the impact of recent micro-economic ‘reform’ on professional autonomy or the implementation of the New Public Management on health care delivery in public hospitals in Australia, although political scientists and human resource scholars have made extensive commentaries (see for example Braithwaite 1997; Hindle & Braithwaite 1998; Bloom 2000; Stanton 2000; Barraclough & Gardner 2002; Stack 2002; Bray & White 2002). The exceptions are Collyer’s (1997) and White & Collyer’s (1998) examination of the privatisation of public hospitals in New South Wales and Grbich’s (2002) analysis of the privatisation of public hospitals in South Australia. This is a surprising omission within Australian sociology given the speed and enormity of the ‘reforms’ and the parallels with other Western countries such as Britain, New Zealand and Canada, where governments have experimented with New Public Management in an attempt to reel in rising health care costs (Harrison and Pollitt 1994).

Several features distinguish current Federal and State government endeavours from previous attempts to control the labour of health professionals. These are the intensity and comprehensiveness of the ‘reform’ process (no aspect of the public health care system has been exempt); and the similarities in the ideologies and strategies used throughout the English-speaking world, no matter what political party is in control. These include ideologies of neo-liberalism and economic rationalism, and the universal focus on curtailing welfare state budgets to support reduced taxation. Importantly these ‘reforms’ have attempted to incorporate health professionals, primarily doctors, into taking responsibility

for the resource implications of clinical decision-making, despite the fact that doctors have always put up barriers to health care 'reform' in Australia (Alexander 2000). What this thesis argues is that 'time' is a central component of the processes of incorporation of and control over health professionals and that the state has accelerated its attempts to take control.²

It is no revelation to suggest that time is a tool used by managers to increase labour productivity and efficiency in work arenas such as manufacturing or in the service sector, for example, higher education; nor that control over one's working time is an indicator of status and power and pivotal to claims of professional autonomy. The pioneering work of Braverman (1974) firmly established the relationship between scientific management, the division of labour and the control of working time, and recent research in Australia confirms that flexible specialisation has had a detrimental impact on working time and family life (Campbell 1993, 1995; Pocock 2003). However, in this thesis my argument goes beyond Braverman and also beyond exploring the provisions of flexible specialisation bartered through enterprise bargaining, such as increased provision for overtime, holidays or flexi-time. I demonstrate the way in which time is used, not just as a vehicle for work intensification and non-standard patterns of employment, but as the very benchmark for quality, equity and access to the health care provided by nurses and doctors. As a consequence, time itself is at the heart of professional service.

An outline of the thesis

The thesis covers the time between 1992–2000, a period characterised by Federal government bi-partisan initiatives to wind back the welfare state, and, in South Australia, heightened budgetary constraint following the collapse of the State Bank in 1992. I have taken a structural and cultural approach to the control of work and this is outlined in Chapter 2. The structural account builds on a reading of Marx by Postone (1996). For service professionals working within the framework of the welfare state, surplus value is 'time', and its production constitutes abstract time. Surplus and abstract time are the vehicles used by the state to control health professionals, and these modes of time dominate all other temporal considerations such as those of natured and bodily time, or gendered and caring time.

² I am picking up here on Crichton's text *Slowly taking control*, and extending her argument. Crichton argues that in Australia the government has made several attempts to increase its control over the medical profession in the interest of curtailing resource allocation. In this thesis I continue the argument, suggesting that the process has accelerated, and that time is the technique of control.

Creating surplus value through abstract time is achieved by managers using the processes of scientific management or by clinicians designing 'innovations' using evidence-based medicine (EBM). This is a situation that differs from the one described by Braverman (1974), whereby it was assumed that knowledge of the labour process was appropriated by management and as a consequence led to de-skilling of the worker (Thompson 1983). The current processes seek to incorporate health professionals, especially clinicians, into the 'reform' agenda from the initial point of determining casemix allocations through to ward-based innovations. These strategies are consistent with the principles of the New Public Management and enterprise bargaining such as 'best practice' and flexible specialisation, whereby teams of workers are charged with devising new ways for increasing their own productivity and ensuring efficiencies and/or customer satisfaction (Morris 1996).

While it is clear that the implementation of many of the features of the New Public Management (NPM) have increased state control over the work of health professionals as well as increasing work intensity, issues of resistance are more complex. Resistance to the processes occur when health professionals engage in, or take seriously, modes of and relations to time, such as natured, bodily, gendered or caring time; that is, modes of time 'other' than abstract time. These 'other' times are experienced and lived out by health professionals in the course of their labour. They provide evidence of resistance to abstract and rationalised time and are a precursor to 'disposable time' (Postone 1996).

In the second section of Chapter 2, I posit a cultural interpretation for understanding the way time is used as a tool of control over the work of health professionals. This cultural attitude to time has its origins in the medieval Roman Catholic invention of Purgatory³ and the later Protestant ethic. Embedded in these religious innovations are the origins of the psychological predisposition to the rationalisation of time and to what Richard Fenn (1995) refers to as *purgatorial complex* or profound sense of time anxiety. Like time represented as the treadmill of capitalism going nowhere, these cultural innovations, once offered as a defense against time scarcity, are now symptoms of the disease that allows most human service professionals to accept current political, bureaucratic and managerial approaches to the organisation of health care and, as a consequence, control over their working time.

³ In Roman Catholic dogma Purgatory is that place or state of punishment in the next life where some souls have to suffer for a time before they are ready to see the face of God.

Chapter 3 outlines the methodology and is discussed below. Chapters 4 and 5 respectively provide the macro-policy and meso-bureaucratic contexts for understanding how time is insinuated into the labour of health professionals. Chapter 4 outlines the three key areas that have driven public hospital micro-economic 'reform'. These are enterprise bargaining, the Medicare incentives and casemix DRGs. These can be broadly defined under the New Public Management as 'labour market flexibility and performance management systems' (Ferlie 1998).⁴ I provide a brief introduction to the practices introduced into the welfare state sector under this NPM rubric. The focus of EB is commitment to workplace change and increased productivity while the other two 'reforms' concentrate on *time-saving* efficiency, productivity, quality and access. At the end of the section on casemix I illustrate the impact it had on Westernvale Hospital, particularly on nursing staff in the early years following its introduction. I show that casemix has an impact similar to the treadmill of surplus value. I note that the impact of EB is more complex. It promised to be the policy framework committing health professionals to workplace change, yet in practice has also become one of the vehicles for resistance.

In Chapter 5 I explore the bureaucratic context and outline the various benchmarks published by the Commonwealth government to monitor efficiency, productivity, quality and access to public acute hospitals in Australia following the introduction of 'performance management systems' and 'labour market flexibility'. These benchmarks are published in various reports. In this thesis I use the First National Report of Health Sector Performance Indicators produced by the National Health Ministers' Benchmarking Working Group (NHMBWG 1996), the third report published in 1999 (National Health Ministers Benchmarking Working Group (NHMBWG 1999), and a more recent report card: The Australian Health Care Agreements Annual Performance Report 1998-1999 (Commonwealth of Australia 2001b).

I illustrate the way in which the majority of the benchmarks noted in these reports are measured through outputs that are based on either speeding up the labour process or defining quality and access through *duration* or *interval*. In these accounts, time is abstract and the benchmarks a continuous cycle of decreasing and/or increasing duration. Thirteen of the sixteen benchmarks established by the Commonwealth demonstrate a bureaucratic pre-

⁴ In this thesis I argue that the NPM strategy of *labour market flexibility* requires the broader industrial relations mechanisms of enterprise bargaining (EB). EB is a reform strategy that operates in both the public and private sectors, however I argue that it is a key component to successful workplace change in the public sector because it binds the employee through the EB contract to workplace change and labour market flexibility—a key component of NPM.

occupation with measures of equity and fairness where the goal post is defined by constantly reducing the time. A continuous improvement in benchmarks based on the timing of a task is analogous to a treadmill. Short of the benchmark coming back to zero the possibilities are infinite.

Chapters 6 to 9 are four case studies of the impact of five innovations that illuminate the way in which the working time of health professionals is modified, intensified or re-organised through managerial, medical or technical innovations based on time. In Chapter 6 I provide a case study of ordinary everyday working life on Mawson ward. I argue that understanding structural and cultural shifts in working time requires, firstly, understanding the way in which time is already organised in highly rationalised ways in hospitals. I illustrate this by describing the various neo- and post-Fordist models of nursing and the way emotional displays by patients are pre-empted on the cardiac ward via patient education. I also outline factors that threaten the rationalised and controlled time order, such as the process of managing beds and the rosters for early career doctors. In the final section of this chapter, I move beyond these everyday chaotic and fragmented modes of management, to detail the first innovation which was a cultural change program that redefined nurses' resistance to increasing work intensification and up-skilling as laziness and a lack of commitment to the organisation.

Chapters 7 to 9 should be read as a series of windows looking in on life at Westernvale Hospital and be read as occurring simultaneously with the cultural change program outlined in Chapter 6. This is particularly so for the second case study in Chapter 7. This case deals with Excelcare, a computerised work-time product introduced into Westernvale Hospital prior to the implementation of casemix funding, but pivotal to the success of casemix costing. Excelcare, as computerised innovation, provided the mechanism for reducing nursing to a set of timed tasks that forced nurses to organise their work in ways that met the allocated hours rather than professional goals of autonomy and quality care. Excelcare is not simply a product for work intensification. Its most insidious quality is the way in which it defines skills and tasks solely in terms of the time taken to perform them, whereby even dealing with patient anxiety is measured by minutes. I argue that this technological innovation is not neutral. It determines what is done, and what is left un-done. It shapes the very way caring work is understood, the way it is practised and the time allocated to each caring event. It does this in a climate where what is important is meeting a productivity deadline through the standardisation of caring time. It is this pressure to increase production in 'a time' that is continuously redetermined to a base level, that is the fundamental characteristic of capitalism (Postone 1996). But Excelcare also provides a case study in

organised resistance. I outline this resistance by describing the way the Australian Nursing Federation used Excelcare in the third EB round in 2000.

Control of working time is not simply a one-way affair, but a complex set of interactions in which power ebbs and flows and control and subordination are unevenly experienced. This is particularly so in the health care sector where relationships of power are carefully orchestrated (Willis 1989; Shoebidge 1989; Wicks 1999). In Chapter 8 I outline two innovative programs introduced into Westernvale Hospital between 1998-2000 and in doing so provide the framework for the fourth case study. The first innovation was the introduction of six clinical pathways onto the cardiac ward. Clinical pathways represent an attempt by management to introduce the principles of scientific management into the production process, in order to ensure patients are discharged within the standard number of days. Clinical pathways also provide an opportunity for organised nursing to regain some of the power lost to medicine as a result of a move to the Johns Hopkins model of clinical management and budget allocation. At Westernvale Hospital the clinical pathways program was resisted by both nurses and doctors, although in different ways: nurses through non-compliance with the technology, doctors through disinterest.

The second innovation outlined in Chapter 8 deals the Fast Track Surgery Project, which achieved the desired reduction in patient length of stay, by drawing on the techniques of evidence-based medicine (EBM). At the end of the EBM trial a clinical pathway was instigated that reduced length of stay for cardiac patients undergoing coronary artery bypass or valve surgery from 10 to 6 days. I attribute the success of this innovation to the fact that it was under the direction of two senior surgeons. It represents a shift from a clinical pathway that focused on managerial control of the labour process, to one that re-asserted medical dominance through recourse to EBM. Drawing on the work of Dent (1998) and White & Willis (2002), I argue that evidence-based medicine operates in a contradictory fashion; it re-asserts medical dominance in the face of managerial and bureaucratic Taylorist modes of control, but it also meets the managerial demand to reduce length of stay. In the study of the Fast Track Surgery Project I show how this reduction in length of stay was achieved through minor shifts in medical technology and knowledge, and major changes to the re-organisation and intensification of nursing work.

As an innovation the Fast Track Surgery Project also demonstrates the contradictory nature of policies of workplace flexibility, such as up-skilling, for breaking down the boundaries between professional and occupational groups. As a result of this innovation the boundaries between the skills mix of registered and enrolled nurses collapsed, while that between nursing and medicine remained intact. Further, in detailing both innovations, I demonstrate

that while nurses and doctors experience work intensification, there is little evidence of de-skilling, especially for doctors.⁵ On the contrary, as the second innovation suggests, up-skilling improves opportunities for medicine to increase its control over the labour process of nurses and allied health professionals; and further I will argue that medical control of working time is stratified according to career position and status and that as a consequence early career doctors do not enjoy the same control over their time as senior consultants. Chapter 8, as a case study, clarifies my argument that budgetary constraint and the subsequent measures of control have an uneven impact on the two major groups of health professionals; control over the labour of nurses is more complete than that of doctors. This is partly explained by the fact that doctors capitalise on the funding provided for innovations by using evidence-based medicine (EBM) to bolster medical autonomy, but it is also a product of the enduring nature of medical dominance over the work of nurses.

In Chapter 9 I present the fourth case study. I examine changes to the Nursing Respiratory Outreach Program achieved via the innovative management tool: Program Budget and Marginal Analysis (PBMA). PBMA is a decision-making tool that identifies, from a range of possibilities, the change program that will be the most economically efficient activity for the largest population group. The PBMA process commenced at Westernvale in 1997 and dealt with what the hospital administration saw as a problem of high readmission rates and long stays for patients suffering from chronic airway limitation disease (CAL). The chapter outlines the initial hypothesis that identified the problem of readmissions and long stays as a lack of community resources, specifically the incompetence of local general practitioners and the scarcity of home help services. The solutions included a range of collaborative agreements between Westernvale Hospital's Medical Division and the relevant Division of General Practice, the re-organisation of the tasks performed by the Respiratory Outreach nurses, the introduction of a telephone hotline, and change in the criteria for the patient population eligible for nurse visits. Time was made available to the patient population by redefining the criteria for eligibility to the program and intensifying the labour of some nurses.

Intersecting the study of the Respiratory Outreach Program is an exploration of the gendered nature of resistance. I argue that resistance at the level of the ward is often gendered, with male nurses more likely to practise the nursing ideal of interpersonal care over domestic and

⁵ Braithwaite (1997) and Stanton (2000) make similar arguments.

task work. This is an argument that goes against common assumptions about male nurses and gendered time use. My observations point to evidence of change in the division of labour following the intensification of nursing work: junior female nurses have retreated to ensuring the domestic work is done on time, while many male nurses have chosen the interpersonal work.

In the final chapter I provide a comparative analysis of the four case studies and the five time-saving innovations. Firstly, I argue that the impact of the three micro-economic 'reforms' of casemix, the Medicare incentives, and enterprise bargaining has been uneven. While both the Federal Labor and Liberal/National Coalition governments established EB, with support from the union movement, as an industrial relations strategy to ensure workplace change and flexibility directed towards increased productivity, I argue that it is increasingly operating in the opposite direction. EB has the quality of a fairy godmother, arriving on the scene like all good fairies after the disaster has occurred, but able to ameliorate the impact of the damage caused by workplace 'reform'. This is not to suggest that this is a typical outcome of EB in Australia, but I do argue that EB can ameliorate the negative impacts of workplace 'reform' in situations where workers are well organised, labour is in short supply and the bargaining negotiations occur at an industry wide level. The essential ingredients are time to learn from mistakes and time to gather the data, along with collective organisation and institutional power to contest eroded working conditions.

A second conclusion drawn in this chapter suggests that control over the work of health professionals has been an initiative of both managers and practitioners. In the health care sector, as in a number of other public services, under the rubric of best practice, professionals have used their imagination and technology to improve the quality of care and to change the way their work is organised. This has not always been to everyone's advantage. What is clear from the case studies is that these innovations have had little impact on the traditional division of labour within health care in which medicine dominates.

However, my argument is that, overall, the 'reform' process in Australia has strengthened the power of the state, at both the Federal and State government levels, rather than the power of any group of health professionals. Health professionals have been acutely aware of these outcomes. Their responses to policy directives, benchmarks, incentive funding and innovation programs have arisen out of a genuine ethic of service and a pragmatic response to real budget cuts.

Thirdly, I examine the way in which each of the five innovations reinforced abstract time. I argue that the government's micro-economic cost-saving 'reforms' follow the logic of the capitalist treadmill in redetermining the working hour, so that the *cure* (benchmarks, best practice) generate further need to 'save time' and *becomes the disease*. Fourthly, I outline the various modes of resistance used by doctors and nurses against the processes of the New Public Management. I suggest that doctors have at their disposal a range of strategies from non-compliance to the tools of evidence-based medicine, while union action appears to have had little impact on improving the working conditions of junior medical staff. Nurses have little opportunity for individual non-compliance, with the exception of some male nurses. However nurses do use their collective strength through unionisation to ameliorate the redetermination of their working time.

In the final section of Chapter 10 I explore the alternative to abstract time. This is disposable time. Disposable time exists in the imagination of a post-capitalist economy and society. Such a society will not overcome the necessity to work, nor will it produce life-saving technology that overcomes the ravages of nature that attack the body. However it could transform relations to work and, as a consequence, the value of the workers' labouring hour.

The methodological approach

In Chapter 3 I outline the research approach taken in this study: document analysis and focused ethnography. The document analysis draws on selected Federal, State and in-hospital reports published between 1992-2002. Chapters 4 and 5 draw primarily on this data to illustrate the key aspects of EB, Medicare and casemix and the subsequent benchmarking established by the Commonwealth and South Australian government. The case studies in Chapters 6 to 9 draw on ethnographic fieldwork illustrating the impact of five innovations on the organisation of work on the two wards. However, what the ethnographer observes is not the totality of what occurs. There is a real difficulty in establishing a firm sequencing of events. In telling the story for the most part my account is linear, and restricted to one window in time in 1998, although I make comment on subsequent events up to 2003. The focus is also primarily on nursing. Aligning myself with a particular occupational group had implications for my own status and power, to what I was privy, and how I came to understand what was occurring on the wards. These issues are explored in Chapter 3 along with the limitations and possibilities for focused or rapid ethnography.

The methodological approach has also impacted on the breadth of this study. Ethnography allows the gathering of a vast amount of information to be put together to weave the story.

As a consequence this thesis takes a broad sweep, rather than a detailed analysis of the 'reform' process. It would have been possible to restrict this account to the use of Excelcare or to examine the way in which evidence-based medicine is employed by doctors and medical scientists to maintain control over the change processes. However the point of this study was not to investigate a specific technological, managerial or professional mode of control and resistance, but to illustrate the systematic and comprehensive way in which *time*, itself is used to control and shape the labour of health professionals, and in doing so to show how this is tightly organised at Federal, State and local hospital levels, through the imposition of policy, benchmarks and incentive funding. The depth of this study is in its analysis of *time*.

Why a thesis on time: factoring in the self?

Increasingly ethnographic accounts factor in the self. Researchers like myself do not stand outside the micro-world under investigation, but position ourselves as one of the actors, or at least admit to a morbid obsession with the topic. So why a thesis on time? Time is now the scarce resource and therefore the cause of many anxieties in our private and public lives. We are judged on our ability to manage time. When thinking about trusting a project to colleagues, 'time management' is one of the factors I look for. Ironically it appears to be a predictor of care and consideration, not just for the administrative aspects of the task, but also for the individuals involved.

My own interest in time comes from where I am placed in history. A recurring phrase from my secondary schooling comes from Shakespeare's Richard 2nd [Act v, scene: 3; line 372] (Craig 1995). Alone in prison lamenting his past, his remark, 'I wasted time and now doth time waste me', has stayed with me and become a moral injunction to use my time wisely. This phrase dove-tailed neatly with my religious socialisation where one of the mental exercises I learnt in the early years of my novitiate, that my mind still automatically slips into, is the mental prayer: 'Courage my soul, time passes, eternity approaches'. This prayer was said each time the clock chimed: in effect every fifteen minutes during the day from the first bell at 5am to lights out at 10pm. This was not a religious practice arising out of medieval monastic Christianity, but one devised at a time when clocks became routine and the newly established working class religious orders of the nineteenth century turned from contemplative prayer, to industrious and secular work. Since the religious day was no longer strictly structured by the eight hours of the Divine Office, the regular chimes of the clock were needed to turn the mind back to God during the busy distractions of the secular tasks of teaching and nursing.

My early professional training was as a primary school teacher where I learnt in the tradition of the suffering soul in Purgatory, to divide the daily timetable in detailed 30 minute segments of mathematics, English and social studies across the 40 weeks of the school year. Alas there was rarely time for art or sport. In later years as a part-time academic juggling marriage, children and work, like most middle-class women I agonised over the split between care and a professional career, became irritated at the exploitation built into part-time employment, and clung to the euphemism 'quality time with the children'. However the real crunch came in the early 1990s, with the merger of the university and college systems when I discovered that I had to fit research into what was already a packed timetable. It was not clear to me where to find the time, but it was clear that if I wanted to survive I needed to seriously consider this new direction. How was I to now understand my professional vocation as teacher? Students took me from the exercise of research and workload formulae made a mockery of the scholarly and carefully crafted lecture. Staff development programs encouraged effective use of time and, while not to be dismissed, such advice as '...always close your office door, visit colleagues rather than have them visit you so you can control the duration of the interaction, or teach smarter' really mean 'spend less time on these activities and shift your focus more firmly to the task, not the social relationship'.

Such injunctions are the practical results of budgetary cuts to the university sector and promote habits of mind and practices not to my liking. I had been trained to use my time well, but consider it rude to look at my watch while the another person faces me. Yet increasingly I notice it is a practice of 'power' signalling to the audience not the substance of what is being said, but the power of the speaker. Now too, I began to structure the conversation to ensure it ended when I wanted it to, to furtively glance at my watch, or walk down another corridor to avoid a time-consuming interaction. The structures and cultural expectations of success and failure in my workplace were creating a set of behaviours at odds with who I thought I was.

The changes occurring in my workplace arising out of the New Public Management were altering social relations and continue to do so. Resistance is defined as ineffective use of time or romantic nostalgia, yet thinking about innovative solutions to time scarcity is exciting (and self-defeating). Faced with these dilemmas it is not surprising that I am interested in how other workers manage these interactions, what compounds time scarcity for them and how they resist, both at the level of individual decision-making and collectively. I turn to explore a theory of time that helps explain for me what is happening in the world at work.

CHAPTER TWO

TIME IN HEALTH CARE: BODILY, GENDERED AND ABSTRACT WORKING TIME

If a friend could have seen Mr Ferraro that evening mounting the steps of Montagu Square, he would have been surprised at the way he had aged. It was almost as though he had assumed during the long afternoon those 36,892 days he had thought to have saved during the last three years from Purgatory....the worst was over: time lengthened again ahead of him. He thought: 'Tomorrow I will set about getting a really reliable secretary'.
Graham Greene (1942: 353-354).

Introduction: theories of time

The focus of this thesis is time, specifically the way in which time is used by politicians, bureaucrats and managers in their attempts to control the labour of health professionals in public hospitals in Australia. In this chapter I suggest that within the health care sector, time can be examined from three perspectives. The first is the natured/bodily mode of time, the second is a gendered/caring relationship to time, while the third is abstract time in work. A central argument of the thesis is that abstract time dominates these other modes of, or relations to, time, although it should not be assumed that there is no resistance to abstract time. I argue that resistance is sometimes organised, while at other times when it is exercised by individuals it finds expression in uncharacteristically gendered ways.

Time for sociology

Despite claims to the contrary, sociologists have been interested in time from the earliest days of the discipline (Bergmann 1992). The foundational questions of sociology examined the changing structures of social organisation over time: from the medieval to the industrial, the feudal to the capitalist and more recently from the modern to the failed promise of the utopian post-industrial and onto the terrifying endgame of the post-modern. The theoretical explorations of time itself have taken numerous directions, two important distinctions being 'modes of time' and 'relations to time'.

Modes of time include the biological or natured time of life forms; the time of thermodynamics and physics; as well as metaphysical, social, cultural and industrial times

(Adam 1990). These modes are presumed to radically differ, but also intersect. For example the cycles of the moon (physical time), derived from science, are reflected in the date set for Easter—a religious, cultural and social event. A more pertinent example is the obvious need for humans to integrate the demands of natured time with industrial time in order to overcome the ravages of pollution and environmental degradation.⁶ These obvious intersections have led some theorists to suggest that social scientists would gain from deepening their understanding of the nature of time through incorporating the physical, biological and behavioural with the social sciences (Adam 1990). In this chapter I explore the relationship between natured/bodily modes of time and the social mode of time that governs the organisation of hospital life. I argue that both these modes of time are synchronised in the interest of patient care, but that the increasing pre-occupation with abstract time threatens what is already a precarious balance.

The second approach to time within sociology deals with the way in which modes of time interact or their relational character. Here social theorists attempt to explore the way in which particular individuals, genders, civilisations, societies or cultures, use, understand and relate to time; and in turn, how this impacts on the type of people and societies that prevail (Bergmann 1992). A number of scholars have suggested a distinction between linear and cyclical time, with Western society characterised by a determined shift towards the linear, a result of industrialisation, secularisation and rationalisation (Thompson 1967; Dossey 1981; Whipp 1981; Thrift 1990; Bellaby 1992; Glennie & Thrift 1996). However this tendency towards linear conceptions of time pre-dates industrialisation and has its origins in the Judaeo-Christian myths of a 'continuous linear redemptive process' (Helman 1992: 37) which contrasts with the cyclical or fatalistic myths of other dominant world religions and cultures such as Buddhism and Hinduism.

Underpinning Judaeo-Christianity's contribution to Western culture is the idea of a linear progression reflected in concepts such as the Messiah or Second Coming and its secular versions: progress, evolution, development and continuous quality improvement. A linear

⁶ In this thesis I use the term natured/bodily time to refer to both the body and the natural environment, although for the most part the discussion is limited to the healing of the body. Natured time also includes the time taken for regeneration of natural resources. This aspect of time has been taken up by a number of theorists concerned with global time and the impact of industrial time on the environment. See Adam (1995) and the Tutzing Project (Adam 2002; Reisch 2001; Hofmeister 2002). This project explores the relationship between natured time and industrial production and consumption and various cultural relations of time. It takes seriously Adam's claim (1995) that there are multiple forms of time and it attempts to build a praxis between policy and the multiple relations of time. Adam's (1995) point is that the bodily rhythms are closely linked to the rhythms of nature so that there is a delicate thread connecting environmental well-being to bodily well-being. Held and Nutzinger (1998) present an argument similar to Beck's *Risk Society* (1992) thesis whereby the over use of natural resources such as wood and coal in the 18th and 19th centuries that allowed for industrial development are forms of time theft from future generations.

conception of time is more than a long continuous ribbon stretching across human history. It also assumes that with time comes *progress*. In this chapter I discuss gendered relationships to time drawing on two oppositional views; one that suggests that there is no clear binary distinction between male and female relations to time, the other, research-based view, showing that there are decidedly male and female uses of time (Bittman & Lovejoy 1993; Bittman & Wajcman (2000). In both cases the focus is on gendered ways of caring.

Incorporating understandings of natured/bodily modes of time into health care

The most obvious mode of time in health care is bodily time; the time of nature. This refers to the time taken for the body to heal, but also, following Adam (2002), it encompasses the mutual connections between bodily time and the time of the natural environment. It includes the speed, duration and intervals between bodily healing and environmental restoration and recovery. There is an assumption that natured and bodily time stands in opposition to culture and the rational social organisation of health care, and that doctors and nurses have limited opportunity or inclination to take account of natured or bodily time. However, the successful practice of medicine is contingent on the use of medical technologies that operate on the basis of biological, physical and metaphysical time. It is simplistic to suggest that these modes of time are always in opposition to the clock or the social organisation of time in the care of the sick. Nurses and doctors synchronise much of their work and the technology they use with the body's rhythm. They rely on routine tests that measure patient responses to drugs or surgery, or detect the rhythms of respiration, digestion, elimination, temperature, hormones, cells, and circadian cycles in order to pace treatment. These responses are natured 'benchmarks' for determining the efficacy of medical technology. Patients are told to take tablets on a daily or hourly basis, to reduce taking amitriptylines gradually over time, to return to the doctor six weeks post-operatively, or that their condition is serious and must be operated on immediately. These instructions are not simply rational responses to the management of large numbers of patients, they are also based on observations of the body's sickness and disease and the time it needs to restore health.

These two modes of time, natured/bodily time and the time governing the organisation and delivery of health care, interact to maximise health in very concrete ways. Part of what makes for skilful professional care is the ability to keep the technological interventions synchronised with the body in ways that do not cause undue distress. Nature may work without the intervention of the social and technological, but doctors and nurses know that they cannot effectively use medical technology without tapping into the rhythms of the patient's body.

Even interventions drawn directly from nature such as herbs or massage require a deep understanding of the body's time to maximise efficacy. This knowledge is not always the dominant mode of operation. It can become a point of resistance and inter-professional rivalry. For example midwives believe that healthy birthing ought to be independent of social and organisational time, such as the eight hour shift or the intervention of an epidural-induced birth. The move to independent midwifery, birthing centres and the struggle to normalise home births is evidence of this.

The symbiosis between the time of bodily healing and medical technology and science also finds expression in understandings of illness patterns. In their day-to-day work psychiatrists and psychologists advise patients to turn to bio-feedback and meditation as strategies for slowing down the quickening growth of cancerous cells, for pain control or for coping with the inevitability of a premature death. Conditions such as 'morning sickness' highlight the relationship between the body and the rhythms of the day, just as hayfever is seasonal, arthritis subject to temperature and air pressure variation, and psoriasis and depression to sunlight. Epidemiologists know that illness patterns are a reflection of the impact on nature of historically specific forms of industrialisation, technology, power or bureaucracy expressed through time-related epidemics. The most recent epidemic in Australia of repetitive strain injury (RSI) can be attributed to the introduction of computers. The symptoms of 'RSI' stand as a metaphor, as well as concrete pain, for reduced control over the mental as well as manual side of labour at a particular time in history (Willis 1986). Rates of heart disease reflect a pattern of class and power differentials, but are reputed to also be a personality response to social time (Helman 1992; Marmont 1998). Lead poisoning has a far more deleterious impact on children than adults, so that its negative impact dissipates with age (Maynard, Thomas, Simon, Phipps, Ward & Calder 2003).

The rhythms established in everyday life between work and rest, recreation and sleep may dispose workers to industrial accidents or health professionals to medication errors. For some patients, pain continues beyond the scientifically acceptable and rational time of the injury and changes its nomenclature from acute to chronic. Social policy in health care takes these various interactions into account, defining 'health promotion' and 'public health' as strategies for preventing or reducing catastrophic futures. The economics of health takes the seasons into account as evidenced in the increase in funding for winter influenza epidemics. Time is a fundamental modality in healing; the very concept of convalescence attests to this, just as the shift in recent years from 'convalescence' to 'rehabilitation' is indicative of the imperative of the welfare state to get workers better quicker (Beckingham 1995).

Likewise, entering into the sick role is more than a rationalised response by patients to the stigma of idleness and the need to allow medicine social control (Parsons 1951). It is also a time to legitimately excuse oneself from work, go to bed early, restore the body's circadian rhythms and bring it into equilibrium with the natural environment of sunlight, tides, winds and personal relationships. Similarly health professionals know that bodily manifestations of disease are not necessarily in synchronous time with waiting lists or emergency room delays and may alter their work routines to accommodate need—through overtime, weekend work and night duty (Zerubavel 1979). They know that bodily time is intensely personal, individualised, full of uncertainty and historically situated. Well-being is linked to age and life history, previous illnesses, emotional and social support, life-style and age. For health professionals 'time' provides opportunity for entering into the biological lives of patients and creating a relationship where the experienced and empathetic professional pre-empts the patient's pain, predicts the hour of death, or waits for the body to repair (Adam 1995).

Bodily time as dis-ease with clock time

Despite this recognition of the healing relationship between natured/bodily time and the social time of clocks, schedules and bureaucratic organisations, these two modes are sometimes seen to be in opposition and an underlying cause of dis-ease. Stress is seen to be a form of 'hurry sickness', a result of the imposition of the clock's socially disintegrative regime on the body (Helman 1992; Adam 1995). Many patients complain that the routines of the hospital day are organised around the timed demands of technical work, rather than synchronised with night and day, the need for rest, or the rhythms of the body (Adam 1995). Hospital routines are the subject of joking, with the last meal of the day delivered at a time closer to the hours of the nursery, while breakfast is late enough to avoid non-standard hours for kitchen staff. The classic study on hospital routines by Zerubavel (1979) notes these routines are functional to the smooth running of hospitals that are large bureaucracies; not necessarily to the comfort of patients.

The conflict between natured/bodily and social time occurs partly because natured/bodily time is assumed to operate with predictability. One assumption of medical science is that bodily time is linear, directional and variable and that the body can shift from a state of health to illness and then back again to its original state in response to surgical and medical intervention. While in many cases this is indeed what occurs, the body does so at its own pace and, over time, transforms. This is the cycle of decay and renewal. As the body ages, cells regenerate, but not necessarily within the standardised time-frame of the antibiotic or in tune with the pacing action of Heparin, nor necessarily for that matter, back to its original form. Time is not reversible in the body, but transforms the body through a process of

metamorphosis (Adam 1995). The body is the linear structure, time is the interactive agent. Medical researchers suggest that in some cases the transformation extends beyond the body to the personality and has consequences for the disease process (Sundin, Ohman, Palm & Strom 1995; Hayano, Kimura, Hosaka, Shabita, Fukunishi, Yamasaki, Mono & Maeda 1997; Karlber, Krakau, & Uden 1998).

Translating natured modes of time into relational time: personality and disease

One area where there has been considerable research on the relationship between bodily time, disease and personality is in the area of coronary heart disease. Coronary heart disease (CHD) is linked to a number of risk factors such as heredity, smoking, high cholesterol, obesity and high blood pressure. In 1959 Rosenman and Friedman, two cardiologists, suggested a further risk factor; that of personality behaviour. The behaviour was identified as Type A behaviour pattern (TABP) (Helman 1992:31). Rosenman and Friedman classified Type A individuals as highly competitive, craving recognition and advancement and engaging in numerous tasks performed at a fast pace and subject to deadlines (Helman 1992).

Type As are seen as people who wish to do too much in too little time. While there are minor variations in the definition of Type A behaviour, a consistent characteristic is pronounced impatience (Hemingway & Marmot 1999). For individuals with Type A personality, it is their relationship to time that is said to be the risk factor for their heart disease. Their infarction is attributed to conflict between their physiology and psychology and the social and cultural impositions of the clock. Their stress is about meeting deadlines, responding to timetables and appointments and the daily setting of schedules.⁷ For such individuals dealing with the dimensions of time—duration, sequencing, rhythm, deadlines and cycles—are matters of serious concern (Lee 1999: 18).

In his fascinating article on coronary heart disease (CHD), Cecil Helman (1992) linked Friedman and Rosenman's (1959) Type A behaviour to Hall's cultural construction of monochronic time. Monochronic time is linear time and should be viewed as a relation to time, rather than a form or mode of time. For the monochronic individual or culture, tasks are compartmentalised into shifts, hours, minutes, seconds, and appointments and schedules are

⁷ While the use of Type A and B behaviour patterns as a marker for personality traits is now seen as a 'heterogeneous hodgepodge.....without a conceptual base in psychological theory' (Denollet & Brutsaert 1997:4), I would argue that it is incorrect to say it is no longer used to examine risk factors for CHD, particularly by North American, Scandinavian and Japanese researchers. See for example the following research-based literature: Sundin, Ohman, Palm & Strom (1995); Ravaja, Kauppinen & Keltikangas-Jarvinen (2000); Richards, Hof & Alvarenga (2000).

taken seriously, independently of context. Bureaucracy and procedures take precedence over relationships. Monochronic individuals or cultures encourage disciplined organisation whereby time is mentally divided out across the day in detailed half-hour or fifteen-minute segments. When time is wasted or interrupted this is noted and bodily stress may be experienced. When time is well used, pleasure ensues.

Monochronic cultures are orientated towards the sequencing of tasks—one thing is done at a time—and a high value is placed on speed (duration and rhythm) and efficiency (temporal location, sequencing and meeting deadlines) including achieving more in less time. In Hall's view monochronic time is peculiar to Western societies and represents an attempt to impose order from the outside on the individually chaotic lives of humans (Helman 1992:37). Fast is best, even when it is not synchronised with the message or, in the case of health care, specifically heart disease, with the processes of prevention and healing. As Helman (1992) notes the very personality traits needed for success in Western society produce a relationship to time that is counter-productive to health and well-being.

However, while Western society is assumed to be characteristically monochronic, this is not uniform. Since monochronic time is intimately tied to bureaucracy, organisation and economic production, individuals such as women, the unemployed and elderly, often excluded from these, may be less subject to this imposed time order and engage in what Hall refers to as polychronic relations of time (Helman 1992:38). Polychronic time is cyclical rather than linear; it is not readily experienced as lost or wasted, but is multi-faceted. Individuals and cultures that engage in polychronic time perform multiple tasks with little apparent stress, revealing a *laissez faire* attitude to delayed gratification as well as exposing their social class position.⁸ This is because polychronic cultures value relationships, family and human interaction over schedules and organisational demands. From this perspective, while polychronic relations to time may not be conducive to bureaucracy, they may be more suitable in small organisations where relationships are pivotal, or in situations where complex problems must be solved (Lee 1999:17).

Helman (1992:46) argues that behind these characteristics are two moral typologies; the first dealing with values, the second with implications. Monochronic/Type As conjure up ideas of the modern, western, urban, fast, public and profane world of men and money (Helman

⁸ Considerable sociological research was conducted in the 1960s and 70s on the relationship between temporal approaches to the future, class, social mobility, children's school performance or delinquency and the quality of 'delayed gratification' (see Bergmann 1992 for an overview).

1992:47). Without them the world would be primitive and out of date. Unfortunately, the behaviour is reputedly a risk factor for disease. Conversely, non-Type A individuals are referred to as Type Bs. These people are devoid of ambition, competitiveness and a sense of urgency (Helman 1992:31). They are indifferent to time, friendly, relaxed and satisfied individuals who are patient, other-centred and family orientated. The cultural analogy is the polychronic. Polychronic cultures and behaviours are conducive to health. However, such behaviours and cultures imply a traditional, non-western, rural, slow, sacred, feminised private world in need of redemption to bring it into the modern world. This is not the world of innovation and sophisticated medical technology that saves lives; nor is it the world of efficiency and increased productivity in the workplace.

Gendered relations of time use in the labour process

Debates on gendered relations to time use in the public or domestic arena oscillate between those who suggest they are fluid (Hearn 1987; Hearn 1992; Odih 1999; Everingham 2002) and those who see them as still fixed (Bittman & Lovejoy 1993; Bittman & Wajcman (2000). In both cases gendered relations to time are seen as responses to power. Odih's exploration is a useful starting point for asking whether or not time use is gendered because she asks a key question about the relationship between gendered work, women, power and efficiency when she writes of the universal working woman, 'why does providing more attention to ...patients encourage disarray?... and 'mess'....and why is she not attracted to pursuing the career-enhancing efficiency practices of her colleagues' (1999:10)?

Odih presents this dilemma by first stating that work time is neither male nor female, but should be understood as embodied, feminised and relational; or abstract, linear, masculinised and rationalised. Relational time is an experience of time that is contextualised and social rather than internal and individuated. In relational and embodied time individuals may subordinate themselves to the 'other'. However, this should not be understood to be simply women's time or the time of the powerless, but rather the time of those caught up in the feminised discourses of embodied social relations (Odih 1999:21). This relational time is not the exclusive domain of women, but rather a reflection of the power and interpersonal relationships of both sexes. Both men and women engage in masculine or feminine modes of time. This is possible since gender identity is not fixed, but a fluid reflection of social practices, historical circumstances and organisational arrangements (Odih 1999).

As a consequence, the intersection of gender, power and time use is best examined through its practice. It has many directions and points of resistance. Individuals do not solely relate

according to one or other mode of time (monochronic/masculinised or polychronic/feminised), but position themselves according to commonsense ways of being male or female, professionally caring and/or ambitious in the production of their work at a particular time in history. Since commonsense discourses of male and female, and of what is a professional and how to be ambitious are socially constructed, these too are subject to change over time, as well as to complex interpretations. As a consequence, both gender and professional identity are unstable categories within the individual and in their public manifestations, and so too is what constitutes success. They change for both men and women.

Not all professional men engage in rational, instrumental and linear forms of time, devoid of intimacy and wonderment, where the present is trivialised and all action is calculated towards future gain. Not all women passively subordinate themselves to the care of others either in the domestic or public domain (Odih 1999:16), although they may do this for some of their time. This leads to the question of whether or not men who engage in relational time are powerless or their female counterparts powerful? In this thesis the answer is both. It depends on the social and historical context and the way in which the individual chooses to be at that particular time. In Chapters 6 and 9 I apply these ideas to my observations of male nurses and argue that the seemingly feminised or polychronic relations to time practised by some men do not always lead to 'disarray and a lack of career-enhancing efficiencies', but can be an exercise in power, both as a form of resistance and as a career-enhancing strategy.

Despite the argument presented above, the tendency is for men to more often engage in practices of masculinist, linear time, while women more often engage in feminised, relational time (Odih 1999). This is obviously a result of where men and women are placed in the public world of work and the economic value given to working time. Since women's work more often straddles both the private and public domains, decisions about their own time use become subordinate to men whose time is spent primarily in the public sphere; and, since women more often engage in service occupations, there are more opportunities for exercising relational time. Added to this, there is a tendency for organisations to reward what is commonly understood to be patriarchal forms of organisation and time use, even when it is relational work. This is particularly so in those activities controlled by the state such as health, education and welfare, where professional practice requires both a messy relational use of time, as well as efficient instrumental practice in the care and nurturance of the sick and elderly, and in the education of children.

This relational work follows a narrow definition when it is done by women in the privacy of the home, but a broader definition when it comes under the control of the state and, as I suggest above, is often done by men. Activities once the domain of women within the family

are now under state control. This control is exercised through the professions of medicine and law with the detailed but controlled emotional labour done by the semi-professions of social work, teaching and nursing. The split in time use in the public domain of work is hence not only gendered, but also one of professional status and power between the professions and semi-professions (Hearn 1992). For both men and women the value accorded to relational time use depends on their professional status as well as their gender. The time of the compassionate male doctor has more social meaning to the patient than that of the caring female personal care attendant, although she spends more time with the patient.

In this thesis I also argue that gendered time use in health care is dependent on the nature of the disease or the casemix. As I indicate above cardiac disease is said to arise partly out of linear modes and monochronic relations to time, but so too does the response demanded of health professionals who care for cardiac patients, whether these nurses and doctors be male or female. This is not necessarily the case for respiratory patients whose death is a long drawn out event of oxygen starvation, requiring a health professional with exquisite patience. This is not to suggest that relational modes of time use now universally prevail, or that male health professionals act like women, or for that matter that institutions no longer reward what is commonly understood to be patriarchal forms of organisation and time use. Rather, I suggest some forms of relational work have been taken up by male nurses and that this work can be seen as an exercise in power and resistance. However male nurses must be careful to practise this relational work in the right context. In the acute hospital sector efficiency and speed primarily govern working time, but in some instances other relations to time are valued. Disease, gender and time intersect. Understanding and responding to the difference is an act of astuteness and power as well as an act of care.

Time use and gender: the empirical evidence

Despite the claim to fluid expressions of masculinised and feminised behaviour, and the blurring of the boundaries between what might be defined as men and women's time use, other researchers present empirical evidence to suggest time use is still one of clear binary opposites of inequality. This is particularly so in relation to work and the use of discretionary time (Bittman & Lovejoy 1993; Baxter & Bittman 1995; Bittman & Pixley 1997; Dempsey 1997; Sullivan 1997; Bittman & Wajcman 2000; Everingham 2002; Baxter 2002). Much of this research focuses on the domestic arena where gender equity is presumed to have brought about shifts in the division of labour as a result of the feminist movement, the increased participation of women in the workforce and men's own concern for equality.

Indeed the various Australian studies by Bittman (1991); Bittman & Lovejoy (1993); Bittman & Pixley (1997); Dempsey (1997); Bittman & Wajcman (2000) and Baxter (2002) on household labour suggest that there was considerable movement between the sexes up until the late 1980s, with men taking up a larger share of domestic work and childcare. However there appears to have been little significant change in the gendered division of labour since the late 1980s. What these researchers report is that men's engagement has remained relatively stable, while women have reduced their engagement in domestic labour in line with their increased involvement in paid work (Baxter 2002). Further, Bittman & Lovejoy (1993) suggest that while there is considerable agreement amongst men and women about sharing this work at the ideological level, serious gaps still exist in practice. Men reputedly have increased their contribution to some aspects of childcare, such as playing with children, but not to the more mundane tasks of washing the dishes and the infamous cleaning of dirty toilets (Bittman & Lovejoy 1993; Baxter 2002; Pocock 2003).

A clear hierarchical split exists between time for domestic tasks and time for emotional work. In analysing these results, researchers argue that it is now acceptable for men to admit to doing the dishes or to playing with the children. Despite this, men by their own admission spend less time on household tasks than their female partners. Explanations for this include different standards and expectations. Women are too fussy or men trivialise and discount the importance women give to housework. Bittman & Lovejoy (1993) and Dempsey (1997) also point to the practice of mutual participation in this contradiction. Both sexes inflate the male's contribution and deflate the female's, possibly out of a belief that the relationship would not sustain the truth.

There are several points to be made from this research relevant to the arguments presented in this thesis. The first is the ideological shift that allows men to admit to performing domestic labour. I argue that this is significant for male nurses, although it has not led to an increase in the numbers of men in the profession. Nor should it be accepted at face value or assumed that male nurses perform domestic work in the same way as female nurses do. The observations of feminist scholars, critical of Bittman's Time Use Survey method, reveal differences between men's and women's approaches to domestic tasks, even when they do the task together or spend exactly the same time on it (Sullivan 1997). Sullivan shows in her replication studies of the Time Use method that women are more likely to act as the manager, to engage in the task with more intensity and to experience task fragmentation.

The second finding emerging from Bittman & Lovejoy's (1993) research is that men have increased their engagement in childcare, choosing to play with children over housework. In Chapter 9 I use this finding to suggest that changes in time use in the domestic domain may

help explain shifts in how some male nurses are organising their own labour on the wards. Further, the way men inflate their contribution, while women deflate theirs, may shed light on the way male nurses construct their contribution to patient care and how female nurses collude in this definition of the situation. That female nurses allow this to continue may well be the result of a reduction in their own quota of domestic labour, as this work has been siphoned off as 'non-nursing duties' and allocated to the newly created personal service attendants (PSAs), or handed back to the patient.

As a final point, Bittman & Wajcman's (2000) cross-national study on leisure time indicates a convergence in time use between the sexes for both work and leisure, but considerable differences in the structure of leisure time.⁹ Using Australian Time Use Diaries Bittman & Wajcman show that where women and men have similar amounts of time for leisure, the woman is more likely to combine leisure with child minding. Bittman & Wajcman refer to this practice as 'contaminated time'. Many mothers might refer to it as 'quality time' with the children, or family leisure time, assuming that all that is needed is to appear unhurried in order to make claims to 'quality time'. Others might suggest that this is simply an exercise in polychronic time whereby activities are performed with one eye on relationships, the other on the tasks at hand, and that Bittman & Wajcman's view of time use is distinctly male and monochronic in its analysis.

The ability of women to juggle this 'contaminated' time suggests the possibility of combining oppositional modes of, or relations to, time. Within health care the parallel question is to ask if caring nurses and doctors can orchestrate organisational work time with the time necessary for bodies to heal. Within the domestic sphere, feminist scholars suggest there is a limit to aligning the time of the biological needs of infants and children with the time of the workplace (Everingham 2002). In the case studies outlined in this thesis one issue for consideration is whether health professionals can engage in humanising caring time within the context of rationalised clock time, directed towards increased productivity and efficiency. This time of productivity and efficiency is abstract time.

⁹ This research calls into question the popular phrase *double shift* and *double burden* which assumes that in entering into paid work women have not altered the time spent on domestic labour. Bittman and Wajcman (2000) show that women have reduced the time spent on domestic work and the double shift should not be taken literally. The important question is: how has this been achieved? Some answers can be found in part-time paid work, not going for promotion and in combining leisure time with childcare.

Abstract time and domination: the treadmill of innovation

In outlining a theory of abstract time I have drawn firstly on a re-reading of Marx's theory of time in capitalism as interpreted by Moishe Postone (1996)¹⁰ and secondly, I posit a cultural interpretation of time found in the Catholic invention of Purgatory and in the Protestant ethic. Embedded in these cultural and religious innovations are the mental practices of calculation, measurement and a leached out economic rationalisation of time, enthusiastically taken-up in our own time by bureaucrats and managers in the welfare state under the rubric of equity and quality. In focusing on abstract time I am not engaging in a narrow social science, but arguing that other relations to, and modes of, time, such as natured/bodily and gendered/caring time are for the most part dominated by abstract time. The service work of health professionals does demand consideration of caring and bodily time, but expressions of these relations are increasingly subsumed under abstract time within welfare capitalism.

Disposable, concrete and abstract time in labour

Postone (1996) admits to three modes of time; disposable, concrete and abstract time; all other typologies of time—be they polychronic/monochronic, sacred/profane, cyclical/linear—are merely sub-sets of concrete time. Postone quoting Marx defines disposable time as a hypothetical construct that allows 'room for the development of the individual's full productive forces' and that of the society they live in ([Marx 1973:108] in Postone 1996:376). However, the reality is that under the present capitalist relations of power all time is reduced to either concrete or abstract. Concrete time is dependent on real events such as the time it took the medieval Benedictine monks to chant the eight hours of the Divine Office or factory workers to build a car. Concrete time can be sacred, profane, personal, social, cultural, natured, disciplined or metaphysical. Concrete time includes the time of sacred history such as the time governing the unfolding of events between Genesis and Revelations. Sacred time,

¹⁰ Postone's critique is an interpretation of Marxism beyond socialism. His fundamental argument is that Marxists have focused on class domination, class struggle and private property as the essential defining factors of capitalism. Postone posits the elements of the production process itself as the essential defining category of capitalism, or its deep structure exposed by Marx particularly in *Grundrisse* and Volume 1 of *Capital*. Postone suggests that in his later works, particularly *Grundrisse*, Marx was not concerned to examine capitalism as a transhistorical outcome of class struggle and private property, but was primarily concerned with capitalism as a system with a specific relationship to labour. The problem of alienation is not class, but the relations of production in which 'value' is the form of wealth and it is produced through abstract labour time. Hence Postone's repeated phrase that Marx wished to focus on *labour in capitalism, rather than capitalism from the standpoint of labour*. Critics have suggested that as a consequence Postone dismisses the proletariat and their significance to the overcoming of capitalist social relations (Arthur 1994; Fracchia 1995). A more accurate rendering of his argument is that he does not see class conflict as the main point Marx wished to explore, but rather the nature of work/labour, wealth and time under capitalism. Genuine socialism is the overcoming of surplus value within labour (use, exchange and labour time) (Jay 1993:182). For purposes of the argument offered here, I focus on Postone's discussion of abstract time, not on his fundamental reinterpretation of Marx.

whatever the tradition, is similar in its nature to the time taken to do secular tasks such as hunt, type a thesis or play a concerto (Postone 1996).

Abstract time differs from concrete time in that it is 'uniform, continuous, homogeneous, 'empty' time, ...independent of events' (Postone 1996:202). It exists independently of any unit of account or external measure and can be divided into 'equal, non-qualitative and constant components' (Postone 1996: 202) that can be cut up, controlled and edited (Adam 1995). It is independent of contingency. Translated to the world of work, abstract time becomes the time demanded by capitalism that *must* be given over to work in order to achieve the full value of one's labour. Abstract time is what the employer buys from the employee. It is not the actual number of concrete minutes or days really needed to plant crops in the fields or the necessary time required to care for an elderly patient on oxygen, trying to gasp out his or her symptoms, but the time allocated to the worker to do these tasks.

The contradiction within abstract time is that while it is assumed to be standard and invariable, mathematically precise and a true measure of the time allocated to perform a task, it is both an independent and dependent variable in the process of becoming denser or intensified. It both changes and is static, as its social meaning is redetermined. Not every hour is an hour of socially necessary labour producing the same amount of value. As time is redetermined, the abstract hour alters its concrete capacity to produce value. As production increases, the value of the abstract hour decreases. It is this that is the degradation of the labour process. An hour is a constant measure of time in labour, yet when the labourer increases his or her productivity the value of their labour decreases. As the surplus value of the work increases, the value of the abstract hour decreases and is redetermined once again as concrete. This continuous movement of time from concrete—abstract—concrete is the movement of the treadmill across what is understood as historical time (Postone 1996: 293-303).

The treadmill dialectic of time and value in capitalism

The metaphor of the treadmill depicts this imperative in capitalism, not just of continuous consumption, but the continuous production of surplus value, which is always a relative value that decreases under the guise of efficiency: a euphemistic term that favours speed over quality (Adam 1995). Marx himself provides the example of the treadmill effect of capital in the case study of the English hand-loom weavers, when he wrote:

The introduction of power-looms into England, for example, probably reduced by one half the labour required to convert a given quality of yarn into a woven fabric. In order to do

this, the English hand-loom weaver in fact needed the same amount of labour-time as before; but the product of his individual hour of labour now only represented half an hour of social labour, and consequently fell to one half its former value (Marx 1976:129).

The level of workers' productivity increases along with capitalist's wealth, but the value of the hour spent producing the goods or service does not (Postone 1996:288). Time itself is redetermined and takes on a new standard that is lower than its previous value.

The logic of the redetermination of the hour

To understand this contradiction requires making a distinction between material wealth and value as the basis of capital. Material wealth is concrete and can be made so through the production of a car or the purchase of a piece of medical equipment that enables an increased throughput of patients in a medical practice. Material wealth is created by concrete labour, using science and technology to transform nature in concrete time. If production increases, material wealth also increases. If production decreases, material wealth likewise decreases. Increases in material wealth are not totally dependent on the labour time expended in production; the social organisation and technology are also important. However, concrete time is important in the production of material wealth; clearly to produce goods for use and exchange requires time. In this arrangement items are produced, bought and consumed, reflecting the 'social character of labor as productive activity' (Postone 1996:195).

Capital on the other hand has the form of both money and value. Capital exists when it becomes a means to an end, when it works to increase itself in ceaseless repetition as a 'category of movement, of expansion;... a dynamic category,...of 'value in motion' (Postone 1996:269). 'Where value is the form of wealth, the goal of production is surplus value (Postone 1996:308). Commodities are constructed and determined through their 'use value' and 'exchange value', which might co-exist, but are distinct. The 'exchange value' is the price the commodity will bring on the market for the purchaser interested in its 'use value'; the surplus value is the difference between the cost of production and the exchange value. The measure of the exchange value of a commodity, its capital value, is the socially necessary or abstract time taken to produce it. The socially necessary labour time expended on the production of a commodity is itself a commodity or what is being exchanged as value. The socially necessary labour time, is determined not by the concrete time actually required to produce the commodity, but by the inner logic of the capitalist treadmill and its abstract form of domination—abstract time.

According to Postone (1996:199) the key to grasping the centrality of abstract time in capitalist labour processes and in the production of surplus value, is to see that the essential mode of production is not a dialectic between the forces and relations of production, but is a contradiction between value and material wealth. Value (in capital), is produced through labour that is both concrete (a real skill) and abstract (the source of value measured through abstract labour time). Exchange value (producing the surplus value) is a form of wealth that is only determined through abstract labour time, but this value is only maintained for a time. It becomes necessary to constantly increase this value: to create a surplus through endless production and an endless redetermination of the socially necessary labour time. Since the primary goal of capitalism is the eternal production of surplus, this can only be achieved through increases in production, or a reduction in the cost, through efficiency measures usually understood as labour costs, or a reduction in the necessary labour time; ie—time is money.

Production, capitalism and the redetermination of the hour

Production can be understood firstly in terms of the labour process whereby material wealth is created through the transformation of raw materials, and secondly as the process of creating surplus value (valorisation). According to Postone (1996) Marx outlined the major historical forms of production in capitalism as occurring in manufacturing and large scale industrialisation; the former bringing about a detailed division of labour, the latter automation (Marx 1976). Both introduced forms of collective and cooperative labour that allowed for increases in production based on new forms of management, science and technology. Both are social in that they are collective and cooperative, but also in the fact that they are greater than the sum of their parts. This fact should point to a reduction in the necessary labour time, yet does not; and to the argument that workers should be paid for their collective and cooperative effort, yet they are not—they are paid as individuals, as if the free gift of labour created through cooperation and coordination did not exist (Postone 1996).

It is easy to see here how abolition of private property, or the collective ownership of the means of production is assumed to correct this. However the issue is not the misappropriation of collective labour, but the way in which it is produced through changes to the labour process under manufacturing and automation. It is through the technology of manufacturing that subordination is achieved because the technology is able to transform the social relations between worker, technology, skill and owner. This was a point explored in some depth by Marx and later elaborated by Braverman (1974). Both argued that technology allowed the owner to set the speed of the dial, define the quota, and the pay, or replace highly skilled with less expensive workers, based on the fact that the technology is able to break the production

process down into multiple, less complex tasks. What defines capitalism is not simply that some own the means of production and others do not, but that the very mode of production is increasingly specialised, fragmented, controlled and bureaucratised by the employer, who has bought the worker's labour time in order to maximise the value of labour power in concrete and abstract time (Postone 1996:327-333).

The production and expropriation of value is the cornerstone of domination. Domination of people under capitalism is not first and foremost about one class of people directly dominating another class, but is about domination of people by abstract social structures and abstract time managed by a particular class (Postone 1996). This domination arises out of the fact that in the process of working, it is not that individuals exchange their labour time for goods, over a period of an hour or week, but that their very labour constitutes value determined through abstracted time; time whose value is constantly redetermined back to a lower value.

Likewise historical time is not a sequence of events that occurs over time, but the continuous transformation of 'time' itself. Time shifts from concrete to abstract and back again to concrete. Historical time gives an account of the subject, which in this case is capital, not individuals. For Marx, the history of *capital* is an account of changes in productivity, in the nature of work, in the labour process, and changes in those aspects of social life such as family relationships, values and leisure assumed to be outside labour, but determined by the needs of capital (Postone 1996:294). As a consequence of this process, the history of capitalist society is not linear or cyclical, but paradoxical. A linear history would have achieved a post-industrial society where firstly industrial technology and then automation would have eradicated the need for much human labour and produced 'disposable' time.

The historical origins of abstract time over concrete time

One possible explanation for the development of an abstract, mathematical, standardised approach to time is technology. However Postone (1996: 206-212) provides a rebuff to the various accounts that see the shift from concrete to abstract time as simply a reflection of technology, or for that matter the need for disciplined work regimes. Drawing directly on the writings of Le Goff (1980) to identify the necessary pre-conditions, Postone argues that the shift is best understood as arising out of commodity forms of production and social relations achieved through the clock. While time in medieval Europe and Asia was variable, it would be incorrect to say that work was not disciplined and measured especially in that major site of production, the monasteries. Most followed the Benedictine 6th century rule of dividing the

day according to the eight hours of the Divine Office. This division into roughly three hour standardised blocks of time, divided by non-standardised prayer cycles, provided a socially organised framework for work, prayer, eating, sleeping and recreation for highly productive religious orders (Postone 1996: 209).

Time under medieval monasticism had a measure of standardisation and was certainly disciplined, but it was not abstract. The value of the working hour remained constant. The historical venue responsible for hastening the development of practical standardised and invariable time was that other site of medieval production: the warehouses of the merchant urban bourgeoisie, specifically those engaged in the textile industry. According to Le Goff, (1980) the textile industry was not limited to producing for local markets. Master weavers and dyers acted as middlemen to merchants receiving both raw materials and money to be paid to waged workers. Built into this work were the time-related costs and risks of transporting it to distant places. Initially the working day for these waged workers was determined by sunrise and sunset, then by the ringing of bells at regular times and eventually by standardised 'clocks' announcing the start of the work day or breaks for meals. The shift in relations to time was precipitated by an economic crisis in the 14th century (the plague being one contributor to a shortage of labour), which resulted in conflicts over the length of the working day and demands by the workers themselves for a standardised day with uniform units of measurement.

The length of the working day is not an issue when it is determined naturally, even though seasonal variations make for differences over the year. However, once the day becomes standardised, and the duration of periods of work measured, conflict ensues. It is this conflict that indicates that time is now a social (and political and economic) construction, if only for a small, but significant group engaged in manufacturing. Time and productivity are now intimately linked and eventually became the norm for this new form of work, particularly so in the late 18th and early 19th centuries when technology allowed further intrusions into the labourer's hour.

The role of technology in supporting abstract time

As discussed above technology plays a key role in capitalist domination and should not be viewed as neutral (Postone 1996) or part of the process of saving time. It is the very design, cost and need to manage technology that brings about the constant demise of standard working hours and allows for a heightened division of labour. In order to maximise its cost, workers must accommodate to its constant rhythm by working night and day, or

accommodate to its complexity by dividing the tasks among themselves, or between worker and machine. What has emerged is a technology and scientific management that both creates material wealth and reduces the need for human labour and skill, yet simultaneously requires human labour time in order to produce surplus value—‘the expenditure of direct labour time remains central and indispensable to capitalism, despite being rendered anachronistic by the development of capitalism’ (Postone 1996:34). This is because the measure of wealth in capitalism is value. It is only in overcoming value as the commodity form that capitalism could be overthrown. It is not overcome by new time-saving technology.

Further to this access to technology is determined through occupation and professional power. The use of, and control over technology afforded to doctors differs from that of nurses or a ward clerk, just as the abstract time and labour of the doctor has greater value than that of the nurse or the personal service attendant. The measure of the value accorded to the labour of these individuals is a reflection of the arbitrary social value given to the commodity (cure and care) they produce. Yet despite these differences all workers, no matter their status or power, are subject to the constant redetermination of the value of their labour time.

Abstract time and contemporary contradictions in worker resistance

The history of the labour movement in industrial capitalist societies reveals that workers’ resistance to the continued abstracting of time has not overcome this form of exploitation. Struggles by organised labour to bring the working day down to a standard 10 or 8 hours, or to reduce work intensification, have failed to grasp the consequences of the treadmill effect. In the past, where organised labour was able to reduce the hours spent at work, the value of what was produced had to be maintained. As a consequence the intensity of labour needed to accelerate to meet the target. This was achieved through either improved technology, scientific management or increased work intensity. The usual argument proffered for shorter working hours was that workers had more energy to reach the targets where the working week allowed for leisure time (Nyland 1986). Underlying this argument is a tacit acceptance of the redetermination of the productive value of the 10 and 8 hour day. This is not the disposable time Marx hoped for, but continued domination.

Defining disposable time

In Marx’s analysis many societies prior to capitalism required necessary and surplus production; necessary production to re-produce the working class, and surplus production to maintain the non-labouring class. Marx’ objections to capitalist modes of production is not

this social division of labour or its production of material wealth. In pre-capitalist societies the labourer used necessary labour time and surplus time in production. However, under capitalism where the measure of wealth is 'value', the labourer must expend necessary, surplus and superfluous labour time. Superfluous labour time is abstract time and emerges when the time allocated to production bears no resemblance to the time needed for material production; its end point is the production of value. The revolutionary movement is to overthrow value as the source of wealth and replace it with material wealth. In such a situation the end point of improvements in technology and human knowledge would produce disposable time. Disposable time is for developing one's individual and social capacity for production and creative engagement in the world; it is not leisure time, which is time away from labour and defined as time out from alienated work time (Postone 1996:374).

A cultural history of abstract time

What is not explained in the above account of Postone's (1996) re-interpretation of Marx are the cultural transformations that both preceded and accompanied the repetitious treadmill of time that moves from abstract to concrete to abstract again, or how cultural factors might shed light on the contradictions in the organisation of labour which appear progressive in some respects, but in reality condemn workers to an ever faster pace. Postone (1996) makes reference to a set of transformations that occurred in historical time that contributed to the production of disciplined time-conscious workers. His suggestion is that these cultural changes resulted in the inevitability of capitalism. My own view is that there was an 'elective affinity' between particular cultural ideas and the structural necessity of capitalist modes of production, and that this affinity was conducive to the transformation of working time from concrete into abstract time.¹¹ Two of these historically situated ideas are: the medieval invention of Purgatory and the Protestant ethic. These two innovations created the necessary psychological and cultural backdrop for the transformation of the individual's relationship to time. In this thesis I argue that these ideas, now secular, find expression in the discourses currently governing public sector reform and the further intensification of the disciplined worker.

¹¹ See Max Weber (1967) for a discussion on the elective affinity between shifts in the superstructure accompanying changes in the infrastructure.

One common assumption in the sociology of work is that the disciplined relationship to time and work in Western societies has its origins in the elective affinity between capitalism, industrialisation and the culture of Protestantism first outlined by Weber. However the groundwork for capitalist modes of abstract time was well on the way to being established before the Protestant Reformation and later industrialisation. One example is in the medieval consolidation of the Roman Catholic doctrine of Purgatory. This idea has been explored by the historian Le Goff (1984) who suggests that with the increasing use of money in the late middle ages and the early industrial period, Purgatory was 'invented'¹² by the medieval Church as a way of getting around the problem of usury and other commercial activities such as trade.

While the official Church was redoubling its condemnation of usury at the Second, Third and Fourth Lateran Councils in 1139, 1179 and 1215, popular and mass exemplars and sermons on Purgatory, such as the story of the Usurer of Liege, abounded. In this story, the usurer's wife spends two seven-year periods praying for the release of his soul, before she is rewarded with a vision of his ascent to paradise. The intriguing shift in this story is that the Usurer of Liege was in Purgatory, not hell, for '...the usurer, of all merchants, is the most damnable because he buys nothing, and sells time, which belongs to God' (De Roover 1967:95).

The shift from total damnation to a time of punishment that could be 'bought off' via prayers, masses and good works suggests that occupational groups once stigmatised by their work, such as usurers, traders and butchers, could be saved. The fact that this required hard and sustained work over long periods by the relatives left behind, or the allocation of money by the living for the purchase of masses and indulgences, did not deter those prepared to take the risk. Risky work was now worth the trouble given the insurance provided through the invention of Purgatory. It was a clever innovation that allowed the Catholic population to engage in profitable activities previously the domain of Jews and other stigmatised groups.

This shift was a necessary pre-condition for the capitalist capacity to make money simply for its own sake, and to do this through the exploitation of one's brother (or sister) through the creation of surplus value. Before the invention of Purgatory, the medieval pre-occupation with the *hereafter* and the concept of brother- and sisterhood had prevented the development of

¹² Purgatory was 'invented' well before the twelfth century. For example St Augustine in 5th century makes mention of it. Le Goff's argument is to point to the increasing significance and popularity of Purgatory in the Roman Catholic Church particularly amongst the masses at this time. The argument is similar to that offered by Weber on the Protestant Ethic. It is not that Purgatory was invented by the merchant class, but rather an idea that already existed was modified and made more popular because it was functional.

both material accumulation and the psychological pre-conditions necessary for the development of capitalism.¹³ Prior to Purgatory, the ideal for many wealthy merchants was to spend their last years in monasteries responding to the biblical call to sell all they had and give to the poor; or, if this was too high an ideal, to give much of it to charity. The invention of Purgatory enables the money to be conserved within the family, with only some put aside for prayers, masses and that ultimate spiritual commodity, indulgences. Restitution for sins of usury and other tainted occupations could now be done *post mortem*, legally through the Will, via a process analogous to accounting and in a time and a space called Purgatory (Le Goff 1991: 187). Le Goff is not suggesting that Purgatory 'caused' the invention of accounting, but that a set of ideas permeated medieval Europe that found expression both in the invention of accounting and Purgatory.¹⁴

The invention of Purgatory was also an act of colonisation. It allowed the medieval church to extend its control into eternity for the duration of the soul's time there as well as reinforcing control this side of death (Le Goff 1984), for the dead are now in the same time zone as the living (Fenn 1995:58). If we take Kitch's (1967) argument that part of the problem with the emerging middle/merchant class was that they did not fit neatly into the feudal hierarchy, yet their activities were seen as socially necessary, then Purgatory provides the compromise. The activities of the merchant class remain suspect and ambiguous in terms of Church law but Purgatory provides an antidote to the sin of time/usury. At the same time it brings the merchant class more tightly under Church control while opening the way for capitalism.

Inventing rituals to deal with death is not peculiar to medieval Christianity. Most cultures have sets of beliefs and rituals to deal with the emotional attachment to the past (those who have died before us) and the future (our own impending death). What singles Purgatory out from other solutions is that it made this life continuous with the next, by suggesting it ran on a similar timetable. As a set of cultural/religious ideas, the innovation of Purgatory was a pragmatic response that allowed individuals to pay off old debts and to create a personal timetable and schedule for doing so that went past the deadline of their own death. It enabled

¹³ Le Goff (1991) argues that two opposing ideas were current during the medieval period; the first was the imminent coming of the Antichrist indicating the end of the world, the second was the social movement of millenarianism heralding a new world order where democracy would prevail.

¹⁴ De Roover (1967: 77) dates the invention of double entry bookkeeping to around 1300 in either Florence or Genoa and notes that it was *in response to the needs of a nascent capitalism*. He suggests that it did not take hold in other parts of Europe until the invention of the printing press, which of course coincides with the Reformation.

the faithful to play now and pay later, but within a framework of heightened time consciousness, planning and accounting. The detachment from community and tradition that has been assumed to have its origins in Protestantism is first found in Purgatory. Purgatory was a neat antidote to the cultural forces hampering the early development of capitalism.

Dante and the purgatorial complex

Using psychoanalytic language, Fenn's (1995) analysis of the consequence of the invention of Purgatory goes beyond the suggestion that it offered hope of salvation for those engaged in commercial ventures, such as usury or trade, to suggesting that it sowed the seed for what he refers to as a *purgatorial complex*. This is a particular relationship to time, characterised by anxiety, an exquisite emotion centered on the future, and a set of practices taken up in the hope of reducing anxiety. Fenn supports his thesis by drawing firstly on Dante's *Divine Comedy* as the first systematic secular account of Purgatory in the late medieval period.¹⁵ Dante presents Purgatory in secular time as a place (he sleeps there) where souls linger between their death and their final departure (into paradise or the Last Judgement). It is also the time of preparation for the final audit or performance appraisal when the soul is called to account for wasting opportunities and mismanaging time.

Each punishment in Dante's Purgatory is a mirror opposite of one's life on earth, an inversion built on incessant repetition as the flames burn away the dross of the false self. Dante's imaginary characters 'do time' for failing to make the most of their time. Sin is the taint of time, or *time's deep stain* (Dante 1961: 121; Canto xi, line 35) where what went before dominates the present (Fenn 1995:59). For example the antechambers of Purgatory are filled with people who missed appointments, and the various mountains are layered with proud souls now kept waiting. Le Goff (1991:327) reminds us that the medieval Church condemned novelty and innovation; 'repetition was the expression, in the intellectual and spiritual life, of the desire to abolish time and change' and was used to maintain the status quo while avoiding the inevitable inertia of non-action. The soul's punishing journey through Purgatory is extended until the compulsive desire to repeat previous sins is expunged (Fenn 1995:62). Dante's imagery of Purgatory is of the neurotic personality repeating itself. The suffering of Purgatory is the soul incessantly picking over old mistakes until the past is behind it, the

¹⁵ Richard Fenn in *The Persistence of Purgatory*, traces the development of the *purgatorial complex* from its medieval invention through to its transference into Protestant thinking through the writings of Baxter, John Locke and Canning and on into the North American psyche.

memory of lost opportunities forgotten, and the old self burnt away (Fenn 1995). This is not yet the treadmill, but the ingredients of an 'eternal foreground' of abstract time are present.

The paradox here is that the innovation of Purgatory offered the possibility for making up for lost opportunity and time, in order to enter the future with a clean slate. It provided time for achieving this, but in doing so it created within the soul a tyranny around time, calculation, accounting and uncertainty. The deadline for the final judgement or performance appraisal was moved, yet what lay behind it was intolerable; Purgatory was a place of excruciating tortures outlined in detail by Dante. Part of the torture was due to the fact that it never became clear whether or not the soul could do anything to speed up its progress through Purgatory (Fenn 1995:61).

More importantly, life leading up to Purgatory meant that time was now the new obligation and resource that must not be wasted. Prayers and good works became commodities performed as part of one's heavenly insurance, but also organised according to personal timetables and schedules. Spiritual exercises were developed that promised the faithful salvation; yet as insurance packages the fine print could not guarantee the timeline. Purgatory encouraged the development of thrift and the hoarding of spiritual commodities that could be exchanged with the 'angel of death' for a reduction in the time spent in the suffering flames of Purgatory, or bartered in the interest of one's kin; yet never with surety, for while Purgatory ran on an earthly timetable, there was a sneaking suspicion that one day of sinning on earth, ran into years in Purgatory.¹⁶ In effect, the cure—Purgatory—became the disease.

As Fenn notes, these ideas and practices remained current within Catholicism well into the 20th century, but just as importantly were carried over into Protestant consciousness, irrespective of the fact that the purchasing of purgatorial time through indulgences was the very catalyst for the reformation.¹⁷ The shift to a secular *purgatorial complex* occurred over the next three centuries, partly in response to the democratisation of religion that came with the Reformation and the subsequent emergence of a Protestant ethic, and partly as a result of the demands of capitalism.

¹⁶ Evidence for this is found in Dante's Purgatory in the number of characters from the early Roman period.

¹⁷ Recall that Luther's objections to indulgences was not initially about the doctrine of Purgatory as such, but that the wealthy could buy, borrow or make up for lost time, rather than suffer for a time, as the poor were forced to do. Indulgences are about buying time. Workers and peasants cannot buy as much time as the well-off. For most of their lives they are simply running out of time. Luther later moved to challenge the Pope's jurisdiction over Purgatory and then eventually any need for its existence (Bagchi 1991).

Richard Baxter and the secularisation of time anxiety

The connecting point between this medieval construction of the *purgatorial complex* and the Protestant ethic can be found in the writings of the 17th century English Divine, Richard Baxter. Both Weber (1967) and Fenn (1995) use Baxter's writings to demonstrate capitalism's pre-occupation with time and the future: Weber to outline the development of salvation anxiety as the ethical basis of capitalism,¹⁸ Fenn to track the transformation of the medieval innovation of Purgatory and consequent anxiety about time into a secular '*purgatorial complex*' via the Protestant preachers. Both accounts converge to provide an understanding of the social origins of a particular psychological relationship to time as a necessary accompaniment to capitalist work relations.

Richard Fenn on Baxter's injunctions on time

For Baxter, being on earth was the violent self-imposed trial the soul endured in a future poised midway between heaven and hell, ie Purgatory, while the spirits of just men,... 'are eventually made perfect and come at last to Mount Zion, the city of the Living God' (Baxter cited in Fenn 1995: 77). He exhorted his followers to love family and friends with detachment, not intrinsically for themselves, but as a means of obtaining a future. Not to do so was to taint the soul and love the past. Baxter encouraged his audience to live as if they were about to die, always keeping the end in sight as if the deadline was just before them. He urged the faithful to live as though the 'meantime was always part and parcel of the end-time' (Fenn 1995:68). They were:

...to live as though this is the moment of ... death.... Be ready to die and you are ready for anything.... Ask your hearts seriously, what is it that I shall need at a dying hour? And let it speedily be got ready and not be to seek in time of your extremity (Baxter cited in Fenn 1995: 68).

The contradiction evident in the above quote is that the individual must have confidence in salvation and the knowledge of God, but live as though God is testing them, keeping their own death/deadline in constant view. Baxter's prescriptions for the soul, like Dante's, are similarly both cure and disease. He writes 'we may confess heaven to be the best condition, though we despair of enjoying it, but we can never delightfully rejoice in it till we are

¹⁸ Weber devotes an entire chapter to Baxter (see his chapter 5, footnotes). He prefaces his account by suggesting that he will treat Protestantism as a single whole at this point for the sake of the general argument he wishes to make about the Protestant ethic.

somewhat persuaded of our title to it' (Baxter cited in Fenn 1995:79). Certainty is necessary, but doubt must drive the soul on. This is the life of expectation where the soul 'is conscientious and disciplined, frugal and productive, not only in the minutiae of everyday life but down to every minute of every hour. Time had become serious business indeed' (Fenn 1995: 82). 'Others will trifle away the time in delays, and promise this day and the next, but still keep off from the doing of the business' (Baxter cited in Fenn 1995:68), but those with their eye on the clock will do it now. For time itself is now to be redeemed.

Max Weber, the Protestant ethic and abstract time

In *The Protestant Ethic*, Weber uses Baxter's writings to argue that Calvinism encouraged the pursuit of 'continuous renewed profits' by rational means, through a particular relationship to work time. What distinguished this pursuit from previous endeavours was that wealth was achieved through exchanges based on rational, non-traditional forms of social action. In Weber's view the necessary ingredients for this form of exchange were found in the newly disciplined free labour, in the new science and technology and in a set of religious ideas which, as will become clear, substituted one form of time control for another. This religious idea was the Protestant Ethic.

Weber defined the spirit of capitalism in terms of working to make a profit for its own sake and argued that until the labourer or nascent capitalist saw this possibility, capitalism as an economic mode of production was not possible. However the spirit of capitalism goes further than the possibilities for material profit to a very practical and new moral ethic that is made concrete in relations of disciplined work and time. Virtues now had a use and exchange value, as they had with the invention of Purgatory. The entrepreneur or lowly worker conveyed to others around him or her, habits of thrift, punctuality and reliability. These qualities safeguarded individuals against personal financial risk, but also provided them with credit for future ventures, for 'he that is known to pay punctually and exactly to the time he promises, may at anytime, and on any occasion, raise all the money his friends can spare' (quoted in Weber 1967:49).

Work became the ascetic technique of the spiritual life where:

waste of time is thus the first and in principle the deadliest of sins... Loss of time through sociability, idle talk, luxury, even more sleep than is necessary for health, six to the most eight hours, is worthy of absolute moral condemnation (Baxter cited in Weber 1967: 157).

The organisation of this calling was systematic and methodical, creating the necessary character traits for successful engagement in business. Concurrently poverty lost its place as a necessary pre-requisite for salvation, while wealth, (seemingly neutral, condemned only when

it led to idleness, waste of time and consumption), became sanctified and its acquisition a logical and rational outcome and expression of Divine favour. Certainly Baxter did not excuse the wealthy from continuous work when he wrote:

Question: But will not wealth excuse us? Answer: it may excuse you from some sordid sort of work by making you more serviceable to another, but you are no more excused from service of work...than the poorest man... Though they (the rich) have no outward want to urge them, they have as great a necessity to obey God. (Baxter cited in Weber 1967: 261)

The religious support for this moral ethic came from the profound uncertainty and psychological loneliness that resulted from the doctrine of predestination, an idea that overtook any hope of a second chance in Purgatory—once again the cure became the disease. A second contributing factor was the democratic but contradictory Protestant sense of vocation that flourished under Calvinism and Methodism. This sense of calling encouraged good works and conformity, but also innovation; while success in these activities provided some confirmation of one's future destiny and encouraged and sanctified specialisation and the consequent division of labour. Work, rather than grace or the magical properties of sacramental rituals, became the central motif of salvation.

Weber develops the concept of rationalisation of work in his account of Calvin's distrust of emotion and, by default, mysticism and magic. Weber argues that the consequences of Calvin's rationalism was that in Protestant domains, work replaced Catholic ritual; but it is work that is now organised in a systematic and methodical manner to ensure no idle time and to allow the individual some control over their secular and religious future, in much the same way as Purgatory promised. It is however a precarious and contingent control, with progress itself the expression of salvation. Where previously the Church and monarchy socialised the population into the time patterns of everyday life and work, the firm and the civil/public service now do this. While individuals might still exercise their agency, the prevailing religious ideas facilitated a rationalised, non-emotional approach to work and innovation. What the Protestant ethic encouraged was an elective affinity between rationalisation in the mystical life and the secular world of work and commerce.

In the contemporary workplace these ideas find expression in two contradictory approaches. On the one hand they foster disciplinary practices of thrift, hard work and a calculating monochronic approach to time, where personal likes and dislikes must be abnegated to the enterprise. On the other, they foster innovation and change implemented with charismatic (and polychronic) fervour and enthusiasm (du Gay 2000). It is not simply that the organisation must change, so too must the individual. They must become charismatic innovators able to transcend rational doubt in order to take responsibility both for themselves and the future transformation of the organisation (du Gay 2000). Such individuals are able to

take initiative, are self-reliant and ready to accept responsibility in a work environment where all actions are subject to calculation and innovation (Doolin 2002).

Du Gay's analysis suggests a shift in the culture of work time whereby efficiency is no longer entirely governed by monochronic time. The language used to 'sell' this approach is religious. Managers, with a favour reminiscent of Christian fundamentalism, resort to the production of mission or vision statements that become the underpinning of arbitrary decisions to 'down-size', 'outsource', benchmark or re-arrange the production processes (du Gay 2000). Visions of the future of the organisation are usually given from on high to specific individuals who are then in a position to challenge the behaviour of others and bring about mass transformation through their charismatic authority. All this is done through the processes of the holy grail of 'best practice' in order to achieve a competitive edge.

In Weberian terms, the Protestant ethic replaced ritual as the producer of grace in response to Calvin's distrust of emotion, mysticism and magic. In the contemporary workplace what is demanded is a disciplined charisma on the part of the manager and emotional commitment to the enterprise on the part of the worker. Fenn (1995:33) writes:

...in this process bureaucrats and capitalists require more expressive yet disciplined performances from their employees; the contribution of the worker must come from the heart and often from the soul as well as from the body... A form of expressive asceticism is required of those who work in service organisations so that interactions will go smoothly and produce satisfaction, just as in a liturgy. These heightened requirements for personal commitment and self-control, along with diminished control over the conditions in which they work, give modern employees additional reasons for anguish and self-doubt.

This is the *purgatorial complex* which will appear throughout this thesis in the daily endeavours of nurses and doctors to save time.

A timely conclusion

In this chapter I have outlined the three approaches to time central to health care; bodily, gendered and abstract time. I have argued that bodily time is a serious consideration for health professionals, particularly in monitoring the effectiveness of technology and synchronising this with the body's own rhythms. I have also argued that our relationship to time can act as an exacerbating (heart disease), preventive (meditation) or healing (bio-feedback) factor. Gendered relations to time are more contradictory and the approach taken here has been to examine gendered relations to work time. On the one hand I have argued that scholars suggest that clear binary opposites do not exist in the workplace; rather men and women act according

to commonsense ways of being male or female, powerful or caring and that these change according to status, power, functional role or historical situation. I argue, conversely, that the empirical research indicates that there is a clear division of labour (in the domestic arena) with men's contribution still well behind their female counterparts. I use both arguments to ask whether this 'evidence' might shed light on the way some male nurses use their time on the wards, and whether this enhances their power and status.

I have also argued that abstract time is the dominant form. It determines the labour process, mediates social relations, structures what and how work is done, thus intensifying and extending working hours. However I suggest that no change in work relations to time is complete without concomitant cultural explanations. In the case of cultural approaches to time, I have argued that the Western monochronic approach to time was well entrenched before the Protestant Reformation and can be found in the medieval invention of Purgatory and the development of what Fenn (1995) has termed a *purgatorial complex*.

Both the Protestant ethic and the *purgatorial complex* produced a precarious confidence in salvation that found expression in obsessive habits of mind that kept an eye on the deadline and the future, and sought relief in schedules, timetables, and time management protocols. Many of these cultural practices and structural approaches to time find expression in the contemporary workplace of large public hospitals in Australia via the strategies of the New Public Management discussed in Chapter 5. The innovations outlined in the case studies in subsequent chapters could not have occurred if those nurses and doctors working on the wards were not imbued with an ethic of professionalism tinged with either a *purgatorial complex* or Protestant work ethic. In the next chapter I outline the methodological approach taken to this research.

CHAPTER THREE

METHODOLOGICAL CONSIDERATIONS & SHORT STAY ETHNOGRAPHY

Time stops only at the devil's door

For it never grows old,

Hell does not grow cold

Time stops only at the devil's door

Today is but tomorrow gone before. (Ryan & Frances quoted in Held & Nutzinger 1998: 210).

A brief introduction to the methodology

Understanding time use in a large and complex institution like Westernvale Hospital is impossible. Understanding how time is a technique for control over the labour of nurses and doctors is an equally daunting task. Realistically all that can be gained are miniscule insights into the prevailing culture, which undoubtedly differs in detail from department to department, ward to ward and for the various professional groups. These differences are further exacerbated as individual managers, doctors, nurses and allied health professionals interpret the change processes, or are subject to these processes, in different ways because of the nature of the casemix of the patients under their care or its impact on Westernvale's budget at a particular time. In this chapter I outline the research approach—focused ethnography supported through documentary analysis—and discuss the way time impacts on the authenticity of the portrayal. This is done through an exploration of the impact of time on the objectification of the subject, and the impact of my own emotional states, on the credibility and trustworthiness of my account. The chapter begins with a description of the research site— Westernvale Hospital and the two wards, Hartley and Mawson—and the research process I engaged in.

Westernvale Hospital in the late 1990s

Westernvale Hospital is a large tertiary acute facility of around 400 beds, a number that fluctuates according to the budget and the seasonal impact of winter influenza. By the year 2000 the annual budget was \$155 million and approximately 2,168 full-time equivalent (EFT) staff worked at Westernvale as allied health professionals, doctors, nurses, scientists and technical, administrative and support staff. A private hospital is close by, and Easternvale, a

hospital situated some 4 kilometres away, has close working relationships with Westernvale particularly for salaried medical staff who rotate between the two hospitals. The emergency department at Westernvale is one of the busiest in the state with only 20% of admissions falling into the elective category (Silent reference No 2: 1999-2000).

This study was conducted in the Medical Division at Westernvale on two of its five wards: one, a cardiac ward with 28 beds, and the other, a ward dedicated mainly to patients with respiratory, endocrine, and skin problems and patients with multiresistant staphylococcus aureus (MRSA) disease, also with 28 beds, together with a stand-alone day dermatology unit. I have called the cardiac ward 'Mawson' and the ward primarily dedicated to respiratory diseases, 'Hartley'. A medical team is attached to each ward reflecting the ward specialties or casemix; although, as will become clear, ensuring that wards receive only patients with the relevant disease specialty is rarely achieved. Both wards must contend with patients who are 'outliers', with diseases other than the ward specialties, and as a consequence medical and surgical teams visit from other wards. Mawson ward also has a team of cardiac surgeons attached, as well as cardiac physicians. The medical team on each ward is made up of visiting medical officers (VMOs) who are employed by the hospital on an hourly or sessional basis, resident medical officers (RMOs) and interns. The majority of consultants are male, except for dermatology.¹⁹ The gender mix for RMOs and interns is equally divided between males and females.²⁰

Nursing staff on wards at Westernvale also is arranged hierarchically. The senior nurse on each ward is the Clinical Nurse Consultant (CNC Level 3). Most wards at Westernvale also have two to three Clinical Nurses (Level 2), and several registered nurses (RNs Level 1). The RN category has six steps of seniority with accompanying salary scales.²¹ There are few promotional positions at Westernvale so that many Level 1 RNs are on the sixth step and have been nursing for up to twenty years. One or two graduate nurses (GNPs) and a smaller number of enrolled nurses (ENs) complete the nursing complement.²² A significant number of

¹⁹ Research by AMWAC found that junior female doctors are selecting general practice (60%), paediatrics (65%), and psychiatry (46%). Only 13% of trainee surgeons are female (Harris 2001)

²⁰ This is consistent with AMWAC figures that show that approximately 53% of people entering medicine are female (Harris 2001).

²¹ The 3rd EB round made provision for a 7th step of Nurse Specialist.

²² In 1986 the SA branch of the ANF conducted a vigorous and successful campaign for award restructuring. The new award created five promotional grades, and three areas of expertise: clinical, educational and managerial.

staff are employed part-time and the majority are female. The skills mix is listed in Table 3.1. Westernvale employs Personal Service Attendants (PSAs) on each ward instead of cleaners and catering staff. Each Division may also employ a pharmacist, but staff such as physiotherapists and social workers are attached to a separate Division and work across the wards. Senior administrative staff of the Medical Division include the Medical Divisional Director, the Divisional Director of Nursing (level 4), the Nurse Manager and a Nurse Educator (Level 3).

Table 3.1 Skills mix of nurses on Mawson and Hartley.

Ward	Nursing staff	RN Level 1	CNs Level 2-3	ENs	EFT	Males	Number of staff part-time
Hartley	41	28	4	9	22	4 (3 RNs/1 EN)	16
Mawson	43	29	4	10	22	3 (2 RNs/1 EN)	15

Communicating with staff from a range of professional groups of varying status who work around the clock is always difficult. In one of my early diary entries I note that the *nurses' station on Mawson was replete with notices for meetings, drug trials, times for getting scripts down to pharmacy or social events* (Field notes 4/8/98). The nurse's station on Mawson also displays the surgery list, two clocks, the cardiac surgeons on-call roster, the list of cardiologists working in the hospital, the roster for night Covers, and times for lectures for the interns. It is impossible to notify all staff of administrative changes or patient progress through meetings, and important not to assume that all staff read ward notebooks. Added to this is the fact that doctors and nurses work on different rotations. Nurses for the most part stay with their home ward. The registrars and medical officers are usually appointed for a twelve-month period, while the interns rotate on a 3 monthly basis. These various staff movements highlight the difficulties for staff communication even when they work on the same ward.

Most wards at Westernvale are designed with a central suite that houses the utility rooms, such as the drug, pan and PSA equipment rooms, the CNC's and doctors' offices and the nurses' station, with patient rooms, either single or four-bed bays on either side. The staff tea room and patient lounge are usually at the end of one of the long corridors. The nurses'

station is the nerve centre of each ward. It is an open plan area with counters around the perimeter supporting computers, the ward clerk's desk, lab reports, phones, medical notes, trolleys, filing cabinets, and white boards with patient names, bed numbers and nursing and PSA rosters clearly written. Lockers for securing handbags and personal items can usually be found in a discrete area. The junior medical staff office is adjacent to the nurses' station. Staff tend to step inside the nurses' station to consult with each other or to read notes, rather than stand in the corridors between the counters and the patients' rooms which are traffic to drug trolleys and a thoroughfare for people moving through the hospital. The nurses' station is permanent home for the ward clerk and nurses. The PSAs also use this area, but to a lesser extent; while the junior doctors spend much time there, but occasionally retreat to their office, an area seldom breached by the nurses. Allied health staff also make themselves at home at the nurses' station when they are on the wards. It became my own home base, the point from which I began my ethnographic observations.

The research process

Getting started

Before I began I knew it was important to learn how to 'be' at the bedside. To deal with this dilemma, in the semester prior to commencing fieldwork I spent half a day each week for ten weeks working with a nursing colleague on another ward at Westernvale. This nurse had clinical privileges on the ward and spent two shifts each week supervising students. From July I learnt much about where and how to stand, the ward layout and the boundaries and zones allocated to each health professional group. I also learnt how to idly stand by the bedside, and mentally note points to be dealt with at a later time.

On both wards I briefed the staff on the aims of my research project several weeks before I commenced observations. On Hartley the CNC set up a box in the nurses' tearoom where staff could volunteer their names if they were prepared for me to accompany them while they worked. Twelve staff volunteered although I was only able to spend time with seven nurses. On Mawson the nurses opted for me to approach individuals with a request to accompany them. No nurses refused me, although one PSA did. On Mawson I worked with seven staff: five nurses, the ward clerk and a PSA. The fourteen staff, together with the CNC of each ward became my key informants; and their pseudonyms and the dates I accompanied them are listed in Figures 3.1. and 3.2. We went to morning and afternoon tea together on the days I accompanied them. I used these times to clarify issues, check out my understanding of what

was occurring and to discuss journal articles I had asked them to review. In the following four years as I wrote each chapter I returned to these sixteen informants for further clarification.

I decided to work a three day week, alternating between both wards, following advice from the CNC on Hartley who suggested this would extend my time on each ward across the entire four months and as a consequence allow staff more time to become familiar with me. I commenced formal research on April 1st 1998 and did my last shift on the 12th July. On the ward the nurse I accompanied usually introduced me to patients as a researcher interested in 'working time'. Consistent with my ethics approval these were the only occasions I engaged in direct conversations with patients, although I joined in the ordinary everyday exchanges that occur between patients and nurses. Occasionally I removed myself from these patient-nurse interactions particularly when patients were distressed, appeared to want to talk privately with the nurse or doctor, or were having an intimate procedure done. At some point during each shift I retreated to the nurses' station to write up my case notes, read the medical notes or observe interactions between the various professional groups who milled around the computers or medical file trolley. This usually occupied about half an hour a day.

Figure 3.1 Shifts worked in Hartley 1998

Date	Ward and professional group staff member	Shift
7/4/98	RN Bernice	1.30pm — 10pm
8/4/98	RN Bernice	7am — 3.30pm
12/4/98 (Easter Sunday)	RN Bernice	1.30pm — 10pm
24/4/98	RN Luke	1.30pm — 10pm
25/4/98	RN Luke	7am — 3.30pm
30 th April/May 1 st	RN Luke	9.45pm — 7.15am
15/5/98	Ward Clerk Margaret	8am — 4.30pm
18/5/98	RN Virginia	1.30pm — 10pm
19/5/98	RN Virginia	8am — 4.30pm
24/5/98	RN Virginia	7am — 3.30pm
27/5/98	RN Matthew	8am — 4.30pm
3/6/98	CN Level 1 Judith	7am — 3.30pm
7/6/98	Un-attached (Mawson & Hartley)	10am — 4pm
18/6/98	RN Susan	1.30pm — 10pm
21/6/98	Un-attached	10am — 3.30pm
5/7/98	Un-attached	10am — 11.30am
12/7/99	Respiratory Outreach Nurse, Muriel, (Hartley)	9am — 4pm

Figure 3.2 Shifts worked in Mawson 1998

Date	Ward and professional group staff member	Shift
1/4/98	Clinical Nurse Consultant Shirley (Mawson)	8am — 4.30pm
2/4/98	CNC Shirley	8am — 4.30pm
9/4/98	CN Level 1 Heather	7am — 3.30pm
16/4/98	RN Heather	1.30pm — 10pm
17/4/98	RN Heather	1.30pm — 10pm
22/4/98	EN Marilyn	7pm — 3.30pm
28/4/98	EN Marilyn	1.30pm — 10pm
11/5/98	CN Monica	8am — 4.30pm
13/5/98	CN Monica	8am — 4.30pm
14/5/98	CN Frances	8am — 4.30pm
17/5/98	CN Monica	8am — 4.30pm
21/5/98	RN Anne	8am — 4.30pm
25/5/98	Ward Clerk Eileen	8am — 4.30pm
28/5/98	Level 6 NM Sonia	8am — 4.30pm
10/6/98	6D PSA Trudy	8am — 4.30pm
14/6/98	Un-attached	10am — 3.30pm
28/6/98	Un-attached	10am — 1.30pm
12/7/98	Un-attached	10am — 1.30pm

Going into the field: participant observation

The primary method of ethnography is fieldwork and the major tool is the self as researcher. Methods of ethnography include participant and non-participant observation, interviews, the keeping of detailed field notes and document reviews (Street 1992). Participant and/or non-participant observation is the primary approach and is employed so that details of everyday activities can be observed and recorded. The majority of my observations were non-participant observation, although there were times, particularly on Mawson where it became impossible for me not to help out and I took up some of the tasks of the ward clerk. It may well be that I missed picking up on events because I was otherwise occupied hurrying to a laboratory or answering the phone, but I did experience the frustrations of working a shift where I was subject to the dictates of incessant phone calls from anxious relatives, the Accident & Emergency (A & E) department, doctors wanting a test ordered or the bed manager looking for a bed. I established a firm protocol in taking up these tasks, always

indicating to the caller who I was, what my role was on the ward, writing down the message and seeking out the appropriate person. At these times I engaged in participant observation.

Recording observations and field notes

Taking notes in an unobtrusive manner presented some difficulties. It is an obvious act that I presumed would be inhibiting to many. I overcame this problem to some extent by retreating to the nurses' station to write up notes, but also by using a 'cheat sheet'. The first nurse I accompanied on Mawson was Heather, a confident young woman who gave me a copy of the patient list used for handover. I noticed that nurses divided the back of these sheets into a Gantt chart and wrote down the times for patient tests, procedures and drugs. These Gantt charts were kept unobtrusively folded in their pocket or clipped to a board near the Excelcare computer and affectionately referred to as 'cheat sheets'. This derogatory name indicates their awareness that cheat sheets reduce patients to bed numbers and timed procedures. I used my own copy of the patient list as my 'cheat sheet', drawing up a grid to follow the hours of the day and using each slot to jot down key words used as memory jogs for later writing up of field notes. Where writing required direct quotes or immediate comment I retreated to the nurse's station and wrote out the incident in full. I typed up my field notes at the end of the day for those shifts where I did a 7am to 3.30pm day, and on the following day for the late shifts that saw me home around 11pm.

Informal interviews and serendipitous participant observation

Throughout my description of life at the nurse's station, other staff appear besides the sixteen key informants to make comments on working life on the wards. Conversations with these nurses, doctors and PSAs occurred as part of the daily shift; sometimes they were working with the nurse I was shadowing or I met them in the tea room, at handover, or a ward meeting. At other times they were part of spontaneous conversations that broke out during a lull in the work. I used these conversations as opportunities for clarifying issues, checking out my assumptions and testing theories. Along with the unforeseen additional opportunities that arose, they afforded me insights into the interactions between staff of various statuses. Other serendipitous events included: attending the monthly on-site Australian Nursing Federation (ANF) meetings from May to December in 1998, as well as those called as part of the dispute leading up to the signing of the 2nd EB round between the union and the Department of Human Service (DHS); acting as editor for a group of nurses who responded to the Australian Medical Association (AMA) call for submissions to the national *Safe hours project*; and

preparing a 'time-and-motion' study for management on the tasks being performed by the two case managers engaged in the clinical pathway cardiac trial, discussed in Chapter 8.

I also interviewed the industrial officers for the ANF and the South Australian Salaried Medical Officers Association (SASMOA) and attended an afternoon tea hosted by the company tendering for the cardiac monitor contract and I attended three cardiac rehabilitation classes. In 1999 I joined the picket line one afternoon on a ward adjacent to Hartley and accompanied the Respiratory Outreach Nurse on one of her visits.

Formal interviews following preliminary analysis

Between 1999 and 2003 I interviewed ten of the sixteen participants identified in Figures 3.1 and 3.2 in order to verify my interpretations. For example, mid-way through the analysis dealing with Excelcare I interviewed Bernice and Virginia (see Chapter 7); when reflecting on cardiac clinical pathways and the Fast Track Surgery Project I interviewed Heather, Monica, Shirley and Frances (see Chapter 8); and when dealing with gendered care I interviewed Matthew, Luke, and Tyson (see Chapter 9). I used these interviews to check out my interpretations and to clarify issues. In all interviews I outlined my theoretical interpretation of events, what the academic literature noted on the issue and sought comment on how this literature resonated with the experiences of these nurses. Interviews usually took place during the nurse's days off, over lunch or coffee and went well beyond the hour, or in the case of the three male nurses stretched to several evening meals.

Most of the interviews with the doctors took place during my formal time on the wards on Sundays, during a quiet time in their roster or after they had finished the work for the day. I also conducted interviews with the Director of Nursing, the Divisional Director of Nursing, the Divisional Nurse Educator, a senior research scientist for the Division, the Head of social work and a medical member of the Commonwealth Clinical Casemix Committee; and I had lunch with four ward clerks. Interviews were not taped, since in many instances the point of these interviews was to clarify my interpretation of what I saw, rather than gather completely new data. At these interviews, I used the same technique as the one I employed on the ward. I jotted down key words and then wrote up the interview immediately following it.

Supporting data: Triangulation

The ethnographic researcher usually seeks out other sources of evidence besides observations to lend support to the analysis. This is referred to as triangulation. Triangulation is the process by which the same issue is examined in a variety of ways so that different types of evidence are produced to support a particular finding (Minichiello, Sullivan, Greenwood & Axford 1999: 45). During my time on the ward I had access to documents readily available to staff such as patient records, the minutes of various meetings, reports, ward timetables and rosters, Excelcare data, public notices and the numerous memos that pass through wards. I collected these for the six months prior to my time on the ward, as well as the six months of my stay. This provided some background to current events and decisions as well as identifying key players in ward politics and identifying the issues regarded by the medical or nursing managers as important.

I paid particular attention to the way in which time was recorded, noted or measured in documentation. One intriguing example was the patient records and notes. I was able to peruse these for insights into how patient histories are constructed, surgery described or accounts of the deviant behaviour of certain patients consolidated, as their misdemeanors are repeated 'ad nauseam' in the nursing handover and medical notes. During the time I spent with the Nurse Manager I was able to access a number of files held by divisional administration. These included annual audits on medical errors and incident reports retrieved out of the Excelcare data. This documentation made me aware that Excelcare had capacity well beyond being a computerised nursing care plan. It was also a tool for quality audits.

Content analysis beyond the research site

In chapters 4 and 5 I have drawn on wider literature to illustrate the inordinate pre-occupation with time underpinning EB, the Medicare incentives and casemix. In both chapters I show how the temporal pre-occupation of these policies and the consequent benchmarks impact on the day-to-day work of health professionals at Westernvale Hospital. In presenting this literature, my aim has been to show that the focus on time as the unit of account in health care reform goes well beyond work intensification to become the very definition of productivity, efficiency, quality and access. Much of this literature is taken from the web sites of the various Commonwealth and State government home pages. I also used the National Demonstration Hospital Program (NDHP) web site; the Australian Resources Centre for Hospital Innovations (ARCHI) and attended one NDHP national conference. The ARCHI site supports the dissemination of hospital-based innovations and publishes regular up-dates,

conference papers and reports including innovations trialled at Westernvale Hospital. This published material often provided more extensive data than can be obtained on the wards.

Organising field notes and the generation of ideas, themes and leads

I used the computerised reference program Endnote to organise these field notes. This was done in three ways. Firstly I used Endnote as a literature data-base. Secondly I set up a library reference, using the heading 'personal communication' for each person I accompanied and a third data-base for my own diary notes which I called 'reflection library'. The library for each person was a descriptive account of the day; my own reflection library included possible questions to explore the next day, theoretical links and journal articles I knew touched on points observed, and emerging themes which formed the basis for guiding my observations or provided lead questions. For example, mid-way through my time on the ward, based on my observations to date, I refined the themes of the research to include:

- rosters and time;
- idle time;
- caring time;
- organisational change: listing the innovations and their impact on daily work;
- critical pathways;
- technology/Excelcare;
- managerial leadership and styles;
- shifting the load; how is this done?
- medical control of time;
- patient control of time;
- resistance;
- collaborative resistance;
- personal resistance;
- professional resistance;
- miscellaneous observations.

These categories allowed me to organise daily field notes; but they also proposed new ideas and observations and allowed me to generate new categories and themes. At other times particular issues caught my attention and towards the end of my stay I paid more attention to them. For example once I began to notice differences between the behaviour of the male and female nurses I focused on this; and at another time I observed daily use of the Excelcare protocols.

While Endnote is not a computerised qualitative data organising tool like Nudist, it does allow the creation of themes to be sorted out according to the date of entry and to then be cross-referenced with the literature through the merging of libraries. From this perspective it provides a useful organising tool once the field notes have been read and ideas and themes begin to emerge. For example when I came to read through my accounts of male nurses in the 'personal communication' library I was able to put in the following codes: *male nurses, male RNs, men, emotional labour at work, domestic work*, and the various names of the male nurses I had accompanied. This generated the number of entries across the three libraries I had constructed. I was able to merge the three libraries and speedily retrieve and read through them for key ideas.

It would be incorrect for me to say that I pursued data and the generation of themes until the point of saturation since there is always something new to see in the field; and in the case of Westernvale Hospital, always a new innovation about to be implemented. The problem is to determine what is relevant and useful, what to surrender and when to comply, given the supervisor's insistence that the number of words be reduced! Just as at some point I knew I must stop collecting data, so too I had to stop sifting through field notes for ways of understanding or interpreting the text. Not to do so was to be forever lost in a sea of possible themes. Llewellyn, Sullivan & Minichiello (1999:177) note that theoretical saturation refers to the point in the collection of data when similar instances keep recurring and every attempt has been made to look for alternative examples. For me saturation point is about stopping when the relationship between literature, data and theory begins to make sense, is coherent and can be adequately substantiated by the thick description of events and the analysis of negative cases. It is not when there is nothing left to be said about the field. In the case of ethnographic research this would rarely be achieved and in any case all that can be said refers to 'this point in time'.

Writing up the ethnographic account as a credible and trustworthy account of the field

A key component of ethnographic accounts is to provide the reader with a thick description of events and the actions of the participants. In ensuring that the account is a credible, relevant and trustworthy portrayal of the case under investigation the rule of thumb is prolonged engagement in the field; indicating the frequency, extent, intensity and duration of events as well as exploring negative cases. Negative cases refer to participants, situations or institutions that do not act or conform to what has been observed. Further strategies include member checks whereby participants may cross-check accounts of interviews or interpretations; triangulation; persistent observation and providing a detailed account of the processes

followed, or mapping the research journey (de Laine 1997). Triangulation and observation have already been dealt with. I deal with the issue of member checks below within a broader discussion on the politics of ethnography as a research approach, along with the more difficult question of ethnography and time.

In writing up the account, field note entries are in italics, but not indented. I have done this to facilitate the flow of text. Quotes from books and articles are placed within inverted commas, and where they are longer than three lines, indented and italicised. I have used the Australian National Health Dictionary version 2 (AIHW 2001) produced by the Australian Institute of Health and Welfare throughout. Many of the terms in the glossary come from the dictionary and are included to reinforce my argument that there is now a myopic focus on time.

Interpretation and analysis of working time at Westernvale

Most ethnographic accounts go beyond thick description to provide an interpretation of the results in the light of theory. This requires analysing the data in order to make connections between language, behaviour, events and theoretical explanations. The process of analysis is complex. It is not simply bringing together all the material and waiting for the themes to magically reveal substantive theory, but has far more to do with one's own orientation, despite advice to enter the field and read the data with an open mind. As I indicated in the opening chapter I entered the field looking for examples of the way in which work time is altered, intensified, extended and modified through processes of innovation and change. I also entered the field with a hunch that time was used as a technique of control well beyond budgetary control. The theoretical ideas outlined in Chapter 2 give some indication of the way I organise the world and what my stance is on these time techniques. What I 'discovered' is very much a reflection of what I have read as a sociologist interested in health, working firstly in a school of nursing and more latterly in medicine, wishing to deepen my understanding of the practical basis of theory relevant to nursing and medicine. The thesis reflects what I currently understand about this world with all its ambiguity.

Analysis is also a matter of style of presentation. In chapters 6 to 9 I have provided descriptions of particular events dealing with the introduction of innovations onto the wards at Westernvale aimed at increasing efficiency, productivity, quality or access. This description is supplemented with reflections on the relevance of these innovations, coupled with an analysis based on the related literature. This is referred to as theoretical description (Hammersley 1990: 20). So for example in Chapter 8 where I describe the implementation of the clinical pathways and the Fast Track Surgery Project I draw on literature that is both descriptive and

critical of clinical pathways and evidence-based medicine and relate this to the issue under investigation. I then analyse the innovations in the light of what I observed happening and ask a new set of questions related to theories of working time. For example I illustrate the way in which the Cardiac Fast Track Surgery Project up-skilled, but intensified the work of nurses. This allows me to make comment on the way in which nurses and doctors working on the cardiac ward provide yet another example in support of the theory outlined in Chapter 2, where I have argued that abstract work time is the dominant form of time and colonises all other relations to or modes of time in the contemporary workplace.

Whether the thesis can then make a claim to empirical generalisations (Hammersley 1990) whereby the theoretical deductions proffered can be generalised to all doctors and nurses working in hospitals undergoing workplace change is a more vexed question. Most researchers of qualitative accounts are advised to say 'no'. However if readers in similar venues cannot nod their heads in recognition then the relevance of the study is suspect. An important caveat to the issue of empirical generalisations is to note that this does not necessarily mean that a particular behaviour or response will be replicated by the entire population, but rather that the descriptive accounts point to a way of being in the world shared by others and that it can be explained with recourse to the same theory. The theoretical points I make about male nurses in Chapter 9 are a case in point. The reader may well ask do all male nurses prefer emotional labour to technical and instrumental work? Or is the answer more likely that this is but one direction male nurses have taken amongst the many avenues open to them? The significant theoretical point is that there are a variety of ways of being a male nurse. It is this that is described, generalised and said to provide a theoretical interpretation of the social world.

Ethnography: a short-term approach to understanding the social world

In classic ethnographic studies of hospital life, fieldwork of less than twelve months is considered inadequate to capture such events as the calendar of peaks and troughs in bed use in a hospital, the cycle of rotations for interns or the rituals covering the care of the dying (Glaser & Strauss 1965; Glaser & Strauss 1968; Zerubavel 1979). The usual pattern is a long stint of around twelve months to two years followed by time back in one's own culture and then at least one, and possibly two return trips into the field to verify interpretations (de Laine 1997; Minichiello, Sullivan, Greenwood & Axford 1999). This pattern was developed within the discipline of anthropology partly to guard against the risk of 'going native', and in order to examine field notes from a dispassionate distance. According to Fabian (1983) many

researchers report that the second visit generates increased trust between themselves and the participants raising serious questions about the reliability of shorter stints in the field. Studies that take a short cut are of two kinds: focused and rapid ethnography.

Focused and rapid ethnography: overcoming a shortage of time

Focused, short stay, rapid or mini-ethnography, like large-scale ethnographic studies, seeks to discover how people actively construct their social world. However such studies take one particular topic as the focus of persistent observation and examine it in detail, for example child-feeding practices amongst a particular cultural group or, as is the case in this study: *time* at Westernvale. In focusing on one particular area the argument is that the researcher comes to grips with the structure and culture of the specific topic more quickly than if a large scale or wholistic study were attempted. Focused ethnography has developed from the understanding that most researchers these days do not have time to spend two years in the field, or if working in their own culture, do not need to spend such a long time in an arena they are already familiar with (Walker 1983). This is particularly so for those professionals like myself attempting research in mid-life, who are also holding down a job, or as in the case of rapid ethnography, those researchers requested to find quick answers to key social questions (de Laine 1997).

Critique of (focused) ethnography and the methodological problem of time

If busy academics like myself think the problem of time can be overcome through focused or rapid ethnography we are deluded. Time is not only a possible topic for exploration it is also a methodological problem. Time is a fundamental problem to even prolonged ethnographic research and overcoming the issues 'time' throws up is well nigh impossible. The problem is not the amount of time in the field, nor the fact that change is now the only constant; it is in how 'time' constructs the 'other'. The origins of this problem lie in the very history of ethnography as a method suitable for understanding social life and in the history of time itself. In Chapter 2 I argued that the shift from a medieval to a capitalist mode of production produced a new set of relationships to time, best understood as time now constantly redetermined. This is despite the potential of technology and science to free humans from the drudgery of work. Time is no longer bound by the dictates of nature or the sacred, but is secular; and alas, not free. The sundering of once sacred time from human history was achieved by drawing on the ideas of human emancipation and the scientific achievements of the Enlightenment. Enlightened scholars positioned human history as evolutionary and moving towards an ideal future, rather than a future tied to an eschatological salvation.

According to Fabian (1983), anthropology as discipline and ethnography as method have their origins in this shift from human salvation achieved through the reenactment of the Christian journey, to 'real travel to real foreign places' in order to deepen one's humanness through knowledge and understanding of the 'other'. It is these travels that are the precursors to the discipline of anthropology and the ethnographic method, but also to the construction of the 'exotic other'. Where the medieval and Western Christian notion of history saw non-Christians as pagans to be converted and brought into the fold, secular notions of history positioned the savage as needing to be civilised. However while the pagan is always potentially a candidate for salvation, the savage is never ready for civilisation (Fabian 1983).²³

For Fabian it is this very secularisation of time, based on the evolutionary ideas of the progress of human nature—aptly demonstrated in the binary typologies of monochronic/polychronic, urban/rural, male/female, industrial/feudal, developed/developing or first world/third world modes and relations to time—that are the intellectual background of anthropology and ethnography. Similarly, at the core of the origins of sociology is the desire to explain the shift from/to: *Gemeinschaft*/*Gesellschaft*, charisma/routinisation; organic/mechanical solidarity and Parsons' pattern variables. Underlying all these typologies is the notion that pre-industrial populations, lower classes, women or non-Western societies fail to use the clock like 'us' (Fabian 1983). It is this that makes them different.

Consequently the researcher enters the field knowing that time is not shared among equals and that 'our' time is superior. This is an interesting dilemma given that the task of ethnography is to deepen the communicative process in order to understand how a particular social world is constructed, operates or changes. However once in the field the researcher is forced to share a similar relationship to time in order to meet with participants, although all this changes with the writing up of the account. It is here that the 'schizophrenia' of ethnography is revealed (Fabian 1983). The ethnographer lives and works in the present while in the field, but slips into the past or freezes the present in the act of writing up. Ethnographic accounts are invariably written from the perspective of the researcher, even where she or he is aware that colonial or managerial organisations may use this knowledge to further their own agenda, rather than as a guide to understanding and communication (see for example Glaser & Strauss 1965; Sudnow 1967; Willis 1977; Bell 1983). This split between the time of the other

²³ Nineteenth and Twentieth century missionary endeavours required more than conversion from their 'pagan' fold to admit them to equal status. Fabian appears to have glossed over the fact that missionaries like their colonial confreres were as imbued with the notions of uncivilised savages as Darwinists, even well after conversion and education of the fold. From my own experience it was anthropology that revealed the shared humanness and rational organisation of other cultures through its systematic (and functionalist) investigation of the social structure of Indigenous culture.

and the time of the researcher is evident on a number of fronts and goes well beyond the classic division between the emic/insider and etic/outsider.

This problem is partly caused by the underlying advice given to the neophyte researcher. Typically the beginning ethnographer is told to learn the language and read up all they can get their hands on before going into the field in order to save time, despite the fact that this knowledge may very well shape observations. In my case I spent time learning medical terminology from a colleague, partly not wishing to be a fool, but also for expediency. More importantly time becomes problematic towards the end of the adventure when the researcher seeks to tell their story and write up the thesis. To write up the account in the present tense presents two dilemmas: the reader may assume that this is the world of the 'other' static and frozen in time; or that this is the totality of the world of the 'other', devoid of further subtleties and nuances. To write it in the past tense is to relegate living people to history and to rigid behaviours never subject to variation. Neither account is fact, but a positivist illusion (Fabian 1983:79). Not all nurses resist(ed) the process of work intensification, not all doctors consciously fail(ed) to work collaboratively. These are not statistical facts that allow the account to be generalised to all situations. Detailing the workings of social life is a much subtler affair, so that the description of behaviours, values and beliefs must always be qualified. All that can be claimed is that this is a study of one slice in time taken from one vantage point.

However, beyond the descriptive account is the analysis and commentary. It is the social science commentary that gives the ethnographic account value and it is in this section that the researcher often uses the first person singular, while the history and description of events refers to the informants as 'them' even when they have pseudonyms. This is because the audience is not the other/them; the audience is the scientific community of social scientists, post-graduate colleagues, supervisors and examiners. The written account is a linear conversation between three parties whereby the ethnographer, having talked to the participants in the past, now tells the scientific community what did occur, hoping it is still timely. Rarely do the participants talk to the reader, despite the multi-voiced accounts of some feminist and post-structuralist ethnographers who attempt to overcome this objectifying dilemma (see for example Lather 1986a; 1986b).

My own endeavours to deal with this met with mixed success. A number of nurses have studied sociology and are familiar with the critical literature on patient-practitioner relationships (Parsons 1951), the doctor-nurse game (Stein 1967), or medical dominance (Willis 1989); so that I assumed it would be of interest to them to discuss emerging themes in the light of the literature and that this would enable their analysis to be part of the text of my

thesis. To this end I invited them to read Brannon's (1990; 1994; 1996) series of papers on the impact of team and primary nursing on work intensification and the division of labour; with clinical nurse consultants I used Green and Armstrong's (1995) paper on bed shortages; and with the PSAs, O'Donnell's (1995) paper on post-Fordism or neo-Fordist work arrangements in two New South Wales public hospitals. I provided the three male nurses on Hartley with several articles that explored the gender contradictions for male nurses and I report on their reactions to these in Chapter 9. I also did a literature search for two nurses engaged in innovative programs dealing with Excelcare and telephone hotlines in health care.

My intention was that the interviews, informal discussions and tea room chats might go beyond the ordinary everyday analysis to one where the participants reflected on their world from the point of view of theory, becoming analytical informants *par excellence*, but also validators of my interpretations. This strategy of 'member checks' was most successful with the PSAs who were delighted with O'Donnell's paper, particularly his gender analysis. Rolling their eyes they regaled me with stories of male PSAs who could not clean a ward or deliver a meal. The three male nurses were also particularly interested in the literature I gave them. The feedback time these men gave me allowed us to produce an additional paper for possible publication. However expecting participants to engage in the exercise of analysis highlights the problem inherent in such contrivances at democracy in the techniques of 'face validity'. I did not fully agree with the men's analysis of their situation so that the problem of objectifying the subject remained.

Ethnographic credibility and the pace of institutional change

Feminist and post-structuralist multiple-voiced accounts may attempt to overcome the problem of objectification, but can do little to accommodate the pace of change in organisations (Harford, Savage & Witz 1997); they must also confront the fact that participants do not always agree with the researcher's interpretation when the data is brought back to them for verification, or the report returned to them for confirmation of the analysis. It is no longer simply that the social group is presented as frozen in time; the pace of change is so fast that often the participants cannot remember the incidents that gave shape to their story and the researcher's analysis. They claim that it once may have been like that here, but has now changed (Harford, Savage & Witz 1997).

Harford and her colleagues argue that loss of memory of the past raises serious questions about the theoretical inferences drawn by the ethnography and challenge claims to empirical generalisation, but it also explains some of the motivation participants have in freely

proffering information to the researcher. Managerial practices for ensuring high productivity, such as annual performance appraisals, make it risky for workers to complain to senior staff or their peers or to reveal vulnerabilities and weaknesses. However the interested researcher provides a discreet and trustworthy willing ear for problems that are current, but that may shift radically in the immediate future. Interested researchers also provide a catalyst for resistance by the very questions they ask. I outline the implication for this later in this chapter.

It was certainly my own experience that when I returned to the field over the following four years to check interpretations or to ask questions of clarification, my own mind fresh with the incidents from reading my field notes, this was not so for the participants. The case of Frances and Monica illustrates this nicely. Both were senior nurses, and had worked as case managers on a clinical pathway project I describe in Chapter 8; yet neither had seen the report of the final outcome, nor could they remember much about the project, and thus they deferred to me as the expert. Interestingly when I provided memory prompts they gave me insights into the failure of the trial that were not captured in the hospital's official report and that they had not shared with me at the time. Their working lives had moved well beyond the events I wished to recall: they were now differently aligned in the organisation and their political views had changed so that their resistance to particular interpretations had dissipated, and their reticence about critiquing the actions of specific managers had dissolved.

This is not to suggest that they had become collaborators; but, rather, the pace of change in organisations like Westernvale is so rapid and complex that the story now told by these individuals called for nuanced alterations to the interpretation. The temptation for the ethnographer is to panic, believing the pace of change will render the entire account irrelevant. The research process is linear and comes to an end; the behaviour of individuals in an organisation is forever changing. In the modern organisation what is predictable and stable is change; what is unpredictable is its direction, although clearly I am arguing the worker's hour continues to be squeezed for surplus value. The ethnographic account is, as a consequence, not as I argue above a thick slice, but snatches of intervals of one era in time. This raises questions about what tense to use in the ethnographic vignettes. Should they be written in the past or present tense? In this thesis the present tense is used. However, while I suggest in the final chapter that the accounts presented here are in many ways unique to the time period 1992-2000, I hope the theoretical interpretation is as fresh as it was when Marx first espoused it.

The very length of time the student ethnographer spends in the field provides some confirmation of interpretations. This is especially so for those in situations where the study is done on a part-time basis spread out over many years. The particulars of the field, its practices

and personnel, change; but these very changes provide opportunity for reflecting on the validity and reliability of interpretations. In this study time comes into its own and is a strategy for verification. It is most potently illustrated in the case of professional managers. Early in my analysis I viewed them as aligned with the bureaucracy of the State Department of Human Services; over the ensuing years I shifted to see them caught in a contradictory class location (Wright 1978). The contradictions for this group of workers were lived out daily; but as individuals they also capitalised on the shifting fortunes of the government of the day and its bureaucratic decision-makers.

Ethnographic trustworthiness: emotions and time

A further challenge to the credibility and trustworthiness of ethnographic research is how to deal with displays of negative emotion; particularly difficult if they are directed towards you. While colleagues outside the field might tell you *not to take it personally*, or suggest that you are 'super-sensitive', it takes a strong-minded individual to develop interpersonally intimate relationships that facilitate trust in interviews, yet remain aloof from the emotional messages conveyed. I want to argue that my own emotional responses give some insights into what was happening for others in the research site, but also raise questions about how emotions influenced what I did in the field. This leads me to ask 'does this influence the social construction of the account and, if so, does this matter?' Clearly I think the answer to both questions is 'Yes'. Emotions are central to the research process both as an influence on what is done in the field and in how the field is socially constructed by the researcher; but, more importantly, emotions are central when researchers come to write up their account. In order to explore these two questions I provide two vignettes. The first concerns the politics of gaining ethics approval and entry into the field; the second deals with my relationship to the medical staff.

The anxiety of ethics approval

In my original research proposal submitted to the Hospital's ethics committee (Appendix A & B) for approval and in my discussions with the Chief Executive Officer, Director of Nursing and Medical Divisional Director of Nursing I indicated that I was interested in the impact of time intensification on work as a result of micro-economic reform and that I thought the best way to explore this was to be part of the innovative projects underway through a federally funded initiative (Silent reference No 1:2000). These three senior managers were supportive of my research providing I interviewed staff outside of working hours. I was required to wait until the next round of innovative projects at Westernvale Hospital had been decided upon

and the relevant wards selected before I was able to contact ward staff. As a consequence my negotiations for access to the wards were with the Medical Divisional Director of Nursing rather than specific clinical nurse consultants on the wards. I presented my proposal to the innovations committee prior to gaining ethics approval. One Clinical Nurse Consultant (CNC) and three project officers were adamant that my presence would create a *down draft* on the wards and prevent the proposed changes from being successfully implemented. Despite the protests of the Divisional Director of Nursing and the Director of Nursing who was chair of the committee and the instigator of the change program, the committee did not agree to my access.

The CNC argued that I would become a point of resistance on the ward by the mere fact that I would be asking reflective questions and this would make it difficult for her and the project team to combat staff resistance to workplace change. The three project officers attached to the innovation projects likewise argued my research proposal took a critical approach to workplace change and that I would represent the processes in a negative light. Their view had some substance. They attended the ward briefing on Mawson where I outlined my own research and observed several nurses begin to give me pertinent data, one nurse telling me with disdain that management assumed that those who were promoted should *push the party line*. When individually briefed on the project by the Medical Divisional Director of Nursing the three project officers and CNC made no formal objections, but did so when I spoke to them. Some days later they used the committee process to ensure that I did not gain access to the two innovation projects that were of interest to me. It was an insight into how staff may use their power through the committee process to achieve their objectives. The power of management is not total in the workplace, particularly where workers can use their collective strength. On the basis of this resistance the Divisional Director of Allied Health Services asked me to draft a Memorandum of Understanding (MOU) ensuring that I did not take up work time of any allied health personnel.

The MOU was drafted by myself following a lengthy telephone conversation with the Divisional Director of Allied Health Services who outlined her concerns. I had to ensure that all discussions:

(did) not interfere with staff time schedules;

(were) not held during working hours, this included morning and afternoon tea times; and

Should not involve elaborated conversations during working hours. For example this means that a 5 to 10 minute conversation which held the staff person up would be inappropriate.

Staff (were) free to talk to me:

Where and when they consent to do so, including in meetings;

Outside of working hours, including lunch breaks;

Interviews during lunch breaks need to be sensitive to the need for staff to have adequate work breaks;

Conversations while we wait for meetings or adjournments should not distract staff from the task at hand or hold them up in any way.

The selected planned interviews in 1999 (had to) be held outside of working time.

The ethics committee granted me access to two wards, but not to the numerous meetings planned over the following six months to introduce a series of 7 innovations. As a consequence while I was able to maintain my original research question, I had to shift my focus. Instead of examining in detail the up-coming innovation round, I moved to examine the impact of various innovations on those staff whose working lives revolve around the nurses' station. Ethics clearance was granted subject to no access to doctor-patient conversations, except when accompanying a nurse; no access to patients and no time-consuming interviews. I agreed to destroy all incidental information on patients at the end of my research and I was required to follow universal precautions according to ward protocol. Under Westernvale's ethics guidelines I was also required to reapply each year and did so for the following five years.

Impact on my behaviour of the Memorandum of Understanding

The guidelines outlined in the MOU clearly indicated that I should not be seen wasting anyone's time. It would be an understatement to say that this initially caused me anxiety. In the first few weeks when staff would hold me up at the lift to chat with interesting information, saying *here's something that would interest you*, I became anxious wanting to move us on and get back to the ward. I also became obsessive about consent, all too ready to believe myself unwelcome and taking up staff's valuable work time. As Wilkins (1993) notes while this is good practice, the point to be made is that what drove me was anxiety, rather than the ethical imperative. It was not until well into my time on the wards that I learnt when these time-consuming chats were legitimate and when they were considered wasteful. More importantly I eventually came to see that it was not true that staff did not occasionally dawdle back from morning tea, have a brief chat with a colleague by the lift, use a corridor conversation to network or check the football scores.

My own anxiety about wasting time or the time of others and the very formality of the MOU also says something about the work site. Was I the only one who felt intimidated when they

were caught talking by the lift, took too long to have a tea break, or did not immediately respond to the heart monitors? Indeed I was not, as the ensuing months illustrated. The comment by the Divisional Director of Allied Health that *no staff take tea breaks now, they do not have time* was not accurate, but it was a reflection of management's awareness of the increased work intensity, and an expectation that the work took precedence over normal industrial rights. Missing out on tea breaks, taking short lunch breaks and working beyond one's shift were seen as the norm, hardly to be mentioned since everyone was forced to work under these conditions. I discovered later that when nurses made errors, being *overworked* was not considered an adequate excuse. As one nurse said to me when I asked what would happen to someone who could not take the pace, her reply was *we're told toget out* (Field notes 22/4/98).

However I also discovered that those who did not take a tea break usually had more control over their labour than those who did and that those who disregarded management's demands to intensify the pace could clearly articulate what they were doing. When I made arrangements for interviews suggesting times that would reduce my intrusion into their day or when interviews went longer than arranged and I began to apologise, staff looked bemused and indicated that it was not a problem. This led me to examine who these staff were, what was their position in the organization and how could this be explained. My observations here suggest that male nurses more readily determine their own work pace, as do allied health staff despite the fact that in signing the MOU I had agreed not to corner this very group at the lift for a lengthy conversation. These health professionals created an atmosphere where I felt secure to ask questions and probe in some detail. In a number of instances my ready access to these people was directly linked to internal politics in the organization. They were indeed busy, but giving me their time was an act of resistance against the very management that had curtailed my access. Acting out their resistance was not simply support for me, but an opportunity to tell their story to someone who was interested in the very question of work time for health professionals caught between a service ethic and a casemix benchmark.

I had long conversations with the senior medical registrar who spent time trying to explain the complexities of the interns' roster system. I also spent time with a senior social worker who gave me insights into what innovation projects had been selected and why and as a consequence what was the underlying agenda. In my first encounter with him, by the lift his first remark was, *Ah! the researcher with too much experience who will take up everyone's time* (Field notes 30/4/98). He was part of the innovation committee and had been privy to the objections raised against my accessing the various project meetings. He made a special point to have lunch with me, taking the full hour to reveal the processes for selecting wards for change initiatives and to show how this heightened existing factional interests. I did not

become fully aware of these factional interests until my final interview with the Director of Nursing some six years later, when she was free with the passage of time, to be more open in revealing them.

My own feelings gave me insights into how others might feel, the opportunity to check them out both through observation and interview and more importantly to understand the broader political context. Wilkens (1993:6-7) writes that:

our emotional responses may aid a sophisticated sensibility in two ways. Firstly,they have a sensitizing, cognitive function which alerts us to the meanings and behaviors of others.....Secondly, a sophisticated sensibility grounded in our emotional responses has an important interpretive function.

The issue here is not to take it personally, but to make use of one's own emotional state for what it tells us about the field.

The impact of status differences on trustworthiness

The second account dealing with emotions concerns my relationship to the medical staff. I went into the field with close links to nursing. I arranged to work alongside nurses shadowing individuals across various shifts during the week. I presumed that over the period I would establish a relationship with interns and medical officers on the ward and that these informal interactions would enable me to ask questions. I found to my astonishment that, having thought I had established contact with an intern or Medical Officer, the next day this young man or woman would look straight through me, ignoring my presence and greeting. This felt disconcerting to say the least. I became intimidated about the effort required and began to re-think my research. Because it was so hard to become friendly with these workers I began to disregard them and tell myself I would leave any interviews until the end of my field work when I would have to steel myself to approach them.

I discussed these feelings of rejection and inferiority that I felt with a colleague. He suggested to me that what I felt might tell me something about the status relationships in hospitals between doctors and nurses and other health professionals. Once again he suggested that it was worth asking myself whether my feelings were shared by others. This led me to ask what was the meaning of this behaviour and how generalised was it? I discovered that many nurses experienced the same feelings of rejection and inferiority in their interactions with medical staff and were grateful for the opportunity to talk about this. They spoke of their amazement that one day you could have a pleasant conversation with a doctor; the next day he or she

would ignore you on the ward, or work alongside you at the nurses' station with no greeting or acknowledgement. These accounts were not universal, but they were generalised enough for me to pursue and to intensify my observations.

I knew from my reading of nursing research that Annette Street (1992) had noted that when she dressed as a nurse she felt invisible to the doctors, but when she changed her clothes and dressed in a white coat she felt acknowledged. I had entered the field dressed in a way to be able to pass as a nurse with a white blouse and dark blue straight skirt. A number of patients assumed I was the one in charge and it was not uncommon for patients to come to the nurses' station and address their concerns to me. However changing my way of dressing would create problems of class and occupational solidarity, an action I now realise I could have experimented with. I regret that I missed this opportunity, because of how I dressed and because of a set of feelings about solidarity; I had intended that my research would explore the work of all the professionals and occupational groups milling around the nurses' station.

Toward the end of my fieldwork I braced myself to interview six interns. I approached each request waiting to be rejected. I was never rejected to my face, although one failed to show up at the appointed time. I chose Sundays to ask them and Sundays to interview them because on this day they worked by themselves supported by nursing staff. Each interview was successful in terms of establishing rapport. Following these interviews I was no longer invisible. The intimacy of the interview remained during the time of my fieldwork, but in subsequent years when I walked through the wards I had once again become invisible to this group of workers; yet not so to the nurses, PSAs or ward clerks who will still greet me five years on, ask how the thesis is going and gossip about other events.

These status differences between doctors and nurses, doctors and researchers, are subject to the rules of *time and context*. Sometimes doctors have time for you. You just have to learn the rules of when to interact and when not to. If I had broken through the status differences, perhaps by dressing differently, I may have uncovered other perspectives on what was happening. My own view is, however, that ethnography is only a narrow slice of life, not holistic in any way, and limited by the social position and constructions the ethnographer brings into the field. These include the ethnographer's emotional states, confidence, and how decisions to interview participants in the field or not, or to interview them earlier or later in the research project, impact on what is uncovered and on subsequent theory construction.

Observations of inappropriate practice

As a final point to this study and the overall thesis, some comment should be made on my observations of inappropriate practice. Social science research in the health care sector has a reputation for picking up on unprofessional behaviour and subsequently discrediting the nurses, doctors and managers involved (see Goffman 1961; Sudnow 1967). This is especially so for nurses who have less power than doctors for controlling researchers, as my own ethics agreement demonstrates. Nurses are also constantly on show, and unlike doctors who move around the hospital, and allied health professionals, who have offices in other buildings, the nurses' workstation is an open plan area for all to view. The fact that I saw so little negative behaviour leads me to two conclusions. The first explanation might be that for most of the time nursing and medical care is respectfully given. The second explanation suggests that staff were on their best behaviour. No doubt they were. However, even one's best behaviour has a certain style to it, and it is this that I comment upon. For the most part I was impressed with what I saw, although I found that the best is tinged with time scarcity, routinisation and technical efficiency. A possible third explanation is that I was in the field long enough for staff to drop their guard.

It is also a fact of fieldwork that some participants resist the nosey researcher at certain times. I am sure that on Mawson, at times, I was sent off early so staff could debrief without me; although this was always presented as a reward for all the 'jobs' I had done during the busy late shifts. It is not always easy to distinguish between these acts of manipulation of the researcher and ordinary courtesy. One area where this was particularly intriguing was in the nurses' tea room. On both wards nurses often sat there in silence, individuals appearing to protect themselves from the hubbub through burying their head in a magazine or watching television, which to my irritation was always on. Following my natural inclination I often tried including these nurses in my conversation, particularly if they sat between me and others, moving my chair back to create what I thought was an inclusive arch. Often this had little effect.

I checked out my observations with Luke who was of the view that time in the tearoom was respite from the noise, the juggling of tasks and the pace of the shift; not necessarily resistance to my inquiries. In his view nurses were often too tired to talk; and used this time to opt out. PSAs likewise retreated to another space, although mostly they found an empty room to be by themselves. Some years later in discussion with an anaesthetist at Westernvale he indicated that in the operating theatres, where the tea room was shared between the doctors and nurses, the TV had been introduced in 1995 and the situation was the same. The surgeons and anaesthetists had become irritated with the TV on all the time and the subsequent curtailing

of conversation, and eventually secured a separate tea room where he claimed they discussed personal and professional issues with alacrity and curiosity. It may well be that nurses do not wish to be intruded upon during their tea break by a nosey researcher wanting to gauge their opinion on the routinised nature of their work. For them reflecting upon their workload and stress may compound, rather than ameliorates their distress, given their work provides little opportunity to exercise their initiative.

In this chapter I have argued that doing ethnographic research brings with it a multiplicity of issues that challenge the trustworthiness and credibility of results. As cultures, institutions and practices undergo change, corporate memory fragments and shared understanding of past events is lost. For the ethnographic researcher this creates methodological problems especially when participants cannot remember past events with any clarity, or insist their situation has changed and it is 'not like that here anymore (Harford et al 1997). While this situation is of some assistance to the ethnographer in that health professionals and other workers in large institutions like Westernvale may be willing to confide in outsiders, the problem of the relevance of the findings 'after the fact' remains. The 'truth' of the account must be found in the theoretical interpretations, and the lessons to be learnt; not in the details of day-to-day practices, which are constantly changing. If the interpretation still holds despite the shifts in ways of organising the work, in practices and personnel, this is evidence enough. The substantive theory is confirmed over time; time itself is a methodological strategy for confirming the findings.

However the validity of these interpretations is not without some problems. The methodological dilemma is twofold. Ethnography makes claims to being one of the most systematic, precise, comprehensive and detailed approaches to social science research—time makes it such—yet it freezes the account at one point in time. Secondly, the ethnographer takes up the voice and understanding of one culture, organisation or group of people and communicates this understanding to the scientific community of scholars as if it were a comprehensive account of the field. In this study the account is directed towards social scientists and perhaps policy planners. It is not directed to the participants; they have not collaborated in the portrayal of their own world, nor have they commented on its accuracy in any formal manner.

The 'comprehensive' nature of an ethnographic account is less than a thick description or deep slice. It is no more than the view of one researcher, in one place at one time with limited understandings of the complexity of the arena. The interpretation may be accurate enough and may be shared by others, but it is also an interpretation shaped and coloured by where the researcher stands in the hierarchy and what they feel about this. As I have argued above in

my confessional account, my social status impacted on my own confidence in the field, and in turn on to whom I spoke, what I asked, and what I was told. The strengths and weaknesses of ethnographic research, or any qualitative study where the 'self' is the tool of inquiry, reside in one's intellectual capacity to make sense of the arena, but also in one's confidence, honesty and emotional stamina.

The next two chapters needed little emotional stamina to write, but are demanding of the reader. They draw primarily on document analysis to outline the major ways in which the strategies of the new public management control the labour of health professionals through techniques of time. It is possible to get a sense of the thesis argument by skipping directly to Chapter 6 and reading on to through to Chapter 10 and only returning to Chapters 4 and 5 at the end. However they are important to the overall argument, for they outline the *iron-cage* of political and bureaucratic reform.

CHAPTER FOUR

CREATING A POLICY FRAMEWORK FOR ACCELERATING CONTROL OF HEALTH PROFESSIONALS' TIME

Apart from time there is one other means to bring about important change—force. If one works too slowly, the other will do it faster (George Christopher Lichtenberg quoted in Fabian 1983).

Introduction: service professionals and autonomy

This chapter deals with the three major Federal government policy changes introduced to reform Australia's public hospital system during the 1990s. These can be broadly defined within the framework of the new public management as 'labour market flexibility' and two 'performance management strategies' (Ferlie 1998). Labour market flexibility was bolstered by the structural reform of enterprise bargaining, an industrial reform strategy that extended to the entire public sector workforce. The two 'performance management strategies' are the time-based incentives built into the Medicare Agreements of 1993-1998 and 1998-2003, and casemix DRGs. I argue that these three 'reforms' constitute a broad micro-economic framework within which the state sought to control the labour of health professionals working in the acute public hospitals sector. Further, I argue that these 'reforms', introduced to reduce health care costs through increases in efficiencies, productivity, quality and equity of access, are time 'reforms'. They operate through the imposition of benchmarks that measure the speed, duration and interval of such disparate events as patient length of stay or the speed of operation per surgeon. The chapter begins with a discussion of professional autonomy within the welfare state and the vexed question of what constitutes a 'commodity' for service workers and hence how their working time produces surplus value.

The very word professional conjures up the idea of autonomy rather than control. Professionals lay claim to independence of practice based on the special relationship of trust between themselves and their client. This is seen as necessary for effective service and underlying it is the belief that the doctor or lawyer always acts in the best interest of their client (Parsons 1951). Occupational groups striving to achieve professional status attempt to establish autonomy through invoking a code of ethics and thorough claims to a unique body of knowledge and a role in client advocacy. The relationship between doctors and their patients is often presented as the ideal type of this autonomous professional relationship, above

interference from the law or the state and certainly not subject to the control of the market where the strategies of scientific management might be brought to bear on day-to-day practice (Leicht & Fennell 2001).

In the case of medicine, the profession has developed and promoted a strong code of ethics that emphasises universalism (treating all patients regardless of class, status, race etc) over particularism, and also emphasises affective neutrality (emotional detachment) (Parsons 1951). These characteristics are seen to regulate and socialise the novice into the functional social role, while the injunction to use the most up-to-date evidence and technology, ensures a high level of skill and competence. Any deviation is dealt with in-house, for self-regulation is a key aspect of professional autonomy. These obligations are rewarded with the privilege of medical autonomy in clinical decision-making and a tacit agreement by the state to ensure the continuing dominance and legitimisation of Western bio-medical knowledge.

Sharing in some of this autonomy has been on the agenda for organised nursing in Australia for several decades. It explains the transfer of nurse education to the tertiary sector, the implementation of various models of care, the development of a career structure in the late 1980s, claims to a unique role in patient advocacy and more recently the establishment of nurse specialisations including the nurse practitioner project (McCoppin & Gardner 1989; DHS 1999; DHS 2003b).²⁴ In the case of nursing, the issue has been to wrest control of their labour from medicine as well as the state. In the past both doctors and nurses have met with resistance from the state: doctors in maintaining their incomes and autonomy, nurses in achieving autonomy (Shoebridge 1989; Daniel 1990; Bach 2000; White 2000).

Salaried health professionals and professional autonomy

Debates in Australia on the professional autonomy of medicine have tended to deal with those doctors employed as general practitioners, specialists in private practice or visiting medical officers (Willis 1989; Daniel 1990; White 2000). Challenges to the autonomy of these three groups has come from two directions; the state and the market. In those situations where doctors in private practice are reimbursed through fee-for-service, funded by Medicare, the state continues its endeavours to curtail costs through a series of bureaucratic measures

²⁴ Bach (2000) suggests that the 'super-nurse' has been a powerful development within the European Union. In his view it indicates that world wide nurses have fought the state on two fronts; firstly in ensuring that the state does not substitute nursing labour with lower level care attendants, and secondly in attempting to get the state to up-skill the profession in order to extend professional autonomy through the creation of categories of nurses legislated to diagnose and prescribe.

linked primarily to quality assurance, but also to limiting provider numbers, reimbursement fees or access to public hospitals for the private patients of visiting consultants. White (2000-1:9) refers to this as 'bureaucratic, hierarchical rule-based controls...or state-mediated professionalism. In these cases medical autonomy is under pressure; but it has not eroded to the point where the profession is deprofessionalised or proletarianised (Willis 1988), although White (2000) suggests the possibility for this in his exploration of the impact of the national GP strategy. The impact of corporatisation on the medical autonomy of GPs is a more recent development and, as yet, too early to determine (2000-1). In this thesis the two groups under consideration are salaried medical officers and nurses. Senior salaried medical officers have some scope for private practice, but it is usually limited in terms of hours or to a percentage of their salary.²⁵ Nurses working in public hospitals have no opportunity for private practice.

In Australian public hospitals medical care is provided by medical officers who are salaried employees of the hospital and private consultants who are contracted on a set fee as Visiting Medical Officers (VMOs). The majority of salaried medical officers are juniors training as interns, medical officers or registrars, usually attached to particular specialties such as cardiology, respiratory medicine, psychiatry or dermatology with restrictions against engaging in private practice.²⁶ While it has always been difficult to argue that salaried service professionals enjoy full control over their labour, Dent (1998) commenting on the situation for doctors under the British NHS suggests that, ironically, their autonomy has been taken as a given by the very absence of the constraints of the market. Similarly, in Australia salaried medical officers working in public hospitals are also employed within the framework of the welfare state. While their numbers are small, in the past they enjoyed high status, prestige and autonomy.

There are a range of alternate explanations of the relationship between medicine and the state and consequent definitions of 'autonomy' for this group of professionals. For example using Friedman's (1977; 1979) concept of 'responsible autonomy' it might be argued that salaried medical officers maintain control over the right to diagnose, but that this is subject to

²⁵ There are differences between the States on the amount of time or percentage of private, fee-for-service work that can be done by salaried medical officers employed by public hospitals, and those employed as academics working in schools of medicine. In this thesis consultants came from both groups.

²⁶ These restrictions do not prevent junior doctors in training for a speciality from working as locums in general practice although the Medicare reimbursement fee they receive would be lower than that of a specialist qualified GP.

budgetary constraint; that is, the profession maintains institutional control; the state, organisational control. Doolin (2002) commenting on New Zealand makes a distinction between organisational and individual medical autonomy. Organisational autonomy is characterised by the political right to act as a powerful interest group in order to influence policy via the various colleges and associations; the economic right to determine remuneration, through the union or the market; and the technical right to set standards and control performance. At the individual level doctors exercise medical autonomy by resisting any incursion by other health professionals, managers or state bureaucrats that challenges their role as the primary diagnosticians and determiners of appropriate treatment (Doolin 2002: 374). All these avenues to exercise autonomy and power, with the exception of the market, are open to salaried medical officers.

Intruding on the autonomy of the salaried service class

Offe's 1985 account of the functional role of the service class, which includes salaried medical officers, provides a useful starting point for understanding the way in which the state has attempted to erode the autonomy of salaried doctors in public hospitals through intrusion into the labour process. Taking a functionalist approach Offe suggests that the role of service professionals in capitalist, as well as non-capitalist societies, is in maintaining the social system through a process of 'synthesizing', 'mediating' or 'normalising labour' (1985:105). Service professionals achieve this through two seemingly contradictory processes. Professionals must give the best quality care to the client currently before them, yet at the same time treat all clients with equal care. In order to achieve this desired quality outcome, service professionals need a high degree of room to manoeuvre; or professional autonomy. The professional doctor must be able to respond in an ad hoc fashion to a particular situation. It is this very ability to exercise discretion towards the case in hand, that separates medicine out from other health occupations and is what nurse leaders aspire to for their profession.

This professional knowledge and the service given is highly individuated and inextricably tied to a sense of self. It is impossible to alter the 'service' or 'commodity' or intensify the production, or improve the efficiency of service work without impinging on the personal qualities and social skills integral to the deep structures of the professional self (Harford, Savage & Witz 1997). Service professionals, particularly in the health sector, draw on their unique body of knowledge and service ethic in the giving of care. It is this combination of service and skill, along with autonomy of practice that defines them as professionals. In the case of medicine this autonomy means the freedom to decide what treatment the patient

before them at a particular moment in time requires to maximise their health or comfort and to be able to do this without undue resource restrictions.

This care carries over into the use of medical technology. Competent doctors and nurses recognise that medical technology can sometimes be distressing to patients, but is necessary for efficacious outcomes. Achieving a positive outcome requires helping the patient deal with the negative aspects of the technology, as well as being proficient in its use (Strauss, Fagerhaugh, Suczek & Wiener 1982). Medical technology does not replace the professional self, nor is it simply the cause of increased routinisation, but the skill and care in using it is part of the professional 'self'. To subject this service to productivity and efficiency gains not directed towards patient comfort or the alleviation of illness is problematic, not just for the patient, but for the very meaning of the professional self (Harford et al 1997).

Explanations for a shift in the balance between the functional requirements of medical work and cost containment can be found in the 'perverse incentives' built into any supply-induced health care system—private, for-profit, or state funded system, and from the financial demands made on the welfare state. In Australia under the structural arrangements of Medicare, where doctors in private practice are paid on a fee-for-service basis, there are minimal incentives to curtail health care expenditure and many inducements to support increased consumer demand (Hindle & Perkins 2000:81). While this is not the case for salaried medical officers who do not benefit directly from the 'perverse incentives' built into private, fee-for-service health care, except in a limited way, the welfare state-based health care system still needs capital for salaries and to purchase medical technology, pharmaceuticals and plant equipment. These expenses are part of the capitalist profit-system. Once health care expenditure becomes part of the welfare state, decisions about resource allocation are no longer the sole prerogative of professional medicine. Rationing the resource is now imperative. The question is who should do the rationing? One strategy used by politicians, who do not wish to be blamed for limiting resources, is to give the appearance that health professionals, as public servants, must now take responsibility for budgets they supposedly previously allocated with arrogant abandon (Harrison & Pollitt 1994). This is now achieved via the strategies of the new public management which aims to incorporate the practices of the market into the welfare state (Ferlie 1998).

The new public management

'Reform' within health and welfare sectors impacting on the professional autonomy of doctors and nurses is not isolated to Australia; nor is it restricted to health (Harrison & Pollitt

1994; Bach 2000; Leicht & Fennell 2001; Doolin 2002). The trends are global, and the motivation is cost control, with some commentators suggesting the Anglo countries of the USA, Britain, New Zealand and Australia have been more ruthless and determined in their efforts than many European states (Bosch 1998; Doolin 2002). The origins of this move to a new political economy can be found in a popular belief, held in the early 1980s in many social democratic states, that the public sector was underperforming and that the solution lay in incorporating many of the competitive strategies of the market into the public sector (Cairney 2002). This belief led to a series of strategies broadly defined as the New Public Management (NPM) (Ferlie 1998; Bach 2000).

Cairney (2002) argues that there is no accepted definition of the NPM except to suggest that the principles of the market are applied to public institutions and as a consequence to the working conditions of those employed in these institutions, such as salaried medical officers and nurses. Alternately, Ferlie (1998) lists six features of the New Public Management. These are (1) privatisation of public utilities; (2) the introduction of market-like mechanisms into the public sector; (3) separating core (policy) from peripheral (service delivery) tasks and (4) outsourcing the service delivery, while maintaining government control over policy; (5) more active management such as performance management systems; and (6) labour market flexibility. Added to these are the emphasis on outputs over inputs and the break-up of large, uniform organisations into smaller business units (Bach 2000:928).

In applying these criteria of the NPM to the health care sector the evidence from Britain and New Zealand is more obvious. In both countries the introduction of quasi-markets via the purchaser/provider split that devolved purchasing power down to the level of Trusts or GP fundholders more clearly emulated market mechanisms (Harrison & Ahmad 2000; Doolin 2002). In Australia, control has remained more obviously centralised. However I argue in this thesis that the rationalised methods of Federal and State budget containment, exercised through EB, Medicare incentive funding, best practice and casemix benchmarking, have resulted in the imposition of NPM strategies at the local hospital level. The thesis focuses on two of the strategies: labour market flexibility and performance management systems.²⁷

²⁷ Other strategies of the NPM are also in evidence in this study, such as outsourcing and privatisation, and the creation of quasi-markets.

Labour market flexibility: controlling health professionals through enterprise bargaining

Enterprise bargaining (EB) has been a major factor in achieving workplace flexibility due to the fact that agreements contract workers to engage in workplace change, although it must be stated that EB operates independently of the new public management. Enterprise bargaining operates across both the public and private sectors. The progress towards enterprise bargaining began in earnest in the mid to late 1980s when the Australian Industrial Relations Commission ratified a two tier wage system that allowed negotiations for wage rises above the award to occur at the level of the workplace. These agreements were subject to the restructuring and efficiency principle (REP) that demanded evidence of a commitment to changes in work and management practices, and increased functional flexibility such as multi-skilling, up-skilling and retraining (ACIRRT 1999). The 1988 National Wage Case replaced the REP with the Structural Efficiency Principle (SEP) with the aim of increasing the range of functional flexibility arrangements in workplaces to include clearly delineated career paths, the removal of impediments to multi-skilling, parity of conditions amongst workers within the same workplace and increased numerical flexibility allowing for a variety of hours, days and shifts to be taken up by workers, or demanded of employees (ACIRRT 1999).

Despite these shifts the AIRC did not incorporate an enterprise bargaining principle into the 1991 National Wage case until both the Federal Labor government and the Australian Council of Trade Unions registered their protest over the failure of the Commission to do so. The trade union movement was of the view that negotiations over wages and working conditions needed to move to the level of the enterprise in order to safe-guard jobs and maximise workers' share in the profits (Morris 1996). The view of the AIRC was that both managers/owners and employees were not yet in a position to navigate the inequities of decentralised bargaining. The Federal government responded in 1992 to this lack of flexibility by amending the Industrial Relations Act of 1988 to allow for enterprise bargaining (Wooden 2000). Agreements were for a fixed time and wage increases could only be granted where there was genuine productivity and efficiency gains (ACIRRT 1999). These ideas were cemented in the 1993 Commonwealth Industrial Relations Act, which established enterprise bargaining within the framework of existing union awards with safety net provisions. Further increases in the safety net, such as minimum wages and conditions, instigated in 1995, were directly linked to productivity increases. The 1995 amendments also made provision for flexibility in the standard 38 hours a week.

With the election of a Liberal/National Coalition government in 1996, EB was firmly established under the amended Workplace Relations Act. This Act allowed for individual workplace agreements (AWAs), legislated against any industrial action outside of the negotiating period, including sympathy strikes, allowed for non-union members to overturn union-negotiated agreements through democratic voting, placed restrictions on the role of the Industrial Relations Commission and established the twenty allowable matters that became the framework for awards (Hancock 1999). A key component of all EB agreements is the commitment to workplace change and flexibility which has bolstered the NPM strategy of labour market flexibility aimed at increased productivity and efficiency.

Controlling health professionals through labour market flexibility²⁸

Of the twenty allowable matters under the Federal Workplace Relations Act 1996, twelve deal with issues of work time; that is, with issues of numerical flexibility.²⁹ These enable management and workers to negotiate over flexibility in rosters; forms of leave such as those for maternity, adoption, professional education or reasons of sickness; on call and overtime provisions; hours of work, payment for work during public holidays and casual employment. For doctors and nurses, rosters and on-call arrangements are key areas of contestation. Negotiating agreements that allow these professionals to have a life outside of work, but still be available, is an elaborate exercise in rulings on meal breaks, minimum payments for call back, proximate call, remote call and overtime allowances.

Enterprise bargaining at Westernvale: negotiating for continuous change

At Westernvale, nurses (through the Australian Nursing Federation) and salaried and academic medical officers (through the South Australian Salaried Medical Officer's Association and the National Tertiary Education Union), have engaged in three rounds of EB since 1996. In all cases, agreements were negotiated directly with the State Department of

²⁸ The role of the state in controlling health professionals, particularly doctors, pre-dates the events discussed here. For an account of this history in Australia see Daniel (1990) and Crichton (1990).

²⁹ Besides the 20 allowable matters other issues, such as salary increases may also be brokered as part of EB agreements. The 12 matters dealing with time include: (2) hours of work, (3) hourly rates of pay; (4) piece rates; (5) annual leave; (6) long service leave; (7) other forms of leave; (8) parental leave; (9) public holidays; (11) loading for overtime; (13) redundancy rates; (14) notice of termination; (18) types of employment, eg full-time (Community and Public Sector Union 1997).

Human Services, rather than the managers of specific hospitals, allowing for standardisation of wages and conditions across the sector, despite the fact that pattern bargaining is contrary to the EB principle of workplace flexibility. While Westervale may advertise and directly employ its own staff, these individuals then become public servants subject to the conditions of employment of the Public Sector Management Act of 1993 (Silent reference, No 3).

All EB agreements negotiated between the DHS and health professionals in South Australia between 1996 and 2001 built in provision for the management of change. However these agreements did not specify how productivity and efficiency was to be achieved, nor was the issue of clinical autonomy challenged. This is consistent with research elsewhere in Australia, which suggests that EB has not been the mechanism for directing the kind of workplace change managers would like to introduce (Stanton 2000). However EB does include a clause binding workers to cooperate in changes imposed by management. Many unions are able to build into the agreement opportunity to be part of, or briefed on, workplace changes before they are instigated. More importantly, EB at a very fundamental level constitutes a tool in the processes of redetermining the worker's hour. Agreements commit workers to intensify productivity either through changing the work processes or working longer or harder in return for wage increases. However, EB also has the capacity to ameliorate the negative impact of productivity and efficiency measures where certain conditions prevail. These conditions include strong union membership, labour shortages, public sympathy and legislation in support of professional closure.

Controlling health professionals through performance management

According to Morris (1996) the structural reforms of EB were accompanied by cultural change in the workplace that saw in the late 1980s and early 1990s a proliferation of human resource consultants employed by major companies and government instrumentalities. These consultants recommended outsourcing, downsizing and a range of workplace activities that encouraged flatter structures, team work, the generation of mission statements and increased quality assurance, all of which veiled, or made palatable, work intensification.³⁰ The tactics

³⁰ These 'reforms' are variously defined under the terms 'flexible specialisation' or 'post-Fordism'. Within the private sector, especially manufacturing, post-Fordism is characterised by labour market de-regulation, small batch production of value added and differentiated products, produced on multi-purpose machines by multi-skilled workers organised around small teams and flat managerial structures. Proponents of post-Fordism argue that it encourages non-authoritarian work and management structures that are flexible and responsive to production demands and the need to innovate (Matthews 1992). Within the public sector the term 'productive efficiency' is preferred as it seen to encompass the service sector where in real terms what is produced is a service, rather than a concrete product (Matthews 1992:97). The flexibility extends to wages and the organisation of the hours worked negotiated via EB, in order to respond to demands and attempts to overcome previous rigid divisions of labour and authority structures separating management and workers.

also included incorporating some health professionals into the management agenda. At the same time there was an increase in electronic forms of surveillance primarily through computer technology. This has enabled dubious measures such as length of stay (LOS), bed numbers or hours of care to become the legitimate measures of productivity (Harrison and Pollitt 1994).

The use of computer-based technology is of particular interest. The systems in place must be seen to be legitimate ones. Computers are presumed to be legitimate, rational and neutral carriers of information. As Harrison & Pollitt (1994:95) cynically note, 'if incorporation is the strategy for involving professional provider groups in sharing management responsibilities with the state, the most profound level of such a strategy is the creation of shared meaning'. This shared meaning derives from computer technology and illustrates Postone's (1996) assertion that technology itself should not be seen as neutral in the processes of work intensification. The technology allows centralised collection of data not only of the LOS, but also detailed knowledge of the care patients receive at any point in the twenty-four hours, in what appears to be a rational, value neutral and equitable format.

Whatever approach taken—new technology or re-arranging workplace processes—achieving efficiency is problematic. One way of doing it is for employers to supervise or control the activities of employees through direct surveillance, or technology such as production lines or the setting of targets, and to impose penalties for non-compliance. Direct surveillance can be costly and in some workplaces, particularly service industries, neo-Fordist production processes may be inappropriate, out-dated or distasteful to the workers' sense of professionalism and autonomy. A seemingly democratic solution to the problem—which management faces when attempting broad-based control of the labour process and increased control of professional labour—is arrived at by combining 'best practice' and 'benchmarking'.

In Australia 'best practice' as a quality assurance measure initially dealt with the private sector, but in 1990 when the Industry Assistance Commission was restructured and became the Industries Commission it included a new sector in its brief, that of the public sector. Both the Medicare agreements of 1993-1998 and 1998-2003 and casemix use benchmarking as cost containment strategy. These imposed benchmarks forced hospitals to use the cultural processes of 'best practice' as one of the many management strategies necessary to meet the benchmarks

of productivity, efficiency, quality and equity of access.³¹ The benchmarks incorporated in the Medicare Agreements are discussed in the next section.

Benchmarks and incentive to change: the Medicare agreements

Funding for public hospitals in Australia is through a mix of Commonwealth and State grants. Since the introduction of Medicare³² in February 1984, the Commonwealth has entered into a range of agreements with the States and Territories in four, five year cycles: 1983-1988; 1988-1993; 1993-1998; and 1998-2003 (Commonwealth of Australia 1993; Commonwealth of Australia 1998). In recent years one of the most successful ways both the Labor and Coalition governments have coerced health professionals into engaging in the 'reform' process is through the creation of financial incentive or innovation pools. This has been achieved by reducing the Medicare base funding, and tying additional funding to targets and benchmarks. This is the rationale behind the various 'best practice' programs for general practitioners and incentive funding for public hospitals instigated by Commonwealth and State governments over the last decade.

In the 1988-1993 Medicare Agreement the Federal Labor government established a base Hospital Funding Grant, adjusted for inflation and population growth and determined through age- and sex-weighted hospital utilisation rates, with the Commonwealth contribution at 43.2%, the State contribution at 47.2% and the non-government sector at 9.5% (Senate Inquiry 2000:34). The Federal Labor government also made it clear in the 1988-1993 round it intended to move to casemix funding in the future, and began to implement some of the necessary information technology. The 1988-1993 round included additional funding via incentive programs for those states that increased the throughput in palliative care, same-day surgery and early discharge, and the implementation of casemix information systems. As the Senate Inquiry into the funding of public hospitals in Australia (2000:35) noted, this 'provided the opportunity for the Commonwealth to encourage service innovation'.

³¹ According to Sklair the public sector was seen to be particularly inefficient and 'best practice' became a tool for reform, bolstered in 1991 with the establishment of the Best Practice Demonstration Program generously funded under the Federal Labor Hawke/Keating government and located in the Department of Industrial Relations (Morris 1996; Sklair 1996). Despite cuts in funding under the Coalition the concept remained in both private and public sectors (Pocock & Wright 1997).

³² Medicare is a universal, health insurance scheme based on the principles of equity and equal access for all eligible Australians. Expenditure under Medicare in 1997-98 was \$6.33 billion for General Practitioners, pathology, specialist services and diagnostic imaging. Payment for these services is made by the Commonwealth direct to the practitioner. The client often makes a co-payment given that the Medicare payment to the doctor is only 85% of the scheduled fee; not all doctors bulk bill and the doctor has the discretion to charge above the recommended scheduled fee. The Commonwealth also pays block grants to the States for free access to public hospitals. Expenditure to the States in 1997-98 was \$5 billion (Magarry 1999).

Significant changes were introduced into the third round of the Medicare Agreement in 1993-1998 also brokered by the Federal Labor government. The principles of Medicare as a universal program, free at the point of service, remained. However the base grant, although calculated in the same way, was reduced by \$400 million. This \$400 million was transferred to two bonus incentive pools. Bonus Pool A was for additional public bed-days above a pre-set benchmark established at 51.5% of the aggregate of total bed-days. If any States' percentage share of public bed-days was below this benchmark financial penalties were incurred. Bonus B Pool funds were distributed to those States and Territories 'that increased their share of public bed-days above 51.5% of the total bed-days, and included penalties for those states if their share of public bed-days went below this benchmark figure' (Senate Inquiry 2000:36). In effect this intensified the work of health professionals as States and hospitals competed against each other for funds (Queensland Health 1996). For example, if a State or Territory increased its share of public bed-days from 53.5% (1990-1991) to 54% (1993-1994) they were eligible for funds from this pool, but not necessarily as much as other States, if other State's performance resulted in a higher percentage increase.

Penalties were applied to those States where Commonwealth funds for General Practitioners per capita fees exceeded the national average by more than 1.11% and further incentives were available for quality improvement strategies. This guarded against the notorious cost shifting between the States and the Commonwealth.³³ The Commonwealth also provided funds under the Day Only Procedure Program for States to increase the day surgery rates in public hospitals. This led to the need to develop refined definitions of what constitutes 'day only surgery and other time-related tools such as 'episode of care' and 'time of discharge' and to the development of tools to benchmark day surgery rates and to determine which procedures should or could be done as a one day admission (Cleary, Lloyd & Maguire 1999).

In the third round of the Medicare Agreements (1993-1998), the Commonwealth also agreed to provide additional funds to States where the proportion of the population without private supplementary hospital insurance fell by 2% on June 1993 levels. The Senate Inquiry (2000:37) notes that this was a continued point of conflict between the Commonwealth and the States with the Federal government failing to honour this agreement in the way that the States understood the arrangements. Despite this, Commonwealth expenditure exceeded that of the States 46.1%/45.4% for the first time (Senate Inquiry 2000:37). In 1995/1996 with the

³³ Funding for hospitals comes from the States, via Commonwealth grants which are administered by the States, while GPs are reimbursed by the Commonwealth. One way for States to reduce costs for primary care is to ensure that patients go to their GP rather than to a hospital outpatient service.

change to a Liberal Coalition government the incentive pool (Pool B) was replaced with a 'Performance Pool' and set targets were allocated for public hospitals in each State, eliminating the need for inter-state competition (Queensland Health 1996). The criteria under which hospitals were deemed eligible for funds from the 'Performance Pool' focused on: inpatient activity; non-inpatient activity; elective surgery waiting time; and emergency department waiting time targets. Funds were also provided for mental health and other health services (Queensland Health 1996:19).

The 1998-2003 agreement brokered by the Liberal Coalition government is known as the Australian Health Agreement. A number of performance targets for waiting times have been maintained at the levels achieved in the previous Medicare Agreements, although there has been an attempt to more clearly link funding to policy development and to introduce a system of risk sharing in experimenting with financial and management arrangements. The establishment of the National Health Development Fund to pursue innovations that improve efficiency and effectiveness or reduce the demand for public hospital services is one example (Magarry 1999). Conflict between the Commonwealth and the States over the base grant for hospitals continued during the 1998-2003 Medicare round, exacerbated by the reduction in the number of Australians with private hospital cover. The 'reforms' put in place by the Coalition government have ameliorated this to some extent.³⁴

Principles of time management are built into the agreement. Clause 13 (2) of the agreement states that access to public hospital services by public patients must be based on clinical need and within a 'clinically appropriate period'. Clause 20 and 21, Schedule C, commits the states to continuous benchmarking and the collection and sharing of data to achieve this aim; and Clause 67 to a continuous process of efficiency. Clause C requires both the Commonwealth and the States and Territories to develop indicators to measure waiting times along with a range of other issues (Commonwealth Department of Health and Aged Care 2001b).

The major change in the 1998-2003 agreement is in the variations introduced into the calculation of the base grant, with more opportunity for modifying the grant according to the changes in the growth and age structure of the population, changes in the percentage of the population with private health insurance or the percentage who are veterans, and changes in

³⁴ Reforms to encourage the take up of private health insurance include a 30% rebate on premiums; initially means-tested, but now extended to everyone with private health insurance, and the abandonment of community rating in 2002. This allowed the government to legislate to allow insurers to charge a penalty for late joiners. For example, insurers add a 2% penalty to the premium for each year a joiner is aged over 30 years of age (Medicare Private 13/1/2004).

the hospital output costs known as the Hospital Output Cost Index (HOICI), based on all of the above plus the consumer price index and wage increases (Senate Inquiry 2000:37-8). However the difficulty for the States has been in coming to an agreement with the Commonwealth over the formula for determining the HOICI. For example the Commonwealth Department of Health and Aged Care's submission to the 1999 Senate Inquiry on funding of public hospitals in Australia, argued that the South Australian government's percentage of funding fell by 5.2% between 1998-1999 (Senate Inquiry 2000:47). In return the SA Liberal government argued that the difference between the Commonwealth's offer and the amount determined by the Australian Bureau of Statistics as appropriate was \$54.2 million less over four years (Senate Inquiry: 2000: 51).

As a consequence Medicare remains subject to dispute. The States and Territories must agree to provide universal, free, at the point of service and clinically timely health care to the entire population, but this must also be done with efficiency within a Federal system where the States do not have the capacity to raise their own revenue.³⁵ It would be inefficient for hospitals not to have waiting lists, yet public media debates about lists do not distinguish between the patient's wait, the clinical appropriateness of waiting times and public demand for efficiency (Swerissen & Duckett 2002). It is not surprising that the Medicare Agreements cause tension between the States and the Commonwealth, and that in turn these budgetary tensions become part of the interactions between local hospital managers and State health authorities, who likewise tie funding to incentives as a way of achieving efficiencies and increased productivity. However, the overall direction of block grants and incentive funding, while requiring clinicians to speed up the delivery of services, do not demand changes to the way the work is organised or to clinical decision-making. Change in the pace of work or in the organisation of work is more readily achieved through casemix. This is a refined form of benchmarking and a system for measuring the product mix and type of patients admitted and procedures performed in hospitals and other health care settings. Its implementation has had a profound impact on the organisation of hospital work and the professional autonomy of doctors as I illustrate below.

³⁵ Swerissen & Duckett refer to the shift towards efficiency and away from equity and social justice as the Goldilocks effect: are we spending too much, too little or just right (Swerissen & Duckett 2002:36)

Intruding into the day-to-day work through casemix

The introduction of casemix DRGs into the Australian health care system was first mooted in the National Health Strategy (1989-1992).³⁶ The 1988-1993 Medicare Agreement established the Casemix Development Project and in the following Medicare Agreement (1993-1998) the Commonwealth indicated that it intended to move in the next round to funding all jurisdictions through a nationally unified casemix system (Reid, Palmer & Aisbett 2000). Given this, States and individual public hospitals had no choice but to comply.³⁷

Derived from engineering, casemix is an attempt to measure the production process within the health care system through categorising each product, case or patient episode of care. It is, to date, the most sophisticated process for product costing (Hindle & Braithwaite 1998), reducing care to a commodity the value of which is largely determined through time and output. Casemix classification systems are employed in a variety of health care settings including Resident Classification Scales (RCS) as the basis for funding nursing home hours of care; Ambulatory Patient Groups used for community care; and Diagnosis Related Groups (DRGs). DRGs is the system used as the basis for funding public hospitals in Australia (Draper 1992).³⁸

DRGs are a prospective payment system whereby the hospital is pre-paid an amount calculated on the average cost for a number of patients with a specific diagnosis. The underlying rationale of casemix is that a hospital's costs are directly related to the type or mix of patients it treats. This is its output. DRGs provide a tool for defining the complexity of

³⁶ Funding to public hospitals prior to the introduction of casemix while based on population was largely determined through historical arrangements such as the previous year's budget, political influence, negotiating skills or pure luck (Swerissen & Duckett 2002:23). Where hospitals overran their budget, beds were closed (and nurses and other staff may well have lost their jobs) or State health departments picked up the overrun. In many ways the introduction of DRG funding is an attempt by politicians and Federal and State administrators to achieve equity as well as standardisation in funding based on output or production targets. It is also an attempt by governments to shift some of this decision-making back onto clinicians, particularly doctors. Clinical decisions are not simply based on the trust relationship between practitioner and patient, but also on economic rationalisation. The funding to individual hospitals is based on the clinical load; how that load is managed is often either a clinical or a workflow issue which doctors and nurses must now take responsibility for.

³⁷ The Commonwealth has put considerable resources into developing DRGs for Australian conditions. So successful was this exercise that various versions of the product have been sold to New Zealand, Germany, Singapore and Denmark (Duckett 1995; Hindle & Lenz 2001; Commonwealth Department of Health and Aged Care 2001a). The New Zealand government uses Australian derived benchmarks to calculate patient LOS and costs per DRG (Doolin 2002).

³⁸ DRGs were originally designed by Bob Fetter and colleagues at Yale University in 1978 as a quality assurance tool, but were taken up by the Reagan administration as a mechanism to control funding over-runs for Medicare, the USA program that finances care for the elderly and disabled (Draper 1992). The use of DRGs as a system for determining efficiency through hospital length of stay (LOS) spread to a number of countries including France, Belgium, Ireland, Portugal, Italy, Spain, Scotland, Wales and the Nordic countries. England, the Netherlands and Austria have developed related models, with less dependence on LOS as the major determinant of efficiency (Wiley 1999).

cases for specific hospitals, and the severity and treatment protocols. DRGs are also a record of the output of the hospital providing a measure for ongoing funding and input, resource allocation and the charging of services based on tangible and measurable outcomes (Commonwealth Department of Health and Aged Care 2001a).

The underlying motivation is to encourage hospitals to treat patients within the average cost structure, which is seen to be best measured by length of stay (LOS) as a predictor of resource intensity. Where costs blow out beyond the national or state determined cost weights, the assumption is that inefficient clinical work processes, or population factors are present. Hospitals can respond to this through changing clinical practices, reorganising the production process or arguing that their casemix deserves special pleading.

Casemix and the standardisation of cost

As an information system, casemix allows the funding agency to standardise costs, with firm data on each case and its related costs. Casemix assumes that all patients with similar diagnoses/clinical conditions can be treated in the same time-frame using similar resources. In other words all bodies respond to the assaults of illness and surgery and recover within the same time-frame. Built into casemix systems is the capacity to compare one body against another body, one hospital against another, one jurisdiction against another and the practices of doctors, nurses and other health care professionals with each other for obvious benchmarking purposes.

The amount allocated by the Commonwealth to each State is based on that State's casemix. This amount is calculated through the production of national cost weights linked to the *average length of stay* (ALOS). These are very similar although not uniform across the country, reflecting recognition of some differences in population, economies of scale and organisation of health care. For example South Australia is a centralised system, while in New South Wales health care is organised and funded through area health boards. Not all States use the same cost weights; some States use the Commonwealth cost weights, while others have developed modifications.³⁹

³⁹ South Australia has its own cost weight system, NSW cost weights are based on grouping hospitals into peer groups, Victoria uses a similar system for 18 of its public hospitals, while Tasmania, Northern Territory, ACT and Queensland use the national cost weights (Commonwealth Department of Health and Aged Care 2001a).

Part of the work of hospital managers is convincing State or Federal funding bodies that their population group is unique and should attract a higher casemix dollar, usually translated into either more nursing hours or the need for more doctors or resources for beds (for example see Baker, Phythian & Brown 1996). Funding authorities may respond by suggesting that 'reform' of workflow systems might better achieve the required savings, particularly in cases where other hospitals have a reduced LOS. Both the Commonwealth and State governments have provided specific funding throughout the 1990s for 'best practice' innovations that encourage hospitals to re-organise work-flows in order to reduce LOS. These programs are required to publish the outcomes of best practice innovations, thus strengthening arguments for standardisation of LOS throughout the country.

Diagnosis related groups: standardising individual difference

Each casemix DRG is classified according to age, sex, complications and co-morbidities. Patients with complications are assumed to need a longer time in hospital and to use more resources (Draper 1992). For example, a person may be diagnosed with unstable angina, with or without complications or co-morbidities such as diabetes. Diabetes is a complication that may impact on length of stay (LOS). The code assigned by the doctor determines the amount of resources the hospital will receive for this patient. Exception hierarchies have been developed for high cost, low volume conditions such as transplants that do not readily fit into this categorisation (Antioch & Zhang 2000). The first Australian version, AN-DRG 1 had 527 diagnostic groups, subsequent versions have increased to 667 while version 4.1 has 646. Throughout this thesis AN-DRG version 3, average length of stay (ALOS) and numbering system is used, as this was the one in place in 1998. However in 2000 AN-DRG version 4 was introduced and the terminology altered to reflect this. It is now referred to as AR-DRGs (Australian Refined Diagnosis Related Groups).

Version 4.1 is aligned with the international classification of diseases system, ICD-10 and has 23 Major Diagnostic Categories with five major functional codes, one of which is the number of hours the patient is undergoing mechanical ventilation. Duckett (1995) believes that it is highly unlikely that subsequent versions will increase the number of diagnostic groups since 20 DRGs account for over 28% of all admissions and the top 200 account for 85% of public hospital and 95% of private hospital admissions. Version 4.1 has drawn on extensive research from the United States, although a major structural difference between the USA versions and Australian DRGs is that in Australia 'age', rather than 'secondary diagnosis', is used to determine LOS.

Refinements have also been developed in the area of severity and for specific population groups such as rural, remote, Indigenous and paediatric groups that appear to require more time and resources. For example, research at the Women's and Children's Hospital in South Australia showed marked differences in LOS (4.04) and use of nursing hours (34.66) between children under 3 years of age with common complaints such as bronchitis and asthma (DRG 186 <50 with complications or >49 without complications) and those children over three (ALOS 4.55, nursing hours 25.94) (Baker, Phythian & Brown 1996). This type of research explains some of the variations in cost weights between populations.

Where health units are unable to establish special provisions for these groups, the cases are known as outliers: that is, those who stay longer than the ALOS (day outlier) or those who use more resources (cost outlier). For ease of statistical analysis long and short stay outliers are trimmed or removed in order to calculate more refined averages. Commonwealth and State funding for outliers usually factor in increased LOS, but not additional resource use, in order to discourage the practice of 'gaming' (Commonwealth Department of Health and Aged Care 2001a). This is where hospital managers or doctors allocate the patient to a more expensive DRG or keep the patient in longer than the allocated time in order to receive the additional funding. A reimbursement to hospitals for an outlier is considerably lower overall than that allocated for patients who are discharged within the time limit. Payment to hospitals for outliers also differs from State to State. Long and short stay trim points are 3 times the ALOS for all States except Queensland, which is 5 times the ALOS for long trim points.

Other areas of refinement have been developed as a result of issues raised by the major public teaching and research hospitals likely to have high volumes of complex cases, particularly those with a high percentage of emergency admissions. The difficulty for these health units is that the DRG cost is based on the average cost as well as normative policy linked to specific State and Federal budgets for that year, rather than any objective benchmarks. So for example in the case of South Australia and Victoria, casemix was introduced along with reduced budgets and the cost allocated to each DRG altered accordingly. Much of subsequent activity by hospital business managers has been to argue for risk-adjusted increased funding. In these cases, hospitals have had to demonstrate that they conform with international benchmarks of resource use, clinical practices, management systems and LOS to achieve additional funding (Antioch & Walsh 2000). This may lead to changing practices in line with the standards set by evidence-based medicine or following up what is done in other hospitals around Australia through the various clearing houses such as Australian Resource Centre for Hospital Innovations (ARCHI). This is one strategy of incorporation whereby successful practices in one hospital become standardised in many others.

Diagnosis related groups and the creation of a managerial class

DRGs provide a clinical framework for the reorganisation of professional governance. DRGs measure an episode of care defined by the date and hour of admission and discharge. The original Yale system had 23 medical diagnosis categories based on body systems, usually linked to a medical specialty or major diagnosis category (MDC). DRGs are then further divided into 467 surgical and medical diagnoses and procedures, classified according to anatomy. This classification of patients into surgical or medical categories is the rationale behind the re-organisation of hospitals away from separate medical, nursing and allied health departments into medical and surgical divisional, multi-disciplinary directorates, often referred to as the Johns Hopkins model of devolved management. The reorganisation of the various professions according to clinical, rather than occupational, categories is the first step in the process of incorporation into the state's agenda. It is also one of the strategies used to consolidate quasi-markets within the public hospitals whereby the medical and surgical divisions become departments with their own budgets and the capacity to purchase and provide services to other parts of the hospital or health care sector.

Many public hospitals in Australia were re-structured into medical and surgical divisions to reflect DRG funding classifications either prior to, or following, the introduction of casemix. This was certainly the case at Westernvale Hospital. At the national level the Australian Medical Association (AMA) supported the shift to the Johns Hopkins model seeing it as a counter measure against the imposition of casemix. In the early 1990s the AMA believed the divisional model would give the professions control in a tripartite team of doctor, nurse and business manager. However this restructuring did not involve any real power sharing as budgets either were not devolved, were already allocated, or clinical managers found themselves caught between their clinical colleagues and management over resource allocation (Alexander 2000).

The problem is that there is only a very narrow range of decisions left for divisional directors, given that the global budget and the patient quota is already set by Commonwealth or State government via the Medicare Agreements. The determination of wages and staffing levels are industrial issues also outside their jurisdiction. However managers and government counter argue that since divisional directors are invariably doctors and it is doctors who make the clinical decisions, they should take responsibility for the budget. As Harrison & Pollitt (1994:91) succinctly put it, divisional directors must 'hunt with the service providers and run with the unit managers'. They have control over their subordinate colleagues, but no power over the resources their colleagues need to practice. All that is left is to re-design the work processes, lobby for the latest in time and labour saving technology, and use medical evidence

in the hope of coming in on target. These executive medical managers have now become responsible for what may be contradictory aims: continuous clinical excellence and budget constraint (Harrison & Ahmad 2000).

One would assume that senior clinicians might be able to influence the determination of benchmarked prices and LOS of casemix weights through the Australian Casemix Clinical Committee. This committee, made up of senior medical and surgical specialists, one senior nurse and allied health professional, was established by the Commonwealth in 1988 to advise it on clinical aspects of DRG classifications. Reid, Palmer & Aisbett (2000) suggest that the Committee provides clinicians with an opportunity to influence the allocation of LOS and the financial resources needed for each DRG. However this was not the view of a senior member of the Committee I interviewed in 2002. He saw the Committee's role as restricted to quality assurance and safety issues, for example ensuring that each DRG adequately reflected the illness or disease, rather than symptoms. The Committee worked intensely on these issues up to 1996 in line with the development of AR-DRG version 4. However between 1997 and 2002 the Committee had had little input into the development of casemix and in fact did not meet (Silent reference No 4: 2002).

This senior clinician also viewed the allocation of LOS, benchmarks and the various casemix weights as 'top-down' decisions made by senior bureaucrats on the advice of the government of the day. In his view, the determination of cost weights bore little relationship to the real cost or the advice of clinicians who might wish to suggest certain new technologies offered better quality patient outcomes. For example, he indicated that the South Australian Casemix Clinical Committee had not met since 1996, yet hospital budgets allocated by the DHS provide costings for each DRG, and within the DRG the costs associated with medical, nursing, allied health, pathology and catering services. He noted that the benchmarked price for medical DRGs had had a 20% unexplained reduction in 1999 and that rumor had it that the 2001-2002 state benchmarked price had gone through thirteen revisions before the price was determined. In his opinion, hospital administrators and clinicians believed the price was tweaked to fit the budget, rather than resulting from any genuine costing study. The result is that decisions about the allocation of resources, particularly for high cost but more effective treatments, must be made at the hospital level. At Westernvale these decisions are not left to individual doctors, but handled collectively at the divisional level.

When I asked this senior clinician how new technologies for particular procedures were incorporated into the DRG price, he argued that there was no formal process. Where individual doctors or hospitals took up a particular technology, the hospital had to carry the cost until a critical mass of hospitals took up the new technology, leading to eventual

incorporation into the benchmarked price.⁴⁰ These new technologies arise out of the intertwining processes of evidence-based medicine and the systematic marketing of technology. He saw little relationship between the incentive funding provided by the Commonwealth linked to the Medicare incentives and the various innovation programs at Westernvale or any other hospital. He was cynical about whether or not these programs had had any impact on casemix weights, although he agreed that the various innovations conducted at Westernvale had been successful in reducing LOS and costs.

In this senior doctor's view the allocation of DRG benchmarks was arbitrary, but the intended results were clear. These were firstly the incorporation of people like himself into the process of making casemix work. Having spent time on refining the quality assurance and clinical aspects of the system, including educating other doctors to be precise in the allocations in the interest of patient safety, he was committed to them. Secondly, he argued that casemix provided a seemingly equitable form of rationing, but this rationing was part of a broader strategy to firstly force more people into private health insurance, and secondly devolve this difficult decision-making down to the level of the individual hospital. In effect casemix acts both as a tool for the Department of Human Services (DHS) to set the budget, and for hospital management to control the activity of medical staff. As an accounting system, casemix can be viewed as an attempt to control the consumption of medical resources.

The introduction of casemix funding and the Medicare incentives into public hospitals in South Australia

Casemix funding was introduced into all hospitals in South Australia in the 1994/1995 financial year, although the Health Commission had been using it since 1985 as the tool for dealing with morbidity data, had established a clinical advisory committee in 1989, and completed the first nursing weights study in 1990. The accelerated introduction of casemix into all public hospitals in South Australia was a result of a change of government. The Liberal party came to office in late 1993 following the collapse of the State Bank. Their resounding win was seen as a mandate to reduce the State debt through curtailing public expenditure. Consequently casemix was introduced at the same time as the public health sector sustained a budget reduction of \$30 million over the three-year period 1994/1996. Fifteen million dollars of this was carried by the public hospital sector; this represented a

⁴⁰ Many new technologies are rationed within the patient load; eg stents rationed in 1994/95 are now routine for all patients needing an angioplasty. In 2002 dual chamber pacemakers were rationed despite the fact that single chamber pacemakers were less effective (Silent reference No 4).

reduction of 4% in real terms of the total health care budget for the State. This was achieved by reducing activity to below 1993/1994 levels (South Australian Health Commission 1995a). As a consequence benchmark prices for each DRG were determined by the available funds, not the real costs (Brooker 1997). As I illustrate below, meeting these cost savings required a reduction in staffing, which in turn intensified the labour of those left to do the work.

Funding to individual hospitals was negotiated through Service Agreements, which in effect outlined for each hospital their share of the State debt and opened the way for other NPM strategies such as contestability (outsourcing) and the privatisation of non-core activities. The Minister for Health, Michael Armitage announced that the principles of casemix were, 'to promote efficiency and discourage inefficiency, thereby reducing the time the people wait for elective surgery, to encourage greater integration of services and to provide a focus for primary care' (Brooker 1997: 39). The deficit was not evenly spread across all major public hospitals: some received additional funds through transitional grants; one hospital was privatised; and funding for the Repatriation Hospital was shifted from the Commonwealth to the State (Brooker 1997). While there was a general agreement among hospital CEOs that casemix was a fairer system, in the initial years the transitional grants were seen to favour those hospitals that benefited under historical arrangements (Brooker 1997).

Funding to public hospitals in South Australia following the introduction of casemix in 1994 was in three parts: an annual grant, an activity grant, and an efficiency (or service pool) grant. The annual grant was fixed and covered infrastructure, education and research. The activity grant for each hospital was the benchmark price for each DRG calculated by dividing the available funds for acute admitted patients by the number of weighted separations for that hospital. The LOS remained for each DRG, but the reimbursement was reduced, thus producing and in-built efficiency. Hospitals were forced to either intensify labour, reduce staffing levels, or re-design work processes. Where staff were made redundant and the work of those left was intensified the value of their working time was redetermined back to a previous amount. Activity for 1994/1995 for each hospital was set at 1993/94 levels. For some hospitals the budget provided in 1994/1995 for this activity was less than they would have received for the 1993/1994 financial year. Where hospitals came in under the agreed target they had to reimburse funding as if it were a loan, where they went over the target they had to fund this activity from within the activity grant, supplemented by a transitional grant (Brooker 1997). The transitional grants were dispensed with by 1996 and were paid at a rate of 50% of the deficit. *The Hospital Service Improvements Strategy* (South Australian Health Commission 1994:11) notes 'this differential is a measure of the hospital's inefficiency. It is expected that all hospitals will operate at the efficient benchmark'.

The efficiency or service pool grants were drawn from the savings generated and are based on the Medicare incentives. There was a booking list pool, a throughput pool and a primary health care incentive pool. In order to access funds to the booking list pool, which was established for teaching hospitals, a hospital had to reduce waiting lists. In the first year of operation one hospital received 70% of the available funding leaving the other hospital administrators with a sense that the funds were subject to 'gaming' and manipulation (Brooker 1997:67). Funds were also available for increased activity linked to service improvements such as establishing benchmarks for same-day surgery, reducing readmissions, implementing programmes that facilitated early discharge such as Hospital @ Home programmes, and reducing surgery LOS (South Australian Health Commission 1994). In the first year money from this pool was spent in the first quarter requiring hospitals to cap or increase productivity for the remaining nine months.

A major difficulty with the introduction of casemix into South Australian public hospitals was the fact that there was only a four-month window between the announcement in December 1993 and its implementation in April 1994. A number of small hospitals did not have the necessary information technology in place to handle the data. But perhaps the major criticism was the complexity of the system. Hospital administrators found that their own data did not match the Health Commission's. When they challenged the figures they were found to have mis-understood the procedure; yet clarification of these procedures was always retrospective. Between the implementation of casemix in April 1994 and December 1997 the Health Commission issued 22 amendments or technical bulletins that provided further clarification of the funding mechanism.

The purgatorial preoccupation of casemix

Many of the technical bulletins highlight the purgatorial preoccupation of casemix with bureaucratic precision and control around the fruitless conservation of time. For example reporting requirements meant that hospitals had to make projected monthly activity statements, which were then compared with the actual monthly activity and the budget modified accordingly if they came in below the base workload. Dates were set for each hospital to submit their data on a quarterly basis by four o'clock on the designated day. Data dealing with non-admitted patients had a deadline of 4 pm on the 10th working day of the month following the reporting month. The penalty for failing to submit morbidity data by the date set was 50% of the benchmark price. Hospitals had to advise the Health Commission by the 5th of the month if they were going to be late with their data to avoid any penalty. Hospitals were notified of their activity target by the 30th of May each year and trim points

for key units one-month prior to the beginning of the financial year (South Australian Health Commission 1995b).

A second example derives from the way that activity targets were set for Intensive Care Units, separate from patients in other wards in the hospital. Funding was linked to the number of hours patients were ventilated. A patient ventilated for seven days brought an extra 96 hours of funding. However each major hospital had a limit on the number of hours for funding in the Intensive Care Unit (ICU). The highest number of hours for any hospital was 170,000 and the lowest was 500 (South Australian Health Commission 1995c), so that the trick was to achieve the maximum, but not go over the benchmark. Technical bulletin 95/17, '*LOS calculation*', recognised that admission, discharge times, and time in ICU varied from hospital to hospital (South Australian Health Commission 1995d).

The calculation of a patient stay in hospital changed to an *episode of care* rather than a *separation* to reflect the fact that some patients received hospital care prior to, and following discharge. The calculation was refined to hours, rather than days and rounded up to the next highest .2 of a day. Payment for LOS was then further modified by the trim points; lower trim points were rounded to the next full day; so 2.2 days would become 3 days. These calculations are re-assessed each year. In calculating the DRG payment for LOS for short and long stay outliers the Health Commission used the admitted and discharge times, minus the time in ICU rounded to the nearest day and shifted payment from weighted DRGs to a *per diem* rate. In the case of short stay outliers this was seen to discourage the inefficient practice of keeping patients in hospital for a longer period than was necessary (Brooker 1997:73) and in the case of long stay outliers this discouraged the practice of 'gaming', such as assigning a patient to a DRG with a higher resource load and/or longer LOS.

The benchmark price for determining the casemix budget for each hospital was set by first removing amounts not attributable to inpatients, such as money for teaching and research, ICU, accident and emergency and health promotion, all of which were separately funded. For acute admitted patients the following rules were applied in the 1995-1996 round:

- AN-DRG weights applied to average cost per inlier (benchmark price) to get inlier payment
- Short stay inlier payments. Where the average LOS was 4 days or more the short stay trim point was set at one third of the ALOS. Days below the short stay trim point were paid at \$410 per occupied bed day plus \$800 for theatre costs.
- Long stay outliers payments were \$190 if their stay exceeded three times the ALOS

- Nursing home type patients who exceeded 90 days received a per diem rate of \$115 per day
- ICU was separately funded as was rehabilitation and high cost outliers at 95% of the 1994-1995 occupied bed days (adapted from South Australian Health Commission 1995a).

There is no doubt that the shift to casemix funding resulted in increased productivity, efficiencies and a genuine search for equity in funding between hospitals, but the technical bulletins also illustrate the bureaucratic and obsessive preoccupation with time down to the last hour and minute. Administrators now needed to keep their eye on the clock, calendar and roster for fear of missing a beat. Knowledge of the processes was now knowledge of 'reforms' that could only be understood retrospectively or through second-guessing. Failure to meet the various deadlines had dire consequences including job losses for nurses, cleaners, orderlies, kitchen staff and as recently as 2001, medical scientists.

The independent evaluation of casemix in South Australia

In his independent evaluation of the South Australian casemix program, Brooker (1997) notes that patient separations increased by 4% in the 94/5 financial year; there had also been a 9% increase in the 93/4 year on the previous figures, while the available beds reduced by 9% between 1989 and 1995 (Brooker 1997:34). This was due to a significant growth in same-day surgery, which increased by 13% in 1994/1995. While ALOS reduced by 6% for this period, it is almost totally explained through the increase in same-day patients. When same-day patients were excluded, the reduction was not significant. Part of the explanation came from the fact that much of the increase in patient load was for cases like DRG 184 *Chemotherapy*, which increased by 34% from 1993/1994 to 1994/1995 and shifted from an overnight stay to same-day.

Another example is DRG 270, *Unstable Angina*, which increased by 9% from 1993/1994 and 16% in 1994/1995. While not a same-day event the increase puts significant strain on hospital resources and, as I demonstrate in Chapter 8, reducing LOS for this DRG is fraught, given the unstable nature of the condition and the fact that new patients take time to understand the subtleties of angina pain. The evidence also suggested that the severity and complexity levels of inpatients had increased, although hospitals were treating these complex cases in a shorter time than they had previously (Brooker 1997:86). This is a point I return to below, as there appear to be some unexplained anomalies in staffing levels that impact on the work intensification of doctors, medical scientists, nurses and PSAs in the immediate years following the introduction of casemix.

The impact of casemix funding at Westernvale

Westernvale hospital did not come in on budget in the first year casemix was introduced, nor in the subsequent six years. In May 1995 the CEO resigned and the hospital engaged in a program of staff reduction through voluntary separation packages under the Liberal state government's workforce reduction scheme. In 1995, the number of redundancies was 255, with nursing and junior medical staff numbers decreasing by 90 and 19 respectively, and the remainder coming from support staff such as orderlies and cleaners.⁴¹ In 1996 a further 67 staff took packages and another 15 in 1998 and 1999 (Silent references No 6 1995; No 7 1996; 8 1997/98 & 9). Total staff numbers went from 2316 to 2137; a loss of approximately 8% of staff.

The hospital reduced its LOS from 6.0 to 5.1 days in the first year of casemix funding and increased throughput by 20% gaining funds from the throughput pool; but since these funds were exhausted in the first quarter subsequent increases in throughput were unfunded. In February 1995, the hospital held a strategic management conference to deal with the implications of casemix and the State debt. Out of this conference came the new management structure of clinical divisions based on the Johns Hopkins model. By 1996, budgets had devolved to the newly created divisions with the new CEO noting that, 'Clinicians who make decisions that drive our costs also have the authority to manage budgets and staff... and {that} the hospital was \$597,000 over budget' (Silent reference No 7 1996:4).

A Medical Director and Assistant Director of Nursing were appointed to each of the medical and surgical divisions. Following the recommendations of a consultancy firm the catering and general cleaning services were outsourced, along with diagnostic laboratories. The orderlies, ward-based cleaners and kitchen staff were offered either a separation package or training as a Personal Service Attendant (PSA).⁴² In 1996 the hospital took out a loan of \$25,601,000 from the SA Government Financing Authority for debts incurred as a result of the financial stringencies, to be paid back over a five year period (Silent reference No 7 1996). By the end of 1998 Westernvale Hospital entered into an eleven-year agreement with a private hospital close by for the provision of a number of procedural services for a small fee (Silent reference No 9 1998-1999). This in effect became a further avenue for outsourcing and an attempt to

⁴¹ A significant number of redundancies of nursing staff were of those engaged in non-clinical, middle management duties.

⁴² This is an example of up-skilling or multi-skilling; however I would agree with Thompson (1983) that any analysis of managerial control of the labour process needs to take account of the labour market. These occupational groups could be said to have been part of the secondary labour market, and were certainly not subject to professional closure, so that creating one multi-skilled occupation was possible and reflected the shift in the type of labour needed.

persuade privately insured patients to use private facilities, thus reducing the patient load at Westernvale.

The variable impact of casemix on health professionals: the case of nursing

The impact of the new funding model can be examined from a number of perspectives. Firstly I suggest that the series of redundancies, up-skilling of orderlies, nursing assistants, kitchen staff and cleaners has exacerbated work intensification for nurses more than it has for doctors. Some evidence for this hypothesis is provided in Table 4.1. Year 1994 is the first twelve months of casemix. The Annual Report 1995 indicates a drop in staff number of 90 nurses and 19 doctors.⁴³ In 1996 medical staff were further reduced by 45, but by 1999/2000 increased to 336 with 21 Visiting Medical Officers (VMOs). This is a significant increase of 15% on 1994 figures whereas nursing figures remain at 95% of 1994 numbers.⁴⁴ In a private conversation, the interim CEO noted that the redundancy program in nursing had resulted in the loss of clinical experience that would take several years to restore (Silent reference No 5 1998).

I have included in figure 4.1 the category; hotel staff (orderlies, kitchen staff), since they include the Personal Service Attendants (PSAs). Included also are the hospital scientists/technicians; both these groups contribute significantly to either nursing or medical work. PSAs work on the wards doing duties such as cleaning, transporting of patients and serving meals, which were once part of nursing work. The number of hotel staff decreased by 22% over the 1994/1999 period with Westernvale's own data indicating a reduction of 9% to 122 (Effective Full-time) PSAs by 1997 (Silent reference No 10 1998). The numbers of scientists/technicians who work alongside medical staff on research projects remained steady over the period, although by 2001 they came under threat of redundancies for the first time.⁴⁵

⁴³ Brooker (1997) makes the point that nursing numbers had been decreasing prior to this date.

⁴⁴ The increase in medical staff can also be attributed to two other factors. In 1996 the Federal Liberal Coalition restricted the allocation of private provider numbers for GPs to 400 per year. This policy forced some early career doctors to stay on as salaried medical officers in the public hospital system or seek a training position with another specialty. There has also been a significant shift in the specialties with casemix reducing the length of stay for a number of DRGs linked to specialties such as ENT and dermatology. As a result public hospitals do not have the resources or reason to take on training positions in these specialties as there are few patients, their stay is less than a day and invariably they are treated in a private hospital. As a rule private hospitals in Australia do not engage in formal training of doctors so that it is now very difficult for these specialty colleges to gain sufficient training positions to maintain adequate numbers. This is particularly so for ENT specialists where the average age of the profession is now 50+ (Commonwealth Department of Health and Aged Care 2001b).

⁴⁵ By 2001 it was politically inappropriate to make nurses redundant, given the State and world-wide shortage of nurses. It is only at this point that the focus shifts to medical scientists. A consultancy report done for Westernvale Hospital in 1998

Figure 4.1 Activity data and staffing numbers 1994/95-1999/20 Westernvale Hospital.

Year	Occupancy (%)	Out Patient	Same-day	Cost per separation	Nursing/Hotel staff	Medical staff/VMOs	LOS days	Bed days available
1994	N/A	307,700	13,186	\$3029	922/314	292/26	5.10	402
1995	86.9	302,499	14,232	\$2782	833/200	273/n/a	5.22	402
1996	87.8	N/A	N/A	\$3417	857/180	238/n/a	5.30	413
1997/8	88.3	331,738	16,553	\$3790	882/146	308/22	5.01	427
1998/9	87.3	336,773	17,860	\$2,505	918/150	324/21	4.72	437
1999/2	95.40	322,641	20,035	N/A	881/144	336/21	5.10	402*

Taken from Silent References 6 (1995); 7 (1996); 8 (1997/8); 9 (1998/9) & 20 (1999/2000). Up until 1996 Westernvale produced a calendar year Annual Report. From 1997/8 onwards Annual Reports are for financial year.

In the evaluation of the introduction of casemix into South Australian hospitals Brooker (1997:108) notes a drop in overall numbers of patients and nursing staff, but an increase in the acuity of the patient load. He suggests that:

Despite the reduced number of bed days, nursing workload can be regarded to have increased ...there has been a trend to treating more complex patients and towards shorter hospital stays. Reducing the length of stay increases the average intensity of nursing care, as the later days of a patient's stay usually require less nursing care than earlier days.

The increase in same-day surgery also gives an indication of increased work intensity. Brooker makes no critical comment about the increase in medical staff numbers, which is a State-wide trend, except to indicate that there had been a 14% increase in medical services and that the reduction in hotel staff may also be a result of contracting these services out. He does note the following percentage changes in medical (+6%), nursing (-13%), hotel (-29%) and scientific & technical (+1) between 1989 and 1995 (Brooker 1997:108). I find little evidence to suggest that an increase in the work of doctors is not also an increase in work for

nurses. Any increase in patient load is an increase to both groups. The only new task for hospital doctors would have been the paper work attached to allocating a DRG to each patient.

The reduction in PSAs was made possible though a workplace agreement made with the relevant unions. These agreements focused on facilitating workplace cultural and structural change given the threat the work could be outsourced (Silent reference No 3:20). What will become clearer as the case studies unfold is that the majority of innovations introduced into Westernvale Hospital between 1996 and 2000 focused on nursing work. One explanation for this is that this was the area most severely affected by the budget shortfall. Another possibility is that, after the 1986 union action, South Australian nurses restructured and created a three-divisional promotional structure that included managers, educators, and clinicians with education curriculum in the tertiary sector to support their continuing education. This group became change agents, particularly the clinicians and managers.⁴⁶ Nurses are also well organised and are the largest occupational group. Budgetary savings in nursing costs are consequently significant for any hospital that can achieve them.

Identifying areas for 'reform'

A series of strategic management conferences funded by the Health Commission were held at Westernvale in 1993, 1994 and 1996 to deal with the funding crisis and a report was published and given a euphemistic title, *The Customer First Report* (Silent reference No 11 1997). This document and subsequent processes became the blue-print for a future envisioned as creating a culture that would make things better and improve the life of patients and staff. Staff newsletters claimed with charismatic enthusiasm that a new level of 'teamwork was now on the horizon... that the process was exciting, staff would be kept up-to-date through roadshows and that everyone was invited to discuss the issues' (Silent reference No 11 1997).

There is now a general agreement that casemix was introduced along with real budget cuts so that the DRG price per patient LOS was reduced to below the previous year's benchmark (Brooker 1997; 22). This is a factor contributing to the redetermining of the worker's hour. Further to this, productivity targets were increased, and labour intensified through increases in

⁴⁶ See Chapter 3, footnote 22.

same-day surgery and reductions in staff levels to below pre-casemix levels (Brooker 1997; Moss 2002). The re-organisation of administrative functions to medical and surgical divisions that included devolved budgets, threw the onus for achieving these targets onto clinicians as part of the process of establishing internal markets (Silent reference No 7 1996). All staff from the PSAs to the CEO needed to work to targets that required streamlining the work-flows as well as the reporting mechanisms. What was required was a set of highly coordinated interactions that enabled beds to be emptied 'Just In Time' and re-made ready for the dozens of patients in Accident and Emergency or waiting for elective surgery. Failure to speed up this process would mean that the hospital was not eligible for incentive pools monies. Time was the business at hand and all staff were now co-opted into working to achieve the benchmarks through an acceptance that things could be better, salvation was just beyond the next innovation and that cultural change was not just a responsible response but an exciting option (du Gay 2000).

Concluding discussion

Significant control over health professionals' work has been achieved in Australia through a variety of methods. Like all workers subject to enterprise bargaining, health professionals sign on to workplace change directed towards increased productivity and efficiency when agreements are put into place. Protest or resistance against the changes is contrary to EB agreements, since under the 1996 Workplace Relations Act it is illegal for workers to take any industrial action outside of the EB negotiation period. The second strategy, instigated by both the Labor and Coalition Federal governments, has been to tie access to Medicare grants to incentives, directed at speeding up the process for getting patients through A & E or reducing the waiting time for elective surgery. In speeding up these process hospital staff either intensify their own work or design new workflow systems that create the necessary efficiencies. In either case these efficiencies are now measured and recorded through IT systems that are assumed to be rational records of the work processes. Whatever strategies are implemented to gain access to incentive funding, the work must be done within a reduced period and within the same or reduced budget. This is a clear example of the redetermination of the working hour (Postone 1996). Labour is intensified in order to meet standardised benchmarks that are constantly redetermined back to their original value.

The introduction of casemix forms of funding in South Australia in 1994 and more formally across the nation in the 1998-2003 Medicare Agreement directly tied funding for health care to outputs. The output is standardised care for a homogenised and commodified body. As the LOS reduces, it is not only the labour costs that are redetermined back to the abstract hour,

but also the caring time given over to the body for restorative functioning. Casemix, as a Taylorist accounting system, extends political and bureaucratic control over health professionals, beyond work intensification, to the very organisation of hospital units and management structure, and beyond this to the patient's body. Introduced into South Australian public hospitals at the same time as real budget cuts, it clearly demonstrates the treadmill effect. As the average length of stay for each DRG is reduced, or funding curtailed, doctors and nurses are forced to treat more patients in a shorter time-frame and to speed-up or modify practices in order to do so.

Casemix offered the possibility of a more equitable approach to public hospital funding with the shift to outputs over historical arrangements. However the very cure (for inequity) has become the disease (Fenn 1995). This is best illustrated through the various technical bulletins. These are delightful examples of a purgatorial pre-occupation with the techniques of time control. The innumerable directives portray a bureaucratic culture of time anxiety that seeks to establish precise and restrictive formulae for the submission of data or, for example, the number of hours a patient can be ventilated or reside in ICU. What started out as a strategy for achieving equity in funding, beyond 'gaming' or historical favoritism, has been reduced to myopic observances of dates, deadlines and cut-off points.

What is also clear is that the re-organisation of health care has had differential impact on health professionals. Overall, the numbers of doctors employed in public hospitals in South Australia between 1994-1999 has increased. This has not been the case for the profession of nursing. It is not until 2000 that nursing numbers returned to pre 1994 levels. The numbers of PSAs has also remained well below the previous combined levels for orderlies, cleaners and kitchen staff, while the number of medical scientists, who work closely with doctors, remained stable up until 2001, then decreased as a result of redundancies. Consequently I argue that the introduction of casemix and the accompanying State debt has had a far more deleterious impact on the nursing workforce than the medical workforce. However, it is clear that if medical autonomy is to be defined as both an organisational and individual attribute, then medicine is also now under pressure; this is particularly the case as Medicare incentives and casemix begin to intrude into the allocative decisions that characterise medical decision-making.

Of the various analyses made about the 'reform' process in the acute public health sector in a range of countries, two possibilities emerge from the strategies of the new public management. The first focuses on smaller government through privatisation, outsourcing and the creation of a quasi market, the second on increasing centralised control through regulation, incentives and benchmarks. In both cases the processes allow governments to play the dual

role of minimising expenditure while extending control over health care expenditure (Duckett 2000). In the Australian context, the direction appears to have strengthened centralist control by government. Medicare and casemix are examples of 'reform' directed toward strengthening the role of the purchasers (state and bureaucracy) against the provider (hospital). Casemix allows the purchaser and funder to penalise inefficient hospitals across the board simply because the benchmarked price is standardised and public information. This sets up competition between hospitals as the price is fixed based on the best performance. These structural changes are embraced at the local level as both managers and health professionals alike are forced to engage in the processes. This is achieved via strategies of NPM: a set of strategies directed at managing cost containment, over and above administering health care expenditure. Workplace flexibility and performance management are key components of NPM. Built into performance management is best practice and benchmarking. The tactic of national benchmarking is the topic for Chapter 5.

CHAPTER FIVE

BENCHMARKING TIME IN THE PUBLIC ACUTE HOSPITAL SECTOR: GIVING SHAPE TO ABSTRACT TIME

The sound of your hammer at five in the morning, or eight at night, heard by a creditor, makes him easy six months longer... (quoted in Weber 1965:4).

Introduction: benchmarking and time

By the mid 1990s the roll out of Medicare incentives and the introduction of casemix led to the establishment of a series of time-defined benchmarks and performance management indicators. One of the earliest publications identifying key benchmarks was the *First National Report of Health Sector Performance Indicators* produced by the National Health Ministers' Benchmarking Working Group (NHMBWG 1996). This document identified a four category framework of; *efficiency, productivity, quality* and *access*, for benchmarking health care. In this chapter I use this report to describe the way in which time became a major organising and conceptual category for 'best practice' in the funding, evaluation, organisation and delivery of health care in Australia. Where appropriate, I indicate the benchmarks carried through to the third report published by the National Health Ministers Benchmarking Working Group (WG) in 1999 (NHMBWG 1999) or the *Australian Health Care Agreements Annual Performance Report Card 1998-99* (Commonwealth Department of Health and Aged Care 2001b).

In the previous chapter I positioned the industrial relations policy of enterprise bargaining as contributing to labour market flexibility, and the Medicare agreements and casemix, as part of the performance management strategy. These policies are part of the macro level of 'reform'. I demonstrated the impact of casemix, the Medicare incentive funding and budget cuts on the work intensification of health professionals at Westernvale, particularly nurses, but also doctors. I also illustrated the way in which the State government used casemix funding and budgetary restraint to draw hospital administrators into producing excruciatingly refined and exacting monthly reports where the slightest deviation in time of delivery resulted in penalties. In this chapter I take the analysis a step further and demonstrate the way in which Commonwealth government imposed benchmarks, control the very way hospital staff

approach their caring and curing work. Efficiency, productivity, quality and access are now defined and benchmarked as *duration*, *age* and *speed*, and lead to patient care being evaluated almost exclusively in terms of minutes, hours, days or weeks. This is the meso-level of 'reform'.

In commenting on these benchmarks I suggest that Federal and State health bureaucracies exhibit an obsessional pre-occupation with time; no doubt because benchmarks, audits and performance management systems are the lubricating oil of the treadmill. When bureaucrats come to operationalise the Medicare incentives and casemix they create several layers of scrupulously articulated and defined timings/benchmarks. These benchmarks operate at a number of levels. Time-based benchmarks are in place for receiving Federal funding under the Medicare Agreements—for achieving efficiency, productivity, quality and access—and in South Australia, myopic benchmarks are put in place for reporting outcomes on all these activities on a quarterly basis to the DHS. Each benchmark is measured by the clock, rather than the quality of interactions between health professionals and patients. I provide a brief history of the National Health Ministers' Benchmarking Report below, before listing all sixteen indicators. In the discussion on the indicators I have not described each item, but merely picked up on some of the complexity, obscurity and contradictory aspects of this approach to evaluating health care and illustrated the problem of attempting to standardise performance across the country.

Benchmarking and 'best practice' In National Health Ministers' Benchmarking Report

In 1994 the Australian Health Ministers' Conference (AHMC), an annual meeting of the various State and Territory Ministers of Health, agreed to the development of a national set of performance indicators and benchmarks for the health care sector. The initial focus was on the 755 public hospitals that treat 3.8 million patients annually and consume 25% of the health care budget (Senate Inquiry 2000). The working party charged with establishing and defining appropriate benchmarks worked closely with the National Hospital Outcomes Program, a group established as part of the 1993-1998 Medicare Agreement and a range of other national committees or funded projects, including various innovations and hospital demonstration programs (Commonwealth Department of Health and Aged Care 2001b).

The Australian Institute of Health and Welfare, using existing data sets submitted by the various States and Territories, produced the first report. Part of the Institute's brief was to negotiate with the various State health authorities to establish uniformity in data collection in

order to establish national benchmarks. This is an ongoing process and has resulted in the commitment to standardise data across the country, to the collection of a minimum data set, and to the development of the *National Health Dictionary*. The process was consolidated under the 1998-2003 Australian Health Care Agreements (Commonwealth Department of Health and Aged Care 2001b).

Under Schedule C, of the Medicare Agreement (1998-2003) each State is committed to the collection and standardisation of a variety of performance indicators which are published each year and indicate where the State stands in terms of what it agreed to, and what it achieved (Commonwealth Department of Health and Aged Care 2001b). Consistent with increased competition and benchmarking, information is fed into a centralised data-base, rather than shared between units.⁴⁷ In 1996 the Institute published sixteen performance indicators for acute public hospitals using the framework of *efficiency, productivity, quality* and *access*. Thirteen of these are either defined by, or calculated, through *time*. Each performance indicator provided a baseline for comparing one jurisdiction against another, although different targets were established for each State based primarily on the level of private health insurance, geographical position or the particular characteristics of populations.

In the 1999 report, the framework for evaluation was *effectiveness*, (defined as *quality, appropriateness* and *access*), and *equity* and *efficiency* (NHMBWG 1999:25).⁴⁸ The 1999 report also provided a four-category set of peer hospitals: 'principal referral', 'major referral', 'regional' and 'community' enabling benchmarks to be set for each peer group of hospitals. The benchmark was defined for each hospital 'as the average of the combined costs of the peer group'. Those hospitals that exceeded these costs performed outside the benchmark (Cleary, Lloyd & Maguire 1999:194). While this may seem harmless enough as a formula, the benchmarking exercise compared in detail, length of stay (LOS) for specific surgical procedures and medical treatments between hospitals in the same peer grouping, using

⁴⁷ Although the Commonwealth has established quasi government instrumentalities for the dissemination of successful innovations such as ARCHI, careful reading of this site, particularly the National Demonstration Projects, provides insufficient information on the various innovations for any other hospital to take up these 'best practices'.

⁴⁸ The committee overseeing the work of the WG was superseded by the National Health Performance Committee in 1999, as a result of decisions made with the signing of the 1998-2003 Australian Health Care Agreements (Commonwealth Department of Health and Aged Care 2001b).

abstract measures of time. In this list Westernvale was categorised with other 'principal referral' hospitals.⁴⁹

National Health Ministers Benchmarking Framework

The *Third National Report of Health Sector Performance Indicators* (1999) divided benchmarking into three types: functional, internal and collaborative. Functional benchmarking compares the practices of the leading industries with one's own, while internal benchmarking identifies the best practices within one's own organisation. For example in the report, benchmarks are drawn from other countries presumably leaders in health care providing examples of functional benchmarking. Benchmarks between peer group hospitals are one example of internal benchmarking, but comparisons of the performance of various departments within a hospital would also be an example of internal benchmarking. Examples of collaborative benchmarking can be found in the National Hospital Demonstration Program, funded by the Commonwealth government, where clusters of hospitals bid for funding to trial various best practice initiatives. In the NDHP example one hospital becomes the lead hospital, while several others trial the innovation in their setting to test its reliability and make the necessary contextual modifications. The WP suggests that the motivation for hospitals to engage in benchmarking is consumer demand for quality and value for money and the attractions of achieving improvements in care. Where hospitals successfully engage in benchmarking, they achieve 'best practice', becoming models for other hospitals to follow.

The authors of the *Third National Report of Health Sector Performance Indicators* (1999) refer to the public health sector as an industry in competition with the private sector and therefore benchmarking is imperative. However as a final point in the discussion on benchmark frameworks they note that the score card approach, used by a number of government agencies, defines 'quality' as an isolated measure of performance.⁵⁰ The authors

⁴⁹ In Round 2 of the National Hospital Casemix Data Collection (Department of Health and Aged Care 2001a) nine peer groups were identified. Like the NHMBWG (1999) these groupings were based on the size of the hospital, number of weighted separations, and geographical position in a capital city or rural town, but it also categorised hospitals in terms of their relationship to other major hospitals in the region.

⁵⁰ The Commonwealth is not ignorant of the many negative findings linked to 'best practice' and benchmarking. The *Third National Report of Health Sector Performance Indicators* provided an overview of current literature on benchmarking in health noting that proponents of the strategy gloss over the difficulties in their enthusiasm to get managers and workers to take up the processes (NHMBWG 1999:45). They also highlight the slippage between the terms 'best practice' and benchmarking.

admit that this approach is hardly acceptable in health care, where quality care is the first and last rationale for action. In health care all benchmarks, whether they lead to efficiency or greater access, must also have a quality outcome (NHMBWG 1999:48). Achieving genuine quality is not helped by the use of terms such as 'Report Cards' and 'Score Cards'.

Despite these caveats, it is difficult to overcome the negative aspects of benchmarking which has a primary focus on cost reduction, or where the focus is product improvement, the rationale is to achieve market edge. In a critical paper on 'best practice' and benchmarking, Morris (1996:18) outlined the key principle as the 'identification of model performers and their imitation'. 'Best practice' and benchmarking are 'self-help' strategies aimed at cost reduction and quality control, as firms benchmark performance against international 'best practice'. This is achieved through:

...assiduous networking with suppliers and customers,... and undertaking remedial productivity enhancement if a performance gap (is) identified. In addition, flatter managerial hierarchies (are) called for by benchmarking pundits, along with greater productivity as a central goal...

As Morris (1996:18) cynically comments, benchmarking is 'in theory a cycle of perpetual effort...in the search for the holy grail ...against the forces of inertia'. It might also be called the 'eternal foreground' present in Dante's imagery of Purgatory or Marx's treadmill. It is certainly part of the performance management systems of New Public Management, where the individual on the shop floor/ward is held responsible for designing new ways of reducing expenditure or increasing profits. Entrepreneurial ideas for workplace reform are no longer divided along traditional scientific management lines of control; benchmarking and 'best-practice' require workers—doctors and nurses—to engage in the process of intensifying their own labour and redetermining their own working hour. Like the soul in Purgatory or the anxious puritan Protestant, benchmarking and 'best practice' are activities analogous to the neurotic soul incessantly picking over old mistakes until the past is behind it, the memory of lost opportunities forgotten, and the old self burnt away (Fenn 1995). Certainty of success is necessary, but doubt and the fear of failure drive the soul/worker on. I turn now to the first benchmark—*efficiency*.

Benchmarking *efficiency* through the use of time

In the 1996 report, the Benchmarking WG defined *efficiency* as 'the relationship between the cost of various inputs and the output produced' (NHMBWG 1996: 21). The measures used by the 1996 WG were: the cost per casemix-adjusted separation; and the cost of treatment of outpatients; and the average length of stay (ALOS) for the top twenty Australian National-

Diagnostic Related Groups (AN-DRGs) (NHMBWG 1996:18). In the *Australian Health Care Agreements Annual Report Card 1998-1999* (Commonwealth Department of Health and Aged Care 2001b) this last indicator was limited to the top 10 DRGs; and in the 1999 report three further indicators were added to this list: full-time equivalent staff per 1,000 casemix-adjusted separation; the average salary for individual staff-all categories, and the user cost of capital per casemix-adjusted separation. These are listed in Figure 5.1 below. The column headed 'Time-related indicators' provides a brief description of those indicators that are measured using time as the unit of account. The discussion following, deals with some of the ambiguities of these measures.

Figure 5.1 Hospital performance indicators for efficiency: 1996 & 1999.

Indicator 1996	Indicator 1999	Time-related indicators
Cost per casemix-adjusted separation.	Cost per casemix-adjusted separation.	Inpatient fraction (IFRAC) = ratio of inpatients to total hospital costs. In 1996 this was 7.1 outpatients to one inpatient bed day. Acute admitted: Acute is for brief episode of care and distinguished from non-acute such as rehabilitation and nursing home types which attract lower daily funding rate because of longer stay. Outlier: Those patients whose stay is atypical; ie longer than expected. Calculation of length of stay may be trimmed. Trim points: long and short stay patients have their time trimmed back to a standardised number of days for ease of calculation. 1996 Report included medical and labour costs noting that nursing costs equal 27.5% of the total recurrent expenditure. Cost weights for Nursing based on Excelcare and PAIS timings. Cost weights for Medicine are based on all bed days, both public and private patients.
	Full-time equivalent staff per 1,000 casemix-adjusted separations Average salary for individual staff- all categories.	Recurrent expenditure: staff salaries (Effective full-time/part-time).
Cost of treatment per outpatient.	Cost of treatment per outpatient.	Recurrent expenditure x (100-IFRAC)/total non-admitted patients.
Average length of stay for top 20 AN-DRGs.	Average length of stay for top 10 DRGs.	Cost weight: The relative value (cost) of all AN-DRG cases for one condition in relation to all 500 AN-DRGs, where it is assumed that the overall average would be one.
	User cost of capital per casemix-adjusted separations.	Depreciation + opportunity cost/ casemix-adjusted separations.

Cost per casemix-adjusted separation

The cost per casemix-adjusted separation is determined through multiplying recurrent expenditure on salaries by the inpatient fraction and dividing this by the total number of separations multiplied by the average case weight (NHMBWG 1996:21). While the measures are presented in the report as the result of careful calculation they are also the subject of debate and have considerable impact on funding formulae. For example in 1996, the formula used to estimate the inpatient fraction (IFRAC) was 'the cost of one patient in bed for a day is equal to the resources needed to provide services to seven outpatients (1:7)' (NHMBWG 1996:84). This was a cost reduction from the previous ratio of 1:4 inpatients to outpatients, based on 1971 figures. At that time the average length of stay for inpatients was 9.8 days, whereas in 1993/1994 it was calculated at 4.7 days (NHMBWG 1996:84). The impact on funding can be seen from the following example. The price of one casemix-adjusted separation for South Australia for 1994/1995 was \$2208 based on the ratio 1:7. (Westernvale's costs were \$3029 per weighted separation). The total outpatient occasions of service in this year for South Australia numbered 2,119,000 while total separations numbered 295,000; or one-seventh.

By 1999 the Commonwealth benchmark for the inpatient ratio had reverted to 1:5.8 (NHMBWG 1999:35), with no explanation provided in the report as to why this was so and certainly no indication that the ratio of outpatients to inpatients accorded with this new determination for all the hospitals required to meet the benchmark. The differences demonstrate pragmatic decisions by the working group to come up with a standardised cost in the face of a multitude of practices across hospitals. For example, there has been considerable increase in same day services, which may get patients through the system in reduced time, but intensifies the labour of nurses and doctors. Other factors are linked to the strategies of the NPM, such as outsourcing pathology or radiology services, which enables hospitals to reduce their expenditure through cost shifting to the Commonwealth, or discouraging patients to attend outpatients (NHMBWG 1999).

Average length of stay (ALOS) for the top 20 DRGs.

Average length of stay as a benchmark for efficiency is also used as a predictor of costs (NHMBWG 1996:29), despite a belief that at best it is only a proxy for such measures. As Hindle, Degeling and Van der Wel (1998: 46) note it is routinely used since it requires minimal effort. The ALOS is calculated by dividing the total number of occupied bed-days by the total episodes of care. Benchmarks have been established to include and exclude same-

day cases. Same-day and overnight cases both receive a value of one day. The gradual reduction in LOS over the time period 1995 to 2000 for South Australia is illustrated in Table 5.1. It is clear that the real gains are made by shifting procedures from an overnight stay to a one-day episode of care.⁵¹ However it seems unlikely that public acute hospitals, like Westernvale, will be able to reduce ALOS below these figures given that they receive the most serious and complicated cases, perform minimum elective surgery and the majority of their patients are older and sicker than those in private hospitals.

Table 5.1 Average Length of stay for acute public hospitals in South Australia 1995-2000.

Year	ALOS (excludes same-day cases)	ALOS (includes same-day cases)
1995-96	6.4 days	3.8 days
1996-97	6.3	4.1
1997-98	6.8	4.0
1998-99	6.2	3.8
1999-20	6.2	3.8

Source Adapted from Moss (2002: 168).

The LOS for a number of procedures is longer in the private sector although the gap continues to narrow. The classic cited example is 'AN-DRG 674 Vaginal Delivery w/o complicating diagnosis'. In 1996-1997 figures for South Australia for this procedure were 3.35 days for public hospitals, and 5.00 days for the private sector (NHMBWG 1999:39). This begs the question of what is speeded up and which are the push and pull factors. For example, are various procedures and tasks not done in the public sector; does the woman's body heal faster in the public sector (push factors); or are there services in her home community (pull factors) that allow her to bring the baby home?⁵²

Under Schedule G of the 1993-1998 Medicare agreement, funds were provided up until 1997 through the Post-Acute Program (PAP) for public hospitals that reduced ALOS, while

⁵¹ Private hospitals have taken up much of the same-day procedure surgery. It should not be assumed that the patient returns to normal duties following a same-day procedure. They usually have to be driven home, contact the hospital if pain or bleeding persists, take some time off work, continue taking pain-killers and rest. Care shifts from the hospital to the home.

⁵² A number of authors have explored the difference in cost between the private, public and public teaching hospitals in order to make a definitive statement on efficiency. The difficulty is that the casemix differs across the three types of hospitals so that the findings seem to suggest that hospitals develop an expertise in their casemix and of course there is a suspicion that private patients pay for the extra time. Badham and Brandrup (2000) found that when they calculated the cost for private hospitals to do public work the LOS ranged from a 7.7% increase in days in 1995 to a 3% increase in days in 1997-98. Conversely, if public hospitals did the private caseload the LOS went from a -1.5% to 2.4% increase in days. They concluded their discussion by suggesting that volume appears to have a significant effect on efficiency. In their final comment they noted that public hospitals appear to be more efficient across the range of DRGs if psychiatric events and the top 5% DRG cases are excluded for each sector.

maintaining continuity of care; and the Hospital Access Program also provided funds for post acute care such as Hospital @ Home programs. Closely tied to ALOS are the various definitions given to the clinical approach and duration of stay such as *acute*, *rehabilitation*, *palliative* or *nursing home type*. Each category has a precise expected outcome determined by the time, although only *acute* care is part of the casemix DRG costs. Acute episodes of care for admitted patients focus on curing an illness, relieving symptoms or protecting against further deterioration and are assumed to be achieved in less than thirty days. Rehabilitation care aims to restore lost function and palliative care assumes a cure is no longer deemed possible and the nursing and medical approach is to assist the patient to have a comfortable death. In both rehabilitation and palliative care the time allocated is longer than for acute episodes, although treatment is rationed according to time and response and the daily reimbursement rate is less than for acute conditions. Other non-acute episodes include: Nursing Home Type Patients (NHTPs) for whom the time in hospital has exceeded thirty-five days; the patients who do not have an acute condition; and patients in psychiatric care (Commonwealth Department of Health and Aged Care 2001b:131).

Benchmarking DRGs

In 1995 the Casemix Implementation Project Board, a division of the Commonwealth Department of Health and Aged Care, accepted a proposal for ongoing collection of data from both public and private hospitals as a national benchmarking exercise (Commonwealth Department of Health and Aged Care 1999; 2001a) and by 2001 they had produced five revisions of the national cost weights (Commonwealth Department of Health and Aged Care 1999; 2001a). In many instances these exercises are part of the States' own costing activities as the national cost weight data is finalised by the 30th April each year, providing time for State health authorities to consider whether or not to apply these to the funding of hospitals in the coming financial year (Commonwealth Department of Health and Aged Care 1999; 2001a).⁵³ As a consequence, each year State health authorities and private hospitals submit detailed costing data to the Commonwealth as part of the National Hospital Cost Data Collection (NHCDC). Public hospitals are required to do this under the Medicare Agreements. The data provides information for establishing benchmarks for subsequent Medicare Service Agreements and allows for State and intra-State comparisons.⁵⁴

⁵³ South Australia moved to use its own cost weights in 2000-01 (Moss 2002).

⁵⁴ As State government and hospitals in both the public and private sector re-organise their computer software, more refined standardisation of data collection across the country in both sectors is being realised.

The DRG cost weight is a measure of the average cost of a DRG compared with the average cost of a reference DRG. Usually the average cost of all DRGs is chosen as the reference value and given the value of one (Commonwealth Department of Health and Aged Care 1999; 2001a), although it is recognised that this is inaccurate and the true measure is around 1.2 (NHMBWG 1996). A DRG with a separation cost of \$400 and one at \$100 have a cost relativity of 4:1. Increases in the average price of DRGs from year to year are also weighted in relation to previous years' costs, taking into account increases in salaries and other associated expenses. Cost weights are determined for each DRG, and within the DRG, for each aspect of service provision. An example of the detail provided in determining relative cost weights is illustrated below in Table 5.2 for 'Cost weights Liver transplant AN-DRG 005'. In this example, costs for each service include direct and indirect, as well as on-costs, labour production costs and depreciation. The cost weight for Liver transplant is 37 to 1.

Table 5.2 Cost weights Liver transplant AN-DRG 005

Weight	Standard error	Number of seps	Number of days	ALOS (days)	Cost per DRG	Medical + ov/head	Nursing + Ov/ead
51.36	1.76	144	5,450	37.96	\$124,380	\$14,919 +\$3,395	\$18,045 + \$7,718
Allied	Pathology	Imaging	Pharmacy	Critical care	Operating room	Emergency	
\$1,299=456	\$5,415+ 1,707	\$2,061+494	\$30,529+ 3,974	\$10,766+ 2,703	\$7,643+ 2,801	\$116+\$45	
Special Procedures Suites	Supplies	Prosthesis	On costs + depreciation	Hotel			
\$13+\$4	\$1,102+\$136	\$244	\$4,669+\$3,340	\$656			

Adapted from the (Commonwealth Department of Health and Aged Care (1999)).

Indirect cost is usually time spent in work other than direct patient care. Even hospital-related hotel costs can be timed down to the number of minutes allocated to cooking and delivering meals to patients. Recent benchmarking activities in South Australia have reduced meal production and delivery times down from 25 minutes to 17 for specific hospitals (Silent reference No 12 2001). This is particularly difficult for hospitals that are spread over a wide campus or use freshly cooked rather than frozen production systems. It aptly demonstrates the reduced value of the working time of hospital kitchen staff, and ignores patient satisfaction surveys—a quality indicator—that invariably make some comment about food quality, usually to do with its blandness or the fact that it arrives cold. More importantly the breakdown of DRGs across all activities and health professionals provides evidence for the way in which casemix reinforces and affirms the detailed division of labour in health care. It

also dissects the DRG into an array of intermediate products on an assembly line, where the aim is to minimise the resources used in the construction of the product (Lowe & Doolin 1999).

Costs not built into the original casemix version include capital works, medical education, research, outpatient services, psychiatric and rehabilitation services, palliative care, ambulance services, prosthetics, organ retrieval, blood transfusion services and rural and urban differences (Duckett 1995). Between 1996 and 1999 formulae were developed to factor in costs for these services, so, for example in NSW, medical undergraduate education is now costed by the hour, as is nurse graduate education. The development of sub-acute cost weights for patients in rehabilitation, palliative, psychiatric, geriatric and maintenance care has extended the range of casemix systems, beyond DRGs, and are now in place for determining hospital budgets. The National Sub-Acute and Non-Acute casemix classification system known as AN-SNAP provides a funding model for these long stay patients (Edgar 1999).

Cost weights produced on an annual basis allow for comparisons across time and for analysis of the impact of increases in costs, including labour and technology, as well as shifts in the clinical processes for each DRG. The cost weight is for an episode of care that begins on the hour of admission and ends at the time of discharge. It does not include community-based care, hence the often made, but difficult to substantiate, claim that patients are discharged into the community 'quicker and sicker', with cost shifts from hospital services funded through State grants, to community services such as Home and Community Care (HACC) funded directly by the Commonwealth.⁵⁵ Part of the argument proffered by community organisations is that their work has become intensified with little shift in funding (Douglas, Vemuri & Xiao 1996). A secondary problem in the 1990s was the lack of technology in place to track patient trajectories. If a patient was readmitted to the same hospital the data was available, but should they be admitted to another hospital, public or private, this readmission data could not be captured.

Ongoing attempts by the State government to get General Practitioners to work more closely with hospitals as well as innovations such as the Hospital @ Home service, reflect the realisation that an illness event does not fit neatly into a four or three day DRG episode of care, particularly for elderly people and those with chronic conditions, and that the system is fragmented. State health authorities are moving to implement the necessary technology to

⁵⁵ In 1996 productivity measures for HACC services were calculated on the number of hours per 1000 population of people with moderate or severe disabilities (NHMBWG 1996).

track readmission and medication use. Duckett (1995) has suggested that a future refinement might be to bundle up the various procedures and services including community care into one episode of care with a single DRG. So for example 'AN-DRG 674, Normal vaginal delivery' might include 2 days, some of which would be spent in hospital, but an early discharge would include a range of community-based services and home visits. The development of this form of integration will come up against the mix of State and Commonwealth funding that plagues the Australian health care system, as well as the more complex questions of whether an episode of care is a definition used to describe a clinical event or a financial liability.

Cost weights are also devised for individual hospital's performance of a procedure. Hospitals either come in under or over the average set price, usually tightly linked to the length of stay. This data is available for each DRG as well as for aggregated surgical and medical episodes of care. For example, in 2001, the difference between the State average and that of Easternvale Hospital, a hospital close to Westernvale, for all surgical procedures was an additional 1.3 days. For medical episodes of care the difference in ALOS was 3.6 days and for Rehabilitation care 10.89 days (Silent reference No 12 2001). At Westernvale the ALOS of stay for 'DRG 270, Unstable Angina without complications' in 1997 was 5 days (Silent reference No 12 2001) while the State average was 3.85 days in 1995 and 3.17 by 1998. These differences motivated staff at Westernvale to target 'episodes of care' for angina patients as an area for productivity and efficiency innovations since Westernvale was well outside the national average LOS of 3.32 days (Commonwealth Department of Health and Aged Care 1999; 2001a).

The process for determining cost weights for the various services performed by pathology, medical, allied health or nursing and hotel services was not standardised in 1996. The Maryland Service weights (ie Johns Hopkins) formed the basis for pathology, radiology and allied health services. In 2000 they were replaced by Australian weights; for example the Australian Allied Health Classification provides the beginnings of a casemix system for ten allied health professional groups (Australian Allied Health Classification System 1997). These cost weights limit the number of days and duration of service times available per patient, per DRG, forcing allied health professionals to standardise care along production line models. This assumes that patients are restored to health within a set number of visits or treatment episodes. It is an example of standardising the healing time of bodies. Nursing cost weights were developed using Excelcare data from South Australia and the Patient Assessment Information System (PAIS) data from NSW (Diers 1999). It is discussed in Chapter 7.

Benchmarking *productivity* through time

Productivity is defined as ‘the relationship between the mix of inputs and outputs’ (NHMBWG 1996: 34). Figure 5.2 lists the indicators for measuring productivity for 1996. The two major indicators are the cost of capital and equipment and labour costs, although the report indicates that labour costs are part of the cost per casemix-adjusted separation—an efficiency indicator—but include a discussion on these costs in the productivity section. The capital costs deal with issues of use, depreciation, replacement value and usage of the buildings and equipment, and a formula is used to calculate the user cost of capital per casemix-adjusted separation (NHMBWG 1996:34). This is the depreciation value, plus the opportunity cost, divided by the casemix-adjusted separation. Depreciation is measured each financial year. In South Australia building and plant equipment is assumed to have a life of 50 years although this can vary from 33 to 3 years and a key finding of the recent South Australian 2002-2003 *Generational Health Review* is that hospitals lack the capital to replace essential equipment (DHS 2003a). Despite these difficulties a monetary value is applied each year to buildings and equipment at an estimated 7% per annum depreciation value (NHMBWG 1996:37).

Figure 5.2. Hospital Performance Indicators for *productivity*: 1996

Indicator 1996	Time-related indicator
User cost of capital per casemix-adjusted separation.	Depreciation + opportunity cost/ casemix-adjusted separation.
Ratio of depreciation replacement value to total replacement value.	Depreciation value = 7% per annum Total replacement value is current cost of item or capital on a greenfield site. Buildings in SA have use life of 50 years.
Total replacement value per casemix-adjusted separation.	Current replacement cost (capital intensity) per casemix adjusted separation.
Labour costs per weighted separation.	Salaries of permanent and contract staff + superannuation employer contribution.

Adapted from the National Health Ministers' Benchmarking Group (1996:18).

Labour costs are also built into the cost of each DRG and include salaries, the cost of visiting medical officers who are usually paid by the hour, superannuation and other on-costs. Salaries for doctors are a complex issue with the ratio of the DRG cost allocated to medical salaries

dependent on whether or not it is a public hospital in the metropolitan area or a rural site.⁵⁶ Estimating the cost of medical salaries has been also complicated by the fact that in public hospitals some patients are privately insured, while others are publicly funded. The 1996 report assumed all patients were public for ease of calculation. This is an intriguing decision given that salaried doctors can charge private patients a fee for services they receive in the public sector and the hospital also can bill the patient's private health insurer.

Despite these formulae for measuring salary costs the reality is that there is considerable variability between the States a result of EB agreements, with the current Australian average for salaried medical officers at \$97,000, while in South Australia the average is \$79,000 (Moss 2002). Inter-state differences in doctors' and nurses' salaries are primarily a result of EB agreements and a cause of considerable industrial action. The role of employer negotiating teams is to ensure that salary increases come in under the casemix price. I detail the work of the salaried medical officers' union, SASMOA, in Chapter 6 and provide a case study on nursing salaries and workload in Chapter 7. The point to be made at this juncture is that it is difficult to take seriously State by State comparisons and benchmarks given the significant differences in salaries resulting from different EB agreements. Enterprise bargaining operates on the premise that standardisation of salaries or pattern bargaining is contrary to workplace flexibility, yet Commonwealth benchmarks compare peer group hospitals across State boundaries.

Benchmarking *quality* through the use of time

Defining *quality* is usually understood to be 'the clinicians' and patients' understanding of the high standard of care and outcome' (NHMBWG 1996:40). In the 1996 report the first three indicators are clinician-focused, the fourth deals with patient perceptions and the final one with formal accreditation of the hospital for a set number of years (Figure 5.3 below). In the 1999 report the 'condition of the capital', which had previously been an indicator of *productivity*, was included under the *quality* benchmark. An emergency admission is defined as patient needing to be admitted into hospital and treated within 24 hours. A readmission is a patient who is discharged and then readmitted within 28 days. In 1996 most States did not have the information technology necessary to track patients readmitted to a hospital other than the one they were initially discharged from. IT systems are increasingly allowing this data

⁵⁶ In many country hospitals, medical staff are paid directly through the Medicare Benefit Schedule since they may be the local GP. This allows these hospitals to shift the costs back onto the Commonwealth.

collection. In Chapter 9 I outline the results of the Program Budget and Marginal Analysis study in the Respiratory ward as an example of an attempt to reduce the readmission rate at Westernvale.

Figure 5.3 Hospital Performance Indicators for quality: 1996 & 1999

Indicator 1996	Indicators 1999	Time-related indicators
Rate of emergency readmissions.	Rate of emergency readmissions.	Rate = Emergency admissions / total admissions. Number of emergency readmissions within 28 days (patient must require treatment within 24 hours on readmission).
Rates of hospital-acquired infections.	Rates of hospital-acquired infections.	Rate = Clean surgery; Day 5 infections/ clean surgery separations. Rate = Contaminated surgery; day 5 infections/ contaminated surgery separations. Rate = Hospital acquired; Bacteraemia sep/seps > 48 hours.
Rate of unplanned returns to theatre.		Not calculated through time.
Patient satisfaction.		Not calculated through time.
Proportion of beds accredited by the Australian Council of Health care Standards.	Proportion of facilities that were accredited by the ACHCS. Proportion of facility beds that were accredited by the ACHCS.	Proportion of beds accredited by the ACHCS: range from 1 to 5 years.
	Condition of the capital.	Condition of the capital measured in years. See productivity above

Adapted from the National Health Ministers' Benchmarking Group (1996:18 & 1999:7& 25).

Rates of hospital-acquired infection are calculated using time as the predictor. Operations are defined as 'clean, contaminated, dirty and those with a wound infection'. The areas where time matters is in wound infections following clean surgery, and wound infections following contaminated surgery (NHMBWG 1996: 42). The date of the first procedure is used as the starting point if the patient returns to theatre. The infection rate is calculated for both clean and contaminated surgery by dividing the number of patients with infections on day five or beyond by the number of patients having surgery. In both cases the patient must be undergoing a procedure where the ALOS is beyond 5 days.

Similarly data is collected for patients who had a temperature less than 37.4 C on admission but within 48 hours become febrile and have a positive blood culture indicating that they have a hospital-acquired bacteraemia, or MRSA (NHMBWG 1996:43). These patients must have a

LOS of 2 days or more. The rate of hospital-acquired infections is low, at around .03% for South Australia (NHMBWG 1996: 43). At Westernvale patients with MRSA are cared for in one ward as an efficiency and safety measure. They require full barrier nursing or universal precautions, which is time intensive nursing. Patient satisfaction surveys do not directly focus on time, although as I demonstrate in Chapter 8, patients may make unsolicited comments on the time given to their care and length of stay.

The final indicator is the number of hospitals per state that achieve 1 through to 5-years accreditation from the Australian Council of Healthcare Standards (ACHCS). The number of years granted is a marker of quality. While accreditation is granted for a number of years, the focus is on continuous quality improvement, with a never-ending cycle of activity to ensure the hospital will acquit itself for a future visit from the Australian Council of Health Care Standards. The quality assurance cycle dovetails neatly with benchmarking, reinforcing a culture of perpetual inadequacy and striving for the impossible—a perfect score. At Westernvale, this culture of continuous inadequacy is bolstered by the activities of the EQuIP team, and the multiplicity of committees linked to this quality assurance process. The hospital was successfully assessed in 1997 and 2002 for five year periods.

Benchmarking *access* through the use of time

Access is measured through a variety of time benchmarks. These are listed in Figure 5.4 with ‘waiting times for emergency services and waiting times for outpatients’ listed as part of the hospital’s non-admitted patient care. This does not include such services as dialysis, pathology, radiology, imaging, endoscopy procedures or mental health and alcohol and drug services (Commonwealth Department of Health and Care 2001b:115).

Figure 5.4. Hospital Performance Indicators for *access*: 1996 & 1999

Indicator 1996	Indicators 1999 Accessibility, equity and appropriateness	Time-related indicators
Waiting times for elective surgery.	Waiting times for elective surgery.	Clearance times. Proportion of patients waiting inappropriately at census; and, proportion of patients admitted after inappropriate wait.
Accident and emergency waiting times.	Accident and emergency waiting times.	No official indicators—ACEM triage categories.
Outpatient waiting times.	Outpatient waiting times.	No official indicators available, but clearly measured through time.
Variations in intervention rates.	Variations in intervention rates.	Not measured through time.
Separations per 1,000 to total population.	Separations per 1,000 population.	Not measured through time.

Adapted from the National Health Ministers' Benchmarking Group (1996:18 & 1999: 7).

Waiting time for elective surgery has received considerable attention by the Commonwealth and the States. Data now exists from 1994 through to 2003 for surgery waiting times, presumably since waiting for elective surgery is seen by the media to be a major factor in whether or not funding is adequate for Australia's public hospitals (Starick 1998; Ellicott 1999; Eccles 2000; James 2001). In the NHMBWG (1996:48) report, waiting times were divided into two categories: category one referred to patients needing to be admitted within the next 30 days; and category two referred to patients where there was no time limit or sense of urgency. These categories have been extended and are described below.

The National Elective Surgery Waiting Time Data collection for 1995-1996, 1996-1997, 1998-1999 (AIHW 2000a; 2000b) provides data on: waiting times for patients admitted to elective waiting lists; the status of waiting lists at a particular point in time; clearance times; and patient numbers for a range of clinical specialties. The focus is on the wait, rather than the length of the list since the turnover rates are difficult to determine. The evidence suggests that the length of list, is not reduced, even when productivity increases; in effect the more surgery done, the higher the demand in what is still a supply-led system (Queensland Health 1996). The waiting list itself is on an endless treadmill, an eternal foreground never reached.

Refining the benchmarks for waiting lists for elective surgery

Refining the data collection for waiting lists began with the incentives built into the 1988-1993 Medicare Agreement and was extended under the 1993-1998 Agreement. Under Schedule E of the 1993-1998 Agreement the States contracted to: reform the management of elective booking systems; implement a system of regular clerical validation of waiting list numbers and times; develop and implement clinical validation protocols to ensure access to elective surgery was based on clinical need and provide standardised data to the Australian Institute of Health and Welfare, in order that regular publications of waiting lists and waiting times were available for benchmarking exercises (Queensland Health 1996:3). This data was necessary to access funds from the Commonwealth Medicare Pool B incentive funds. The Commonwealth also provided financial incentives for hospitals to increase same-day surgery for defined targets through the Day Only Procedure Program (DOPP), under Schedule G of the Medicare Agreement.

Reform that tackles reduction in waiting lists for elective surgery must also deal with: the issues of the number of surgeons and anaesthetists available per population in each State; the number of female doctors with their higher rates of part-time work; the number of working hours for resident medical officers; financial arrangements for visiting medical specialists; the number of provider numbers supplied; and the management systems used in theatre. These issues are reported in the *1998-99 Report Card* (Commonwealth Department of Health and Aged Care 2001b). The 1998-2003 Medicare/Australian Health Care Agreement commits each State to collecting waiting list data on an agreed date, 30 June each year, as a benchmarking measure (AIHW 2000a).

Patient waits for elective surgery are now divided into three categories according to urgency: Category 1 patients should be admitted within 30 days or their condition is likely to deteriorate and become an emergency admission; Category 2 patients need admission within 90 days; and Category 3 within some time in the future—their condition is seen to cause minimal pain, discomfort or disability and is not likely to become an emergency admission (AIHW 2000a: 5). Categories 1 and 2 are further refined into those who have extended waits of over 30 or 90 days respectively, and they are termed 'overdue'. This indicates that the wait is clinically undesirable (AIHW 2000a:5). Under the 1993-1998 Medicare Agreement South Australia agreed to treat 88% of Category 1 patients in 30 days and 85% of Category 2 in 90 days. In 1997 and 1998 these targets were met (Commonwealth Department of Health and Family Service, Annual Report 1998:91).

Waiting lists are calculated by noting the proportion of patients admitted from waiting lists for elective surgery after an extended wait. This is throughput data. The second measure is the number of patients on the waiting list at the census date and the third measure is the median waiting time for patients admitted from waiting lists. The median wait is gathered in order to avoid the extremes of short and long waits since some patients wait less than 7 days. Measuring waiting times is subject to some variation across the States as is the definition of an Emergency Admission. In South Australia the method for calculating waiting times is divided between those who have extended waits: 'total time waited in the most recent clinical urgency category', and for average and median waits: 'the total time waiting in all clinical urgency categories' (AIHW 2000a:7).

Clearance times are also collected. The clearance rate is determined by dividing the number of patients on a waiting list at the time of the census, by the number who have been removed since the last census (AIHW 2000a:11). Data is also collected to determine the proportion of patients admitted who had an extended wait, and the median waiting time for patients (this is determined by recording the date when half the number of patients have been admitted) and the proportion with extended waits (AIHW 2000a:12). For example data for 1995-1997 and 1998-1999 on the proportion of patients and their clinical urgency admitted after extended waits or still on the list on June 30th are provided for South Australia in Table 5.3 below.

Table 5.3. Waiting time for elective surgery for South Australia for 1995-97 and 1998-99

Proportion of patients admitted after extended waits (%)			Proportion of patients on the list with the extended waits on 30 th June			Median waiting time (days)		
Clinical urgency category								
1	2	3	1	2	3	1	2	3
10.9/8.6	14.9/8.9	4.7/2.7	26.9/ 14.8	16.1/ 13.3	n.a/7.8	9/na	41/na	50/na

Adapted from: Waiting times for elective surgery 1995-96 and 1996-97 (AIHW, 2000a:13) and Waiting times for elective surgery 1997-1998 (AIHW 2000b: 6 & 7).

Benchmarks are also provided that allow for comparison across all States on the number of category 1 patients with extended waits January to June for each financial year, and by the specialty of the surgeon and the procedure for each clinical urgency category. These data vary in waiting time across the three categories with orthopaedic surgery, plastic surgery and urological procedures having a higher percentage of patients with extended waits in all categories for the years 1995-1996 and 1996-1997 (AIHW 2000a; 2000b). The median was

also provided for each surgical specialty and procedure in the 1995-1996 and 1996-1997 publication, but not in later publications that benchmark waiting times. These waiting times shed light on the politics of what constitutes elective and essential surgery. For example in the 1995 federal budget 'AN-DRG 404 and 405 Total hip replacement' shifted from essential to elective surgery. In 1996 the median waiting time for total hip replacement for category 1 was 36 days, for category 2, 70 days and for category 3, 116 days. This was the only procedure with a waiting period for category 1 urgency of more than one month (AIHW 2000a:20). Shifting it to elective surgery does little for those waiting, but does move the procedure from emergency to elective and, as a consequence, legitimates the wait.

Benchmarks are also provided according to the number of beds in the hospital, with the larger establishments having longer waiting times than smaller ones, but of course higher rates of category 1 patients. Waiting times are further categorised into the exact number of days or months on a nine point scale, so that it is possible to illustrate whether or not speed of throughput has increased, even if patient waits are outside the benchmark.

Cromwell and Mays (1998) have made the point that the aggregated data collected by the Commonwealth is of little use to individual hospitals for purposes of managing their waiting lists. What is needed is precise data at the hospital level that indicates the numbers being added to lists by surgical specialty, the throughput data and the number of people who are taken off the list as 'not yet ready'. Activity data fluctuates from month to month and what hospital managers need to know is why this is so, and what can be done to overcome the blockages. Part of the problem in identifying blockages is that the management systems do not have the capacity to produce the necessary information. While the Australian Health Care Agreements (1998-2003) commit each State to standardisation of information technology infrastructure in order to make national comparisons, these systems may not provide the necessary data for hospitals. In Chapter 8, the case study reveals the inadequacy and limitations of IT systems.⁵⁷

⁵⁷ A secondary issue raised in the Chapter 8 case study deals with the training of interns and resident medical officers and the difficulty of predicting the availability of Visiting Medical Officers who are presumed to train young doctors in the specialty. One of the benchmarks used in the AHCA Annual Performance Report 1998-99 is the number of medical trainees and graduates needed for the 13 medical specialist colleges in Australia. This data is correlated with waiting lists (Department of Health and Aged Care 2001b). Where colleges do not provide adequate numbers of graduates or are unable to fill their quota, the numbers of patients on waiting lists is likely to be high. This is to some extent a result of shortages of training positions and the relatively older age structure of the medical work-force in some specialties. Pressure is also being felt by specialties such as pathology and radiology where the services have been outsourced to private hospitals or providers who do not contribute to medical training.

Benchmarking emergency department waiting times

Benchmarking time waiting in emergency departments has been the subject of a number of studies (Commonwealth Department of Health and Aged Care 2001b). The 1996 report did not define emergency department waiting times but used the Australasian College of Emergency Medicine's definition. The 1999 report notes that the 1993-1998 Medicare Agreement negotiated a series of targets for each State. There is standardisation for determining the benchmark for the required waiting times, but considerable debate on whether or not 'time' is a factor to be built into casemix costing systems for Accident and Emergency services.

This debate is partly explained by the research conducted by Ewich-Nijhout, Bond and Baggoley, in 1996, to develop the casemix system for costing the work of nurses, doctors and allied health staff working in accident and emergency departments. They developed a set of cost weights known as Urgency, Disposition and Age Groups (UDAGs) based on Urgency Related Groups (URGs). In the study, the time taken by clinicians to treat patients was recorded using time-and-motion stopwatch techniques, but the timings were abandoned in the final cost weight as subject to gaming. This is an intriguing response given that there was a high correlation between work time and cost for each category of emergency admission. Once the timings for treatment were determined, it would have been simple enough to link reimbursements to this time as is the situation for DRGs and eliminate any possibility of cheating. In some hospitals, clinical pathways have been developed for each emergency category of the most numerous medical or surgical conditions as a way of speeding up the processes (Lacey 1996).

The triage time scale developed by the Australasian College of Emergency Medicine has 5 categories. Category 1 patients are defined as 'resuscitation and require treatment immediately (within seconds); category 2 are defined as emergency patients and should be treated in 10 minutes, category 3 as urgent and to be treated in 30 minutes, category 4 as semi-urgent and ideally should be treated in 60 minutes, while category 5 in 2 hours (120 minutes)' (Commonwealth Department of Health and Aged Care 2001b: 36). These times do not refer to when a patient gets a bed in a ward. This may be any time up to 24 hours and is the subject of media claims of a system crisis (Eccles 2000; James 2001).

Long waits in A & E refer to situations where a patient has waited for medical care longer than is clinically appropriate. For example a patient presenting with chest pain should be seen in 10 minutes, not just because it may be unstable angina and the patient may have had a heart attack, but also because a number of tests need to be performed within the first hour to confirm this diagnosis. The technology is also time dependent. Up until 1998 no national data existed on waiting times, although the 1993-1998 Medicare Agreement negotiated targets for each State in 1996-1997. In South Australia three hospitals were committed to reaching the set targets for 1995/1996 and six hospitals for the 1996/1997 targets, but the major focus was implementing an information management system appropriate for the task. Table 5.4. gives the benchmark targets and long waits for NSW and Victoria and South Australia. Clearly those patients with non life-threatening conditions are the group most likely not to be seen within the benchmarked timeframe.

Table 5.4 Benchmark targets and long waits for NSW, Victoria and South Australia 1996-1997 and 1998-1999

Target area	Benchmark target set by the Commonwealth	Actual % target achieved 1996-97	Actual % target achieved and % long waits 1998-99
NSW	80% of category 1- immediately	91	97 (3)
emergency	60% of category 2- within 10 minutes	72	78 (12)
Departments waiting times	55% of category 3- within 30 minutes	68	64 (36)
Victoria	98% of category 1- immediately	100	100
Emergency	70% of category 2- within 10 minutes	78	82 (18)
Departments waiting times	70% of category 3- within 30 minutes	76	76 (24)
South Australia	Category 1- immediately	N/a	97 (3)
Long waits	Category 2- within 10 minutes		74 (26)
	Category 3- within 30 minutes		63 (37)
	Category 4- within 60 minutes		65 (35)
	Category 5 -within 120 minutes		91 (9)

Taken from NHMBWG (1999), and the AHCA Agreement (1998-2003, p 34).

Benchmarking outpatient waiting times

The 1996 report gave no indication of how waiting times for outpatients could be benchmarked, other than to indicate that the various States were developing casemix formula to meet this demand. Similarly, the 1999 report indicated that work was still to be done in this area. The Report Card does not mention benchmarks for treatment times for patients seeking care from either nurses or doctors at the various outpatient clinics (Commonwealth Department of Health and Aged Care 2001b). At Westernvale follow-up visits are scheduled 6 weeks following discharge, and in some of its own internal reports comment is made that patients have to walk from department to department to make these appointments, due to a

lack of integrated IT systems (Silent reference No 11 1997). What is clear here is that 'access' is almost totally defined in terms of waiting time for the date of the appointment, not the number of hours waiting to see an overworked doctor or nurse with a schedule of double-booked patients.

Concluding discussion

Despite the fact that during the period under discussion the Commonwealth published four *National Reports of Health Sector Performance Indicators* (NHMBWG 1996, 1998, 1999, 2000), and a series of report cards, it is difficult to determine to what extent public hospital funding is directly tied to these benchmarks, or for that matter the standardised DRG casemix price. As I noted in the previous chapter, the general belief amongst managers and divisional directors at Westernvale was that the annual price for DRGs was an arbitrary figure, determined by bureaucrats within the State DHS.

However, staff do make a link between the Commonwealth and State benchmarks and the hospital's inability to come in under budget, or when hospital administrators complain to the DHS about insufficient funding, bureaucrats are known to use the benchmarks as ammunition. Consequently hospital managers work to achieve the benchmarks, giving clinical staff the impression that this will solve the problems. This is further compounded by the fact that the State government also imposes benchmarks that run parallel to those imposed by the Commonwealth as illustrated in the previous chapter where the DHS imposed a series of target dates that hospitals had to meet in order to ensure on-going funding.

As a consequence there are now a myriad of report cards and benchmarks across every range of hospital service, with the Commonwealth and State governments continuing to refine and standardise these throughout the country via elaborate computerised and retrieval systems. Every facet of the work is now subject to targets, deadlines, benchmarks and indicators, measured in intricate detail and with increasingly refined and standardised precision. When hospital staff achieve the benchmarks they are assumed to enjoy a competitive edge, since they produce surplus value expressed as coming in under budget, having adequate staffing levels or reduced waiting lists. But benchmarking is more than a process of rationalisation. It is a competitive technique that constantly redetermines the working hour of those charged with achieving the reduction in time or expenditure. As the benchmarks are standardised throughout the sector—as they must be, since this is the rationale for their establishment—the competitive field eventually levels out and the advantage enjoyed by those who first achieved the benchmark dissipates. This year's benchmark becomes the indicator for next year, as

hospitals seek innovative ways to reduce LOS and create surplus time. In this way service professionals in the public sector experience the full weight of the treadmill of their abstract labour in abstract time.

There are no benchmarks measuring the quality of human interactions or emotional expressions of care, nor are there indicators that recognise that bodily healing is subject to individual differences, although more recent report cards are framed in this way.⁵⁸ The struggles of the cardiac patient or the pain of the elderly woman awaiting a hip replacement are reduced to technical and clinical discourses, where what was last year an emergency admission is this year transformed by bureaucrats into 'elective surgery' achieved satisfactorily within the benchmarked time. As a consequence the very work of health professionals is subject to rationalisation whereby their primary concern is beating the clock, not offering the care. Providing quality and equitable care (efficiency) has become a new disease of time scarcity. While it is surely useful to ensure that surgeons operate with minimal risk of infection, the problem is not solved by establishing benchmarks and targets that highlight speed and duration over care and concern.

As each target is reached a further reduction in time accelerates the rate of service. This is a cycle of constant redetermination, where illness, infections, and the assaults of surgery on the body are rationalised to fit a Federal or State imposed benchmark. What is not taken into account is the bodily time taken to heal or the progress of disease, although the latter may manifest in later readmission rates. Patients who cannot accommodate to these regimes are referred to as long stay outliers; their health care costs leave the hospital in debt because their bodies cannot achieve the benchmark, or they are discharged too early only to be readmitted as 'deviant recidivists', upsetting the benchmark for readmission rates. Exercising care by keeping these patients in hospital for longer periods, or shifting them to another category, results in lower reimbursement rates—as the payments for long and short stay outliers attest—as well as preventing access to bonus pool funds. Arguing for alternate modes of reckoning is seen to fly in the face of economic logic and to be a nostalgic return to the past. The penalties in place when targets are not met result in bed closures and prolonged patient waits.

⁵⁸ By the time of the publication of the *Fourth National Reports of Health Sector Performance Indicators* (AIHW 2000) discussion of benchmarks defined narrowly as productivity, efficiency, quality and access had receded to one chapter in a larger set of benchmarks based on principles of equity, comparisons with other countries and quality of life issues. However at the day-to-day level of hospital funding the four benchmarks remain the primary measures.

In this chapter I have illustrated one way in which bureaucrats translate Federal and State government policy into refined instruments of control. The vehicle for control is time scarcity played out in work intensification; not just for the doctor and nurse, but also for the body of the patient. Time-determined policies and benchmarks dominate all other characteristics of quality and equity of access to health care. It is not just efficiency and productivity that are measured through time, but also the quality of interactions and the equity of access. In the public acute hospital sector, 'best practice' means efficient, efficient means under budget, coming in under budget means achieving an outcome 'quickly'. The required speed is the benchmark; regardless of the context. It is not surprising that, in the early years of casemix and in response to the Medicare incentives, health professionals sought *new ways to capture time* (Fenn 1995) firstly through managerial and/or organisational change and latterly through evidence-based medicine. Nor is it surprising that part of the time span covered in this thesis, 1992-2000, was characterised by a sense of temporal panic and anxiety in response to the myopic detail of bureaucratic requirements. Just as the state, through its policies, attempted to control through time, so, too, do health professionals. In doing so they also come in under the spell of time (Fenn 1995:186). This spell is the motivation to innovation. It expresses itself in a flurry of inventions directed towards faster ways of performing the work and is evidence of the complicity health professionals share in succumbing to bureaucratic control. In the next chapter I begin to outline the ward-based reforms at Westernvale, starting with an exploration of ordinary everyday time.

CHAPTER SIX

FROM ORDINARY TO EXTRAORDINARY ABSTRACT TIME

Like the clock I am divided (Harris 2001:115)

Introduction: ordinary everyday time

Telling the story of intensified working time and its transition from ordinary to extraordinary abstract time presents a number of difficulties. In this chapter I draw on the ethnographic account of my time on Mawson ward to argue that understanding structural and cultural shifts in working time requires firstly, understanding the peculiar ways in which a rationalised time is already intrinsic to ordinary everyday life in hospitals, particularly for nurses and doctors. I illustrate this by describing the various neo- and post-Fordist models of nursing care, the ordinary everyday routines of nursing work, such as dealing with medication, the way nurses deal with patient emotional displays through rational instrumental forms of education, and the brutal nature of rosters for early career doctors. Doctors' rosters are the classic example of the torture of unreasonable working hours, while the shift in the models of nursing care illustrates the triumph of scientific management over the aspirations of nurses for task re-unification. Time on Mawson ward was linear, rational and monochronic even before the new processes of benchmarking and 'best practice' arrived.

Overlaying this structured, linear and monochronic use of time on Mawson ward are a number of factors that threatened the rationalised and controlled time order. Two of these are processes involving the managing of beds: the admission and discharge of patients from the hospital, and time-induced modes of inter-professional relationships at the nurses' station. In the final section I move beyond these chaotic modes of time organisation to illustrate one way in which senior medical and nursing managers on Mawson redefined nurses' resistance to work intensification and fragmentation as laziness and a lack of commitment to the organisation. This leads me to outline the details of a cultural change program of enhanced performance management and the responses of those who complied and those who resisted.

This cultural change program is the first of the five innovations explored in this thesis, while the chapter as a whole presents the first of the four case studies.

Organising nursing work: from Fordism to flexible specialisation

The work of nurses varies in its many modes of organisation which include functional, team, comprehensive, primary, and case management models of nursing care. Functional and team nursing represent the detailed division of labour of neo-Fordist modes of production. The focus is on the tasks to be done for each patient and these are divided among nursing staff according to skill and seniority. One nurse, usually an RN, may do the drug round at four hourly intervals interspersed with wound dressings; another nurse, often an EN or first year graduate takes on responsibility for the morning sponges, toileting and responding to patient bells. Nurses take responsibility for their set tasks, but not for the overall care of the patient. This is in the hands of the team leader or senior ward nurse.

Primary nursing requires all staff to be experienced RNs. It involves one nurse taking full responsibility for a patient from the time they are admitted to their discharge. When first introduced, primary nursing represented an attempt to create flatter structures and highly integrated and specialised team work analogous to post-Fordist modes of production.⁵⁹ The role of the primary nurse includes attending to patient medications, consulting with the patient's doctor as well as doing the routine tasks such as daily sponges, showers and toileting, arranging the patient's discharge and negotiating with other staff caring for patients at night or on weekends. Comprehensive nursing is a hybrid of team and primary nursing. One or two RNs take full responsibility for two to four patients during the eight hours of their shift. Enrolled nurses in this model do task-based nursing attached to two comprehensive teams. This model of nursing was employed on fourteen of the sixteen wards at Westernvale between 1998-2000.

Case management is a model of nursing promoted by Zander & McGill (1994) and is usually associated with the introduction of clinical pathways. It involves the nurse as case manager taking responsibility for all patients admitted into the hospital under a particular Diagnosis Related Groups. In Britain and the United States nurse leaders have promoted primary nursing and case management as strategies for enhancing the professional role of nurses. Likewise in

⁵⁹ Only one ward at Westernvale employed primary nursing between 1998-2000 at Westernvale. Neither Hartley or Mawson used this model of care.

Australia, primary nursing continues to be promoted particularly for advanced practitioner positions in public hospitals. In both primary nursing and case management the nurse needs to be able to work outside the 8 hour shift in order to follow their patients from admission to discharge. To date there are very few funded case management positions although universities have begun to educate nurses for this extended and autonomous role of nurse practitioner or case manager. Those few nurses already operating in this role work long hours without the accompanying salary rewards.⁶⁰

The model of nursing care employed in hospitals in Australia represents a struggle between the aspirations of professional and academic nurses, and pragmatic and budgetary decisions by management, including nurse managers. Throughout this thesis I argue that at Westernvale the models of nursing employed on the two wards represents the triumph of management.⁶¹ Mawson ward used team nursing as its model of care following the establishment in 1997 of a 'stand-alone' unit for same-day procedures in one of the four-bed bays on the ward. The uneven number of beds on one side of the ward was seen to work against comprehensive nursing. However by 1999 the ward had returned to comprehensive nursing to accommodate a Step-down unit for patients returning from intensive care following cardiac surgery, but also to encourage 'commitment' to the work. In both cases what motivated the shift from one model of care to another was the drive for efficiency, not the aspirations of the profession for task unification.

⁶⁰ South Australia's first formally structured position for a nurse practitioner was announced in 2003. The Generational Review, the State Labor government health reform strategy, also recommends the employment of hospital nurse practitioners (NPs). Evidence to date suggests that NPs will create a more detailed division of labour within nursing, but are unlikely to challenge medical dominance at the point of intersection between the highly qualified and experienced nurse and the junior intern, since most positions appear to be primarily focused on outreach liaison between the hospital and the community, including the GPs.

⁶¹ Commenting on the USA experience Brannon (1990; 1994; 1996) has argued that nurse leaders in universities and professional associations supported the shift from team to primary nursing in the 1980s. Nurse academics were interested in enhancing the nursing role through task unification. Hospital managers supported the move since the technological advances meant that it appeared to be cost effective to employ staff who were multi-skilled, rather than employ lower level carers who were neither trained nor legally sanctioned to do all the required tasks. However, while ward-based nurses enjoyed the task unification that resulted from primary nursing or case management, they found themselves doing tasks that they once had been able to delegate to lower grades such as ENs. In effect their work was intensified. The ENs and unlicensed carers on the other hand found themselves initially unemployed, then employed in community settings, with little supervision and in many instances required to do tasks that in the hospital setting would have been considered outside their competence or legal jurisdiction. By 1996 a number of hospitals in the USA had moved back to team-based nursing as a cost reduction measure, this time employing lower grade nurses in larger numbers with the few employed RNs acting as supervisors (Brannon 1996). Similar developments have occurred in Britain where it was hoped that primary nursing or the 'new nursing' would rejuvenate the profession. Increasingly, health care assistants are being employed in hospital wards with RN acting as supervisors (Daykin & Clarke 2000). This is not possible in South Australia since the ratio of ENs to RNs is regulated under the EB agreements.

Ordinary everyday work on Mawson under team nursing

My own experience of team nursing was that it quickened the pace enabling mostly brief interactions with patients. When accompanying a nurse doing a set of isolated tasks such as the showers or drugs down the A or B side of the ward I could not physically keep up. I found myself running most of the time. The pace of the ward was so frenetic that I was often compelled to take up the role of ward clerk or PSA. This was especially so on the late shift, when the ward clerk had finished for the day and the number of PSAs had reduced. The ordinary everyday pace of work on Mawson, with its strict division of labour, beeping of monitors and bevy of cardiac physicians and surgeons milling at the nurses' station, was hectic.

Despite increases in patient throughput and the reduction in staffing numbers, nurses normalise and synchronise the routine tasks as much as possible in line with everyday life. For example many routine cleaning jobs needed to be done by nurses to make up for the shortage of PSAs. These jobs were set down for the weekend and not factored into the staffing allocation. Nurses performed them according to the 'natural time' for doing housework and, like housewives, did these jobs when they had an idle moment and for the most part without having to be asked to do them. On one occasion around 9.30pm at night on the late shift the staff were chatting at the nurses' station. Several nurses kept asking others if there was anything they could do for them. The replies were all negative. Since it was a Saturday, I suggested we could look at the cleaning roster. This was met with a hostile response, and I was asked with incredulity whether I did housework on Saturday nights after 9.30pm. This was despite the fact that nurses will admit to doing domestic work when they go home after a late shift and need time to wind down. At other times when they are on a late-early rotation they will make their children's lunches at midnight before going to bed knowing they will have little time in the morning.⁶² The PSAs tell me with much amusement that they use the winding down time after a late shift to prepare the meals for the week and to avoid going to bed with amorous husbands.

⁶² Late-early rotation; nurses work a seven day shift doing either 7am to 3pm or 1.30 to 9.30pm. A late early rotations would be first day starting at 1.30, second day starting at 7am. Under the EB agreement there is meant to be at least 10 hours between shifts.

The ordinary everyday cycle of medications in team nursing

On any ward the cycle of medications follows the instructions given by doctors. Medications and time go hand in hand. On Mawson, where team nursing is employed, one nurse is responsible for all the drugs. While nurses do not strictly adhere to 2, 4 or 6 hourly medication routines, the variances need to be defensible. As Zerubavel (1979) notes, not all patients can get their tablets exactly at 8am but the norms of acceptable lateness must be learnt, as well as the optimal time and sequence for giving medications. Professional nurses know their drugs, and thoughtful ones are mindful of the implications of deviating; they would, for example rarely give a patient a diuretic late in the evening. Experienced cardiac nurses doing handover remind the staff that patient's pain should always be pre-empted; however, a patient still asking for an opioid on day five is presumed to be either very sick or a wimp.

Working with Heather on an early shift I note that her sense of timing structures each interaction with the fourteen patients on her side of the ward. Her shift is an exercise in patient education. She begins by giving the diabetics their medications telling me that she likes to give the non insulin dependent diabetes (NIDMs) their medications half an hour before breakfast otherwise they get emotional. Following this we do the 8am drug round. With each patient she hands out the half tablet of aspirin telling them to throw away the other half, when they return home, as it loses its potency once it hits the light. This information is repeated to the patients *ad nauseam* across the three shifts for the five days of the patient's stay. I become so knowledgeable about the medications and symptoms that I develop chest pain! As Heather moves along she also checks when patients last had their bowels open, saying she likes to monitor it as she goes along so it won't be a problem in five days' time. Her care for their comfort and her own sense of good nursing is future orientated about these 'Activities of Daily Living' (ADLs).

Doing the drug round allows Heather to see her patients every two hours, to *keep tabs on them* and to do a variety of procedures in between. When asked by a passing physiotherapist about the progress of a patient she replies, *typical for the code*. This is shorthand for, *this patient has been in hospital five days and is responding in the way that five day old patients ought to respond. He is on target*. She cajoles a passing nurse to check the date of a drug, saying, *I think this is why I have an obsession with supermarket use-by dates. It's because I'm a nurse*. I am struck by her ability to predict patient comfort, possible dangers and detailed progress. Her thinking moves backwards and forwards across the patient's illness trajectory. Her timing is a symphony in anticipation (Field notes 9/4/98).

In discussion with nurses during a tea break about this focus on prediction and the future they talked about cardiac events needing to be controlled. Patients may look healthy, but experienced nurses know that after a cardiac event a patient's electrical system can be in disarray. Nurses need to anticipate the unpredictable. The monitors help in doing this, but must be carefully watched for evidence of silent trouble and as a way of managing the rhythms. Not to respond immediately to the monitor's reading is negligence. Leigh notes that she often has her observations finished before they are due. This reflects her anxiety about prediction. Forgetting to do a procedure could result in an incident report, but so too could forgetting to do it at the right time.

Managing patient anxiety through education and task-based nursing

Education is the primary way nurses deal with the emotional states of patients on Mawson. As I noted above, during the medication round Heather begins each interaction with her patients by instructing them on what to do with the tablets and predicting for them what they will feel one, two or five days 'post-op'. If a patient is feeling depressed they will already have been alerted to this possibility. Each patient will have been visited by the nurse educator and probably attended at least one or two in-hospital education sessions. They may even have attended several rehabilitation sessions while on the waiting list. At these sessions, the social worker pre-emptively delicate questions such as how long they should wait to have sex and when patients can resume driving their car.⁶³ Sessions are given on reducing stress in one's life, usually assumed to occur at work and usually dealt with by smoking and over-eating. Interestingly most of the patients on Mawson are retired.

Nurses on Mawson define an experienced nurse as one who can anticipate what amount of time is needed to deal with a patient's anxiety and on what day it is needed post-operatively. My own observations were that much of the day-to-day social interaction and emotional support was supplied by families, other patients and the PSAs who spent considerable time in the bays mopping the floor, dusting the furniture or taking the patients to their various tests. In effect, those with the least expertise, formal knowledge and power spend the most time with patients (Frankenberg 1992). Nurses rarely spent time chatting to patients other than when they were performing a clinical task.

⁶³ For the reader's interest the benchmark in 1998 for resuming sex was when you could go up stairs without getting breathless; for driving a car, four weeks following an infarct and six weeks following a CABG. In 2001 the benchmark for resuming sexual activity is when both partners feel ready (Silent reference No 14 2001).

Patients are given few opportunities to express their emotional distress associated with their heart disease. This may well be because cardiac disease is predominantly a male disease.⁶⁴ On one occasion a male patient came back from the operating theatre after 9.30pm without having had a planned coronary artery bypass graft (CABG). An explanation was offered by the attending nurse: an emergency had come in taking up the surgeon's time. The patient was given a cup of tea and two biscuits to compensate for his day of fasting. His wife who had been waiting all day was given nothing and the night's work continued. The other three patients in the bay were left to deal with the patient's disappointment and anxiety about how long he would have to wait for the next opportunity. As was often the case this was done through the exchange of stories and humour (Field notes 17/4/98).

Working with Heather on a hectic late shift two men in a bay begin to tell her about how they had teased another patient about his up-coming procedure. She sat on the bed for a while sharing the humour of the situation, but soon noticed one patient's jelco was messy and began to clean it up, excusing herself briefly to get clean tape. It is difficult to know what the men understand by this bringing together of nursing task and their desire to communicate the fun they are having, but it is clear that the two events are synchronised. As the jelco is cleaned up, so the story finishes, as if the time it takes to do the task is signalling to the men how much time they have to tell the story. When I ask Heather outside why she stayed the ten minutes to hear this story, given that she had earlier told me how stressed she felt not knowing her patients, she said that the decision to stay was based on noticing the messy jelco. She saw that it needed to be done and here was an opportune time to do it, since she could relax into listening to the story (Field notes 16/4/98). However, for the most part, the emotional life of cardiac patients is dealt with indirectly and instrumentally. It beeps on the monitors in the nursing station and consequently becomes a medical event, is pre-empted through education or predicted on the computerised nursing care plans, according to what day the patient is post-operatively.

One evening the monitor begins to beep indicating that a patient is in auricular fibrillation (AF). Andrew, a male nurse of 20 years experience, says it is because the patient's family is visiting him and he is emotional. The exact form of the emotion was not clear, but emotion sent the heart haywire. The interaction between Heather and Andrew is also emotional and a sense of panic and haste is evident. They both wonder why it came on so quickly and Andrew

⁶⁴ Rates of Coronary Heart Disease are similar for males and females although men are more likely to be hospitalised and to die from it. For those under 75, death rates from CHD for males are 2 to 3 times those of females. After the age of 75, more women die from CHD than men because there are more women left to die (AIHW 1999).

suggests that he check the patient and talk him down. He brings up the patient's various test results on the computer data-base looking for possible explanations indicating that 'talk' should bring the heart rate back to a respectable beat. Heather overrides the emotional explanation, says simply that it is happening and immediately calls the medical Cover. The Cover arrives. Heather briefs him, saying they think it's simply the emotions of a family visit, indicates what medication they thought they might give and waits for the Cover to respond. He chides her with mock amusement; however I notice that once the two nurses have gone back to the patient, he rings the proximal Cover for the cardiac ward himself to check his own decision-making. It is exactly what Heather had suggested (Field notes 16/4/98).

My observations were that emotion was dealt with either through education, or adherence to procedures, or observation of tests and vital signs; rarely through talk, since it takes too long and is possibly not as reliable. Nurses from other wards tell me that Mawson is highly strung, *it's the nature of the work*, they suggest. It was clear in the above account that both nurses knew what to do, and that possibly Andrew could have talked the patient into a more comfortable state. However, emotional events are either pre-empted through education or defined as an emergency to be dealt with quickly through medication, contacting medical staff and adherence to procedures. Engaging in feminised polychronic relations to time is not acceptable on Mawson ward for either male or female nurses, for the very nature of the disease to a large extent determines the pace, the procedures and the technology. The cardiac ward operates on protocols and hierarchical chains of command reminiscent of Type A personality or monochronic time, not messy emotional interactions.

There are some contradictions here. During my time on the ward the senior medical registrar complained that the nurses rang him too often at night, failing to use their own commonsense. As Zerubavel (1979) and Frankenberg (1992) argue, there is a link between the blurring of public and private time for high status medical staff, but this does not mean they like being controlled by their mobile phone, woken up at night or forced to stay within the radius of a thirty minute dash back to the ward. Yet despite this dislike for broken sleep and phone calls, and claims that nurses *fail to use their commonsense*, a memo issued by the cardiac surgeons in February requested that they be contacted at home when patients required adjustments to their drug warfarin, rather than nurses acting on their own judgement or contacting the medical Cover on duty for the night (Ward meeting notes 25/2/1998). This became part of the ward's set of procedures passed on to all staff over a series of handover meetings.

Medical 'management' of patient medications

This apparent sense of order and adherence to procedures masks some of the underlying tensions linked to bed shortages. Balancing the smorgasbord of medications, so those patients with Chronic Heart Disease (CHD) are able to wait out their time on the surgery list in comfort, is a job for the medical team. The nurses tell me that the task of the junior doctors is to use medications to keep the surgery waiting list 'respectable'. They jokingly suggest that patients should keep complaining of chest pain in order to move up to the top of the list going from an elective to emergency admission. Readmissions of patients are dealt with by increasing dosages, altering the combination and admonishing the patient to change their life style and attend the rehabilitation program. A patient I fondly refer to as the English Patient, on holiday from Britain, is admitted following an infarct and needs an urgent CABG before the airline company will let him back on a plane. His insurance will not pay for the surgery, so he is discharged. I see him two months later attending the rehabilitation classes although he has yet to have his CABG, so officially this is not rehabilitation. He cheerfully tells me his visa has expired and the Immigration Department is demanding a date from the surgeons. I am sorely tempted to give him the nurses' advice, *Keep complaining and presenting at A & E. It will move you up the list.*

Patients do not know the exact date of their impending surgery, but when it does eventuate a medical logic is provided, which includes the fact that they have managed well up until this point in time on medication and have not 'needed' surgery despite their own bodily experiences. Issues such as bed shortages or budget blowouts are not revealed except in the tea room between nurses, through union statements, or occasionally when doctors go to the media with their criticisms. For patients;

(Being made to wait, and not knowing what is to happen and when is not an incidental of the cultural performance of sickness in biomedical-dominated healing, it is central to the conversion of the suffering to the patient, what Zola (1973) called the pathway from person to patient. In the terms of Fabian (1983)...it is the way that medicine creates its other and makes its object (Frankenberg 1992:17).

One indication of the political nature of these measures is the way bureaucrats subject waiting lists to 'impression management', by further classifying the waiting period into booked and unbooked patients. This categorisation is designed to convey to prospective patients the idea that their wait is partly dependent on 'patient work' or rituals they need to complete. It is this that engenders a sense of progress. One of the outcomes of the Cardiac Clinical Pathways study discussed in Chapter 8 was the development of an 'active waiting list' for patients awaiting bypass surgery. It was developed by the surgeons at Westernvale as part of a strategy to engage general practitioners and consumers in keeping the lists 'respectable'.

Managing beds: rationalising the chaotic

While ordinary everyday time on Mawson ward is highly structured and hectic, to a large extent it is under control. What makes it unpredictable is the intensity of the flow of patients through the system either for elective surgery or as emergencies. Westernvale is continuously the subject of media reports on waiting times in A & E, to such an extent that a new phrase has emerged: 'ramp time'. This is the time patients wait in the back of Ambulances for an empty barouche that will allow them to join the queue of patients waiting in A & E for treatment and a bed. Patients presenting at A & E move from the barouche to the Transfer lounge and then the ward. This process may take up to 30 hours, although hospital data on waiting times is surprisingly inconsistent with the media accounts and patients' stories. However, it should not be presumed that patients are not being treated during this waiting period, a point the senior medical registrar was at pains to impress on me. He claimed hospitals kept quiet about the fact that treatment began in A & E, in the interest of making media mileage out of funding cuts.

The reality of this seemingly chaotic, but highly organised, process came home to me when I followed a patient through from A & E to the ward. The patient arrived at the hospital at 10pm on the Sunday night where he waited on a barouche to early the next morning, then from 10am to 2.30pm in the Transfer lounge before he arrived at Mawson ward for a 4pm angiogram which was duly outsourced to the private hospital attached to Westernvale. The ordering of tests was done by the cardiac team attached to Mawson early that morning when they visited him in A & E. At that time they alerted him to the need to fast and reduce his dosage of warfarin.

What is of interest here is that his treatment began within ten minutes of arrival at the hospital (consistent with the Medicare benchmark and sound clinical practice) although his progress through the system to an eventual bed in a ward took sixteen hours. The decision to put him on an already long list was made early in the morning in order to reduce his length of stay by 24 hours consistent with the casemix benchmark. However the consequence was that the nurses on Mawson had this patient return from an angiogram at 5.30pm needing a meal and regular observations for several hours while the three night duty staff had to deal with a patient still suffering the after-effects of the dye. While on the wards, I noticed that on many occasions patients would return from surgery or procedures as late as 8pm and need specialised attention well into the early hours of the morning.

In hospitals the number of nursing staff rostered reduces as the day progresses, on the assumption that the pace of the work slackens as the day proceeds. However this assumption

is no longer true for the late or night shift. The rationale behind the rostering pattern that sees 7 nurses on the early shift, 5 on the late and 3 on night shift is that by late afternoon all the patients have returned from surgery and are settled, their laboratory tests have been processed or the patients for that day have been admitted or discharged. This is an inaccurate assumption. Theatre and pathology rosters do not synchronise with nursing or medical rosters, but with the broader hospital endeavour to reduce length of stay consistent with casemix levels of payment.

One of the major difficulties with the increased throughput of patients is finding a bed. Bed managers have difficulty finding a 'fit' between the next patient needing a bed and the next ward with an empty one; often the available bed is not in a ward specialising in the patient's complaint. Nurses on Mawson constantly complained about the increasing number of outliers. From a ward that previously rarely had an outlier, the proportion was now around 50%. Outliers on Mawson are those who do not have heart disease. Anne, an experienced EN pointed out several patients with cancer commenting *we don't know how to counsel these women, and we don't have time*. Indeed they don't. Dealing with the emotional impact of breast cancer through medication education is a clumsy initial response to a woman about to undergo a lumpectomy. When I asked senior nursing staff how this increase had occurred it was explained as a result of bed closures. As bed numbers decrease along with the length of stay (LOS), and as the number of patients presenting in A & E either increases or remains constant, it becomes difficult to allocate patients to their specialty ward. This is despite the various innovations aimed at achieving just this.

Chaotic time, bed management and doctor/nurse conflict

In my own observations, conflict between nurses and doctors occurred more often between outlier medical teams and ward-based nurses, than ward-based medical teams and the nurses. Where the number of patient outliers increases so does the conflict. Such events were commonplace on Hartley where all patients in the hospital with multiresistant staphylococcus aureus (MRSA), whatever their primary illness, were nursed. Taking a wound dressing down might require a morphine injection 30 minutes before the doctor from the patient's previous home ward came to do this task. Nurses had to anticipate what time the doctor would arrive. Invariably it was either earlier or later than scheduled, leaving the patient unprepared and the medical team irritated as well as quick to criticise nurses for treating the wound, not the primary illness.

Medical home teams have the opportunity of developing working relationships with the nursing staff, including time to work out misunderstandings. On several occasions I observed ward nurses and the home team doctors chipping each other over mishaps, but resolving the issue without rudeness, and usually clarifying channels of communication. This was especially so between RMOs and senior nurses. On Saturdays and Sundays, nurses would help home team young doctors by doing tests and procedures to allow them to get off before midday. This was not the case with outlier teams where communication was brief, and typically nurses knew neither the doctor's name, nor for that matter, what medical specialty they practised. Conflict was high and rarely resolved, leaving the nurses to engage in vocabularies of complaint in the tea room after these strangers had left the ward (Turner 1986).

Hospital rosters and the maintenance of professional boundaries

The various peccadilloes of hospital rosters have been delightfully told by Zerubavel (1979). As he notes, while allied health professionals such as social workers or ward clerks appear to think human misery conforms to an eight-hour day, virus and bacteria do not. As a consequence nurses and doctors provide 24-hour care regardless of the day or hour. Nurses and doctors take shift work as a given. It is premised on the moral imperative to care for the sick 365 days of the year, 24 hours per day, rather than any economic considerations, although doctors and nurses gain financially from working un-social hours (Zerubavel 1979). As Zerubavel (1979:62) notes, sharing a common schedule constitutes a powerful basis for mechanical solidarity, while interdependence and organic solidarity is established with those working to a different rhythm.

Shared rosters solidify group affiliation, necessary as part of the process of professional socialisation. However, the cycle of night and day causes some variations in this rhythm of socialisation as the following vignette illustrates. While on night duty I had a pleasant conversation with the young intern acting as night Cover, but was surprised at daylight, around 7am when he walked passed me without recognition. The medical team had returned to the ward and the change-over was about to occur. At this point I became invisible. With the darkness and skeleton staff, lone doctors incorporate nurses into their team along with researchers who 'work' with the nurses. With daylight the team narrows to one's professional group and the rosters and rotations they share (Zerubavel 1979). Similarly on Sundays, some nurses will help a young doctor on duty to get off early, by performing tasks that are outside their legitimate prerogative between Mondays and Fridays.

The rules governing the boundaries between rosters differ between the two professions. Unlike nurses who go off duty close to the appropriate hour—partly because a team of new staff are ready to take over, but also because everyone chips in to get the work finished on time—doctors are expected to finish their own work before handing over to the doctor on the next shift. The expectation is that they go off duty when the work is finished and there are strong social norms to complete admissions or patient work-ups, rather than handover in the middle of a procedure. One intern tells me the trick is to pick patients that can be done on time, as the clock moves slowly towards the end of the shift. The change-over must be slow enough to ensure continuity, for the immortality of the group depends upon the fact that the change is sufficiently slow and gradual (Zerubavel 1979:48). This is now a more difficult task given that incentive funding is tied to timed admissions and targets, although the order of patients has always been determined by the seriousness of their condition.

When Zerubavel (1979) explored the relationship between professional medical and nursing time in American hospitals, he argued that doctors were paid for the work done, not by the hour or shift. The boundaries between their public and private world were blurred and it was not uncommon for them to be contacted at home with the expectation that they would return to the hospital to attend to a patient. Jack, the senior cardiac registrar tells me wryly that *the problem is the public regards young doctors as spoilt rich kids, but their own doctors as hard working; so there is little sympathy* (Field notes 14/6/98). Doctors adhere to the view that they are always on duty (Zerubavel 1979). Nurses on the other hand, finish work at the end of the shift and to hang around the ward is seen as peculiar. In my experience this was only ever done by those who did not have families waiting at home, and then only on the weekend or during holiday periods when the pace slowed.

Frankenberg (1992) has suggested that the beeper has intensified this blurring of the boundaries for doctors allowing them to be a phone call away at any time of the day or night. For young doctors it allows the shift known as 'proximal call', where they may go home, but must stay within a certain radius of the hospital and have their beeper on all the time. Proximal call is cheaper than having the doctor on duty, but prevents the doctor from drinking alcohol, going to the movies or being in any situation where he or she cannot get to the hospital within 20 minutes. Beepers have replaced the stethoscope as the status symbol of power on the ward. Many nurses now carry stethoscopes. They are bought as part of first year professional induction while still at university. Beepers and mobile phones on the other hand are usually only carried by doctors and senior nurse managers. Beepers allow intrusion into private time, while simultaneously symbolising one's increased status.

Zerubavel, quoting Simmel (1897-98), also suggested that the asynchronous nature of the nursing and medical rosters and rotations contributed to the sense of timelessness and continuity. 'The more anonymous and impersonal the unit is, the more fit is he (sic) to step into the place of another, and so to insure the group's uninterrupted self-maintenance' (Zerubavel 1979:43). What the rosters achieve is a strong sense of professional identity. Both professional groups develop stronger relationships with their own profession than with those who are working similar hours to them, although as I note above, night duty meant that these professional boundaries were transgressed and doctors could be seen chatting with nursing staff. Even on the late shift, as the hour drew closer to 10pm, when only the nurses and Cover were on the wards, and relatives had crept away, sometimes a doctor put his arm around a pretty nurse.

Brutal time: young doctors' rosters

No technology or practice structures working time and social interactions for doctors and nurses more than the roster. Asking a nurse what roster she or he is on is used as a form of greeting or initial conversation ice-breaker. For medical staff, rosters represent an entrenched culture of long hours that is resistant to even well-organised campaigns for workplace 'reform'. Medical rosters follow a very different pattern from those worked by nurses; although like nursing, they are under the control of the profession, and subject to the financial constraints of the hospital and enterprise bargaining agreements. Interns and resident medical officers (RMOs) officially do a five day shift from 8am to 5pm with half an hour for lunch and one afternoon per week off in lieu of overtime; an afternoon they claim they never take, since in many teams the ward round does not finish until well after 2pm. Of course they never finish at 5pm and can often be seen well after 7pm in the doctors' office writing up discharge summaries and reports.

Besides this pattern of five days, interns and registrars are also rostered to do an extra shift one night per fortnight from 5pm to 10pm making that particular day a minimum of 14 hours. They also do two weekend split shifts per month from 8am to 11am and 5pm to 10pm. Night duty is done in a six-week cycle with eight nights on and four off, seemingly allowing for both continuity of care and time for the body to adjust to night-time circadian rhythms.⁶⁵

⁶⁵ This is contrary to research that suggests night duty should be kept to a minimum number of nights over the seven day cycle (Olson and Ambrogetti 1998). Circadian rhythms refer to the fact that bodily functions such as respiratory, cardiovascular, immune system, hormone production, body temperature and stomach and intestinal cell function and the sleep/wake cycle follow a rhythm of night and day (Adam 1995).

However the eight-night cycle is split for the registrars between two hospitals. They work four nights at Westernvale and four at Easternvale, a hospital some five kilometres away. This is hardly conducive to continuity of care.

The AMA campaign to reduce working hours

In 1995 the Australian Medical Association began its campaign for safe working hours for hospital doctors. In 1998 it conducted an extensive consultation process and in 1999 ratified the Code for Safe Working Hours for young doctors (AMA 1998, 2000, 2001). Based on research into shift work and long hours, the AMA benchmarked the working hours of doctors against the transport industry, specifically pilots and truck drivers supplemented by case studies of young doctors' working hours conducted in public hospitals in Victoria, South Australia, NSW and Queensland. These studies indicated that around 70% of junior doctors worked more than 50 hours per week, 40% in excess of 60 hours and 15% in excess of 70 hours (AMA 1998: 23).

One of the oft-mentioned reasons for long hours is the need for training. Interestingly, in the AMA study, interns reported working for 70% of the time without supervision and that time for professional education had little impact on hours worked. These findings were consistent with those held by senior nurses at Westernvale who believed that VMOs spent too few hours on the ward, invariably visited their patients on Sundays when only skeleton junior medical staff were present and left much of the decision-making to junior doctors, including the vexed issue of patient discharge.

The AMA campaign attracted little attention from those doctors I talked to in 1998; nor were these doctors aware of the endeavours being made by their union as part of the up-coming 2nd EB round to establish safe hours consistent with the AMA campaign. Young doctors regarded the campaign and the EB round as a useless distraction if they were aware of it, but for most of them they first became so, only when I asked for their views. They expected the current EB negotiations to achieve a salary increase, but believed any improvements in working conditions would be on paper only. In effect the EB agreement would be continuously abused. They cited the previous EB round which had brokered the elimination of Proximal Call, only to be reinstated by the VMOs. They saw union action as dangerous to their own career aspirations and all had apocalyptic stories of interns who did take industrial action or put in time sheets indicating overtime who found themselves barred from securing a position with a specialist college.

Senior medical staff were not sympathetic, although some professional colleges have incorporated the guidelines of the Safe Hours project into recommendations governing the employment and administration of departments (Australian and New Zealand College of Anaesthetists 2000). In 1997, when hospital management attempted to get senior medical staff together to discuss junior doctors' rosters, they found it impossible to get doctors to attend the meetings, leading to the project being abandoned. Lindy, a registrar in training, who from my observations appears to be on the ward all the time, tells me with wry amusement that a senior consultant had that very morning said to her, *Well these days young doctors in training only work about half-time anyway* (Field notes 28/6/98). She sees herself needing to put in the time and once she is qualified as a specialist, believes she will determine her own hours. Like all the junior doctors I observed, she took annual leave to catch up on study and to prepare for exams. Research by Pocock, van Wanrooy, Strazzari & Bridge (2001) indicated similar findings, with fear and intimidation being a major reason why junior doctors do not reject the 'long hour' culture endemic to medical training.⁶⁶

In 2000/2001 the AMA conducted a nation wide anonymous audit with over 400 junior doctors. The audit sought data on the number of hours worked, periods without a break, number of days off in a 28 day cycle, rotations that went anti-clockwise, the number of nights in the seven day roster, on call hours and night duty during peak educational periods for interns/resident medical officers and registrars (AMA 2001). Around one quarter of respondents were in the higher risk category for 'hours worked' and 'periods of work without a break' and of these 81% worked seven or more days without a day off (AMA 2001). Table 6.1 outlines some of the measures used in the seven day audit.

Table 6.1: Risk Assessment Junior doctors' rosters: selected items—7 day audit

Risk category N = 417	Range of total hours worked by risk category over the seven day audit	Longest continuous period of work over the seven day audit	Percentage with no days free during the seven day audit	On call during the seven day audit for 3+ nights
Higher 24%	45-106	Range 7-63 hours	81%	31%
Significant 54%	34- 86	Range 5-24 hours	32%	18%
Lower 22%	10- 74	Range 5-21 hours	9%	5%

Adapted from AMA (2001)

⁶⁶ Research by AMWAC indicates that junior female doctors under 25 years of age work similar hours to their male counterparts. However average hours worked per week for female doctors aged 25-34 is ten hours less than male doctors, while in the 35-44 age category women's weekly hours of work are around 32 hours per week—20 hours less than male doctors. Female hours worked do not come together with male rates until the 75+ category (Harris 2001).

The South Australian Salaried Medical Officers Association attempted to incorporate a number of the guidelines of the Safe Hours Project into the third EB agreement negotiated with the DHS in 2000 (Australian Industrial Relations Commission 1998b). The most contentious issue of the campaign was the provision for 8 days off in every 28. South Australia was at that time the only State where medical officers were not guaranteed one day off in every 7. The Department of Human Services agreed to 4 days off in every 28, with the union insisting that these four days be spread across the month with no more than 8 consecutive days worked without a break (SASMOA Newsletter October 2001). These provisions are well below those enjoyed by many other professionals in the health care sector.

From intensified work to part-time work: redetermining the training hour

Besides outlining a strategy for achieving safer working hours for junior medical staff, the AMA has approached the issue through instigating a forum on workplace flexibility (AMA 2000). Flexibility covers models of training as well as hours worked, with the possibility now existing for the specialist colleges to offer part-time training (Australian and New Zealand College of Anaesthetists 2000). This is usually a half-time appointment to a training position. This is a similar solution to that offered to nurses. When nurses complain about the pace and the workload, the response is, *if you can't take the pace, go part-time*. It is a solution, but it is one with financial implications. Much of the rationale for this strategy resides in the fact that a significant number of medical graduates looking for positions in a specialty are now women, but also in the problems experienced by some specialties in attracting candidates. However, offering reduced hours through part-time contracts merely reduces the value of the junior doctors' working hour. Given that the average working week for young doctors is around 60 hours, a half-time appointment of 30 hours is only 8 hours short of Full-time work in other occupations. Shifting the culture of long working hours for early career medical staff appears so far to be resistant to serious 'reform' and, as the part-time approach illustrates, deals with the problem by reducing pay, not work duration.

Early socialisation in how to save time for early career doctors

Despite the long hours, the pace of the medical round was slower than that endured by nurses. When I accompanied the medical round I could always keep up, though the logic of the work routine was difficult to fathom. Often we began in A & E, only to return to the home ward and then begin to visit the outliers scattered throughout the various wards in the hospital. Medical shifts differ from nursing shifts with fewer breaks for morning tea or lunch and little predictability to their timing. Often the junior member of the team missed out altogether, as

the processes of socialisation into the medical round were learnt. Those young doctors who waited behind to assist elderly male patients do up their pajama buttons or tie the string of their trousers risked being left as the medical team moved on to the next bed. Invariably they arrived after the introductions to the new patient had begun and certainly to the irritation of the waiting consultant. On other occasions the medical team would sweep in to visit a patient, leaving the intern to check that the patient understood all the instructions, order the tests and write up the notes while the senior doctors went to tea. This usually meant that by the time the junior doctor arrived at the cafe, the team was ready to re-commence the round and he or she missed out.

Power and time: medical control of nurses' time

Despite young doctors' subordination to senior consultants their time always takes precedence over nurses' work. While this is assumed to be an efficient system for doctors, it is not necessarily so for nurses. Working with Heather, I observe her begin to tidy up a patient's jelco site. She sets this up and is about to begin when the intern arrives wanting to do a blood test. This takes precedence over Heather's procedure. She returns to completing her notes, is interrupted by a VMO wanting a tray prepared and a number of patients ring their bells. Later in the day the nurse manager arrives wanting to take one staff member away for the second shift. Heather had not completed her Excelcare data so evidence against this move is not available and the ward loses a staff member on the second shift. Similarly while working with Anne, the nurse educator, she constantly makes way for the medical team, re-organising her schedule, saying to me as an aside, and without irony, that their work was more important than hers.

Medical control of nurses' work also extends to research. On Mawson and the Cardiac Intensive Care Unit there were thirteen clinical trials in progress all under the direction of senior medical consultants.⁶⁷ Many of these trials were overseen by experienced nurses who had their offices in the corridors adjacent to Mawson. It was commonly believed that these nurses had moved from shift work to project work in order to gain an 8am to 4.30pm day. However ward nurses were expected to sign the patients up to the trial and often do the necessary clinical tests. This could involve re-arranging patient procedures and booking times in order to be consistent with the trial protocols. When I ask Gabriele, a young Graduate Nurse what happens when nurses are busy, she says she can call the research staff, *after all it*

⁶⁷ Ethics approval for my own research was subject to my not interfering with these projects.

is their trial and they want the patient and need nursing cooperation. I can stuff it up if I think it is causing too much work; it's really their work. It appears that nurses too can control medical time, but in this example it is the nurse researcher who will take the blame, not the doctor.

Nursing control of medical time

While it may very well be true that nursing time is structured by the demands of medicine, it sometimes happens that nurses control the time of doctors. This is especially so where there is an age and experience difference between nurses and doctors. On my first day on the ward the divisional nurse educator, Janice, suggested to me that the doctor/nurse conflict was most evident where the age and experience boundaries were blurred. Where doctors were older and experienced they worked well with younger nurses; where doctors were young and inexperienced they worked well with older experienced nurses. Conflict arose most often where inexperienced, and usually young, nurses and doctors worked together, and of course there was always the older irritable consultant. The rudeness of one consultant was legendary and stood out because he was not typical. He would vent his anger if observations were not done on time, with such expletives as *the nurses needed gelignite up their bums* (Field notes 21/5/98).

The power of nurses to control the work time and work-flow of registrars and medical officers appeared to depend on the nurse's status and the issue at hand. In the case of the English Patient, the Clinical Nurse Consultant (CNC), Shirley, with twenty years experience, was able to get a senior registrar, Tony, to wait while she rang England for confirmation of payment by the insurance company. When this was not forthcoming she sent him down to inform the patient, assuring him it would be alright since the chap was *a nice man*. On another occasion I observed Shirley during the morning handover in Cardiac Intensive Care. The cardiology team attended this handover and both Shirley and the medical team gave advice to the nursing staff. On a number of points she questioned the medical team and confirmed or supported their proposed actions.

Clearly her experience was significant here, but so too was the age difference. Some months later when Peter, a youthful senior registrar, complained about nurses ringing him at home in the middle of the night for issues he believed they should deal with themselves, Shirley agreed. However she reminded him that this action was partly motivated by poor working relationships within the medical team and several memos insisting medical staff be telephoned. She also withstood criticism from the senior cardiac consultants when they

complained about male patients being put in bays with females. She counseled her staff to work from the principle outlined by the hospital administration of finding a bed and not moving patients around unnecessarily despite what the doctors felt. She did not allow medical authority to stray into areas of ward organisation.

Shirley also worked hard to control the future work of the nursing team. During my time on Mawson she entertained the company wishing to gain the hospital contract for new cardiac monitors, twelve of which went to Mawson. This was a full day event, complete with demonstrations and afternoon tea. Shirley was given free hand by the Professor of Cardiology to make recommendations on the purchase, including the number required, although the allocation of patients to wired beds is a decision made by the Registrar or Cover and is subject to strict guidelines. She kept the recommended number to be purchased to a minimum, despite the fact that *The Customer First Report* (Silent reference No 11 1997) made a strong argument for increasing the number of monitors based on benchmarks from other major hospitals in Australia with a similar caseload. Shirley argued that the more they had, the more nursing time this would take up. *Too many (unnecessarily) monitored beds would increase the work of nursing staff*, she said exhibiting a clear understanding of the role of technology in subordinating workers to the dictates of its rhythms and the setting of the dials by those with more power.

After the new monitors were installed she kept a tight control over them insisting that they could not be allocated without her knowledge. This was particularly important for Eileen, the ward clerk. Almost every morning visiting cardiac surgeons would attempt to circumnavigate the official processes and gain a monitored bed for their patient. This required Eileen to reject the request and remind the senior consultants of the appropriate processes—a difficult task given that these men were paid by the hospital on an hourly basis and Eileen was a lowly paid ward clerk.

Silent time in confined spaces

More intriguing than the classical doctor-nurse conflict and games (Stein 1967; Stein, Watts & Howell 1990) was the working relationship of both professional groups at the nurses' station. Both doctors and nurses could work for hours in the confined space of the nurses' station with no verbal communication occurring across professional boundaries, not even greetings or acknowledgment of each other's presence, despite intra-professional conversations and the brushing against each other in the confined space. Spontaneous social conversation did break out on Sundays between lone doctors or on night duty, but rarely

during the day. It also erupted when the EB negotiations between the nurses' union and DHS resulted in the nurses working to rule and wearing civilian clothes, creating a sense of carnival; but of course these events are rare.

A number of nurses found this silent working relationship problematic. With the interns rotating every three months and medical teams visiting outlier patients, the nurses often did not know the doctor's name. Nurses wear a badge that identifies their name, often doctors do not. When I asked some of the young interns why the time spent together was spent in silence—given that I thought it would be easier to get verbal information about patients from the nurse standing next to them—they argued it was because they did not have time. Another possible explanation is that under team nursing it is not clear which nurse is looking after which patient, so it becomes just as efficient to resort to the notes where the collective knowledge of the patient comes together. However even where case management was practised by nurses, both professional groups worked in silence. Socialisation towards one's own group, rather than towards other professionals of a lower status, is probably the key and the organisation of time for each professional group is peculiar to itself. However, sometimes management from both groups conspire to intensify the work of one group as was the case on Mawson in early 1998, with significant consequences for my research.

The first innovation: managing beds, up-skilling and intensifying work

Establishing the routine and pace of ordinary everyday work time is usually achieved by nurses and early career doctors within the first six months of practice. However when innovations abound and the pace intensifies, managing work time becomes problematic. Innovations on Mawson were driven by the need to come in under budget, to reduce waiting lists for elective CABGs and Valve surgery and to deal with the increases in patients presenting with unstable angina. The innovations were made possible by improved technology and evidence-based research findings in medicine, as well as the managerial imagination.

Managerial solutions focus on streamlining the flow of information and patient throughput. This was achieved through a number of strategies broadly understood as active management or 'performance management', whereby the nursing staff on Mawson were defined as 'needing to be brought into line', and to 'work smarter' and be up-skilled. The process for achieving the necessary cultural changes is outlined below and should be understood to have occurred in tandem with the various innovations discussed in later chapters. It was an exercise

in up-skilling and work intensification along with a change in leadership. The up-skilling program made the innovations easier to implement because it produced a team of workers anxious to be seen as highly skilled and hard working who were brought into line by nurses from within their own ranks. Protest is made more difficult where the group can be disgraced or shown to be incompetent, lazy or resistant to the overall vision and mission of the organisation. What was once constituted as an acceptable standard of work is redefined as 'uncommitted', lazy and obstructive. Maintaining this sense of the precarious worker was easy to sustain on Mawson given that there had been a series of forced and voluntary redundancies across the hospital in 1995 and targeted redundancies on the ward two years earlier.

In 1996 *The Customer First Report* defined Mawson as *having lost its way* (Silent reference No 11 1997). This was not a view universally held. In my interviews with interns, they defined the ward as good place to work and said that this was its reputation. Two years before my arrival on the ward the CNC had been persuaded to take a redundancy package. This event resulted in some nursing staff notifying the ANF and led to a confidential inquiry. The new CNC regarded a number of staff as lazy and refused to take *no time or heavy workload* as excuses for medication errors or other lapses of practice. Discussion was held with senior members of the medical team about these mishaps and a program of up-skilling was implemented to over-come apparent lack of knowledge and commitment.

New senior nursing staff were also appointed to the ward from other areas in the hospital to instigate the program of change. A common strategy when difficult changes are needed is to appoint outsiders who are free from emotional attachments to the group, so are more easily incorporated into the managerial agenda. Two of the appointments were young single women considered by older nursing staff not to have *done their time*. Long term staff were passed over. They complained that the hospital management assumed senior nurses would adhere to the management agenda and not act in the interest of nurses on the ward. Anne, a RN of twenty years experience, defined this as a shift in culture whereby *management must be obeyed in a new way* (Field notes 14/6/98). She tells me she excludes herself from seeking promotion as she has two teenage children and it is now universally believed that promotion means taking stress home.

The newly appointed senior staff were required to get the ward back into order and were supported in this through regular attendance at meetings, where the various innovations that were part of the 'reform' vision were hammered out. The results of these innovations are discussed in Chapter 8. Back on the ward these newly appointed staff implemented a number of strategies for up-skilling nurses. One of these resulted in the entire nursing complement

being divided into three teams under the direction of the Level 2 RNs. Team lists were written up and placed in the nurses' tea room and on the pantry door. Each individual nurse was then asked to set learning goals which they were to achieve outside of work times. While teams were not openly competitive, failure to perform became problematic for the team leader, as I illustrate below.

The fact that this meant that staff would have to meet their learning goals during their days off was not voiced; rather, an attempt was made to create the view that this program added to the individual worker's contribution to the ward and hospital and that they were part of a global plan to re-assert the ward's reputation for excellence. This strategy attempted to recast work as pleasure (so no problem in taking it home) and the workplace as the foremost place for fulfillment for self-regulating and autonomous individuals (du Gay 2000:64). Once this self-paced educational program was underway, the ordinary everyday queries and conversations about patient complaints and diseases that nurses engage in, became opportunities for checking out each other's performance.

During handover, staff could be quizzed by Paul, the senior in charge of the Blue team; or during a lull, Heather might ask Marilyn to prattle off her Arrhythmia Appraisal package; or Robyn would ask a graduate nurse standing in the middle of the nursing station what were the indications of a particular condition. In my field notes I have written ... *walking into the nurses' station I overhear Heather asking one of the new graduate nurses why she did a certain action, she comes back with an answer saying 'I knew you would do this'. ...being a nurse is like working in a fish bowl, there is no place to escape to and be lazy or have a rest or a smoke. I ask Heather what would happen to someone who was lazy, who sat around talking. She said they would not survive* (Field notes 17/4/1998). Marilyn later tells me that coming to grips with the Arrhythmia package will be done on her four days off. She needs to ensure she knows the content before Paul tests her knowledge at the end of the month. Staff began to predict these quizzes and to be wary that an informal query or idle moment might become time for a test.

At the time I wondered what this approach might do to the ordinary everyday working relationships and teamwork. Teamwork is central to nursing; the coordinator one day may be reduced to the ranks the next shift. As a consequence social relationships are kept cordial between the team leader and subordinate members. Throughout a shift nurses throw ideas out to each other, think aloud and solve problems together. Factors influencing who is asked include who is available and the perceived competence of the nurse. While experience is central to these interactions, senior nurses will ask juniors for their opinion and work out decisions together. These interactions occur more often during the late and night shifts

particularly after 7pm, when nurses are the only professional group left on the wards. Now these interactions became 'tests' of where one was up to in achieving the learning objectives set by the Level 2 RNs. Ordinary everyday teamwork was now an act of surveillance.

Gendered resistance to cultural change

Not all nurses acquiesced in this new vision for the nursing staff. Andrew and Tom, two male RNs in their forties, were openly hostile to the program and refused to attend the team meetings held each week just prior to an early-late shift handover, or to engage in the team learning exercise, or take work home. Andrew is in the team headed up by Heather. She is 24, he is in his 40s and she tells me she feels uncomfortable pursuing him for his learning goals for the month. However she does approach him on the topic one day prior to a team meeting. He tells her with considerable anger that he is not doing anything on his days off, has applied for a transfer and storms away. He takes up the issue with me, saying *the walls have ears*. During this time a number of staff were sick with the 'flu' including Andrew who took two days off. So too did Paul. Paul is presumed to be sick, Andrew a 'wuss'.

Each week during the meetings Andrew and Tom volunteer to keep the ward going while the others have their learning goals checked, or are up-dated on the latest innovation. This was always done with amusement and mock concern for the patients. On another occasion Paul and Heather arbitrarily arranged for the nurses to write up patient notes using the same charts as the doctors. It was a decision they made over morning tea. Andrew protests, arguing this is intruding into medical territory, and that a break in protocol will result in conflict. He is overruled. Andrew did not get a requested transfer to ICU, but left the hospital to go into psychiatric nursing, while Tom moved to ICU. Marilyn tells me some months later that it was part of the CNCs plan to get rid of these male nurses. They are seen, consistent with the nursing literature, as lazy men who do not want to do the dirty or hard work. Marilyn, the EN, thinks *he will do well in psychiatric nursing*.

In discussion with nurse managers, I am told that some nurses are referred to as having an *eight hour mentality*. This is shorthand for a lack of commitment, a phrase once reserved for those who worked part-time, but now extended to those who do not want to take work home. One manager tells me she is not going to appoint any more part-time nurses because they cannot maintain a sense of continuity across the week. There is a contradiction here. The solution offered by management to the work intensity is to go part-time; however the definition of a part-time worker is *uncommitted*. In discussion with nurses such as Marilyn, she tells me that the word is *do further education in your own time or go to another ward*.

In a separate conversation on workloads, Marilyn indicates that in her view the intensity of the work had spilt over into her private life. As a professional she maintained the pace at work, but now finds that she is sleeping more on her days off, so that her social life is being eroded. She believes she can't slacken on the job, since management has been clear that high levels of performance are expected and those who cannot shape up, should go to another ward. Two years later when I talk to her again, she talks with pride of the commitment needed to work on the cardiac ward, saying *cardiac nurses have to expect to take work home*. She appears to have internalised the new norms, even if the male nurses did not.

Concluding discussion

Achieving a working environment where nurses are prepared to spend increasingly more time at work, at a more intense pace, requires changing their emotional responses and perceptions; in many ways changing who they are and how they relate to time. What occurred on Mawson was an erosion of social time through the dominance of institutional time, in a climate that changed from stability to unpredictability. While nurses still joke about partying all night and ringing in sick the next morning, they rarely do so. The pace of work time now intrudes into social time, so that it is not that they suffer from a 'blue Monday' (Lewis & Weigert 1981), but that their days off are spent recovering from the 'seven day shift'.

On Mawson this change was achieved through berating workers for their laziness and easing out those who resisted. This was done through a process of shaming, so that their practice was deemed *not up to scratch*, a variation on team-based surveillance (O'Donnell 1995). The process of negotiating with the relevant unions was adhered to, opportunity for counselling provided, but management pursued its objectives of creating a culture where staff believed that the only way to measure up was to use their own time to up-skill.

As du Gay (2000) argues, the language used to sell the performance management strategies of the New Public Management, draws on fundamentalist religious discourses of *vision* and *mission* statements that see an optimistic future of salvation for the firm, and by default an apocryphal martyrdom for those forced into redundancy, or unable to deal with the necessity to change. For those individuals left at the workplace the response must be self-induced work intensification, propelled by a secular version of salvation anxiety. Individuals take on personal responsibility for redetermining the value of their working hour in order to increase productivity. This is done through the motivation to work, through increasing the pace, taking work home, skipping lunch and tea breaks, backing out of a patient's room while they talk, controlling the beginning and end of conversations or refraining from idle conversations on

the way back from tea. Importantly these personal changes are embraced with a heightened sense of anxiety, but also with a contradictory sense of personal responsibility and with charismatic and entrepreneurial flair. Individuals take it upon themselves to transform.

An argument of this thesis is that significant (but not all) resistance to work intensification comes from male nurses, as does resistance to the rationalisation of working time. In the examples of Andrew and Tom, their resistance was not constructed in positive ways, nor were they seen as easy-going personalities with a propensity to value relationships over technology. They were constructed as lazy and their interest in dealing with patients' emotional states, through talk, often overruled. Their attitude to work was also seen as an evasion of the dirty side of nursing. This is partly because emotional work takes time and interrupts the domestic work, but also because it is outside the ordinary rationalised approaches used on this ward in the care of a predominately male patient population. The emotional states of patients are contained via anticipatory education, adherence to procedures, and medication. Relatives and PSAs deal with what leaks out—relatives informally, PSAs tacitly.

The resistance also illustrates that the vision of leaders may not be shared by those charged with doing the tasks. Like the charismatic leader entrusted with a job from on high, senior nurses and medical staff on Mawson had a vision, although it was not necessarily shared by those staff subordinate to them. The change process seemed arbitrary, yet compliance was required. This was particularly so for Andrew who objected to sharing medical case notes, spending days off up-skilling or always calling in the Cover. These actions required changing his relationships to doctors and his days off, in order to 'fit in with what was a divinely ordained new order' (du Gay 2000:68).

For doctors, the rosters continued to encourage the long work hour culture. Resistance was dangerous to one's career aspirations and the institutional solutions explored by the AMA only increased the treadmill of working time. Flexible work arrangements, such as part-time work may see doctors' hours of work equivalent to the standard working week, but on half the salary. This is the treadmill of the redetermined hour, whereby the value of working time is de-valued. Likewise, those nurses who could take the pace took study packages home with them, working well beyond the prescribed eight hours and seven days. Those who were not thrifty, future orientated or committed to the managerial ideal, went part-time or became agency nurses. This allowed them to work within the confines of an eight hour day, becoming for them a cure for the way work time seeps into everyday life, but not without considerable cost. Thus both doctors and nurses were gradually realising the impact of micro-economic reform on their own natured/bodily time—in theoretical terms, a shift from ordinary to extraordinary abstract time. In the next chapter I illustrate the way in which the

rationalisation of working time is increased through the use of computerised workload products to further the redetermination of the hour. Following an introductory quote, the chapter begins with an extract from my field notes.

CHAPTER SEVEN

REDETERMINING AND RESISTING THE NURSING HOUR USING EXCELCARE

It's a bit insulting in some way when you know you've eight hours and you mightn't have had a meal break all day and then you get to a computer and you type in all your units of care and it says okay you've only done three or four hours work, and that's a load of crock (Darbyshire 1999: 79)

Introduction: an ethnographic account

(Field notes 15/6/2001, 9am): *I am sitting in the conference room at Westernvale Hospital with a dozen Clinical Nurse Consultants and nurse managers. Judy, the Assistant Director of Nursing from the medical division is chairing the session. She says the group is into the third month of reassessing the timings linked to Excelcare. There are about 200 units of care left for the group to assess. Each Unit of Care (UOC)⁶⁸ has a precise time attached to it. The meeting does not finish until 1.30pm and it appears that several nurses have done homework; they have timed a range of tasks. The first unit of care is 'patient: independent self-care'. The total number of minutes currently given to this UOC is 21 minutes in the morning; 5 minutes pm, followed by 5 minutes during the night shift. After discussion the nurses reduce the number of minutes allocated to the morning shift to 17 minutes.*

Apparently since the last meeting some nurses have done timings for a specific UOC and have the answers ready to hand. As the group goes through the tasks indicating the appropriate minutes to be allocated to each UOC, in a number of instances discussion about other tasks that occur concurrently are noted—an example is 'educating a patient'. It is a legitimate UOC, but assumed to take place while the nurse does some other task for the patient. As a consequence minutes are not allocated to this task. At other times, in line with new technology, quality assurance, and occupational health and safety guidelines, it is now common practice for an additional nurse to be allocated to the task and the timing is adjusted

⁶⁸ I have maintained the abbreviation for UOC used in the literature (SAHC 1995e), rather than the more accurate UsOC, or UOCs.

accordingly. In these cases the number of minutes increases. Judy does not allow much time to be spent on disagreements, but nor does she allow time to be added where there is no agreement. As the group begins to argue she puts the UOC into the hands of Meryl to do a time-and-motion study. It looks to me as though the nurses are using the Delphi technique—decision-making based on expert opinion—to determine the time it takes for a nurse to do a specific task. If consensus cannot be reached Judy orders a time-and-motion study to be completed between now and the next meeting. She also allocates some UOC to specific nurses to check for best practice.

At around 1.30pm the group become restless. I presume this is because handover for the next shift will be occurring soon and these CNCs want to be back on their home wards to check that all is plain sailing. Judy divides those tasks needing to be done amongst the group and the nurses quickly leave. Only Judy stays to tidy up. In conversation with her I check out the methodology the group are using. For Judy this exercise is serious. It is being done in readiness for the introduction of a new product that formed part of the 3rd EB round. The Department of Human Services has agreed with the Australian Nursing Federation (ANF) to staff hospitals according to Excelcare timings. Westernvale has lower timings for many UOC than a number of other hospitals. It is unclear to Judy how this occurred. Judy tells me that the Director of Nursing has ordered this exercise in order to be ready for the new computer-based workload timing product. It is expected to be introduced into all the major public hospitals in the state by the year 2002. She says the DON thinks the time is ripe to argue for increases in staffing, since the new product will provide an opportunity for re-negotiating existing arrangements, particularly if the hospital can demonstrate that the increased timings are linked to solid research.

Neither she nor the DON know what computerised product will be installed. Judy reminds me that Excelcare is not simply a computerised workload product; it also allows care plans to be computerised and has a capacity for quality assurance. Whatever it is, this is their one chance to argue for a higher ratio of nursing staff to patients, based on their patient population and the time it takes to do these tasks. Anne, the Director of Nursing tells me, 'we are caught, if we don't increase the timings the union will be cross, if we do increase them the DHS will be cross'. I have written in my own notes.... The union, the DHS and nursing management may not be working together, but they all know 'time' is the key to resources; human or otherwise (Field notes 16/6/2001).

Back to the beginning

The above account is part of ongoing endeavours by nurse managers and the ANF to ensure adequate nursing staff for public hospitals. In this chapter I recount events that occurred between 1998 and 2002 around the computerised workload product, Excelcare, and illustrate the way it was understood and used by ward nurses and nurse managers at Westernvale. I demonstrate the way in which nurses on the ward engage with Excelcare and the consequent impact on nurse-patient and nurse-doctor relationships. However these interactions are of secondary importance to the 'real' use of Excelcare. It is a tool that enhances flexibility, through abstracting the nursing hour and making it amenable to manipulation for the calculation of the nursing component of casemix funding at state and national levels. I argue in this chapter that Excelcare illustrates the way in which technology is used to extract surplus labour from nurses, not just on the wards at Westernvale, but across the country via the casemix formula for measuring nursing weights.

To suggest that nurses are blind to these processes is to misread the situation. Nurses also use Excelcare to resist the intensification of their labour. This is evident in the vignette recounted above and in nursing research on Excelcare. Innumerable studies have been done to illustrate the lack of reliability and validity of computerised nursing products that purport to accurately measure the number of nursing hours needed to care for a specific population of patient (Carr-Hill & Jenkins-Clarke 1995; O'Brien-Pallas, Irvin, Peereboom & Murray 1997). More importantly, in South Australia, nurses through the ANF, used Excelcare as the basis for re-asserting the value of the working hour in the 3rd EB round in 2000. The 2001-2004 EB agreement provides a unique example of the complexity of organised resistance, specifically the time needed for workers and unions to gather the data for effective negotiations at the enterprise level. It also demonstrates the ambiguous role played by nurse managers in these negotiations. Excelcare is the second innovation discussed in this thesis and the following portrayal of its use and abuse is the the second case study.

The second innovation: Excelcare, the computerised nursing workload product

Excelcare is a computerised nursing dependency costing system or patient classification instrument introduced into the fifteen public acute hospitals in South Australia between 1992 and 1995. Excelcare is part of an integrated delivery system made up of a computerised rostering product ProAct, and a hospital-based Human Resource System called Trendstar. These products interface with each other within the hospital, as well as with the central

system of the DHS. Excelcare has some limitations. It does not interface with other public hospitals in the State, so cannot pick up data when a patient is transferred to another hospital; nor can it handle transfer of data between a number of its separate functions. For example it can produce a care plan and a clinical pathway, but cannot transfer the data from one to the other.

The introduction of Excelcare and ProAct was motivated by the recognition that nursing salaries constitute one third of public hospital budgets in the State and its introduction was part of a wider IT strategy to effect efficiencies and savings through better nurse rostering and clinical management practices (South Australian Health Commission {SAHC} 1995e). The Heads of Agreement document committed Westernvale and the other 14 hospitals to achieving a 2% salary saving over the five years of the project's life, based on 1991/1992 costs (SAHC 1995e). This was achieved at Westernvale by 1995. The Report (SAHC 1995e: iii-v) notes that Excelcare enables time-saving in the production and review of nursing care plans and saves time through standardisation of plans. It is also linked to patient records. What the trial and agreement also attempted to achieve was equity in staffing across all the major State funded hospitals. The ANF was a party in the negotiations.

Excelcare and ProAct provide Westernvale with the tools and data for the submission of monthly reports to the DHS Monthly Management Statistics System (MMSS). The MMSS requires a distinction to be made between productive and non-productive times and costings in order to calculate DRG costs and allocate hospital budgets. Excelcare deals with both direct and indirect productive time. Direct time is any care which is performed by nurses and can clearly be attributed to a specific patient. These times are contained in the Units of Care (UOC) (SAHC 1995e). Excelcare also makes provision for direct and indirect/embedded time. Embedded activities within a UOC include writing of nursing notes, the time spent on Excelcare or reading case notes. These embedded activities are incorporated within the UOC that are common to all patients. Indirect times are divided into fixed and variable units of time. For example a fixed indirect time would be the checking of dangerous drugs at the end of a shift. A variable indirect activity might be equipment checks specific to a ward, for example checking monitors on the cardiac ward. Such tasks are not standardised across the 15 sites. The work performed by some nurses is not recorded via Excelcare. For example those engaged in education or research would come in under 'non-productive time'.

ProAct provides data on the number of hours individual nurses are rostered across the month. This includes call-back time and agency input as well as those nurses on light duties as a result of injuries, defined as non-productive time. ProAct must also take into account rostered days off, holidays, study and conference leave. These are also non-productive times. Such

activities are seen to upset the accuracy of the Excelcare dependency times, since these nurses are not engaged in clinical duties. Where these days are included in the direct productive costings, adjustments need to be made to the Excelcare timings and associated costings.

Excelcare as scientific computerised management

Timings are arrived at through use of a Timings Analysis System reminiscent of Taylorist time-and-motion techniques. This system requires the collection of timings for a minimum set of 20 random events, from start to finish, carried out in the area under review with the researcher observing both ENs and RNs. The starting time includes preparation of the activity as well as disposal of used or unused equipment. Interruptions are outside the timings. Examples of timings include 'Admission of patient' (17 minutes), removal of cannula (7 minutes), while a blood transfusion is allocated 32 minutes. The UOC 'Admission of patient' involves several tasks from showing the patient the bed and locker through to taking their temperature and other vital signs. When RNs are keying in the UOC data they can roll out the full UOC to reveal this detailed task analysis. The time allocated to a task is further divided according to who does the task. If an EN does the task it is cheaper than if done by an RN. It is possible to time adjust the UOC; however adjustments are not encouraged for Activities of Daily Living (ADLs), such as showers and feeding. While it is possible for staff on the ward to adjust times and increase the allocation, to increase the time would require justification and, as I illustrate below, makes little difference to the number of staff allocated to the ward.

Not all tasks are allocated a timing. Some are presumed to be done while doing another task. For example in midwifery wards, assisting a new father to bath his baby would be done at the same time the baby is being bathed. No time is allocated to this aspect of parent education. The Nursing Information Systems unit (NIS) at Westernvale periodically reviews these times and regularly up-dates the UOC to keep pace with changing medical technology or when tasks shift from one professional group to another. Excelcare interacting with ProAct allows units of nursing care to be costed. The costing is based on the time it takes to do the task and therefore the number of staff needed on the ward in relation to the patients and their acuity.

Over the years, variations in the timings attached to each UOC for each hospital have developed resulting in differences in staffing levels between hospitals. It is not clear how this has occurred although hospital and ward architecture would be one explanation. Despite these variations in the way Excelcare has been rolled out in the State, it has a number of refinements that give it its market edge. It is possible to indicate the severity of the patient's complaint so that they can be classified as independent, mildly independent, moderately

dependent or totally dependent. This allows additional time to be added for patient care according to the severity of their illness. Excelcare also allows UOC to be timed and staffing to be adjusted for the next shift if needed, and presumably work left undone attended to in the following shift as a result of increased staffing.

Each ward is allocated an additional 2 hours for tasks not allocated a set time by Excelcare—such as additional time needed to deal with patient or family anxiety or ward meetings. Nurses are allowed 3 minutes to key in each patient's UOC. Excelcare times are keyed in three times a day and relayed in real time to the NIS unit. The times are 10-10.30am; 3.30-4.30pm and 1.30 to 2.30am. There are 10,000 codes with some tasks specific to specialties such as intensive care or midwifery. Nurses have a personal password that allows them to enter the program and key in the data. This also allows management to know who is delivering the UOC. As a consequence Excelcare is also a quality assurance tool that provides detailed data on the care planned and delivered.

Excelcare can be used as a tool of surveillance as well. For example if a patient had a bedsore, the UOC could be tracked back to individual nurses and shifts. The NIS publishes monthly statistics that compare the number of patients with pressure area sores against the number of separations for the current and past years on a ward-by-ward basis as well as data on medication errors and other adverse events. It is possible to do a retrospective audit of the care provided by each nurse over the three daily shifts for a patient's episode of care and pinpoint the problem nurses. This allows for a multiplicity of nurses to care for any one patient, but for the detail of each nurse's care to be available for scrutiny. Excelcare can transport data through to Trendstar providing complete records of each episode of care by patient, nursing times, shift, skill level, date and costs which then become part of the DRG costing (SAHC 1995e:25).

Excelcare: contradictory practices and ambiguity

Nurses at Westernvale complained little about the Excelcare computer program in 1998 and the way it controlled staffing or measured their workload. On the positive side it acted as a memory prompt for the tasks that had to be done for each patient during their shift. Any resistance to Excelcare was expressed through cynicism towards the NIS nursing staff. Nurses on the wards appeared to have little awareness of the way in which it was used to manipulate and intensify their workload and rarely commented on the way it reduced their work to a set of timed and isolated tasks. Even as late as 2002 when I asked graduate nurses about Excelcare they suggested that since it had little impact on the way they organised their work,

it was not a significant tool. These contradictions are fleshed out below, moving first to the way in which Excelcare is controlling, and then to its possibilities as a tool of resistance. The first section deals with Excelcare and the opportunities for emotional work.

Setting the scene

It is 7am in the morning and I am cocooned in the tearoom in Hartley, the respiratory ward, for handover between night duty staff and the early shift. Elizabeth, the night shift coordinator, goes through the routine, detailing the most up-to date situation for each patient on the ward; the night has been horrendously busy she tells us. I listen to the familiar pattern: 30 patients' stories repeated over the three shifts: Mrs Whiteman, not for resuscitation; Myrtle Brown, bilateral pleural effusion, nursing home bed available Monday; Mrs Murray, exacerbated COAD, good overnight, repeated admissions; Warren Smith, mesothelioma, asks to be woken up half hour before breakfast to do his own insulin, doctors say 'for review'.⁶⁹ The young woman in bed six is a 'chronic attempted suicider'—her deviant complaints are repeated three times a day. She and twelve of the other patients are outliers from the cardiac ward or are MRSA patients.

Today I am with Luke on the A side of the ward. We have beds 1 to 8 with Cynthia the EN working with us, but also picking up work through to bed 16. Comprehensive nursing is the model of care on Hartley. Cathy co-ordinates, while three other staff, cover the B side making seven staff in all with the CNC working in her office, attending meetings and occasionally dealing with patients. Cathy does not arrive until 8am. She has opted for part-time work in order to avoid night duty. This means a 7 day roster, but an occasional late start to reduce her hours.

We begin the round. Luke pops into the four-bed bays and the four single rooms, introduces himself and explains who I am, invites patients to ring the bell when they need anything, checks on various treatments and begins the drug round, followed by bed making in between patient breakfast, showers and washes. Most of the patients are regulars; Luke appears to know them all, especially the MRSA patients who are here for several weeks. Finding a nursing home for them will be difficult, given their infection (Field notes 25/4/98).

⁶⁹ The term 'for review' is regarded by nurses as *shorthand* for 'the doctors do not know what to do, and hope the patient will die, before they have to deal with the issues'.

While doing the washes Luke chats with patients. The conversation is a mixture of what I have now come to learn is 'nursing history and assessment'. Patients are asked questions about how they feel, their illness history, reactions to drugs and life at home. This is done in a way that makes it appear like a social chat, which it is, but it also builds up the nurse's knowledge of the patient. In the four-bed bay we discuss family trees with Mrs Mellow, a woman from Scotland. This elicits several stories from the other three patients and has us in the room longer than I am used to. Following this we go to morning tea. Cathy has put us on first tea roster (adapted from Field notes 25/4/98).

At 11am Luke sits down to do the units of care (UOC) on Excelcare. He comes to the section on 'patient anxiety' and jokingly asks me if the conversations with various patients constituted the UOC 'reducing anxiety'. These UOC are allocated in 15 and 30 minute blocks. He says he does not know whether to put it down and often does not. If the conversation has been about trivial things and he has enjoyed them he asks himself, 'is this work'? Conversations that are pleasurable do not constitute work. He muses over his conversation with Mrs Mellow asking me if I think talking about one's family tree ought to be recorded as 'reducing anxiety', or is this simply two humans communicating (Field notes 25/4/98)? I make a note in my field notes to watch the other RNs fill in the Excelcare data and hang around the nurses' station for the next hour. Over the next hour the four RNs sit down at the computer to fill in the Excelcare data. A patient is admitted and the coordinator draws up the care plan indicating the UOC for this patient and programs it in to Excelcare.

Excelcare and the timing of anxiety

If Luke had trouble writing in 'ordinary everyday conversations' as a UOC 'relieving anxiety', Virginia did not. For her it was one of the few areas where she could allocate time. I observed her during an early shift allocating 30 minutes for 'dealing with anxiety'. I did not recall us spending 30 minutes talking with this patient, but I do recall us trying to get out of his room. This patient kept taking the thermometer out of his mouth while Virginia tried to do his observations. Observations are allocated 5 minutes as a UOC. Patients with thermometers in their mouth find it difficult to talk. Patients having their pulse rate checked are usually polite enough not to talk. They also know it is difficult for the nurse to listen and simultaneously time their respirations. Not so this fellow, who kept us there well beyond the allocated UOC. Virginia deals with this time discrepancy by translating what I thought were our attempts to escape as 'dealing with anxiety'. My observations at this point were that one way in which nurses deal with patient interruptions to the regular flow of work, is to classify it as 'dealing with anxiety'. We might well ask, whose anxiety? (Field notes 24/5/98).

But Virginia also spent thirty minutes with a woman about to have an amputation without recording it on the Excelcare. The nursing notes were ambiguous about the patient's impending surgery, with a cryptic comment 'check to see if amputation on Tuesday' (Nursing notes 24/5/98). There was a public holiday on the Monday and today was Saturday. The woman's anxiety was about the uncertainty of the amputation and the fact that she had not seen the consultant doctor for two weeks, although of course the junior medical staff had visited her daily. She would like to know for sure. Virginia checked both the medical and nursing notes and listened to the woman's complaints, but was unable to find out for sure the time of the amputation. She did not ring up the surgeon, nor did she record her time in Excelcare. This event happened after she had keyed in her UOC, and therefore was missed. When I asked her how she dealt with this on a shift by shift basis, she said she predicted what emotional work she would do and allocated it accordingly. Since she had already keyed in her units, the event went unrecorded. When I returned the following Friday the woman had indeed had her amputation on Tuesday and to the admiration of everyone was already getting herself around the ward in a wheelchair.

Reflecting on Luke's comments where he asked himself whether having a pleasant conversation was a UOC, and Virginia who appears to be able to predict what emotional work she will do, I wonder at the split. 'Dealing with anxiety'—either the patients' or their families'—is one of the few activities that nurses can 'time adjust'. On the cardiac ward nurses tell me that the mark of an experienced nurse is one who is able to predict how many minutes will be required for 'dealing with anxiety' for a given patient in their illness trajectory. Presumably inexperienced nurses cannot predict the time the patient will need to deal with their anxiety and are at the beck and call of bells. Most other nursing activities have standardised times and are technical tasks, whereas interacting with patients is invariably reduced to 'dealing with anxiety'. This means that ordinary everyday interactions between nurses and patients are defined as tasks that must be tallied up, or conversely dismissed as not legitimate. This measuring of tasks runs counter to the nursing ideal of skillfully embedding the taking of a nursing history or assessment into ordinary social interactions.

Excelcare: up-skilling versus medical dominance

The versatility of Excelcare to take up a new UOC allows medicine to move tasks into nursing without any shift of resources. The implications of this for increasing the workload of nurses without increasing the staffing levels is illustrated in the following account. Sonia, the CNC on Hartley, holds a ward meeting immediately following handover, announcing that the doctors have agreed that nurses can now insert jelcos. I recall from my discussion with the senior medical registrar that the doctors have defined this as a simple task transfer—nothing

to do with increasing the autonomy of nurses. The doctors carefully separate out 'putting in jelcos' from another project under discussion within nursing circles: that of promoting some nurses to nurse practitioners (Interview with medical registrar 11/5/98). The shift of tasks to nursing is carefully monitored and controlled by medicine. Inserting jelco's will become a UOC on the Excelcare program and be allocated a time. Sonia tells the nursing staff that where they feel they cannot do the procedure due to lack of time, or where the patients' veins cause difficulty the doctor should be called in to complete the procedure (Field notes 18/5/98).

During the next few weeks I observe ambiguity on the part of the nurses, not so with the doctors. Virginia reminds a medical officer, who is Cover for the late shift, that a patient has had his jelco in for more than 2 days and needs it changed. The doctor replies *it's last on her list*, checking that it is not infected. Later in the evening Noreen attempts to put in an APTT line for a woman patient. The woman's veins are narrow, Noreen is nervous and she decides to ring the Cover. She had asked this doctor to do it earlier in the shift, but it had been passed back to her. Noreen notes to no one in particular, but to all in the nurses' station, *she always palms these things off to us* (Field notes 3/6/98). Meanwhile Virginia does the jelco before finishing her shift and I note similar interactions over the next few weeks until most nurses take up doing jelcos and APTTs. These tasks are now institutionalised both in the daily routine and on Excelcare. However there are no increases in the number of staff rostered on the ward.

The relationship between medicine and nursing around workload can also carry older forms of dominance. While I was accompanying Luke on an early shift a consultant came to the ward unannounced, appeared at the nurses' station and asked for someone to assist him in doing *that nursing sort of thing of TLC* while he put in an IV line (Field notes 25/4/98). To my knowledge there is no UOC for 'tender loving care' (TLC). The procedure took 45 minutes as the woman was highly anxious. Luke's other work was completed by the EN, the RN working in the other two bays and nurses from the other side of the ward. Luke did not get off the shift until 4pm. Strauss, Fagerhaugh, Suczek & Wiener (1982) make the point that much technical and highly invasive work done by health professionals requires 'sentimental work' in order for the patient to endure the assaults on their body. The technological nature of modern hospital treatment cannot be accomplished without caring humans taking time to support patients through the procedures. This care is not 'value added' support, but an essential component of the procedure.

Evidence-based research on computerised workload products

These observations led me to review the nursing literature on computerised workload products, specifically the critical accounts.⁷⁰ Like the majority of readily available and commercially supported systems Excelcare has its origins in the United States and defines work on the basis of time and task. While there are variations in these systems—from those that focus on dependency levels to those that time UOC or measure patient acuity—the basic approach is one where the workload and staffing is calculated by multiplying the tasks by the time and number of patients. The intensity or acuity of the patients' condition can be measured by the number of UOC for each patient, or by patient dependency scales. Weights are apportioned to each task and the average time for competing these tasks is built into the computing system. Used over long periods these systems enable managers to predict staffing levels on a roster by roster basis, as well as in response to seasonal changes in illness patterns or surgeons' holidays.

Research in the USA on nursing workload information systems occurred in the late 1970s following the introduction of DRGs, and in Canada and Britain in the late 1980s and early 1990s as part of techniques of the new public management. There was recognition of the need to accurately cost nursing care and workload (O'Brien-Pallas, Irvin, Peereboom & Murray 1997). According to Sarnecki, Hass, Stevens & Willemsen (1998) prototype systems based on nursing intensity and level of patient acuity or dependency were abandoned in the USA for task and factor instrument systems. Prototype systems are usually based on ward nurses' professional assessment and describe the patient's illness characteristics (Hathaway & Picone 1995). While Sarnecki et al (1998) give no reason for this shift from subjective nursing assessment systems, such as ward-based care plans, to 'objective' systems, presumably the introduction of DRGs was significant, as was the potential offered by computers. DRGs heralded the demand for tighter managerial control and came hand-in-hand with flexible, standardised, hospital-wide computer-generated systems that have the capacity to integrate information gathered across hospitals and regions.

The fickleness of many nursing dependency and workload products has been well illustrated in Britain where a number of systems are in place. Carr-Hill and Jenkins-Clarke (1995) have

⁷⁰ In the literature I came across reviews of the following systems: C for C, Excelcare, FIP and SENS in Britain; Nursing Information Systems for Saskatchewan, PRN 76 and PRN 80 in Canada; CareMap, EMERGE, Excelcare and the recent update eCare, and the Grace Reynolds Application of a Study by PETO (GRASP), in the USA. Around 1000 products are on the market. Hovenga (1995:29) lists the following products for Australia: Community systems foundation (CSF), Resource monitoring system (RMS), the Bendigo extended care system (BENECS), Excelcare and the Fujitsu's patient care management system (PCMS).

compared a number of 'home grown' British systems with Excelcare. They divide nursing workload products into four categories. The first are those products that measure the dependency requirements of patients, specifically ADLs, and provide timings for these activities (eg prototypes such as Criteria for Care {C for C}). The second type are task-based, such as Financial Information Project (FIP), and the third, those like Excelcare, describe present and future workload in terms of UOC and are produced from process and outcome standards for each patient (Carr-Hill & Jenkins-Clarke 1995:223). Their fourth category is ward-specific systems.

Carr-Hill and Jenkins-Clarke (1995) compared C for C, South East Nursing System (SENS), FIP and Excelcare across three wards (2 medical and 1 surgical) for 6 days. Differences in the predictions of hours of care needed, differed significantly. For example on a medical ward the actual hours worked equalled 518. SENS predicted 327.5, FIP 378.7, Excelcare 400.8 and C for C 600. The difference between the lowest estimate of 327.5 hours (SENS) and the highest estimate of 600 hours (C for C) is 272.5 hours or equivalent to approximately 5.6 extra staff over the 6 days. Each system had an internal consistency with little fluctuation in workloads across the wards, with the exception of the surgical ward. This is to be expected given that the workload on a surgical ward would differ according to the day patients had their surgery. Excelcare produced the greatest day-to-day fluctuations, illustrating its capacity to reflect intensity of care on a shift by shift basis. For example it can factor in four, two or six hourly observations, allowing the nurse to change these from shift to shift as the patient's health improves.

In refining their study Carr-Hill and her colleagues took into account the ratio of trained to un-trained staff, the casemix groupings, a crude measure of nursing outcomes and whether the products predicted overstaffing or understaffing. There was little association between casemix groupings and hours of work, except for patients with diseases and disorders of the digestive system, kidney and urinary tract (Carr-Hill et al 1995:224), although they give no explanation for why this is so. The relationship between the products, nursing outcomes and overstaffing and understaffing showed that on any one day the percentage of nursing activities not met ranged from 3% to 24%. For example in the surgical ward the variation ranged from 91% achievement of all tasks through to 76%. SENS, Excelcare and FIP all had weak controls for staff mix, leading the authors to argue that nursing work measuring products do not make sufficient allowance for the skill mix of staff required to deliver good quality care (Carr-Hill et al 1995:225).

Carr-Hill et al (1995) suggest that the next generation workload measuring products need to take into account nursing diagnosis, medical complexity (ie DRG), medical severity (ie LOS),

intensity of nursing responses (ie programs such as Excelcare) as well as the nursing environment. The nursing environment would include such factors as students on the ward, briefing of agency staff, doctors changing orders or difficult to call up, late arrivals of patients, re-scheduling of procedures and the lay-out of the ward (O'Brien-Pallas et al 1997) or the specific case load of the ward or unit (Urbanowicz 1999). Nurse managers and researchers have known since the late 1970s that the various products do not capture nursing care. However the solution appears to be to wait for improved products to be developed, with more predictive capacity, rather than to question the possibility of ever adequately measuring the working hours of service professionals.

The Excelcare project on Hartley: not yet resistance

Not all nurses are blind to the contradictions in Excelcare. Following my interest in the product Luke alerts me to the fact that not only does Excelcare fail to record the amount of real time needed to perform tasks, but also that at Westernvale it appears that management are not rostering staff onto each shift according to the Excelcare precise mathematical predictions. He shows me the Excelcare book used on Hartley to tally up the discrepancies for each shift. This book had been started after Sonia, the CNC on Hartley, noticed a trend of work intensification over several months. Suspicious of understaffing she directed the coordinator to manually check the staff allocation against the computerised allocation and record it in what appears to be an insignificant notebook on the counter near the Excelcare computer, with data going back to 1997. This provided her with a record of the real numbers of staff required, according to the Excelcare timings, as against the number actually rostered by the nurse manager; and to contact the nurse manager, but not confront her, on the discrepancies. This action indicated that nurses on this ward knew what they should be allocated, although nurse managers appeared to act rarely on this information.

I have included the projections for one week in June 1998 to illustrate the discrepancies in staffing. The column headed *Difference* indicates the staff shortage for the shift based on Excelcare predictions. The staff shortfall over the three shifts in any one 24 hour cycle can be gauged by examining June 1st. The total difference is $.69+2.04+3.12= 5.85$ effective full-time staff over the 24 hour period. Built into Excelcare is the concept of projecting future staffing needs and rostering additional staff to catch up on tasks not completed in earlier shifts. Where additional staff are not rostered, tasks are not completed, nurses work overtime, increase their pace or take fewer breaks. I observed nurses forced to take up one or more of these four options. Despite the capacity of the two products Excelcare and ProAct to facilitate adequate

staffing according to precise time-and-motion studies, Hartley ward had a record of several months of understaffing.

Table 7.1 Excelcare Project figures: June 1st to 7th, 1998

Date	Shift	EN	RN	Total project time	Proj/ed staff needs	Actual staff roster	MRSA	Diff/ence
1	1	33.45	44.03	77.48	9.69	9	5	.69
Mon	2	20.08	44.15	64.23	8.04	6	5	2.04
	3	12.44	30.16	43.00	6.12	3	6	3.12
2	1	31.16	44.06	75.23	9.4	6.03	6	3.1
	Tue	2	18.18	42.18	60.35	7.5	6	4
	3	12.45	26.50	39.35	4.9	3	4	1.9
3	1	31.24	42.48	74.12	9.2	8	4	1.2
	Wed	2	20.08	40.19	60.21	7.5	6	4
	3	13.57	29.01	42.58	5.3	3	4	2.3
4	1	34.06	40.38	74.44	9.3	8	4	1.3
	Thur	2	22.45	40.59	63.44	7.9	6	n/a
	3	17.11	30.36	47.47	5.9	n/a	4	?
5	1	37.22	41.11	78.33	9.79	5	5	4.79
	Frid	2	n/a	n/a	n/a	n/a	n/a	n/a
	3	18.10	31.21	49.31	6.16	3	7	3.16
6	1	35.04	43.25	78.30	9.7	5	7	4.7
	Sat	2	23.15	42.23	65.38	8.2	6	7
	3	16.37	29.30	46.07	5.7	3	7	2.7
7	1	31.31	41.48	73.18	9.1	7	7	2.1
	Sun	2	20.59	42.33	63.32	7.9	6	n/a

Staff on this ward saw this record as a strategy, instigated by their CNC, in their interests. What intrigued me at the time was their diligence in pointing out the discrepancies to the nurse manager, yet their failure to follow this up to ensure additional staff were allocated to the following shift. More intriguing still was what I observed in ward meetings. At these sessions Sonia would remind nurses to ensure that they keyed in each patient's UOC on time and to diligently allocate the correct UOC to each patient in order to ensure that the ward was adequately staffed; yet they all knew from their own checking of the timings that management did not staff the ward according to its own evidence.

Similar comments were made by management to staff on Mawson ward. However, when I ask nurses on the cardiac ward if they also did their own projections to see if they were adequately staffed, senior nurses could not manipulate the computer to obtain the data. Several of them cluster around attempting to do so, but give up, telling me to ask the CNC (Field notes 11/5/98). This is of particular interest given that the CNC on Mawson was of the view that her

staff were lazy. However, like her counterpart on Hartley, she used staff meetings as an opportunity to remind the nurses to ensure they keyed in their Excelcare each shift, in order that projections were available for management to reassess the rosters. A memo put out in June shows that nursing staff on Mawson had a non-compliance rate of 40% for keying in their data over the previous fortnight, despite the fact that at times they had staff re-assigned to other wards as a result of this non-compliance.⁷¹ This is the highest of the 16 wards in the hospital. The compliance rate on Hartley was 98% (Internal Memo, Silent reference No 19 1998). This same memo makes the claim that, unless the Excelcare data is completed, it cannot be transferred to ProAct and the extra staff cannot be rostered onto the wards.

On Hartley individual nurses have evidence from the Excelcare data of staff shortages. Even the most junior RN on this ward regularly checks whether management allocates adequate staff to the ward. Management never does, so these nurses know that in being overworked, it is possibly a problem of understaffing, not necessarily their own performance. On Mawson ward nurses do not know how to check Excelcare to gain this information for themselves. This is interesting in itself since Shirley, the CNC on Mawson, will not take understaffing or being overworked as excuses and complains to the acting Director of Nursing, the senior registrar and to me about this (Field notes 28/5/98). However the actions of the CNC and the nursing team on Hartley is not yet one of resistance. It is a combination of exceptional compliance coupled with a daily public statement to management and themselves that indicates that the ward staff are aware of the duplicity built into management's use of Excelcare.

Excelcare: the managerial agenda

This apparent contradiction between the realities of the number of staff rostered to each ward and the claim that the product accurately predicted the number of staff needed led me to discuss the purpose of Excelcare with senior nurse managers. In these discussions managers indicate that compliance with the product makes little difference to rosters, nor does attention to detail. Some wards are known for using Excelcare as a scrupulous nursing care plan and for detailing each UOC, sometimes having up to 20 per patient. The general view of the nurse managers is that these nurses always over estimate the needs of their patients. I am left confused by these comments, particularly as when I suggest the care plans are not an accurate estimation of the patient's needs, I am told that the care plans are accurate. In management's

⁷¹ See Chapter 6 for the incident when Heather fails to get the Excelcare data completed before 11am.

view the error rate increases the more UOC put in and the more attention to detail. This is due to the fact that the timings for Excelcare are too generous. Nurses can do sloppy plans or highly detailed ones; however, the time for care and the number of staff rostered onto a shift will not vary.

Perplexed, I ask bluntly what use then is Excelcare? I am told it is used for global decision-making such as determining standardised staffing levels across wards, or as a tool for modelling cost savings such as trialling alternate skills mix or models of care. For example as innovations were introduced onto some wards, such as mini-intensive care bays, the traditional models of nursing care were no longer clearly delineated and it became more difficult to calculate the number of staff needed. In these cases Excelcare enabled the total number of UOC to be added up and the ward staffed with apparent equity. Excelcare also allowed careful, but remote surveillance of staff. For example on Mawson a trial to up-skill ENs to give drugs could be monitored with precision simply because the EN keyed in the UOC, these were relayed to the NIS and then became part of quality assurance and individual performance appraisal. At this point I recalled an event that occurred on my first day on the ward.

On this day I was orientating myself by accompanying Shirley, the CNC of the cardiac ward. A cardiac consultant had asked her to cost a new low molecular weight heparin drug in terms of how it might reduce nursing hours. He was interested in getting the hospital to purchase the drug and his arguments needed to illustrate the reduction in cost. Nursing hours was one approach that might demonstrate marginal savings. Low molecular weight heparin can be given to patients through injection and need only be given twice a day. It is given for deep vein thrombosis following cardiac procedures or surgery and allows the patient to go home earlier. The current treatment is heparin infusion. This involves taking time to maintain the intravenous cannula, time to maintain and check the starflow pump, time to take blood samples every 6 hours to check whether the blood is thinning and time to do a urinalysis—in total, 12 minutes plus 4 minutes for the urinalysis per shift, per patient. Shirley had to cost the time spent looking after the heparin infusion, as compared with giving an injection, within a 24 hour period.

These timings needed to be evaluated against the fact that the drug would cost the hospital an additional one million dollars. The argument became a complex one at this point—between the additional cost of the drug, the reduction in nursing hours, the increased comfort to the patient who would not have an infusion pump attached to them, the blood tests every six hours and the loss of useful information from not doing these tests. Shirley argued that where patients were having an angioplasty the six hourly blood tests would have to be done in any

case. The injection pathway would mean the data was not collected and therefore would not be available. Her comments to me as we move along the corridor are *the drug company will have to come up with a better deal for us to take this one up* (Field notes 1/4/98). It is at this level that Excelcare is useful as data.

Excelcare and service weights: the bureaucratic agenda

However Excelcare has more global applications than its capacity to cost possible savings attached to new medical technology within an individual hospital. In Chapter 5 I noted that one of the benchmarks of efficiency is the cost of nursing services per DRG. This is assumed to be around 28% of the total cost of any episode of care and around 60% of the total salary costs (NHMBWG 1996). In the original design of DRGs by Fetter and his team, the fact that nursing tasks could be measured by the minute was not a factor thought to be amenable to accounting, although Thompson, a member of Fetter's team, was a nurse (Diers & Bozzo 1997). Despite this, Australian nurses have worked closely with the Commonwealth government to develop formulae for converting the time it takes to do a nursing task into a timed nursing weight for a specific DRG and for the overall nursing costs per DRG (Diers 1999).

Major work has been done by Evelyn Hovenga and Deborah Picone with the PAIS (Patient Assessment Information System) nursing intensity model in NSW and Victoria, and in South Australia by Horsell using Picone and Diers' framework with the Excelcare product (Diers 1999; Horsell 1996a, 1996b).⁷² In both cases the products have been used to predict nursing intensity per DRG and within the DRG. The National AN-DRG Service Weight study, begun in 1993 by the Commonwealth, merged the data from both studies to determine the nursing weights for AN-DRG 2 and AN-DRG 3 (Parkes, Picone & Challinger 1994) and in South Australia nursing weights were developed specifically for local public hospitals for AN-DRG 3, using Excelcare data from across the State gathered between 1995 and 1996 (Horsell 1996a, 1996b).

For the South Australian study, Excelcare timings for each UOC needed for a patient assigned to a specific DRG were collected from 9 public hospitals retrospectively over a 6 month period from September 1995 to April 1996, during the spring and summer months. Excelcare

⁷² Donna Diers, an American nurse has worked extensively with Thompson, a member of Fetter's original team, on developing nursing service weights in the USA. In the 1990s she worked on the Australian version of DRGs.

data (an average of the 'virtual' time it takes to do a task for a patient) allowed the collection of each minute of care allocated to a patient across the three shifts for the 9 hospitals in the project to be rolled up into the total time a patient was on the ward. This was then compared with the number of nurses rostered on a shift, the number of nurses employed but on days off, holidays or study days (indirect times) and the actual length of stay of the patient. The cost of the actual nursing hours was then compared to the total cost of LOS and a nursing weight assigned to each DRG. The overall cost of nursing services is estimated to be approximately 28% of the total DRG price. Inherent weaknesses in the study were acknowledged, such as the problem of capturing high volume psychiatric and respiratory case data, which peak in winter (Horsell 1996b: 15).

An intriguing point in this mathematical and computer-generated process is that literature outlining the need to ensure reliability and validity of these measures assumes that managers are accurately staffing according to the product predictions (Hathaway & Picone 1995; Hovenga 1995). Yet, as I have illustrated, the data drawn from Westernvale was subject to manipulation as nurse managers staff wards at lower levels than those Excelcare predicted were needed, despite the fact that the original timings were carried out under strict conditions and the formula used to do the timings patented by the South Australian Health Commission (Horsell 1996b). This is an explicit example of the manipulation of working time, of what Postone (1996) refers to as the continuous movement of time from concrete–abstract–concrete.

While the formula used to determine the nursing weights clearly has the potential to establish equity in the distribution of scarce resources, its realisation in practice demands closer analysis. The underpinning of the calculations are based on three modes of time. The first is the average time it takes to do a task—the *Excelcare virtual-abstract time*. This is the time derived from a Taylorist time-and-motion study conducted by the South Australian Health Commission prior to the introduction of the product into the 15 public hospitals in South Australia (Horsell 1996b). The second is the real time taken to do set tasks on the ward, on any given day—the *concrete time*. The third is the *actual time or redetermined time* allocated by management to nursing staff to complete each UOC; a timing I have already shown to be an underestimation of the necessary time needed to complete tasks and one where management appear to be eroding time from the official allocations.⁷³

⁷³ The gradual erosion of Excelcare time allocated to nursing care became standard practice at Westernvale, and clearly other hospitals in South Australia, following the collapse of the State Bank when the budget was cut by \$15 million over three years 1993-6. The impact of this subterfuge can be gauged from a simple comparison of the average price for a DRG at

This Excelcare data became part of the information passed on to the Commonwealth to determine and benchmark DRG weights for all nurses across the country. The use of a mathematical formula presumes unquestionable scientific truth-time. As Harrison and Pollitt (1994) have observed, computers (and mathematics), are presumed to provide scientific and true measures of LOS and hours of work. Debate on the validity of these approaches often focuses on the formula, or on purchasing a more refined computer product. However in this case the very figures used are inaccurate. It is not surprising that in the ensuing years resistance became more organised.⁷⁴

Excelcare and resistance

During the series of union meetings held at Westernvale during the 2nd EB round in 1998 the issue of work bans came up for discussion with the industrial officer. The midwives suggested that refusing to type in their Excelcare data would be a useful act of sabotage. However, when the union imposed workplace bans, Excelcare was not included, despite the fact that a central platform of the 2nd EB campaign was to make the public aware of the link between staffing numbers and patient needs. In the next section I outline developments in the nurses' understanding of the power of Excelcare as a tool of resistance. I argue that it is highly unlikely that Excelcare could have been used in this way prior to 2000. What was required was time to understand the EB process and time to gather the appropriate data.

The 1998 enterprise bargaining round

It would be incorrect to say nurses on the ward were not conscious of intensified work time in 1998 during the 2nd EB round. Nor would it be correct to say that nurses had not come to the realisation that their workload had become increasingly intensified prior to 1998. Time was part of the 2nd EB round simply because many of the allowable matters involve some aspect of time. However, the relationship between work and time goes well beyond issues of unpaid overtime, long service leave, or the exhaustion nurses feel working a late-early rotation on a seven day roster. It could be said that nurses and their managers had not yet come to fully

Westernvale during this period. In 1994/5 the price was set at \$3029. In 1995/6 this was reduced to \$2782. This reduction in price was achieved through redundancies and intensifying the work of nurses through manipulation of products such as Excelcare.

⁷⁴ Other funded studies used by the Commonwealth to come up with the formula include the NAIP (non-acute inpatient casemix project) in Perth, Adelaide and Melbourne, an intensive care study in Adelaide, a domiciliary casemix study in the Central Coast of NSW and three separate studies of costings for outpatients and emergency departments (Ferguson & Picone 1994).

appreciate the complex or insidious way in which time permeated all aspects of their working lives. More importantly, nurses on the wards did not have the data to prove their case. In the ensuing three years much happened to alert nurses to the need to firm up control of their work time.

The 1998 EB agreement did address the issue of work intensification, specifically staffing levels. However it failed to set a precise target around working time. The agreement between the DHS and the ANF provided under section 10.(ii) appendix C notes,

- 1. The parties are committed to ensuring that, wherever possible, sufficient numbers of appropriately qualified nurses are available to meet the assessed needs of patient/clients.*
- 2. Accordingly the parties agree that for the life of the agreement staffing arrangements should, where possible, vary in accordance with the number of type of clients receiving care (my emphasis) (Australian Industrial Relations Commission 1998a).*

The sticking point was always the phrase; *where possible*. It was 'never possible' to allocate more nurses to care for patients.

In the three-year period between the 1998 and 2001 EB agreements, nurses working on the wards became aware that even when they assiduously keyed in each UOC for the patients on their ward, nurse managers did not necessarily roster adequate numbers of staff for the next shift despite the capacity of the product to predict the number of nurses needed to complete the work, and management demands to key in the data and claims that this was the purpose of the product. Managers always responded that Excelcare was too generous giving the impression that there were errors in the product's capacity to predict the time needed to complete tasks. This growing awareness led nurses on wards such as Hartley to gather the discrepancies that enabled the union to make its case.

In the 3rd EB agreement (2001-2004) the Australian Nursing Federation (ANF) armed with detailed data collected by nurses on the wards, such as that collected on Hartley, took a two-pronged approach. In the first instance the State Department of Human Services (DHS) had to guarantee 200 extra nursing positions for public hospitals and secondly they were forced to staff the fifteen public hospitals according to precise Excelcare timing, or any product that would replace it. Section 8.6 (iii) (a) reads, 'Hospitals to staff in accordance with Excelcare ...and (ii) Following implementation of the new system in August 2002, health units are to

staff according to the staffing plans generated under the new system' (Australian Industrial Relations Commission 2001). The agreement was implemented immediately.⁷⁵

Industrial disputes following the 2001-2004 EB agreement

All was not smooth sailing following the signing of the 2001-2004 Agreement. By mid 2001 it became impossible for nurse managers to abide by the EB agreement to staff their wards according to Excelcare. They claimed that there were insufficient funds to do so, and ironically no longer enough nurses.⁷⁶ At Westernvale this resulted in industrial disputes and the closure of beds, first on Hartley and then across a number of wards in the hospital. Bed closures came during the winter months of 2001 despite the fact that the DHS made provision for additional funding to cope with the winter influx of patients. Similar bed closures occurred at other public hospitals. Telling nurses that Excelcare is too generous was no longer an option once it became integral to the EB agreement.

In discussion with senior nurse managers they indicated that when the EB agreement was signed in December 2000 they made it clear to the DHS that additional resources were needed to adhere to the agreement. They did this in good faith assuming the government department would provide the funds. It did not. In interview the Director of Nursing indicated that the hospital required an additional one million dollars to meet the EB agreement and that she clearly outlined these figures during the EB discussions with the DHS bureaucrats, yet only \$500,000 was received in the 2000-2001 financial year. This made it impossible for the hospital to maintain the agreement (Silent reference No 12 2001). The response of the DHS was to suggest that the Excelcare timings were too generous and that nurse managers need to refine them and bring them into line with the budget. The vignette outlined in the beginning of this chapter can be read as a response to this injunction, but also as a political ploy by the Director of Nursing to opportunistically argue for increased funding once the new product was put into place.⁷⁷

⁷⁵ The EB agreement in South Australia differed from the agreement made between the ANF and Victorian DHS. The trend in Australia and North America is increasingly towards ratio staffing and statewide legislation to enforce it (Haydon 2001). Ratio staffing establishes a set number of nurses per patient, independently of time, task or patient intensity. Excelcare was seen by the South Australian DHS as a way to avoid this trend and the associated costs. Having avoided the pitfalls of ratio staffing the DHS appeared not to be aware that to staff according to Excelcare timings would also increase costs (Silent reference No 12 2001).

⁷⁶ In 2002 August the State DHS was forced to close 60 beds in the major public hospitals due to nursing shortages.

⁷⁷ Excelcare had not been replaced by December 2003 although a trial of eCare (an up-grade of Excelcare) was planned for 2004, as was the campaign for the 4th EB round.

Concluding discussion

Excelcare is essentially a time and task system, reflecting neo-Fordist and Taylorist production processes. It does not build in times for management of the ward nor is it adequately flexible for patient emotional care. At Westernvale it replaced the subjective nursing care plan, defining care in terms of direct and indirect, legitimate or not, rational and irrational, virtual and real (read unreal). It also defined the way in which tasks were put together, structuring for many nurses how they thought about their work. Campbell (1992) commenting on the Canadian experience noted that nurses embraced new technologies with enthusiasm without realising the control over work they herald. More recently, reminiscent of Braverman (1974), she has suggested that nurses are part of the technology of care, whereby production and management are separated (Campbell 2000). Management now monitors this virtually timed work through computer systems that set deadlines for task performance, while nurses do the real work in real time on the ward.

But Excelcare did more than split care into that controlled by management and that controlled by nurses. It created a false promise. At first sight, it promises workers clear and unambiguous evidence of the intensity of their work; yet, as I have shown, this was not the case at Westernvale. Even where nurses were diligent in maintaining the data-base, checking out the projections and meeting the deadline for relaying this information to management, it was not acted upon. This diligent record keeping was used as data for more global measures, such as costing casemix, or modelling alternate staff skill mixes that ensured ever increasing lean production. Excelcare also accommodated the shift of skills from medicine to nursing, without the concomitant shift in autonomy of practice many nurses hope for.

Excelcare is in effect a performance indicator that allows nursing labour to be subject twice over to the abstract hour. The first redetermination of the working hour occurred with the time-and-motion studies; the second when nurse managers began to undercut Excelcare timings by suggesting the computer program was too generous and subjecting ward nurses to further lean production. Presumably hospital managers engaged in this subterfuge in order to manage budgets set too low by the Department of Human Services. The irony was that these same timings became part of Commonwealth data used to establish national nursing weights for casemix. What was seen as a cure to achieve equity in staffing, became the disease of work intensification for all nurses in public acute hospitals in the country.

Excelcare also reduces paid time for nursing work to detailed tasks performed on patients as if they were products assembled on a production line. Interactions between two humans—one sick, the other caring—are transformed into fifteen minute UOC dealing with anxiety. When

nurses find themselves enjoying interactions with patients they question their caring and healing capacity, asking themselves *is this work?* Legitimate work is limited by the UOC recorded on the system, and presumably must give no pleasure. Incidental caring work is also missed, but so too is work that engages the nurse in professional judgement as individually tailored care plans give way to Excelcare. This is surely the purgatorial complex at its most refined form where only activities that can be calculated, timed, and benchmarked (and are unpleasant) are recorded or accorded any value.

However, what was not predicted by the DHS bureaucrats was that Excelcare would provide the vehicle for resistance against the forces of the New Public Management once nurses were able to supply the ANF with details of understaffing, gathered in a systematic way, and bring this information to the negotiating table. This knowledge took time to gather and was dependent on living out and assessing the weaknesses of previous EB agreements. It was also dependent on a worldwide shortage of nurses. Nurse managers likewise used these outcomes in the interest of reducing work intensification. This is a predictable action by nurse managers. Their loyalties are most often directed towards the profession, rather than the government when the opportunity avails itself (Harrison & Pollitt 1994). What is also evident is that their knowledge of how to use the product is more informed than ward nurses, so they have been able to use the EB agreement as a possible opportunity to renegotiate Excelcare timings within an industrial arena, where nurses have new bargaining power due to labour shortages.

While there is no evidence that managers and ward nurses worked together with the union in compiling the evidence, it is clear that nurse managers intend to capitalise on it, and that all nurses may benefit. It is also evident that these managers remain caught in a contradiction and that conflict between management, the DHS and staff looks certain to continue. As an innovation, Excelcare has had an ambiguous history as this second case study illustrates. In the next chapter I turn to explore the introduction of the third and fourth innovations, cardiac clinical pathways and the Fast Track Surgery Project; together these two make up the third case study. As will become evident, while Excelcare represents one way in which the processes of scientific management are used to organise the work of health professionals, there are other avenues open to management to take control of the labour process. Excelcare controls the speed of tasks; clinical pathways control the ordering of tasks.

CHAPTER EIGHT

FROM MANAGERIAL TO MEDICAL CONTROL OF TIME

Linear time has to be envisaged as a huge, endless knife-blade scraping its way across the universe (Hóeg 1994: 200).

Introduction: scientific management versus evidence-based medicine

Control of health professional work time goes beyond the use of computer-based workload products such as Excelcare. Medical and nursing working time is also controlled through the system of payments to hospitals linked to casemix. Casemix control goes to the very act of clinical decision-making. It is this that separates out the current 'reform' process from previous endeavours. Casemix Diagnosis Related Groups (DRGs), as a new form of reimbursement to hospitals have resulted in new production systems and new ways of organising nurses' and doctors' working time. Importantly, nurses and doctors themselves are co-opted into devising strategies for speeding up the production processes through workplace change, often funded through government sponsored innovations programs such as the National Hospital Demonstration Program. However nurses and doctors are differently placed to maximise the benefits of these innovations. The impact on nurses is more pronounced, while the negative effects on medicine fall most often to junior salaried doctors rather than to visiting medical officers or senior medical staff.

To illustrate these points this chapter focuses on the introduction of two innovations on the cardiac ward at Westernvale between 1998 and 2000. The first innovation was the development of six clinical pathways and the employment of two nurses as case managers. This innovation was considered a failure. In the second innovation two senior cardiac surgeons sponsored a Fast Track Surgery Project under the rubric of evidence-based medicine (EBM). This innovation produced a clinical pathway that successfully reduced length of stay (LOS) for patients undergoing coronary artery bypass graft (CABG) or valve surgery. I attribute its success to a range of factors, the most prominent being that it re-asserted medical

dominance through EBM, thus bringing nursing time more assuredly under medical control. The fate of these two separate clinical pathways innovations is the third case study.

‘Best Practice’: scientific management or evidence-based medicine?

Within the public health care system ‘best practice’ innovation comes from two directions. The first draws on the principles of flexible specialisation and the managerial strategies of scientific management, in order to ensure that health professionals work collaboratively to produce what is now referred to as ‘seamless care’. Excelcare is one example of the way in which computerised technology enhances scientific management. The second approach is evidence-based medicine. This approach draws on the collective findings of systematic scientific research, which is readily available to doctors throughout the world via the Cochrane Collaboration and other EBM data-bases.

According to Timmermans and Berg (2003), both scientific management and EBM have their roots in the Enlightenment project that sought control over the physical world through rationalisation, standardisation, predictability, conformity and efficiency. Scientific management introduced the processes of work rationalisation onto the shop floor through controlling the work of labourers. EBM is a strategy that enhances the capacity of responsible and autonomous professionals to take control of their own rationalisation. Scientific management was introduced in the early years of the 20th century, EBM comes at the latter end of the century, partly explained by the opportunities offered by computer technology, but also by the concerted push to economic rationalisation.

A key component of EBM is the double-blind, randomised controlled trial (White & Willis 2002) and the speed with which the ‘scientific knowledge’ is made available through the immediacy of the Internet and the refereed journal process (Timmermans & Berg 2003). Like scientific management, EBM standardises clinical and medical procedures, but the motivation for this standardisation comes from the medical evidence, not from the imposed managerial imagination of managers, bureaucrats, or politicians. It is a form of quality assurance internal to the medical profession. It is assumed that EBM avoids the drudgery of work intensification, because of the exhilaration it provides from the discovery of new and improved ways to treat, cure and comfort patients. Both EBM and scientific management together generate clinical pathways.

Practice implications of DRGs: clinical pathways

The introduction of DRGs has generated a range of innovative ways of funding the delivery of health care and as a consequence new ways of organising hospital work: case management and the accompanying clinical pathways are two examples. These innovative production processes are based on the idea that the industrial technique of Total Quality Management can be used in clinical settings and that despite the uniqueness of each patient, there is sufficient homogeneity for uniform standards in practice and LOS to be linked to cost (Wilkinson 1995). Based on the principles of scientific management, nursing case management and clinical pathways were first introduced into nursing circles by Zander at the New England Medical Centre in the mid 1980s, in response to managed care (Wilkinson 1995).

Nursing case management and clinical pathways

Nursing case management is a system of care where a primary nurse takes full responsibility for managing and auditing the sequence or pathway of care for a patient during their hospital stay. The nurse manager deals with patients according to their DRG category regardless of where they are in the hospital (Breckon 1995). Nursing case management involves two components that differ from current practice: firstly a multi-disciplinary shift report of where the patient is on a clinical pathway is used instead of the current practice of 'nursing handover'; and secondly a variance analysis is done that identifies the blockages to the patient's speedy progress through the hospital system (Zander & McGill 1994). These two activities position the nurse case manager as the key repository of knowledge and the central point of contact for managing the patient's episode of care, although the doctor remains the primary decision-maker.

Clinical pathways are a written care map or Gantt chart that sequences the tests, procedures and care a patient will receive while in hospital.⁷⁸ They clearly indicate the daily treatment regimes including what day the patient is to be discharged. Clinical pathways demonstrate the sequence of work around the clock, tightly standardising care and practices per case type (Zander & McGill 1994). The pathway also details the work of each discipline in sequence and in relation to other disciplines for each specific type of patient, leading to standardisation of practice. Appendix C provides an example of an Angina pathway.

⁷⁸ Clinical pathways are also referred to as critical pathways (Kingsland et al 1994), anticipatory recovery pathways (Zander & McGill 1994), expected recovery paths, milestone action plans (Breckon 1995), and multi-disciplinary care maps (Claire 1995).

Copious research has been published illustrating the way in which the introduction of clinical pathways work to reduce LOS (Clarke & Hindmarsh 1995; Smith & Kingsland 1995; Yarmo, McDonald & Wendorn 1998). This is achieved through the identification of variances or blockages in the system, which are then dealt with by re-organisation of work processes. Hence clinical pathways often include system-based re-organisation of the patient's trajectory, such as the establishment of preadmission clinics, Hospital @ Home services and comprehensive discharge planning (Challinger 1995; Yarmo, McDonald & Wendorn 1998). These innovations to the 'production' process are part of the overall system change designed to speed up patient LOS. A clinical pathway is the tool that maps the patient's journey through the system and identifies blockages that slow them down. Eliminating the blockages is part of the change process.⁷⁹

Documentation by exception or variance

Documentation of clinical pathway events is multi-disciplinary and indicates any exception or variance from the scheduled path, rather than each doctor, social worker or nurse doing a new assessment or repeating information; hence handover is multi-disciplinary. The primary nurse indicates where the patient is on the pathway, identifies the variance, the DRG, what day the patient is at and confirms with the doctor the next step to be taken. Variances are addressed and handover becomes a process of problem-solving in an attempt to predict or remove existing variances and to guide the multi-disciplinary team caring for the patient in what is now a fast and complex environment. Dealing with variances or blocks to patient progress on the pathway is the basis for quality assurance measures.

Variances are divided into four categories: family/patient; care-giver/clinicians; hospital/internal systems; and community care agencies external to the hospitals. Variance analysis is done for each individual patient and then aggregated for patients allocated to the DRG. Variance analysis is carried out either at the time of the episode of care or retrospectively. When done at the time the patient is receiving care it provides opportunity to act on the variance, to see how the patient is managing and to alter treatment accordingly. System-related variances are usually identified retrospectively and are more difficult to remedy

⁷⁹ Clinical pathways are about reducing the LOS, but proponents argue they are also about increasing quality (Yarmo, McDonald & Wendorn 1998). Not to improve quality would result in readmissions and add to the insurers/funders' overall costs. This is especially so where computerised networks now exist that can track patient admissions across hospital systems or through reimbursement agencies. What is useful to the funding agency are reduced costs; what is useful to the clinicians and patients are quality outcomes. The two come together if the funder does not want to have to pay the cost of a poor outcome and repeat admissions (Challinger 1995).

(Barnes 1999). For example they may involve changes to the time laboratories are open and as a consequence require careful economic modelling to ascertain whether or not they add to overall efficiency. Appendix D lists the variances used at Westernvale.⁸⁰

Understanding the political agenda of clinical pathways

Nursing case management and clinical pathways are a practice outcome of DRGs. With the shift to the Johns Hopkins model of divisional directorates and DRGs, many nursing departments in the United States, and more recently in Australia, lost their own budgets and as a consequence control of staffing and related costs. While directors of nursing remained, their role shifted more towards human resource management, quality assurance and, in the case of the Director of Nursing at Westernvale Hospital, to orchestrating the 'reform' process. While there is rhetoric that the divisional model supports multi-disciplinary care by breaking down professional bureaucracies and boundaries, the DRG categories are medical, the divisional directors are invariably doctors and it is the admitting doctor who allocates the DRG. The system of DRGs 'aligns the practices of clinicians with the economic/managerial goals of efficiency and effectiveness' (Barnes 1999:106), in a process that bypasses nursing and allied health.

Nursing case management and clinical pathways are nursing innovations developed as part of a strategy to re-assert nursing power in the face of re-structured hospital bureaucracies that eliminated nursing divisions as cost centres and further strengthened the medical profession (Zander 1988). Nursing case management and clinical pathways not only re-assert nursing in relation to medicine, but also in relation to allied health professionals. The primary nurse becomes the coordinator of the team orchestrating the clinical path for patients and staff alike.

Given that a key element in the successful take-up of clinical pathways is medical involvement, it is not surprising that the literature indicates that the key reason for pathway failure is lack of involvement by doctors (Barnes 1999). Doctors are seen as resistant to

⁸⁰ The most common criticism of clinical pathways is that they represent cookbook medicine assuming patients are a homogeneous mass. They focus on the physical parameters, such as the day out of bed, nutrition needs, and discharge planning, but not more subtle aspects of recovery such as sexual functioning, or emotional responses to illness (Barnes 1999). Gibb and Banfield (1996) also argue that pathways force early discharge, focusing on the procedures to be completed in a timed sequence orientated to the future, rather than on the care to be given in the present. Clinical pathways are invariably trialled in situations where there are few complications, such as private hospitals, and are usually for elective admissions. These trials do not give an accurate picture of timing or the possible variances that occur in public hospitals where many older patients are emergency admissions with multiple diseases (Gibb & Banfield 1996). On the one hand they are based on the premise that there is sufficient homogeneity amongst patients admitted under any one DRG to set a standard price and time as a benchmark (Gardner, Allhusen, Kamm & Tobin 1997), on the other hand the variances assume differences.

collaboration or to engaging in practices that appear to relinquish clinical autonomy. Outcomes of clinical pathways are rarely published in medical journals and for physicians they represent managerial and nursing control of their clinical work and reduce the system to one where nurses now oversee the total production process (Staugas 1995; McDonald, Morawa, Teige et al 1996). This comes up against a key element of medical professional ideology that argues it is imperative for the doctor to have control over his or her time in order to give quality care and to safeguard the practitioner/patient relationship (Starkey 1992).

Patient autonomy and clinical pathways

Despite resistance from organised medicine there is no doubt that patients and their families appreciate the increased knowledge and education that they receive as part of being put on a clinical pathway. This is not surprising given that patients find waiting tedious and anxiety-provoking (Zola 1973; Adam 1992). Knowing when each procedure will occur or what they might expect is useful information for any patient. Even knowing when you are to be discharged before you have been admitted is useful for planning rehabilitation and reduces the anxiety-provoking uncertainty that is the patient's lot. But to suggest that obtaining information about what will happen is a radical act of consumer empowerment is misplaced. Terms such as 'patient partnerships', now in vogue, offer patients more information, but not necessarily more control over their time, or what procedures they will have, or in what sequence they have them. In fact, claims of increases in patient satisfaction rates with the introduction of clinical pathways are little more than claims to efficiency in time and to a tighter control over patients' bodies.

The third innovation: the cardiac clinical pathways project

Planning for the cardiac clinical pathways project at Westernvale Hospital began in December 1997 and was completed in July 1998, the deadline for the final Report to be delivered to the Commonwealth agency funding this initiative. Information was sought from other hospitals around the country in order to establish benchmarks. One benchmark seriously considered, but not taken up, was Day of Surgery Admission (DOSA). The popular view at Westernvale was that the cardiac surgeons would not support DOSA and this proved to be the case. Six clinical pathways were introduced between February 20th and May 7th. In all, 825 (77% of

caseload) patients were admitted under the six DRG pathways.⁸¹ These are detailed in Table 8.1 with accompanying DRG LOS for Westernvale, the DHS, and the intervention and control groups. Data from pathway No 1. 'Chest Pain Assessment Unit (CPAU)' does not include a control and intervention group as this was a separate innovation project that saw patients admitted to the hospital with undiagnosed chest pain sent to a unit especially dedicated to doing a rapid assessment.

Table 8.1 Details of cardiac clinical pathway projects

Pathway/and date	DRG	West/vale predicted LOS	DHS predicted LOS	Control group N (%)	Mean LOS in days	Interv/ion group N (%)	Mean LOS in days
1. CPAU 20 th Feb	261	24 hours	24.02 hours				
2. Unstable Angina (Mawson) 17 th Feb	270	5 days	3.32	242 (59.2)	3.4	274 (60.1)	4.5
3. Unstable Angina (CIC) 17 th Feb	269	5 days	4.50	72 (17.6)	3.8	80 (17.5)	4.8
4. CABG (Mawson) 21 st March Elective w/o cc	291	9 days	8.81	55 (13.4)	11.6	61 (13.4)	10.9
5. Valve (Mawson) 21 st March Elective w/o cc	222	9 days	9.9	7 (1.7)	13.3	7 (1.5)	10.7
6. Myocardial infarction (Mawson) 7 th May	267	6 days	7	33 (8.1)	6.1	34 (7.5)	5.7
Total sample				409	5.0	456	5.6

Data taken from Silent reference No 15 (1998:40).

A working party of 30 staff chaired by the Assistant Director of Nursing (ADON) for the division, was established to design the pathways; and it met fortnightly for six months. Each clinical pathway underwent several drafts and was submitted to cardiac consultants before

⁸¹ When 100 patients were taken off the clinical pathways this reduced the intervention group to 70% of the cardiac unit's case load.

implementation. The pathways were loaded onto an Excelcare product which has the capacity to track the patient's progress through the pathway. Staff on Mawson and RNs throughout the division were briefed on the project over a four-week period, and glitches ironed out before the project formally commenced. Two nurses were also appointed as case managers, each on a part-time basis but sufficient to cover the seven days of the week.

The primary aim was to reduce LOS both in terms of days and the hour of discharge. Other stated aims included: improvement in discharge planning; bed management; patient education; patient satisfaction; multi-disciplinary teamwork including referral to allied health staff; testing the Excelcare pathway module and the concept of case management; and developing a system of variance analysis. The three main problem areas identified for improvement through the pathway project were the need to oversee the number of monitored beds, the need to streamline discharge practices and the workload. There was no statement about improved quality of care in the final Report, although it was mentioned in a number of internal memos linked to the projects (Silent reference No 16 1998).

The pathways were in operation from February through to July 1998. Data on age, sex and cost weights of the intervention group was compared with a group of patients who had been in the hospital at the same time the previous year in order to establish a control group for purposes of comparison. There was no statistically significant reduction in LOS for the intervention group of patients on any of the five pathways (Nos 2-6) trialled over the five months, with the exception of the valve pathway where numbers were considered to be too small for statistical significance. The only statistical difference was an overall increase from 5 to 5.6 days for the intervention group, compared to the control group when the LOS was aggregated for all the five pathways. Even when patients who stayed under two days were excluded from the analysis, the difference between the two groups was not significant. The Report notes that workload over this period for the cardiology team peaked in April with around 1520 bed days. My own observations were that up to 30 of the 60 cardiac patients at any one time were outliers, indicating severe bed shortages in the cardiac wards and in the Cardiac Intensive Care unit (CIC), requiring the medical team to take time to visit other wards in the hospital where these patients were being cared for (Silent reference No 15 1998).⁸²

⁸² Some indication of the hectic nature of work on Mawson during this period can be gauged by examining the increased through-put in the period 1994-98. This data should be read bearing in mind that no additional staff were appointed to Mawson, and the overall numbers of nursing staff were reduced. Over 64% of patients presenting in the Accident and Emergency (A & E) Department at Westernvale in 1997 had a Category 2 diagnosis (needing to be seen within 10 minutes) and of these 60% presented with chest pain or other cardiovascular conditions making them a patient needing a bed on Mawson, the Chest Pain Assessment or Coronary Intensive Care Units. On Mawson 63% of patients were emergency

Separation times were also analysed. Here some significant differences were found with an average separation time of 30 to 60 minutes earlier for the intervention group than the control group. This is attributed to the nurse case managers reminding medical staff to write out the discharge prescriptions the day before and, in my view, to the establishment of a Transit Lounge. This was a holding area for discharged patients while they waited for their medication scripts. As far as the hospital was concerned, waiting may have been reduced and the figures reported to the State DHS and the Commonwealth funder of the project may have reflected this; but for patients waiting to be discharged the wait remained the same, only now they were in the Transit Lounge.

The project team put forward a number of reasons for the failure of the trial, without placing the blame in any one area or attempting to identify a major variance. For example pathway No.2 'Unstable Angina (Mawson ward)', 202 patient-related variances were the main cause of increase in LOS; in a number of cases these patients needed surgery and were moved onto the CABG pathway, or had chest pain, or bleeding problems. For 'CABG' and 'Valve' pathways, system-related issues abounded; these included the Catheterization Laboratories or Medical Imaging being closed for the weekend and after hours, or a step-down bed not being available. Delays for the Cath Lab totalled 115 beds days alone (Silent reference No 15 1998:46). Other system-related variances included the fact that data fed into the Excelcare computerised pathway product could not transfer patient data from one pathway to another, as was necessary when a patient needed to move from 'Unstable angina' to a 'CABG'. This meant that documentation by exception was not legally viable. As a result 100 patients had to be taken off the trial when data was lost, they were incorrectly assigned or developed conditions that did not fit the specific pathway. The variances are listed in Table 8.2.

Table 8.2 Number and type of variance for each clinical pathway

Variance	Clinical pathways						
	1. CPAU	2. Unstable angina (Mawson)	3. Unstable Angina (CIC)	4. CABG w/o major cc	5. Valve elective surgery	6. Myocardial Infarction (MI)	
Patient numbers	273	271	80	60	8	23	
Patient clinical event	12	172	51	38	5	25	303
Angiogram not required	0	89	15	0	0	3	107
Cath Lab unavailable/ Weekend	0	24	13	0	0	6	43
Medical Imaging unavailable	0	15	9	0	0	0	24
Cath Lab unavailable	0	11	2	0	0	2	15
Cath lab unavailable/emergency	1	12	1	0	0	0	14
Preadmission clinic: pt unavailable	0	0	0	12	2	0	14
Preadmission clinic: Service unavailable	0	0	0	11	2	0	13
D/S not written	1	7	1	2	2	1	14
D/C letter not written	1	5	1	1	2	1	11
Step-down bed not available	0	1	5	4	3	6	19
Nursing history incomplete	0	9	1	2	0	0	12
Rehab package not received	0	2	0	0	0	0	2
Total	15	347	99	70	16	44	591

Data taken from Silent reference No 15 (1998).

Doctor-related variances included a small number of discharge prescriptions not written on time, letters not sent to the patient's GP, the fact that the cardiac surgeons went on holidays in June, and the pre-eminence given to other medical-related research on the wards. Patient satisfaction surveys were highly positive, but the results were no different from previous surveys conducted by the hospital. Patients were asked a range of questions that focused on waiting times, their involvement in decision-making and education. These included information on waiting times in A & E, their knowledge of their LOS, or how long they waited for their drugs from pharmacy on discharge. What the survey did indicate was that a number of patients in the intervention group felt they had been discharged too early. This is an

interesting observation given that overall discharge rates for the intervention group were slightly longer than the control group.

Staff comments were not so complimentary. Staff remained divided on the value of clinical pathways to discharge planning, did not see the value of the variance analysis or knowing a patient's expected LOS, nor did they think communication between medical, nursing and allied staff had been enhanced. Nurses were of the view that they had done the work, while the doctors had had the benefits of the work of nurse case managers. A number of recommendations were suggested; however, the clinical pathways were abandoned. The nurse case managers and the project officer went back to their home wards and the Cath Lab and Medical Imaging departments remained closed on weekends. No explanation was given as to why economic modelling was not done to ascertain the marginal gains to be made by opening these labs after hours. Only the preadmission checklist for CABG surgery remained in place. It became useful as a tool for the Fast Track Surgery Project (FTSP) discussed later in this chapter.

Clinical pathways: the case for ambiguity and resistance

My access to the clinical pathways trial was limited to one formal meeting and time spent with the two nurse case managers, Monica and Frances. They were required to prepare a time-and-motion report on their daily work schedule and requested I do this for them. This gave me the opportunity to shadow both nurses over a five-day period including the weekend and my analysis of the clinical pathways project comes from these days and subsequent interviews with these two nurses over the following four years. My own account of the trial differs from the final Report written by the project managers at Westernvale. Firstly I illustrate how Westernvale's own data on system and patient variances reveal a fundamental ambiguity with clinical pathways. Secondly, I give an account of the project, which focuses on the multiple agendas of nurse managers, the ambiguous role of the nurse case managers, the passive resistance of ward nurses and doctors and the inherent problem of waiting lists.

Ambiguity of Westernvale's own account

Data from the trial points clearly to two major types of variance: patient- and system-related. These two variances alone challenge the fundamental basis of pathways in large public hospitals where the majority of admissions are through the Emergency Department. In such cases the patient population is not a homogeneous group and as a consequence one hospital cannot be benchmarked against another and nor can the illness events be predicted and timed.

Out of a total patient population of 725 there were 303 patient-related variances. If the 107 instances of the variance 'Angio not required' is added to this, the number of variances increases to 410. The project manager's Report notes that the majority of patients not needing an angiogram were patients with chronic heart disease either on the waiting list for surgery or in need of modifications to their medication (Silent reference No 15 1998:46). This points to a fundamental problem of pathwaying patients who are emergency admissions: in many instances these patients have chronic heart disease and are readmissions who had an angiogram during their most recent previous admission so it is not necessary to repeat the test.

The second major variance is the unavailability of the Cath and Medical Imaging laboratories: a system-related variance. Here the total number is 72 delays. There is no comment in the official Report about the economics of opening the labs during the weekend—an obvious solution and one talked about often by the nurse case managers. Behind this silence is the fact that by December 1998 Westernvale had closed its labs and outsourced these services to a private hospital within walking distance. Finally, a major variance is the lack of 'Step-down beds'. This is a result of bed closures (a system variance), the fact that other patients are still sick (a patient variance), and the failure of medical staff to discharge patients on time (a clinician variance). My argument here is that nurse managers do not have the power to deal with major system-related variances; all they can hope to achieve is to get ward-based nurses and junior doctors to re-organise their work and to do it faster.

The problem of multiple agendas for the trial

The difficulties I had in gaining access to the clinical pathways project afforded me some allies, particularly amongst those who were disenchanted with management or were outside the medical or nursing hierarchy. One of these was a senior allied health professional, John, who had missed out on funding for a project submitted by his own department. According to John, when funding came from the Federal government for innovations, it was useless putting up a proposal unless your area was known to be a 'problem' area, this is shorthand for lazy or underskilled staff. His area was unfortunately running well. In his view those areas selected were wards causing problems for management and he proceeded to outline for me the link between funded projects and 'problems' in these wards. According to John those hoping to have their innovation funded needed to be in trouble!

Managers usually also had a second objective which was to generate creative ways to cost-shift, while clinicians thought the agenda was quality care. Integrating all the objectives was sometimes difficult, but also frustrating for those working on the project who had taken the

stated aims at face value and believed the rhetoric about enhancing care. While working with Shirley, the CNC, I was able to attend a number of meetings with senior nursing staff. At these meetings it became clear that Everard, the ADON, was attempting to use the project to cut costs by discharging patients quicker. Shirley saw the project as an opportunity to pull into line difficult staff, while the two nurse case managers thought the issue was to identify the problem variances and improve patient flow through the system. When Monica and Frances met with the project manager and the ADON to discuss the variances, they would often come back to the ward frustrated at the concerns of the senior staff. Monica tells me one afternoon that Everard has said, '*don't worry about all that shit; its crap typing it up; just reduce the LOS*'. The *shit* being typed up were variances (Field notes 17/5/98).

However Everard, the ADON, also saw nursing case management as a model for the nurse practitioner role in the acute care setting, a project under discussion at the time with the DHS. Everard's plan was that the two nurse case managers could expand their role to handling the discharge scripts and case note summaries—two junior medical tasks that currently hold up access to beds. Patients must wait for the doctor to write their medication scripts which must then go to the pharmacy and then back to the ward before the patient is discharged and the bed freed up. State-wide proposals for the nurse practitioners recommended nurses have prescribing rights. Although this was not what Everard planned for the nurse case managers, the hospital doctors made this assumption. Frances and Monica tell me that several doctors have sidled up to them telling them not to take up this work. *Everard will come up against a brick wall*, they tell me (Field notes 13/5/98).

It was one thing for doctors to decide to shift a single task across to nursing, such as inserting a jelco, but another for nurses to make a suggestion about taking up a role previously the domain of junior medical staff. In conversation with Jack, the surgical registrar, he gave me the classic medical response saying *the problem is that the interns will be de-skilled and that when a nurse practitioner is either not available or cannot do the task it will be no use calling in an intern as they will be de-skilled* (Field notes 14/6/98). These are scare scenarios unlikely to eventuate given the number of nurses employed in hospitals. However they give some insight into doctor resistance to the clinical pathway project.

What was intended was for the nurse case managers to write up the doctor's prescription order and get the drugs quickly through the system along with the patient discharge summary. The discharge summary goes to the patient's GP. It provides the GP with relevant knowledge that may prevent a readmission. Often discharge summaries took up to three weeks to reach the patient's GP, and by this time the patient was back in hospital as a readmission. I notice one

day a student pharmacist looking for the notes of a patient discharged four weeks earlier. *Look in the doctors' office* she is told (Field notes 13/5/98)

Ambiguity around the role of the nurse case managers

Both Monica and Frances worked part-time covering the seven-day roster between them and achieving handover by ringing each other at night. Their day began at 8am. Their first task was to print off a list of all patients in the hospital on the various clinical pathways, then attach themselves to the cardiac medical team visiting each patient. Their primary role was to ensure that the medical team adhered to the pathway schedule and attended those patients most likely to be discharged that day or the next. They did this through gentle reminders to do the scripts or summaries, as well as ensuring the doctors enjoyed as efficient as possible access to patients, test results and procedures. Achieving all this was a hit and miss affair, with an occasional sharp response from a registrar or medical officer. Some mornings went well. At other times the medical team could not be found, had disappeared down to A & E or had wandered off to see outlier patients in a sequence that ignored the pathways or the mounting number of patients on barouches in A & E needing a bed.

The clinical pathway indicated to the two nurse case managers what day the patient should be discharged; this is the very point of the pathway and the shift in language is evident. For example No 2. Unstable Angina (Mawson) pathway indicates under *medications* on day 4, that discharge scripts are sent to the pharmacy and that all the staff need to do is *confirm the D/C date with the medical staff*. Confirming the date of patient discharge is a different approach from waiting for the medical team to make the decision, even though most nurses know from experience what day a patient will be discharged. Any deviation from this predicted date of discharge was a variance. The resistance of the doctors to these clinical pathway protocols can be gauged by the fact that the number of scripts written the day before discharge only increased by 6% from a low 17.4% to 23.3% during the trial (Silent reference No 15 1998: 47)—a point not commented upon in the Report.

While the competence of the two nurse case managers was well established and the medical team rarely asked them to do tasks, the nurses' day was shaped by the medical round. Staying behind to attend to a patient meant a shorter tea or lunch break if they wanted to keep up with the medical team. The medical round was only altered when the nurses requested it; for the rest of the time they waited for the doctors and, like other nursing staff on Mawson, always gave over to medical needs, whether it be a student doctor, intern or consultant. The efficiencies they achieved with the doctors were premised on the fact that they spent much

time waiting, pre-empting and anticipating. Their practice reflected a polychronic relation to time in order to allow the interns a clear monochronic flow through the patient list.

In conversation Monica and Frances indicated that balancing the role was difficult. They queried the role of nurse case managers, asking themselves whether it was to put patients on pathways and identify variances or to follow medical teams around the ward, in effect re-organising the doctors' work. Their job description makes no mention of following the doctors from patient to patient, yet by default it is the only way to ensure a reduction in LOS (Silent reference No 15 1998: 114). Nurses no longer accompany doctors on their medical rounds. Communication is through the medical and nursing notes. Returning to a role where the nurse went to each bed with the doctors risked a return to merely carrying out medical orders. As Monica said, *We don't want to go back to the handmaiden role; no one will thank us for that. The trick is to make our presence a professional one* (Field notes 17/5/98).

In a later interview with Shirley, the CNC on Mawson, she tells me three factors are necessary in order to change an order made by the junior doctor. The first is a confident nurse who can tolerate conflict, but play the game. The second is a junior doctor who knows the nurse will go over their head if she does not agree with the care being delivered to a patient and the third factor is a medical consultant who respects that particular nurse. Selecting nurse case managers is hence a delicate task. Clinical expertise is vital, but so too is assertiveness, confidence and reputation. What was also evident in interview with Shirley, Monica and Frances was their lack of awareness of Zander's original visionary agenda that clinical pathways could be used to re-assert nursing power.

Passive resistance from medicine

In the final official Report there is a strong vote of thanks from the junior medical staff for the nurse case managers' support, yet a clear message from nursing staff that the project was hampered by the doctors' refusal to change. For the consultants and surgeons little changed. One morning I notice Shirley the CNC discussing with Monica whether to get a patient up out of bed, as the clinical pathway indicates. It is day 3 following a CABG (Field notes 25/5/98). The surgeon has given contrary orders, despite the fact that he had been part of the clinical pathway team and signed the memo sent out announcing its implementation (Silent reference 16 1998).

During my time on the ward I discussed the clinical pathways with nurses on Mawson. Most nurses felt the clinical pathways project would not work because of the lack of support from

the medical team. Andrew, an RN, was of the view that despite the presence of cardiac consultants on the project team, the surgeons intended to carry on as before. *The doctors will continue to do what they want, regardless of the nurses he tells me, basic medical care remains the same, the bureaucracy just re-organises everything on top of this* (Field notes 17/4/98). This is a perceptive insight. The clinical pathway project was an attempt by nursing management, or as Andrew referred to them the 'bureaucracy' to change practice by creating a process parallel to medicine. Well after the project was abandoned Frances tells me; *the surgeons just humoured us.*

This view is confirmed when I ask Jack, the surgical registrar, about the project. In his view it had no impact on the work of the medical team. He tells me, displaying a low opinion of physicians, that surgeons have always followed pathways: their own. *When we see a patient we always think of the end outcome. We think about the length of stay, when the patient will go home and what the patient will go home to. Surgeons have ready figures at their fingertips on LOS, variances, outcomes, infection rates, whereas medical staff and physicians cannot give you data on outcomes for their infarcts* (Field notes 14/6/98).

I probe him further on the problem of the hospital waiting lists and the need to increase productivity. He says 70% of the cardiac surgery is devoted to patients on the elective waiting list. In his view this indicates high productivity and to increase this would be to increase costs. *The visiting consultants are expensive, he says. They have to be paid for their time plus loss of private practice time.* As a salaried surgeon he already sees himself as overworked and there will be no bonus for increasing his workload, only cuts. In his experience when productivity is increased, budgets are cut rather than staff rewarded. *Why work any harder than we already do as all it means is budgets are cut,* is his final comment (Field notes 14/6/98). This response is a clear understanding of the logic of capitalism as the eternal production of surplus: in this case understood as work intensification, budget cuts and increased throughput.

The problem of early career doctors

The first clinical pathway was introduced in February, the interns changed their rotation in April and July and the occupied bed days for cardiology went from just under 1400 in March to well over 1500 in April staying above 1450 through to July (Silent reference No 15 1998:33). Grasping all that was happening is difficult especially for interns whose rotation on any ward is limited to three months. The intern on Mawson during this rotation was having difficulties keeping up. On several occasions I was part of conversations amongst the nurses over his behaviour. In my own conversations with him he jokingly indicated that we could

talk about social issues, but not about clinical ones, since he was *all at sea*. (Field notes 12/4/98). Mid-term during his rotation, under some pressure from senior medical staff he took two weeks off and was replaced by an intern, Louis, who I affectionately referred to in my field notes as *the one who had the confidence to stay behind to help old men do up their pyjama buttons* (Field notes 17/5/98).

Louis was supportive of the trial, but openly admitted how hard it was to ring up the consultant, despite prompting from Monica and Frances. He found it irritating that a consultant could be seen visiting private patients on Sunday, but not public patients during the week when all the junior medical staff were doing the rounds. The final report is critical of the inability of *junior medical staff to make decisions without the registrar or consultant's approval* (Silent reference No 15 1998: 31).⁸³ Monica and Frances tell me that in many instances the junior doctors' insecurity can make a difference of 24 hours to patient discharge. *They are too scared to discharge the patient*, says Monica (Field notes 17/5/98). As a consequence this left the innovation exclusively in the hands of nursing.

Nursing resistance: playing 'dumb and ignorant'.

Despite the fact that the pathways were a nursing innovation, they were seen as something outside the ordinary ward routine. One morning at handover Heather notes to anyone who is interested, *Monica's on today doing whatever she does* (Field notes 28/4/98). A group around the table giggle. Pathways provide the opportunity for 'document by exception' and the opportunity to use a multi-disciplinary handover to identify variances. Heather's comment is not simply a lack of attention to the innovation, but a failure of the project team to introduce it fully and brief nurses on the political potential for the nursing profession of clinical pathways. Ideally the nurses should have been part of the decision-making and handover could have been used as the time to tackle the variances. In all my time on Mawson I did not see the project officer or nurse case managers go to handover—other than to up-date staff when a new pathway was ready for trial—nor was there any shared knowledge of the DRG LOS and its link to the pathways. Such information would have given nurses knowledge of discharge times, a prized piece of information in the nurse/doctor relationship.

Nurses on Mawson and in the outlier wards universally complained about the time that it took to put the clinical pathway variances onto Excelcare. This was seen to be taking time away

⁸³ Theoretically patients are discharged by the Consultant or Medical Registrar, not interns or junior medical officers.

from other work. Monica would show them how to manipulate the computer, often doing it for them. Robyn, a graduate nurse complained one morning that it had taken her an hour to bring the data up-to-date. She had at the time been working with an EN on the B-side of the ward. She felt cross at the time it took her and anxious about the fact that the EN had been left to do all the *real* work. *The EN probably thinks I'm not really working*, she notes. When I asked her if she thought that in the long run the clinical pathways would save time, she was undecided (Field notes 10/6/98). The issue now was the immediate interpersonal relationships between her and the EN and her own reputation for efficiency.

Despite universal claim that this additional documentation took too long, Monica and Frances could do this task in less than 4 minutes. Nurses were told that eventually documentation by variance would replace all other forms of documentation. Skepticism was the response, with a number of nurses arguing that their current documentation was precise and accurate and they were not going to risk simply ticking a box along with a host of other health professionals. My observation was that many nurses in other wards simply resisted through non-compliance or by acting dumb. This resistance is not evident in the final Report where nurse-related variances are low. This is partly because Monica and Frances did the work for them or the nurses did it when reminded.

When I interviewed Monica some time later she commented that in her view 'Unstable angina' was not a DRG for pathwaying since it is by definition 'unstable'. At this interview Monica admitted that she and Frances did all the outlier documentation and that nurses saw the project as just another imposition. It appears they met no-one's needs, nor was anyone fooled by the aim. One morning I observe Monica give a patient the education sheet saying this will give him the information to make his stay in hospital more comfortable. *Faster you mean*, is his reply (Field notes 17/5/98)!

Outright resistance from male nurses

While female nurses dragged their feet, the male nurses on Mawson were more openly hostile. The views of Tom and Andrew were communicated to the two case managers on a number of occasions particularly when they briefed ward staff on a new pathway or changes to existing pathways. ...*Maryanne, the Clinical Nurse, calls a ward meeting to discuss issues linked to problem-solving and the clinical pathways. Marilyn, Andrew and Tom did not go. Marilyn is told she will be briefed later in the week, but Maryanne steers clear of Andrew and Tom. Both Andrew and Tom make fun of the meeting, taking the notice off the kitchen door and generally sending it up. Andrew tells me with mock hurt that he has not been invited. Tom*

loudly offers to look after the patients while others attended the briefing sessions (Field notes 13/5/98). At other times these two male nurses hid in the utility room, saying to me as an aside that it was a waste of time. Monica admitted privately that she's glad these two male nurses won't come to the sessions as she finds their cynicism intimidating.

Ending one round of innovations and beginning the next

In July 1998 the clinical pathways program ceased and the case managers reverted to their previous roles. In January 1999 the hospital, through the initiatives of the Director of Nursing, received funding for a new round of innovations. On Mawson the Fast Track Surgery Project was implemented under the guise of an evidence-based medicine (EBM) project. This fourth innovation was directly under the control of the two senior cardiac surgeons attached to the ward. With the clinical pathways trial a failure, the Director of Nursing moved away from projects under the auspices of nursing to align the change process more closely with medical staff. When I asked her some years later how she accounted for the success of the Fast Track Surgery Project she indicated that at the time the hospital had been without a CEO and she had been in a position to select an array of projects she thought would work and to select key leaders in their field to bring about system change; she argued this was invariably the senior surgeon or consultant in the specialty. The senior cardiac surgeon was one such leader.

The fourth innovation: the Fast Track Surgery Project

The incentives built into the Medicare Agreements, along with the introduction of casemix have resulted in a number of hospitals implementing computer-based booking programs, in order to ensure that surgeons minimise theatre times, but also start their surgery on time. These computer-based programs measure set-up time, procedure start and finish time, the time the patient leaves the operating room and clean up time (Donnelly & Washwa 1999). They make a distinction between the overall time needed to manage the theatre and the individual time taken by each surgeon to perform the procedure. This can be useful data where surgeons performing on private patients need to be charged for theatre bookings. Careful analysis of this data also allows theatre managers to record the relationship between theatre utilisation times and clinical practices, such as when the anaesthetic is administered or what drug is used. This information is important for system changes.

Computerised systems also are in place for predicting the average time for procedures according to specialty. These systems allow timetabling that reduces the amount of overtime, and in all instances retains information on the time taken by individual surgeons to complete a

procedure. Such information enables the dubious capacity of benchmarking one surgeon against another and thereby the move towards standardisation, co-ordination and regularity of surgical procedures, reminiscent of Taylorist forms of capitalist production.

At Westernvale the computer product HASS-OT was installed in the theatres in the mid-1990s. This product carefully monitors starting and finishing times for all planned surgery for each surgical specialty, including delays, cancellations, returns to theatre, as well as allowing for efficient sequencing of theatre bookings. The time CABG patients spend undergoing surgery is considered important and in the typed notes from theatre the number of minutes taken to perform the graft is always noted. Delays presumably signal unforeseen events that might later explain complications. Recovery for the patient is about becoming independent as soon as possible. This does not start with getting out of bed, but with coming out of the anaesthetic and extubation. Timing for these two events are part of EBM, particularly the impact of technology and drug therapies in speeding or delaying the progress of the patient.

Questioning the medical evidence for speeding up the healing process

Over the last decade, particularly in the United States a number of clinical trials have been carried out to examine the effects of speeding up the surgical process (London, Shroyer, Coll, et al 1998). This has included research on early tracheal extubation, shorter-acting anaesthetic agents, reduced stays in ICU, earlier ambulating and discharge to home with follow-up care.⁸⁴ However, the relationship between 'new medical technologies' and time does not automatically lead to reduced LOS. Newer fast-acting drugs may reduce surgery time, but not impact on patient recovery times; or in the case of key-hole surgery, the time of the procedure may be lengthened, but the time in hospital shortened.⁸⁵ As a consequence some authors have concluded that that LOS is peculiar to the institution. This is shorthand for saying that the variation is due to differing clinical practice styles of the surgeons and the managerial practices of the hospital (Butterworth, James, Prielipp, et al 1998).

⁸⁴ For example, in a study conducted by London and colleagues, patients were extubated at 10 hours and monitored for the impact of this early extubation on time reaching Recovery, LOS and health outcomes 30 days and 6 months later, with no evidence of negative impact.

⁸⁵ For example, a study by Butterworth, James, Prielipp, et al (1998) found that the use of sufentanil rather than fentanyl was associated with a significant reduction of 1.9 hours for tracheal intubation, but had no effect on time spent in ICU or LOS. Similarly the use of intermediate-duration neuromuscular blocking drugs such as the long-acting pancuronium and the short-acting vecuronium, likewise did not impact on short- or long-term outcomes.

As a consequence Butterworth, James, Prielipp, et al (1998) hint that the purpose of EBM is to 'persuade' doctors to change their practice, leading to clinical protocols and standardisation of practices that have a primary aim of reducing costs. Time is a factor used to persuade doctors to this standardisation of practice; the assumption being that any reduction in time for patients must be efficacious, independently of patient comfort. More importantly a significant aspect of EBM is the assumption that it is independent of scientific management and managerial control (Dent 1998). Surgeons will change their practice if the medical and scientific evidence indicates the value of doing so; all else is regarded as interference with the patient-practitioner relationship. The Fast Track Surgery Project made claim to EBM, and is outlined below.

Nursing labour time and the Fast Track Surgery Project

Prior to the clinical pathway trial discussed in the first section of this chapter CABG (AN-DRG 289-291) patients on Mawson went directly to ICU following surgery and stayed there for 48 hours spending 8-10 days in hospital. The timing of their ICU stay was based on when they were extubated. During the clinical pathway trial this time in ICU was shortened to 24 hours. This proved difficult for nurses on Mawson given that many patients returned to the ward between 3pm and 6pm when often only five nursing staff were on duty. Monica tells me that this frequently meant one nurse was left to observe the patient, often without a monitor, where previously two nurses had worked together aided by the cardiac monitor. These patients needed 15 minute observations or effectively one-to-one nursing, although when they first arrived back on the ward it was usual for three nurses to attend to them for at least the first 40 minutes to ensure that they were awake, comfortable and all the various drips and drains were correctly attached and functioning properly. This meant that other patients on the ward were neglected, a point nurses complained about with regularity.

The Fast Track Surgery Project changed this organisation. Under the direction of two senior cardiac surgeons a randomised control trial was conducted with patients undergoing elective CABG and Valve surgery. This trial began in 1999 and went for six months. It commenced with the surgeons designing a clinical pathway for both the control and intervention patients. The control group received standard care, the intervention group a series of fast track measures. These patients attended the preadmission clinic, were admitted on the same-day as their surgery and spent fewer hours in ICU where they were extubated within 6 hours before returning to Mawson to a dedicated four bay room referred to as the 'Step-down unit'. Here two RNs cared for the four patients, ensuring early ambulation and transfer to the ward on day two and discharge two days later. The model of nursing used in the Step-down unit closely

resembles that of ICU where one nurse specialises one patient; except in this case it is one nurse to two patients and the nurses in the Step-down unit were expected to get the patient ambulating before transfer to a Step-down bed (Silent reference No 14: 2001). Patients from the control group returned from ICU 24 hours post-operatively and were nursed in the general cardiac ward (Silent reference No 14: 2001).

One of the outcomes of the trial, which employed randomised selection, was a readmission rate of 33% in the intervention group (see Table 8.3).⁸⁶ This is high, however it allowed the development of a protocol for selecting out suitable patients for the standardised program. The standardised Fast Track Surgery Project began in 2000 and went for twelve months. The results were assessed and it became standard practice for suitable patients. The results of the 6 month RCT Fast Track Surgery Project trial (1999) and the 12 months standardised Fast Track Surgery Project (2000) are outlined in Table 8.3.

Table 8.3 Time reduction for cardiac surgery following the Fast Track Surgery Project

Procedure/ results	Randomised Controlled Trial (6 months), 1999		Standardised Fast Track Surgery Project based on protocols (12 months), 2000	
	Intervention group N=6	Control group N=6	Intervention group N=36	Control group N= 52
Time in ICU	6.8 hours	30.3 hours	7.2 hours	22 hours
ICU intubation hours	4.7 hours	5.0 hours	5.8 hours	8.9 hours
Time in Step- Down Unit	14.3 hours		15.3 hours	
Post Op LOS in days	4.9 days	5.8 days	5.1 days	5.5 days
Total LOS in days	4.9 days	6.8 days	6.7 days	8.0 days
Readmission	33%	0	5.2%	9.6%

Data taken from Silent reference Nos 14 (2001) and 17 (2000).

A major improvement was the introduction of electronic discharge summaries to the patient's GP. In 100% of cases these were completed on the day of discharge (Silent reference No 14 2001), although nothing is said in the various reports about how the interns and medical officers working on Mawson ward were now able to complete these forms in one day, when previously it took them up to 3 weeks working overtime (Field notes 21/5/98). The project took up the Waiting List protocol designed for the previous clinical pathway project for

⁸⁶ A readmission is a return to hospital in under 28 days. See Chapter 5.

prospective patients on the waiting list. Their GPs were provided with 'best practice' guidelines for managing their patients while on the list, and the GPs were designated as the point of contact for information about the state of the lists (Silent reference No 14 2001). The waiting list protocol divided waiting time into three stages, with a list of tasks to be performed by the prospective patient. These are listed in Figure 8.2.

Figure 8.2 Preadmission service check list for Fast Track Surgery Project

1st stage	
Patient placed on waiting list.	Receive CABG booklet and Cardiac Surgery pathway. Receive package of information including history questionnaire. Appointment to education session. If unable to attend, may send loan video.
2nd Stage	
Preadmission Education Session	Held monthly
<u>Education session by:</u> Physiotherapist Registered Nurse from Mawson Heartbeat representative Social Worker (include surgical RMO/Intern).	Emotional issues; Explanation of operation booklet given; Cardiac Rehab program times and contact number; Rehabilitation following operation; Nursing History and assessment determine discharge destination; Patient understands expected discharged date; Teach Shave; Informed of requirement to attend preadmission clinical(Stage 4); Offer relaxation tape and community support.
Interpreter	If required.
Social work and OT referral including Aboriginal Health Liaison Unit.	If required.
Family accommodation and counselling.	Depending on needs, referral will be made.
Country and Interstate requirements	Depending on needs, referral will be made.
3rd Stage	
Surgeon decides who is to be operated on.	1 day to 1 week prior to surgery; List for the following week made Thursday night.
Patient informed of Surgery for next week	Given appointment for Stage 4 clinic.
Cease Aspirin	1 week prior to Surgery.

Taken from Silent reference No 15 (1998: 113).

Examining the evidence: a cost analysis

A cost analysis of the 12 month standardised Fast Track Surgery Project was conducted in 2000. This study evaluated the cost of 36 (9/27 valve/CABG) patients in the intervention group and 52 (14/38) in the control group treated between January and June 2000 (Silent reference No 17: 2000). The focus of the study was on cost minimisation and the assumption was that the health outcomes of both groups were similar. The difference in overall costs between both groups was \$1,490 per patient, with an average cost per patient for the control

group of \$11,675, and for the intervention group, \$10,185. Valve surgery ranged from \$16,559 to \$16,989 and CABG from \$8,060 to \$9,717 per patient. These costs include labour and equipment.

The major savings identified were in ICU hours. These are essentially nursing time costs. This was achieved by early extubation and transferring the patient to the newly established Step-down unit on Mawson on the same day. This meant that the intensity of nursing shifted from ICU to the Step-down unit on the ward. Nursing staff on Mawson were up-skilled to deal with sicker patients and to get them ambulating earlier, but without the same staffing levels as in ICU. Up-skilling occurred on the ward and through self-learning packages done in the nurses' own time, and through the appointment of a new CNC to the ward with considerable experience in ICU nursing. Such practices as up-skilling were part of the culture on Mawson as I outlined in Chapter 6. In discussion with nurses on the ward there was a high level of enthusiasm for the project because of the up-skilling involved, despite some criticisms at the tedium of the work. The financial savings in nursing costs are outlined in Table 8.4 below.

Table 8.4 Analysis of nursing costs: Fast Track Surgery Project

Costs	Intervention	Control
ICU	\$381 (7.2 hours)	\$1,442 (23.7 hours)
Nursing costs	\$1,531	\$1,324
Total	\$1,912	\$2,766
Difference	\$854	

Adapted from Silent reference No 17 (2000).

Some nurses noted that being restricted to the Step-down unit, a bay of four patients, for the entire eight hour shift was hard work, with little relief from the monitoring and mobilising of patients, in order to get them ready for transfer to an ordinary bed on the ward and eventual discharge. When nurses needed a break they were required to ask the ward coordinator to 'mind the patients' in order to leave the bay. They complained that there was little opportunity for private or social time with other professionals, since they were now permanently on 'show'. Nurses believed that they worked in conditions similar to ICU, but did not enjoy the associated breaks. In ICU nurses work one to one with a patient and take a break every two and-a-half hours for a full 30 minutes, alternating with the nurse attending to the patient next to them. Of course nurses in ICU will tell you that when they are busy they also do not take regular breaks. However in the Step-down unit it was not viable to leave four patients with one nurse for a quick trip to the toilet or a cup of tea.

Meanwhile back in ICU, nurses complained that they were being asked to wake patients up who were still very drowsy and they found this task difficult. Nurses also claimed that the

anesthetists were resisting altering the drug regime either because they did not agree with the new protocol, or did not want the extra work involved.⁸⁷ Monica cynically suggested that establishing a Step-down unit was about the cardiac surgeons maintaining control over their patients and nurses post-operatively. Patients in ICU come under the care of the ICU medical team, not their surgeon. Getting them back on the ward more quickly brings the patient back in under the surgeon's care and enables the surgeon to direct the nurses caring for these patients. Staff working on the ward with the intervention group, especially ENs, also noted an increase in pace. ENs were now required to take a full patient load and were up-skilled to do the same tasks as RNs, with the exception of dangerous drugs. They were also required to master the Excelcare product. Excelcare provided the mechanism for nurse managers to monitor the ENs' practice from a distance during this period of up-skilling.⁸⁸

Once the Fast Track Surgery Project was in place, Mawson returned to comprehensive nursing except for those rostered to the Step-down unit, where primary nursing was the model of care. On the other side of the ward was a four-bed bay 'Same-day surgery unit' for procedures such as insertion of pacemakers. Here one nurse worked alone doing an 8am to 5pm shift. Nurses can now be rostered to any of these units depending on their skill and qualifications. Arguments now are not about which model of nursing care is the most cost effective or conducive to patient care and worker satisfaction, because the models of care practised in each ward are now fragmented in order to speed up the production process. Since what is being produced are 'patients ready for discharge', this requires a range of nursing models of care. Ward staff must now be flexible in their approaches to models of care and accommodate the patient/product as they pass through the various stages of the process.

⁸⁷ This 'gossip' suggested to me that the protocol may have involved the use of faster, or shorter-acting anesthetic drugs. However I was unable to gain access to this data, despite requests, and in the publications on the project no change in drug regimes is mentioned. Under the funding guidelines the Commonwealth government requires detailed reporting of the processes of each project. These reports are made public in order that other hospitals have access to 'best practice' 'reforms'. As of 2003 none of the published reports on the Fast Track Surgery Project on the Commonwealths' web page indicate any changes in medical or surgical procedures or drug technologies (Silent reference Nos 14 2000).

⁸⁸ The regulatory framework for increased pay for ENs and RN Specialists did not eventuate until the 2001-2004 EB agreement when provision was made for advanced EN positions and Nurse Specialist positions for RNs (Level One). Nurse Specialists need to have post-graduate qualifications in a specialty such as cardiac care, engage in relevant research and show evidence of contributing to their own professional development (Australian Industrial Relations Commission 2001). While not all nurses on Mawson would achieve this re-classification and accompanying salary increase, presumably, as a result of the up-skilling that occurred with the Fast Track project, some would. The insertion of this classification into the career structure arises out of the realisation by the ANF that the various innovations have up-skilled and intensified the work, not just for those who are promoted beyond RN Level 1, but also for level 1. RNs and ENs on the ward.

Concluding discussion

In an interview with the Director of Nursing in 2003, she was adamant that no changes could occur on the wards unless the nurses supported them. The first innovation discussed in this chapter—the six clinical pathways—was one such change. Both nurses and doctors resisted the first clinical pathways project. Nurses' resistance was passive, although the male nurses on Mawson were more vocal in their criticism. Doctors for the most part acted as if the clinical pathways project did not exist. The potential for creating, interesting work and task re-unification for nurses was not understood by any of the players with the exception of the surgeons, and in the final analysis the computer technology could not handle the legal requirements of the documentation. It is not surprising that nurses rejected the six clinical pathways trial. Based on the principles of scientific management it divided patients between those on the trial and those not, and demanded that nurses and doctors re-arrange their schedules in order to progress these patients through the system in record time, without recognition that system-based variances such as the inappropriate opening hours of the Cath Lab would not change, and that it was unlikely that doctors would alter their schedules to suit bed managers.

The Fast Track Surgery Project was more successful, yet as I have suggested it brought the working time of nurses on Mawson ward more tightly in under the control of the cardiac surgeons and intensified their labour. This innovation also raises two issues for exploration; firstly what was the medical evidence produced and secondly is evidence-based medicine value-neutral, or intrinsically directed toward intensifying abstract work time similar to the strategies of scientific management? In this example my argument is that while EBM may have been a factor in reducing LOS, the most significant change introduced through the fast track innovation was the shift in the organisation of nursing work, under the directions of the cardiac surgeons. As I noted, a key requirement of the funding is detailed reporting of the change processes. To date, the only published material focuses on the up-skilling of nurses and the establishment of the Step-down unit. Both these have intensified nursing working time.

The Fast Track Surgery Project re-asserted medical dominance and power over the innovation process on Mawson ward. This was made possible when the Director of Nursing requested the cardiac surgeons take leadership of the change process and accordingly allocated funding to their project. In her view, they would not have taken up the challenge without the funding, but she knew that without them little system-based change could occur. For their part, the surgeons modified their objections to Day of Surgery Admissions, but there is no evidence of

any other alterations to medical practice, except that their own work presumably intensified as patients returned to the ward to the Step-down unit 18 hours earlier than previously.

However the Fast Track Surgery Project also brought these patients back under the control of the surgeons earlier than would be the case if they had spent a full 24 hours in ICU, where they would be under the control of the ICU medical team. The project also increased medical control over the work of interns, GPs, cardiac patients waiting on the list, and the nurses. Ward-based nurses welcomed the change strategy as it resulted in up-skilling, although this was coupled with increased tedium for those assigned to the Step-down unit, and for the ENs little by way of financial rewards. For the interns their day was increased in order to get the discharge summaries faxed to the GPs on the day of discharge. Even well paid professionals are subject to capitalist forms of domination and in some cases they may be subject to the tyranny of abstract time with more intensity than workers further down the class and status ladder.⁸⁹

Likewise for patients, the Waiting List protocol is a form of remote control. Just as the medieval church exercised control over the merchant class in this life and the next via the invention of Purgatory, medical consultants now extend their control into the homes of prospective patients and the clinics of general practitioners. This control is about time, about how to spend one's time productively on the waiting list and includes what rituals and activities to engage in, such as how to shave in preparation for same-day surgery and what medications to take up or cease. The ultimate outcome is not health, but reduced LOS following surgery—a purgatorial wait in disciplined and anxiety-provoking suspension.

When White and Willis (2002) suggest medical knowledge is not a science that stands free from the bias of its social, cultural, economic or political surroundings, they are suggesting that medical knowledge dominates all other modes of knowing. EBM enables medicine to re-assert its dominance. However, at the same time EBM ensures that the medical profession is incorporated into the state's 'reform' agenda. In the example outlined above, medicine re-asserted and extended its dominance over nursing, the interns, GPs and cardiac patients on waiting lists, but at the same time medicine met the political, bureaucratic and managerial agenda by increasing patient throughput and reducing LOS.

⁸⁹ Long hours of work (the Long Hours culture) are not peculiar to low paid, low status workers in the secondary labour market. Both Pocock et al (2001) commenting on Australia and Rutherford (2001) on Britain note the long hours worked by highly paid, high status workers in both the public and private sectors. Both studies indicate that high paid workers work longer hours partly as a result of their professional status and responsible autonomy, which may allow them control over the sequencing of tasks, but not the pace.

As techniques for organising time, the Cardiac Clinical Pathways Project and the Fast Track Surgery Project combine as a case study in the detailed mapping of linear time. Even procedures that are repetitive or cyclical are represented as linear and ordered in what has become known as 'seamless care'. This is not wholistic care that encompasses patients' social and emotional well-being, or uses medical technology to alleviate pain and suffering, but is a series of activities that operates without faltering, without wasted time, or the need to loop back and re-do procedures or check results. For patients this means a multiple number of carers as they undergo standardised procedures, from the anticipatory waiting list through to the 'day of surgery admission', the Step-down unit, onto the ward and out through the convalescent unit or the Hospital @ Home (H@H). In seamless care, relationships are transitory and instrumental. There is little evidence of how the patient's body heals quicker, or for that matter how the UOC: 'dealing with patient anxiety' is adequately accommodated. But perhaps the most important critique leveled at EBM is the assumption that all that is required to gain the necessary evidence to change practice is the randomised controlled trial. Controlling for a multiplicity of variables, such as who picks up the additional work, or what happens to patients who do not fit the protocols because of co-morbidities, is far more complex, particularly for hospitals such as Westernvale where the elective surgery rate is a low 18% (Silent reference No 7 1996). In the next chapter I explore the final innovation and case study dealing with patients with several co-morbidities and high rates of readmission.

CHAPTER NINE

EXTENDING THE TIME BETWEEN EPISODES OF CARE

Keep up a high esteem of time and everyday be more careful that you lose none of your time
(Richard Baxter cited in Weber [1967])

Introduction: Reducing readmissions; gendered care

This chapter explores two themes. The first outlines the fifth innovation—the Program Budget and Marginal Analysis (PBMA)—an exercise carried out at Westernvale in order to overcome the high rates of respiratory patient readmissions; the second theme explores gendered relationships to time. The PBMA study resulted in a reorganisation of the Nursing Respiratory Outreach Program on Hartley ward. The analysis points to the fact that control of an innovation process determines how a problem is defined, where the blame is apportioned and hence what constitutes a solution. As a case study the chapter illustrates that once again it is nurses—not the doctors—who must change their practices in order for the hospital to achieve Commonwealth and State benchmarks.

The introduction of the Respiratory Outreach Program was premised on the belief that underlying the high rates of patient readmissions were several community issues—specifically, the incompetence of local general practitioners, lack of locum services and the scarcity of community care services. The solutions include a range of collaborative agreements with local GPs and the re-organisation of the hospital’s Nursing Respiratory Outreach Program with a more systematic telephone hotline and follow-up service conducted by the nurses on Hartley. The aim of these innovations was to extend the time between admission and readmission for a group of patients with CAL (Chronic Airway Limitation Disease).

In the previous chapter I argued that doctors are able to partly resist scientific management through recourse to evidence-based medicine. In this chapter I illustrate how they bring together the managerial processes of PBMA and EBM to consolidate their decision-making power. In describing the shift in nursing work following the PBMA project I also illustrate the

different approaches to nursing employed by female and male nurses. I use these differences in style to argue that resistance to work intensification at ward level is often gendered, with male nurses more likely to take time to practice the 'nursing ideal' of care and emotional labour over domestic and task work. Male nurses appear to have what Marx referred to as disposable time (Postone 1996). This is an argument that goes against common assumptions about male nurses and gendered time use (Auster 1978; Game & Pringle 1983; Williams 1989; Okrainec 1990; Issacs & Poole 1996; Bittman & Lovejoy 1993, Bittman & Wajcmam 2000). My observations suggest that time use in nursing is stratified according to gender and seniority, not necessarily experience. By way of setting the scene the first section of the chapter outlines the ordinary everyday organisation of working time on Hartley ward.

Ordinary everyday organisation of time on Hartley

Life on Hartley Ward—an endocrine, dermatology and respiratory ward—at first sight appeared leisurely. Spending time on Hartley after Mawson gave me time to catch my breath, but I also found the shifts tedious; time did not fly. Hartley lacked the adrenaline of Mawson, but on the other hand nursing staff were more cohesive as a team and more organised in their resistance to work intensification, as evidenced in their daily check on the discrepancy between the Excelcare predictions and rostered staff outlined in Chapter 7. Several innovations were in progress on Hartley. Staff were involved in the cardiac clinical pathways innovation because there were always cardiac outliers in the ward. A 'stand-alone' day dermatology unit had recently been established; the transit lounge was up and running; and a senior nurse was working on research to understand why home oxygen patients kept being readmitted. Hartley also ran a telephone hotline on the weekends for patients with respiratory and diabetic conditions. Phone calls came direct to the ward and a nurse took the call in a small office behind the tearoom. This was unfortunate for the nurse, as it took her or him away from their normal patient load, and often required a lengthy telephone conversation together with documentation of the call.

Five single rooms were also put aside on Hartley for patients with MRSA, AIDs or TB. The patients with MRSA had a variety of other medical problems, but were nursed on Hartley because their infectious status required full barrier nursing. For example, one patient had had a CABG which became infected with MRSA and stayed on Hartley for the entire six months of my time on the wards.⁹⁰ No nursing home would take her, as she had had a stroke, was

⁹⁰ This patient would be a long stay outlier with a casemix reimbursement well below the high cost of care needed to keep her comfortable.

unable to move, and the wound was so deep that the wires used to bind her sternum could be seen when the wound dressing was taken down. This patient required morphine 30 minutes prior to a twice-daily wound dressing that often needed also to synchronise with a visit from the cardiac team. Achieving this was difficult and caused considerable hostilities between nursing staff and the cardiac surgeons.

Hartley also received a high number of outlier patients. A favourite activity of nurses, especially when there was a lull in the work, was to break into the A & E data-base to see how many patients were awaiting admission and predict which ones would be assigned to Hartley. Sometimes this gave the nurses time to pre-empt the admission with excuses, but most times it simply offered them the opportunity to work out which bed the new patient would occupy. Invariably these patients arrived on the ward minutes before the end of the shift, leaving the luckless nurse to work overtime.

The fifth innovation: the Program Budget and Marginal Analysis (PBMA) to reduce readmissions

Much of the work intensity on Hartley is determined by the seasons. Winter usually brings an increase in the caseload, simply because this is the time for the various strains of influenza and for conditions such as psoriasis, exacerbated by limited access to sunlight and sea water, to increase. Sometimes influenza hits the suburbs in August, at other times in October. Traces of these epidemics can be found in media reports of over-crowding in A & E and ambulances forced to bypass Westernvale in search of beds elsewhere (James 2001). The DHS provides additional funding for the winter months to deal with this increase in patient load.

Major illnesses dealt with on Hartley, that accelerate in winter, are Chronic Airflow Limitation (CAL), and its sub-set, Chronic Obstructive Airway Disease (COAD).⁹¹ Patients with these diseases might have several admissions to Hartley over the winter months in any one year. So well known are some individual patients that Bernice and Susan check the obituary page each day to see if any of their regulars discharged to Nursing Homes or Hostels

⁹¹ Chronic Airflow Limitation refers to a range of diseases such as chronic bronchitis and emphysema. In 1995 over 6,000 Australians died from these and related conditions making it the fourth highest cause of death, behind cancer, ischaemic heart disease and cerebrovascular disease (ABS 1997). Close to 1,800, or 4% of the total annual admissions a year for (CAL) enter Westernvale Hospital through its emergency department. Eighty five percent of these are at priority 3 or lower and need to be seen within 30 minutes (Silent reference No 6).

have died. Invariably they have and often messages of gratitude to the nurses on Hartley are included in the obituaries.

Regular patients are seen to engage in 'repeated bell-ringing behaviour' on the day of discharge suggesting that, contrary to popular opinion, not all consumers want to go home. How this bell-ringing behaviour is interpreted by nurses is illustrative of their understanding of patient anxiety and readmission rates. One afternoon I accompanied Virginia on the last three days of a seven-day rotation that saw us do a 'late-early-early' three-day shift. Virginia was a young nurse in her second year post-graduation. *A patient kept ringing the bell every few minutes. Virginia remained sweet-tempered throughout the shift, responding to the woman's requests, but at no time taking time out to chat to her or explore the underlying reasons for her behaviour. Following a grimace from me at yet another bell, Virginia commented in her quiet way that 'this woman is one of our regulars, she's going home tomorrow and lives by herself and is lonely. They do this when they're going home'* (Field notes 18/5/98).

The following day during our tea break, when I discussed the incident with Virginia, she suggested that the high figures for patient bells (fifty for the shift), was not a reflection of high patient acuity, or that the nurses had forgotten to do some little chore for the patient, but that a significant number were suffering from 'acopia'.⁹² These she defined as patients who needed a lot of attention and care not only because they were lonely and frightened and lived alone, but also because they were slowly but surely dying of oxygen starvation. As a consequence they contribute to Hartley's readmission rate. In 1997 over 32% of patients were readmitted within six months, and of these 42% were readmitted within 28 days, raising serious questions about the effectiveness of the respiratory services, including Westernvale's outreach program. This readmission rate is well outside the benchmark for quality and was the underlying rationale for a PBMA study which sought to identify and overcome the problem.⁹³

⁹² Unable to cope. This is an inadequate diagnosis. CAL patients may stay in hospital 6-8 days. Upon discharge they will still have a 10 day course of antibiotics to complete, plus other medication, and may still be disorientated and confused as well as suffering from oxygen limitation.

⁹³ See figure 5.3 in Chapter 5 for hospital performance indicators for quality.

The process of Program Budget and Marginal Analysis

PBMA is assumed to be a purchaser tool for use by health care planners and bureaucrats at State or Commonwealth level, not a tool for clinicians. Health authorities use the PBMA process to make decisions about priority setting, specifically what programs to fund or discontinue given budget limitations. The PBMA exercise was instituted at Westernvale by bureaucrats within the Department of Human Services, in concert with the senior hospital respiratory scientist, in an attempt to get the physicians to engage in the process of resource allocation. The process was 'sold' to them on the basis that once funding was allocated to the hospital by the Department of Human Service (DHS) there was no reason why the medical staff could not engage in their own resource allocation exercise to ascertain the most efficient and clinically sound approach to patient care, within the constraints of financial resources.

In funding the project the DHS hoped that the respiratory medical team would come to embrace the idea that, in order to achieve the desired quality outcome, doctors need more than a high degree of room to manoeuvre in clinical decision-making; they also need to take responsibility for how they spend funds. This requires them to move from a focus on the immediate, presenting patient to taking account of the impact of their resource utilisation decisions on subsequent patients needing treatment in that financial year. In blunt terms, doctors need to ration the resources across the financial year in order to avoid budget blow-out and to ensure patients presenting towards the end of the financial year were not disadvantaged. The value of the PBMA process is that it uses EBM to identify the most effective medical intervention for the largest population group for the lowest price.

As a process, PBMA requires a full description and costing of the range of suggested or currently funded programs. A comparison is then made between each program in order to identify which ones provide optimum care given the existing budget, or what marginal adjustments could be made to these existing activities to improve patient care to the largest population group (Silent reference no 21). The PBMA at Westernvale occurred in two phases. The first phase was carried out between 1996–1997 by members of the respiratory medical team. The second phase, carried out in 1998, extended the investigation and this overlapped with my time on Hartley.

The first PBMA Report: gathering the medical and financial evidence

The first PBMA study conducted in 1996–1997 was overseen by a steering committee made up of business managers, health economists, senior doctors and GP representatives from Westernvale and the surrounding region. No nurses were on the committee. The research team was headed by the senior medical scientist and provided information on a range of benchmarks for Chronic Airway Limitation (CAL) disease.⁹⁴ These included the average length of stay at Westernvale compared with the top 5% American hospitals with similar respiratory caseloads and other hospitals in Australia. Average LOS (ALOS) for patients with CAL at Westernvale (7.9 days) was longer than their American counterparts (5.9 days), however Westernvale's patient population was older, and the cost only one-fifth of the USA average (Silent reference No 13 1998). The average age of CAL patients at Westernvale was 72.9 years. This is only 3 months below the average life expectancy for Australian males in 1997 who smoked at some stage in their life (Silent reference No 13 1998). While no comment was made on this fact in the Report, it can be assumed that the majority of these patients are in the terminal stage of their disease.

Westernvale Hospital compared favourably with other hospitals in Australia (Silent reference No 13 1998). Despite this, during the twelve month period of the PBMA study, over 80% of admissions for CAL were emergency priority 1, 2 or 3 admissions.⁹⁵ Of these 33% (567) of the 1,696 patients were readmitted; 43% (242) of these occurring within a month (28 days) of discharge, and 75% within 90 days of discharge. Separations under AN-DRG-3 177 (a sub-set of CAL) had higher readmission figures. Approximately 40.1% were readmitted within 28 days and 80.3% within 90 days. The problem for Westernvale Hospital was that admissions cost more than the reimbursement received under the casemix category, AN-DRG3 177, and readmissions compounded the financial loss.

In 1997 patients admitted under AN-DRG3 177 cost Westernvale \$3,215 per episode of care, with the hospital receiving \$2,634 per DRG from the State, although the Commonwealth allocated \$3,014 (Commonwealth Department of Health and Aged Care 2001a). The Commonwealth and State ALOS for AN-DRG 177 in 1998 was 7.13 days. At Westernvale the ALOS was 8.94 days because the majority of these patients had co-morbidities, with 77%

⁹⁴ Includes chronic airway obstruction, pneumonia, respiratory failure and chronic asthma.

⁹⁵ See Chapter 5 for time benchmarks for Priority 1–3.

requiring special care and 10% care within the intensive care unit. Between December 1996 and June 1997 this left Westernvale Hospital with a short-fall of \$978,636 for all CAL patients, with the mean hospital costs ranging from \$3,428 for those receiving standard care, to \$19,814 for those in ICU. For the hospital to break even, patients would have to have a LOS of 5-6 days, 2 days less than the Commonwealth and State benchmark (Silent reference No 13 1998).

A further difficulty identified was the fact that the majority of patients at Westernvale had a host of co-morbidities with 48% having 6 or more, and for those admitted under AN-DRG 3 177, 29% had 6 or more co-morbidities. Forty-seven percent of these had either chronic ischaemic heart disease or hypertension, while another 30% had conditions such as osteoporosis, peptic ulcers and oesophageal reflux, thought to be a side-effect of corticosteroid treatment for CAL. While age and complications were part of the DRG reimbursement protocol, dealing with more than one co-morbidity is not directly factored into the casemix-funding model. Patients with co-morbidities increase their ALOS by 0.8 days for each additional co-morbidity with a mean increase of 1.67 days. Each readmission increased the time spent in hospital leaving Westernvale with a patient population with increasing LOS directly related to their frailty and co-morbidities.⁹⁶

Describing current practice

The next step in the PBMA process at Westernvale was to describe, cost and evaluate the effectiveness of current practices. This included identifying problems related to the acute state of patients on admission and the high rate of admissions and readmissions. There was some evidence that paramedics were giving inappropriate treatment to some patients and an indication that there was increased LOS as a result of differences in the treatment given by the five physicians and the inexperience of junior medical staff. Table 9.1 details these differences in doctors' discharge dates for patients with diseases categorised under the ICD-9 496, a sub-set of AN-DRG3 177 (CAL). The Report does not pinpoint the practice of any one physician, but does make a comment that there are differences in practice that warrant the establishment of standardised protocols.

⁹⁶ In 1996-1997 the South Australian Health Commission developed a severity adjustment index for all AN-DRGs-3 based on secondary diagnoses and procedures in an attempt to deal with increased LOS (Hindle, Degeling et al 1998). In 1997-1998 a further refinement was put in place. In the work done for the DHS the assumption was not that some hospitals were inefficient, but rather that some patients were sicker and that this accounted for longer length of stay.

Table 9.1 Differences in LOS of consultant physician for ICD-9 496, December 1st 1996 to November 31st 1997

Month	Doctor	Average Length of stay	Number of patients
December 1996	1	6.06	17
January 1997	1&2	8.88	17
February	2	8.08	18
March	3	8.41	17
April	4	7.05	22
May	3	7.43	21
June	1	7.17	16
July	1	7.17	24
August	2	8.06	36
September	2	8.21	42
October	1	7.83	30
November	5	7.50	18

Taken from Silent reference No 13 (1998).

In order to deal with these differences the Report recommended a state-wide hospital trial of patients with CAL to design standardised protocols for earlier discharge and the development of a clinical pathway to guide doctors treating these patients. However, in a later section, the Report notes that 'Physician consensus was that no change to the present system was required' (Silent reference No 13 1998: 40). Some five years later when I interviewed the senior scientist he agreed that this aspect of the Report was glossed over because of the threat it posed for the physicians; all of them claimed their practice was efficient and there was little if anything they could change. In their view the hospital had already achieved maximum technical efficiency; all that was now possible was an allocative response (Silent reference No 13 1998).

Generating and costing an allocative 'wish list'

The next step in the PBMA process is to generate two wish lists. The first list was an incremental 'wish list' of interventions to improve patient outcomes. The incremental wish lists represented additions to care that the team wanted that required more resources. In order to implement these interventions, other programs would have to be abandoned. At the top of the incremental 'wish list' was a rehabilitation program. Other items on the incremental wish list included additional staff, lung volume reduction surgery, improved liaisons with GPs,

increased vaccination, improved education for paramedics and enhanced discharge planning. For each of these items the cost was measured against the gains. The second list was a decremental 'wish list' of situations or programs the team wished to have in place, or were prepared to give up. The top two items in this list were reducing patient LOS, and unnecessary admissions. Other items on the decremental wish list included decrease in inappropriate use of home oxygen, modifications in care, outpatient follow-up, and opportunities to perform bronchoscopies.

The PBMA process assumes that the eventual solution will be within the existing budget, but it must also be one that improves patient outcomes. Hence determining the desired change strategy may be an exercise in pragmatic, but ethical choices. For example in the PBMA study done at Westernvale it was estimated that the cost of a rehabilitation unit was equivalent to reducing patient LOS from 8 to 4 days and could only be paid for if patient admissions were reduced by 40% (Silent reference No 13 1998). Given that it was not possible to send these patients home in 4 days this item on the wish list was impractical. The PBMA process must lead to improvements in care within the constraints of the budget and the principles of equity, but it may not necessarily be the most ideal outcome (Silent reference No 13 1998). Getting the doctors to focus on one solution became a key problem with the ongoing project and one the senior scientist later admitted was impossible to achieve. The doctors would not engage in the process of rationalisation and simply wanted to do everything identified on the incremental wish list. They were in his words: *still bound up in the Hippocratic Oath*, and the attempts of the DHS to engage these doctors in resource allocation came to a stalemate.

The PBMA study: Phase two

The second PBMA investigation, funded in 1998, this time by the Commonwealth through money obtained by the Director of Nursing, reiterated much of the data presented in the 1996-1997 Report. Seasonal variations were noted, with once again CAL admissions peaking from July to October, attributed to late winter influenza, failure to immunise or a secondary reaction to immunisation. However the second Report dismissed the significance of the seasonal and medical influences on increases in LOS, noting that nursing costs are the most significant. Indeed they are, but nursing costs are dependent on LOS and patient acuity, which can only be explained by the severity of the patient's illness, the date the doctor discharges the patient, or the lack of availability of nursing home beds or support services in the community.

The Report notes that the medical variance in LOS is due to the three monthly rotations of interns. Presumably this is a result of their limited experience. The possibility that the practices of the consultants impacts on LOS is dismissed, just as is the possibility that the outgoing intern might also fail to adequately communicate with the in-coming intern.⁹⁷ It is not the responsibility of interns to discharge patients, but that of the consultant.⁹⁸

Auditing medical decision-making

Further data was generated by an external reviewer who was a respiratory physician. This doctor conducted a retrospective audit of the case notes of 74 patients with a primary diagnosis of CAL who had been admitted and then subsequently readmitted, with the audit question being ‘whether or not he would send his mother to the admitting physician?’. The results of this audit indicated that all but two admissions were appropriate. Only 20% of patients were considered to have had too long a stay and 9.3% too short a stay. The majority of those whose stay was too long were awaiting nursing home accommodation, home care support or a procedure (Silent reference No 18 1998: 40). In short, each admission and readmission was deemed appropriate, leading to the conclusion that in order to reduce readmissions, care in the community needed to be addressed. This was identified as the patient’s GP, and the range of domicilliary services available such as meals-on-wheels, visits by the district nurses, home help or a nursing home bed.

A further hypothesis of the PBMA project team was that admissions and discharge times directly affected patients’ access to their local GP. Over 54% of admission to Westernvale of patients with CAL occur outside the standard GP working hours of 9am–5pm. If GPs could see patients outside standard working hours, many admissions could be avoided. The team believed that the reason GPs no longer worked outside the standard 9am–5pm was due to the feminisation of this workforce and the need for women GPs to work part-time; and that the reason patients did not use locum services outside standard working hours was due to the locum’s lack of familiarity with the cornucopia of drugs typical of patients with CAL with all

⁹⁷ According to the chief scientist, interns communicate to each other the various peccadilloes of the consultants rather than the severity of their patients.

⁹⁸ Failure to deal with the training relationship between consultants and interns was a consistent problem at Westernvale and one of the underlying issues of adverse events. In *The Customer First Report* recommendations were made for a series of meetings with VMOs to deal with the difficulties associated with the interns’ lack of experience, but the project was abandoned as hospital management found it impossible to get medical staff to meet on this issue (Silent reference No 11 1997).

their co-morbidities. Over 50% of GPs are now women and many work part-time (Harris 2001).

Further, in my first interview with the senior scientist, he indicated that one of the difficulties was that many discharged patients rang their doctor incessantly on return to home, but the GPs refused to do home visits, regarding these patients as overly anxious and not really in need of medical care. Or conversely, these patients are too overwhelming for GPs, who cannot think of what else to prescribe other than an ambulance (Field notes 7/6/98). The qualitative data supports this, suggesting that while GP hours of work are significant, as is the lack of locum services, GP competence to manage the condition and re-assure the patient, as well as patients' lack of confidence in their GP, are significant issues. Patients with co-morbidities take more than five minutes to treat. GP consultations that go beyond 5 minutes are seen as not cost efficient and patients are directed to go to Westernvale for care.

This view was confirmed by the patients themselves. Between April and June 1998 qualitative interviews were conducted with 25 inpatients, 4 carers and 2 GPs by Marilyn, an experienced respiratory nurse. The major focus of the interview was on the social support available to these clients once they were discharged. Typically these patients knew little about their condition, valued the visits of the respiratory nurse and felt their GP could do little for them. They reported high anxiety when they were not well, which was invariably after hours or at night when their GP was not available and they indicated they felt safe in hospital at such times since many lived alone (Silent reference No 18 1998: 40-51).

Commentary on the reports

The failure of the PBMA research team to take account of the impact of seasonal variations on doctors' practice is intriguing. During the late winter months of July and August in 1998 I had attended the ANF union meetings and heard nurses from Hartley complain bitterly of the shortage of beds. While on the wards I observed that these nurses were exhausted, and often over morning tea they would bemoan the fact that the little niceties for their patients had to be abandoned (Field notes 21/6/98). These events were retold to me with expressions of distress, since many nurses interpret their ability to give quality care as part of the deep structure of their professional selves (Harford, Savage & Witz 1997). When they are unable to do these personalised tasks some seek solutions in part-time work or leave the profession.

The following year, in late June, when I visited the ward for morning tea the nurses spoke again of gearing up for the intense winter months ahead. Nurses admit that the intensity of the

load impacts on their care, yet doctors appeared not to allow the connection to emerge, but rather attempted to identify the problem elsewhere. This is consistent with British research that indicates that re-structuring of the work in hospitals can be hampered by medical staff refusing to see their own practices impacting on quality or productivity (Dent 1998).⁹⁹ In Table 9.2 above, LOS increases in the winter months of August and September when the number of patients increases, suggesting a link between work intensity and quality of care although the increases in LOS for January and March suggests other factors may also impact on LOS.

In summing up, the medical researchers admitted during interview that many of these clients were elderly, had a number of co-morbidities and were in effect dying. Hospital was the most appropriate place for them during these acute episodes. They argued that few gains could be made through earlier discharge or keeping these patients in hospital longer during each acute event. Consistent with the PBMA study, which assumes new initiatives cannot be funded, existing projects are tinkered with to bring about marginal gains. Consequently the only recommendation seen as viable was to revamp the established Nursing Respiratory Outreach Program. Support for this came from a similar program in NSW where the readmission rate of 28% for CAL patients was reduced by 50% as a result of a visit from a Respiratory Outreach nurse within 24 hours of discharge (Brown & Caplan 1997).

The Nursing Respiratory Outreach Program

The existing outreach data-base for the Nursing Respiratory Outreach Program with its hundreds of patients was abandoned and the program effectively started again. Only patients newly admitted to Hartley and recently discharged were now put on the data-base and the focus was on keeping these people at home for at least 28 days. This was done through an intensive program of visits by the respiratory nurse while in hospital and then within 24 hours of discharge. The home oxygen program remained in place, but a 24 hour, seven day a week, telephone hotline was established. Discharged patients were able to ring the nurse when they became anxious and receive a visit from a nurse within 24 hours for reassurance, additional education and training in use of the oxygen or other therapies.

⁹⁹ Despite the Report noting that each readmission resulted in increased LOS, the argument was that keeping sick patients in hospital additional days was not seen as significant in reducing subsequent ALOS or readmissions. What was significant was the patient's ongoing care. Patients transferred to convalescent units, rather than their home had reduced readmission rates (18.2%/28.4%), while patients discharged to private convalescent units compared more favourably than with those going to public facilities (34%/41.7%) (Silent reference No 18 1998).

The introduction of the telephone hotline had not been identified as an option in the various PBMA studies published by Westernvale, nor had it been part of any wish lists; yet it became a central component of the program. No evidence-based research was provided to support its introduction in any publications in Westernvale's reports. It was however a favorite topic of the medical scientist in the ward who discussed with me on several occasions a similar project within the British National Health Service where telephone hotlines were being trialled (Crouch & Dale 1998). In the 2003 interview he admitted that it was his decision and one the medical research team had little input into; it was the only area where he could instigate any change, given medical resistance to the evidence identified in the PBMA study.¹⁰⁰

No additional training was provided for nurses on Hartley ward or for those who conducted the home visits. Specialist training for nursing staff in the effective use of telephone hotlines is still in its infancy and in a study conducted by Crouch & Dale (1998), they note that what is not taken into account is the additional work, skills and training required. Even where computerised decision support tools, based on clinical pathways, are used to guide nurses in the advice they give patients, there is agreement that this is specialist work requiring additional training. One nurse at Westernvale with extensive experience in home visits was Muriel. I accompanied Muriel one day in the first few months of this new project. Muriel had worked on the Nursing Respiratory Outreach Program for several years; she had developed the previous data-base, established the benchmark of 12 patient visits a day and designed the protocols for efficient travel time, although she was not part of the PBMA research team, (Sonia, the CNC, was the only nurse on this team). An account of my day with Muriel is outlined below.

Muriel: Nursing Respiratory Outreach visits.

Muriel rang early. I was to be at her office at around 7.30am as she would be setting off at 9am... she tells me she now only visits patients who are recently discharged and that this is a new development resulting from the PBMA study. When I arrive at her office Muriel is organising the patient visits in the most efficient sequence in order to reduce travelling time. She rang each patient to tell them her predicted arrival time.

¹⁰⁰ Telephone hotlines have become a key aspect in controlling patients in the NHS through *NHS Direct* (Crouch & Dale 1998), and in those health services where legislation makes it impossible to introduce 'perverse incentives' that encourage patients to contact their GP before presenting at A & E. For example in Ireland 'perverse incentives' have been introduced that financially penalise patients who do not contact their GP before presenting at A & E (Murphy, Leonard, Plunkett, Bury, Lynam, Smith & Gibney.1997). Research suggests that where these are used there is a reduction in the use of Ambulance Services; presentations at A & E departments; and out of hours visits to GPs (Dale, Williams & Crouch 1998; Crouch & Dale 1998).

While in the car she tells me she also runs a support group once a month and assists the respiratory medical staff two mornings a week during clinic sessions. Muriel manages the outreach program with another nurse between 8am and 4.30pm each day. One of them is always available for the telephone hotline, but not on the weekends when other nursing staff on Hartley must do this task. Most afternoons Muriel leaves at around 4pm, writing up her case notes at home. Last year she raised \$4000 through cake stalls and other social activities that paid for nursing staff to accompany a group of patients on home oxygen support to go on a holiday. This she did in her own time.

Muriel said that not many recently discharged patients have used the telephone hotline as yet, although all patients offered the service have agreed to it. She visits them three times while they are in hospital for about 15 to 25 minutes to educate them in correct puffer use, ventolin and oxygen techniques. She then visits them within 2-3 days of discharge and then 2 weeks later and then one month post-discharge and then only if they ring the hotline. She says that hopefully this gets them past the 28 days readmission deadline.

The patient quota is 12, but Muriel leaves contacting the last four until later in the day. She does not expect to get through her list, but in any case does not want the later patients on the list waiting for her all day. She tells me that if she has time she will ring them using her mobile. ...any more than seven patients would mean overtime and no lunch break. Once in the car Muriel says that under the old program she initially visited each patient once a fortnight, then it became once a month, once every 6 weeks and then once every 3 months and 'then it was hopeless'. The case load was several hundred before it was abandoned.

Today she has carefully constructed our visiting schedule so that we travel within a confined set of suburbs which saw us slowly, but efficiently weaving our way back towards Westernvale as the day progressed. She says that achieving this efficiency is now a much more complex task than was previously the case when several hundred names were on the data-base and she could pick and choose those she visited. This current set of visits must only pick up patients discharged within the last month. It is not a stable data-base, but one that is now constantly changing as patients drop off after a month, or are added following discharge, or make a phone call to the hotline and request a visit.

Instrumental care in the Respiratory Outreach Program

We arrive at the first patient's house at around 10am and he offers us a drink. Muriel takes out the hotline education sheet. The sheet has the name of the patient, the various dates

Muriel has visited him in hospital, plus the time taken to deliver the education material. It also has a set of questions to do with knowledge of medications, social isolation and home help along with knowledge of oxygen. Apparently the senior researcher for the PBMA study designed the forms. Muriel is scrupulous in filling out each box and noting the time taken for each visit and task. She does not know why the time for each task has to be recorded, but appears to diligently complete each question.

The first patient has several drugs as well as puffers and nebuliser. Muriel checks to see if the man understands what each tablet is for, the dosage and whether or not he has sufficient antibiotics. Apparently in many cases these patients keep scripts from their doctor and begin to treat themselves before medical confirmation in order to nip the respiratory infection in the bud. This is standard practice and when we get back into the car Muriel tells me that she has obtained a doctor's script before leaving the hospital for the next patient on her list. A key idea of the newly revamped outreach program is to inform the patient's GP, but Muriel says she does not let the GPs know when she visits a sick patient, because she can't think what the GP can do—it's just as easy to get a script from the hospital consultant.

She also checks that each patient has a sufficient supply of tablets until their next visit to their local chemist or GP. This is likely to be irregular given that a number of them require portable oxygen. The patients on oxygen have cords long enough to allow them to roam around the house and Muriel makes sure all this equipment is in order. (At the third patient we visit, the woman has a spare room where she makes porcelain dolls. She didn't look as though she had any energy to do this; however Muriel still ensures that the cord can reach into dolls' room).

The second patient was not on oxygen but had had pleurisy and CAL. Muriel goes through the education questions, which are designed as a tick-a-box nursing assessment form. At several points in the conversation the patient's wife butts in with ironic asides. There is some discussion between Muriel and the patient about whether or not to get influenza tablets this winter, but Muriel tells the man the respiratory consultants are against this as many patients finish up in hospital two to three weeks later with a bout of influenza. Later in the car she adds.. "and hence cost the hospital more money". Muriel checks the patient's ventolin and nebuliser and sees that it is not working. He is leaving it on for 15 minutes. She reminds him that the ventolin is expelled within 7 to 8 minutes so that what then comes through is salty water which acts against the ventolin.

Muriel also goes through his medication and gets him to repeat the signs and symptoms which tell him when he should come to hospital. Both the patient and his wife reveal that during that week they had been lying in bed awake for several hours wondering whether or not to ring for an ambulance to go to hospital. Muriel rehearses the situation and coaches them on when to go, and when to merely maintain the oxygen. Finally, she advises them to have their nebuliser checked. It is clear that the wife as a carer needs some support, although this is not given until she walks with us to the gate. She has lost weight and was not feeling well.

Our third patient is a woman my own age who has been refused a transplant. Her ex-husband is there and is very solicitous. She says repeatedly to us, 'They wasted my time. You know what people are like, us people on oxygen – we have so little time'. Muriel checks her tablets, ventolin and nebuliser, but the woman is knowledgeable about her medications. At the next stop the patient's three daughters live close by and bath him every day. He has not been visited in the last 9 months by the company that provide the necessary oxygen equipment, despite the fact that they are supposed to come every three months. Muriel rings the company on her mobile and tells them to come that week and bring him 3 pairs of nasal spectacles. The fifth patient has his nebuliser checked. He is 87 years and weighs 46kgs. No one is overweight, given the energy required of them to breathe; although at our first visit Muriel bluntly told the patient to lose weight.

While we have lunch Muriel talks about patients being poor and isolated and asks herself aloud if her endeavours are keeping people out of hospital. Patient six, a woman living with her brother, keeps the TV on during our visit. Muriel notices that her oxygen equipment is faulty and takes some time to fix it. Cylinders are delivered monthly and patients can apply to Westernvale for quarterly rebates on their electricity bill given the added cost of home oxygen. Muriel shows the patient's brother how to fix the portable oxygen and talks to the woman about her attempts to quit smoking. She also gives this patient a diary to take to her GP in order to record her blood gas levels and other significant facts. This provides useful data when patients attend outpatient clinics or are admitted through the emergency department. The last patient for the day had been discharged two days earlier. This patient is well known to Muriel. She nursed his wife six years previously. The man is frail, but says he does not yet need home help or meals-on-wheels and appears to be keeping his garden well weeded and flourishing.

As we make our way home Muriel does not speak with any bitterness about having to change the Respiratory Outreach Program from one where she visited a range of patients who had been in hospital over the past few years to those who had been discharged within the last 28

days. For her the problem of readmissions is more about social isolation and poverty, than patients' knowledge about their illness. In her view CAL patients do not use their air-conditioner in summer or their heater in winter because they are poor. As a consequence they do not get out of bed, do not eat and do not get any exercise. She wistfully hopes the visits will reduce readmission rates (Field notes 12/7/99).

Muriel's visits to CAL patients were brief; rarely more than 30 minutes. The information was given and all the forms completed although we did not reach our quota for the day. Observing Muriel during her outreach visits also accorded me the opportunity to reflect on the gender differences in approaches to resistance I observed at Westernvale. I found her style different from a previous outreach visit with Matthew, a male RN on Hartley. Male nurses appeared to offer more resistance than their female counterparts to meeting the required benchmarks; and this is explored in the next section.

Organised and individual resistance: a gendered analysis

On Hartley ward there was a strong union presence. Union posters were plastered on the tea-room door and around the nurses' station for all to see. Bernice and Susan, the two union representatives regularly attended the monthly union meetings and while I was on the ward often spontaneous discussions would break out about the forthcoming EB campaign. Between 1999 and 2001 nurses on Hartley were key players in industrial action taken by the ANF. Once in 1999, when the hospital management closed a ward adjacent to Hartley they mounted a picket line for five days and in 2001 in response to the hospital's failure to maintain the EB agreement on staffing according to Excelcare, they engaged in whistle-blowing activities and work-to-rule.

I raise these issues of well-organised and collective resistance by a predominantly female staff on Hartley in order to contrast them with the behaviour of the three male nurses. These men spent more time with patients and referred more patients to allied health professionals. This meant that often some of their domestic tasks were left to other staff, but it would be incorrect to say these men shirked duties or were lazy. Their behaviour is best outlined in the three vignettes outlined below. The first deals with Luke's work on the ward, the second with Matthew's nursing care performed as part of the Nursing Respiratory Outreach Program and the brief account is on a male EN, Tyson.

Male nursing: choosing the better part

Luke was in his late forties and had only been nursing for the last three years. During my time on the ward I spent three days accompanying him, including one shift of night duty. My first shift with Luke was a 'late'. He was working beds 16 to 22 accompanied by Tyson, the male EN. *Luke began the shift by introducing himself to the six patients and telling them he was going to look after them. He spent several minutes talking to each patient, sitting by their bedside as they told their story. He appeared at ease touching and holding hands with either male or female patients* (Field notes 25/4/98). On another occasion he excused himself, telling a woman that he could not listen now as he was behind in his work. I was not used to this direct, but gentle approach. Until now I had observed that most nurses controlled the pace by standing while talking to patients or doing all that needed to be done in the room while the patient had the thermometer in their mouth. Where this was not possible and patients had their mouths free to talk, nurses controlled the topic of conversation backing out of the room while the patient talked. Luke appeared to be comfortable spending time talking to patients, but was also able to withdraw from these conversations with non-offensive assertiveness.

On the morning shift following the usual morning tasks of bed making, washes and drugs *Luke dropped in to talk to a young women with pneumonia. She had five children; her husband was unemployed; and she had spent two weeks at home before her husband had called a doctor. The conversation ranged over a number of problems the woman was experiencing. Luke responded by coaching her on how to raise these issues with the medical team who, the woman claimed, were only interested in an abnormality found in her throat and the pneumonia. I sensed that the patient was disclosing intimate details about her marriage and decide to leave* (Field notes 24/4/98).

Passing the nursing station I overheard Judith, the coordinator, and Bernice, Virginia and Susan discussing which staff would be allocated to the first morning tea rotation. Bernice suggested that Luke should be given the first break; Susan offered to pick up his work for him. This latter suggestion is not followed through; rather, Luke is given the second tea break. As Bernice notes, *He's never on time, if we put him on the first shift we'll all be waiting until 12 o'clock for a cup of tea, better give him the second break* (Field notes 24/4/98). There is agreement on this and the roster is organised accordingly. As the weeks progress I notice this is a pattern. He is rarely asked what tea break he wants; rather, the coordinator says in passing, *Luke I'll put you on the second tea break?* (Field notes 24/4/98). Since he is an easy-going fellow, and appears unaware that the female staff are 'organising him', he always agrees to these suggestions.

As the shift progresses I notice we are running late and the female EN from the other bay is picking up many of Luke's tasks. This includes alerting the coordinator to the fact that a frail woman with chronic diarrhoea needs a medication order. I realise at this point that while Luke is attentive, there are issues he is missing which the EN is passing directly to the coordinator or doing herself. In later conversations with female nurses on the ward there is an agreement that Luke is a *good and caring nurse*, but he takes too long and gets too involved with the patients. Nothing is said about the fact that the female EN appears to have done most of his mundane work such as responding to bells, giving patients ventolin or assisting them to the toilet. This is a different view from that taken by the nurses on the cardiac ward where team nursing is the model of care. There female nurses, especially the EN claim that male nurses avoid the dirty work, dividing it up in such a way that it is left to the ENs to do.

Young masculinity predicting the needs of others

The second vignette involves Matthew and his work on the Nursing Respiratory Outreach Program. Matthew had done nursing as a mature age student and had been nursing for three years. He had recently started post-graduate studies in respiratory health and it was this that had motivated Sonia, the CNC, to appoint him on a part-time basis to the Outreach Program. Matthew worked two shifts a week from 8am-5pm in the program, but had yet to reach the target of 12 patients without working overtime. He said he did not mind doing so since this work allowed him to be his own boss. The day I accompanied Matthew I arrived at his office just before 8am. Muriel was briefing him for the day telling him to do a full day of visits and to return at around 3.30pm to write up the day's work.

Matthew takes down the names and telephone numbers of four former patients, telling me he is constructing a route to maximise time and save petrol. Following this he rang each patient to find out if they would be home; if it was convenient to visit; or to tell them he was on his way; what time he thought he would arrive; how he was dressed; the colour of his car; and the fact that I was with him. He says to me that these people live alone and are frightened and need to know who it is who is visiting them. During this conversation an emergency call came through from a client he had seen the day before. This client was still having trouble with his home oxygen and wants Matthew to return. Matthew re-rings the clients to alter the time, saying he will be late because of an emergency visit and re-arranges the schedule. He tells me he likes the patients to have a general idea of when he is coming so they do not spend their day waiting. It is not until much later that I recall that he has only rung 4 clients, although the daily quota is 12.

On our way out he collects the medical mobile phone as a safety measure so that the hospital can call him at any time, hands in his work-sheet to the CNC, picks up his own car and we are off. He receives a petrol allowance, but no reimbursement for wear and tear on his car. The first patient, Molly, is in a nursing hostel; she has CREST syndrome and is terminally ill. Matthew spends time reading her case notes, which indicate she is depressed and then about half an hour talking to her, getting her to practise deep breathing, an exercise that is very painful for the woman. He gently suggests that she allow herself to have morphine for the pain. He circles the issue of morphine several times, like a friendly albatross, coming back to it until he is sure the woman understands the need to allow herself to take it. The Director of Nursing at the hostel had asked him to do this. The woman is irritable and resistant and chides him for being a male and not understanding women's issues. Matthew listens, but appears to take no offence. He makes a brief report to the Director of Nursing, packs to leave, then remembers that he promised to report back to Molly his conversation with the Director of Nursing. He does this. The entire visit had taken an hour.

We drive on to the next patient, an Italian woman in the care of her daughter, Maria. The daughter appears to have a package of home care for her mother, invalid sister and a daughter with developmental delay, so is not in need of Matthew's additional help; however, Matthew stays for half-an-hour's 'social' chat with Maria. We then move on to Bill. This is the man who had rung in earlier in the morning. His home oxygen is not giving him the same relief as it did in hospital and we spend more than hour with this patient. Later in the car Matthew tells me this is a common experience and may well be partly a matter of anxiety. This visit takes an hour. Bill remains frustrated and angry and accuses Matthew several times of not listening to him. He feels he is not getting any oxygen. Matthew circles the issues again and again, but to no avail. On the way out Matthew says he suspects Bill's wife will ring again tomorrow, but the man has used up his quota of visits.

We stop at the Pizza Hut restaurant for a quick lunch. It is now 2.10 pm and our first stop and drink for the day. The last stop is to a man no longer part of Matthew's list. It's clear the couple are glad to see him. The patient, Bernie, has a book on war games to give Matthew. Apparently on a previous visit they discovered a mutual interest. At one point Bernie is close to tears. Matthew notices this too and deals with this by telling him how he is using him as an example to teach some of the first year nursing students. This seems to cheer Bernie up. As he talks with Bernie, Matthew waits for him to finish his sentences. I've noticed these patients, short of breath, often take a while to get the whole idea out. Matthew doesn't interrupt or finish the sentence. I feel an excruciating tension as Bernie struggles through his sentences between gasps for air. For Matthew the conversation appears easy with Bernie talking about his health and social life. This is the last visit for the day. As we drive in, Matthew tells me he

cannot lie about the number of visits, but he has not reached the quota of twelve. Muriel apparently always does.

Matthew tells me he does not want to get into the habit of lying, knows he will get into trouble the next day when the statistic book is checked because he will be seen to have poor time management. His final task is to complete the paper work. There is a tick-a-box form that must be filled in for each patient. I'm alarmed, as he has not done this during our visits. I assume I've been a distraction.

He hands me the form and I am surprised to see that for each patient I can fill in the boxes. I rattle off the answers realising that, behind each visit, the conversation ranged over health related as well as social and emotional issues. These visits felt like social calls between a young man who knew these patients from their stay on the ward; yet it had also been a nursing assessment. His final comments are a reflection on readmissions: 'Hospital is a quick fix for patients desperately in need of air. What is COAD other than anxiety generated by loneliness?' Such visits of course require time. A comparison of time efficiencies for Muriel and Matthew is provided in Table 9.2. As the table illustrates, Matthew takes up to an hour with each patient, but his route is less efficient with just under three hours spent travelling to see 4 patients in eight hours. Muriel spent 30 minutes with each patient and just over three hours travelling, but saw 7 patients in seven hours.

Table 9.2 Comparison of consultation times for patient outreach visits

Muriel	Consult time	Travel time	Matthew	Consult time	Travel time
Westernvale		45 minutes	Westernvale		45 minutes
Patient 1	10.00- 10.30	15 minutes	Patient 1	10.00- 11.00	30 minutes
Patient 2	10.45- 11.15	15 minutes	Patient 2	11.30- 12.00	30 minutes
Patient 3	11.30- 12.00	15 minutes	Patient 3	12.00- 1.30	40 minutes
Patient 4	12.15- 2.45	15 minutes			
Lunch	1. 00- 1.30	15 minutes	Lunch	2.10 - 3.10	15 minutes
Patient 5	1. 45- 2.15	15 minutes	Patient 4	3.25 - 4.20	10 minutes
Patient 6	2. 30- 2.45	15 minutes			
Patient 7	3. 00- 3.15	35 minutes			
Return to Westernvale	3.50			4.50	
Total time	3 hours and 30 hours	3 hours and 5 minutes		3 hours and 55 minutes hours	2 hours and 50 minutes

Enrolled Male Nurses: gender versus status

The third male nurse on Mawson was an EN, called Tyson. He did much of the detailed nursing tasks and could often be seen picking up after female RNs who had got behind in

their work or caught with a doctor. Tyson also had a reputation for caring for elderly demented patients, particularly the males, in a way that was respectful, firm and time-consuming. While other staff would mill around the nurses' station for a gossip, Tyson would take care of some older man or woman, spending an inordinate amount of time with them. Invariably when there was a wandering patient Tyson would be called to deal with them. His skill and willingness to do these tasks separated him out, both in terms of preparedness to do the work and in the fact that as a consequence he rarely had time to chat at the nurse's station.

Male nurses theorising themselves

The behaviour of these men intrigued me—so much so that I asked them to meet with me on a number of occasions to gain some insight into how they interpreted their work. All three of them made claims that the literature on male nurses was out-of-date, and offensively stereotypical (Auster 1978; Game & Pringle 1983; Williams 1989; Okrainec 1990; Issacs & Poole 1996). They objected to what they defined as a biased account of male nurses linked to traditional sex role theory; specifically, a flight from the dirty and emotional work (Williams 1989). They claimed that junior female nurses have abandoned much of the emotional work and labour for task-orientated nursing in the face of increased workloads and little opportunity for exercising autonomy. In their view what spare time remained after the clinical and routine tasks were completed, female nurses spend chatting amongst themselves. Male nurses engage in emotional work more readily because they are excluded from women's cultural pursuits on the ward such as gossiping about family, children, husbands and sex. Secondly, men bring to nursing a male sense of 'paternal responsibility for the household' particularly to patients under their care. This means that they focus on the psycho-social issues in order to more efficiently get to the heart of the matter.

This sense of male responsibility for those in their care also means exercising their personal sense of authority, autonomy and accountability in the interests of their patients. It partly explains why they are totally absorbed in their paid work. They argue it explains why they move out of ward work as they become frustrated with female nurses' refusal to change, modify working practices, or challenge management. In their view female nurses focus on the task; male nurses on the patient. When I ask them about their performance of domestic work, they refute the claim that they do not get it done in time, noting that much emotional and social labour cannot be done, until the domestic work is complete.

Female nurses theorising about male nurses

For the most part it seemed that female nurses' attitudes towards male nurses corresponded with the stereotypical constructions of male nurses presented in the 'biased' literature. This became evident in the first few weeks of my time on the ward. Female ENs in particular said that when they found themselves teamed with a male nurse they knew they would be run off their feet all day doing the domestic and dirty tasks, while the male nurses talked to doctors and social workers, or, more damning, *sat at the nurses' station filling in the Excelcare at 8.30 am in the morning presumably having finished their jobs for the day.*

In later conversations with nurses at all levels, I checked out the hypothesis that the literature is out-of-date for explaining the behaviour of some male nurses—they agreed male nurses care for their patients. However these female nurses flashed smiles of recognition when I asked if they see parallels between men's caring work in the home and on the ward. Bittman and Lovejoy's (1993) account of the split between childcare (emotional labour) and housework (manual labour) emits an *Ah Yes!* when I suggest that maybe men have increased their care, but not necessarily their housework and likewise that male nurses have increased their care for patients, but not the domestic nursing work. But when I talk about men bringing to the ward a sense of paternal care and authority their eyes cloud-over with confusion, request clarification, then passively accept my account of the men's explanation for their own behaviour.

The conversations bring to light a split between male and female understandings of emotional work and psycho-social care. Both female and male nurses tell me that it takes under 18 months for a beginning nurse to become skilled on a ward and to move from being overwhelmed by the tasks (read: has poor time management) to taking account of the patient's social and psychological needs. Taking account of these needs often involves calling in the social worker, nutritionist or other allied health workers, which can usually be done efficiently when the nurse writes up the UOC on the Excelcare program. It is as simple as a phone call away. The Clinical Nurse Consultant, tells me male nurses do this as well. But they also spend time with patients discussing these issues, often running over time.

Further, Sonia, the CNC on the ward, says that junior male nurses are more likely than junior female nurses to call in allied health workers. When I ask nurses whether these males shy away from the domestic and dirty work, opting for psycho-social work, there is suppressed resentment, resignation and mutual participation in the contradictions, just as Dempsey (1997) has found. *Oh its easier to just do it yourself when you see them behind and you're working on the same side as them* Susan notes, conveying the knowledge that these men more readily

achieve the nursing ideal of wholistic care, but in doing so appear to have left some of the less pleasant work to their female colleagues.

What can be made of these observations? Several themes from the literature come to mind. The first concerns the division of labour. These men have taken up domestic and emotional labour, not in the same way as female nurses, but very similar to the way it occurs in the home, confirming elements of Bittman and Lovejoy's (1993), Game and Pringle's (1983) and Baxter's (2002) arguments. They have put their focus on the patient (read childcare), over and above the domestic (read housework). Here is a split between emotional and task orientated work as well as between mental and manual labour. In the overall organisation of the day, they spend less time on the domestic tasks, and more on the emotional, but this is done by seeing themselves as going to the heart of the problem. From their perspective the female nurses' focus on the domestic work is trivial. These men may have chosen an 'inferior' occupation, but within this decision they have chosen the 'better part'.¹⁰¹

The ideology of care in nursing supports the male nurses' approach. This leaves the female nurses with little to complain about for the men are doing what is seen as the ideal. The worst that can be said is *He's a good nurse, but he gets too involved with the patients!* To voice this 'truth' is to identify male resistance to organisational time. Matthew and Luke have taken control of their own work pace even though they are subordinate to the female clinical nurses; however, it is at some cost to themselves, other nurses and the patients. A quota of 4 patients a day will not see all patients on the data-base visited over the two months, nor will it capture those at risk of a readmission; and on the ward Luke's slowness leaves much for the EN to pick up. Tyson's responses are more complex. As an EN the domestic work is his lot; his solicitous care for elderly wandering patients and the fact that these tasks are delegated to him, is both an expression of his care and concern, and his lower status.

These nurses were also aware that their bodily presence gave them more authority—that symbolically their bulk and size gave them more power, whatever their age, status or demeanour (Harford, Savage & Witz 1997). It may be that this also gives them more confidence to interact with allied health staff and the medical team. Their resistance to work

¹⁰¹ In Roman Catholic spiritual theology contemplation is of a higher order than good works, or labour. The support for this position draws on the biblical story Luke 10:38-42. In this story Jesus visits the home of Mary, Martha and Lazarus. Mary sits at the feet of Jesus, leaving Martha to do the housework. When Martha complains Jesus replies, 'Martha, Martha, you worry and fret about many things and yet few are needed, indeed only one. It is Mary who has chosen the *better part*; it is not to be taken from her'.

intensification is individualised and their relationship to time use, personal; whereas female nurses on Hartley were more likely to engage in collective, organised and legitimate resistance through the union.

In terms of time use and the Type A/Type B personality stereotypes discussed in Chapter 2, junior female nurses exhibit the traits of Type As: their time use is monochronic, linear, impersonal and systematic; whereas the male nurses' use of time is polychronic, cyclical, interpersonal, messy and contaminated. These men have refused to delay the gratification that comes with meaningful patient interactions; their behaviour is reminiscent of Type Bs. However not all male nurses are successful in these endeavours. Andrew's attempts at dealing with a patient's emotional distress on the cardiac ward are over-ruled by protocols and he leaves the hospital taking a position in mental health nursing, where taking time to talk is integral to the cure. On the cardiac ward, speed was the order of the day and emotions were held in check through patient education, whereas for respiratory disease, time is endured, so the male nurses can engage in these practices.

Another explanation for these differences in the male patterns of care may lie in the model of nursing care. Comprehensive nursing allows for some task unification, but in practice the higher level consultative work such as discharge planning, patient education and support are relegated to the coordinator for the day, a more experienced and older female Level 2 RN, or passed on to the social workers in order to get the tasks directly related to patient physical comfort recorded on Excelcare and completed on time. Issues of referrals are complex for nursing staff. While nurses can ring the social worker with a patient referral, only doctors can call up the psychologist for a patient review and, as Susan tells me, *hanging around to make a call, and following up the patient is difficult in a ward where the basic nursing tasks must also be done* (Field notes 18/6/98).

Concluding discussion

In this chapter I have outlined processes put into place to shift the Nursing Respiratory Outreach Program from one that offered support to a large number of patients who had at some point in the last few years been admitted to Hartley, to one that focused specifically on recently discharged patients with the aim of preventing a readmission within 28 days. The rationale for this shift arose out of the PBMA study conducted under the auspices of the medical team. The medical team identified modifications to the outreach program as the most likely innovation to achieve the Commonwealth and State performance management benchmark of quality—reduced readmissions.

This was despite the fact that the PBMA study established that most admissions were appropriate; that many of the patients were in the last stages of their disease; and that there were possibilities for improvements in medical practices. Hence, as I suggest in my analysis of the work of Matthew and Muriel, the shift in the outreach visits is from one that deals with emotional issues to one that is instrumental, educational and focuses on skilling the patient to care for themselves, rather than seek to prevent what on the one hand is defined as an unnecessary admission, yet, in contradiction to this, was shown, via the medical audits, to be a necessity. Just as the Fast Track Surgery Project intensified the work of nurses, leaving medical staff unchallenged, so too did the Program Budget and Marginal Analysis study.

In both cases these change programs, implemented to either reduce LOS or reduce readmissions, were partly financed through grants obtained by the Director of Nursing. Control is extended over health professionals via the performance management benchmarks, but in both cases the direct control is over the nurses' working time. The working time of nurses is now organised in a systematic and methodical manner to ensure no idle time, but also in the hope that the organisation has some hope of achieving the benchmarks. It is, however, a precarious and contingent control with the benchmark of twelve patients a day, or no readmissions within 28 days, the expression of salvation.

A major issue in this case study, revealed through the PBMA, is that these patients are chronically ill. Most have multiple conditions which impact on their LOS and readmission rate; yet the casemix model assumes a neat linear and rational diagnostic event that does not take into account that in the process of dying a patient may have multiple episodes where hospital care is needed, and that these episodes may come in irregular intervals well outside the benchmark of 28 days. As the body fails to respond to conventional medical treatment it becomes increasingly difficult for patients to manage alone in the allocated LOS, or extend themselves beyond the benchmark for a readmission. Dying is not a linear event. Trying to reduce readmission rates for CAL patients is like asking them to hold their breath just a minute longer.

In addition I have used the case studies to illustrate the differences in male and female modes of resistance. Female nurses on Hartley were not passive in the face of the intensification of their work. Resistance was organised and systematic; but their day-to-day nursing care was task-focused and reflected a detailed division of labour despite the expected practice of comprehensive nursing. Male nurses on the other hand resisted at the individual level, were more likely to practice the nursing ideal of wholistic care and to engage with patients. I argue that these differences are inconsistent with the literature that attempts to explain the behaviour and values of male nurses. Male behaviour is reminiscent of shifts that have occurred in the

domestic division of labour in the home, a consequence of the women's movement. In an environment where work is intensified, the consequence of these changes in male behaviour is that much of the domestic work is left to the female nurses.

In the innovations outlined in Chapters 8 and 9, I have also argued that the focus has been on the organisation of the work, as well as the product, in order to ensure the flexibility needed for increased efficiency and productivity. The strategies used have not been via direct surveillance, which is costly and inappropriate in the health care sector, but by capitalising on doctors' and nurses' sense of professionalism. The changes have been achieved through the processes of 'best practice' and 'benchmarking' whereby health professionals, particularly doctors, have been incorporated into the reform processes, while nurses have been the ones to take up the changes. In the final chapter I provide an assessment of these processes and return to the major themes explored in this thesis.

CHAPTER TEN

TIME TO FINISH

Modern elevators are strange and complex entities.... This is because they operate on the curious principles of 'defocused temporal perception'. In other words they have the capacity to see dimly into the immediate future, which enables the elevator to be on the right floor to pick you up even before you knew you wanted it, thus eliminating all the tedious chatting, relaxing and making friends that people were previously forced to do while waiting for elevators (Adams 1980:46-47).

Introduction: Time to summarise

What conclusions can be drawn from the four case studies and five innovations detailed in Chapters 6 to 9? In this chapter, I suggest that the four case studies demonstrate that abstract time is comfortably entrenched in the working lives of nurses and early career doctors in the acute public hospital sector in Australia. The policies outlined in Chapter 4, the bureaucratically imposed benchmarks elaborated in Chapter 5 and the five innovations—(1) a program to manage beds by up-skilling nurses and intensifying cardiac nurses' work, thereby changing the work culture; (2) the implementation of 'Excelcare', a computerised nursing workload product; (3) a nurse-managed clinical pathways program; (4) a Fast Track Surgery Project controlled by surgeons; and (5) the utilisation of the allocation tool: Program Budget and Marginal Analysis—described in this thesis have reinforced the iron cage of abstract time. The four case studies also draw attention to strategies of resistance: to the possibilities inherent in enterprise bargaining, evidence-based medicine and gendered differences in time use. However in this chapter I argue that these modes of resistance do not overcome abstract labour time; they merely alleviate the burden of time. The ideal—the creation of disposable time—requires health care to be delivered in its own time, and in a way that constructs caring work as creatively productive. As a final point I alert the reader to some of the methodological flaws and strengths in the account offered here and make suggestions for future research.

In summarising this thesis I argue that time is a technique of control over the labour of health professionals, specifically nurses and early career doctors. Drawing on ethnographic data and document analysis, I have argued that politicians, bureaucrats and managers at Federal, State and local hospital levels respectively, use *time as the unit of account*, to control and shape the labour of health professionals through a process of work intensification. This control has been

achieved through micro-economic 'reform' within the public sector. The thesis has focused on the New Public Management strategies used by the state such as labour market flexibility, (negotiated through the broader industrial relations strategy of enterprise bargaining), and the performance management strategies built into Medicare and the more recent Australian Health Care Agreement. These include the Medicare incentive funding, the introduction of casemix DRGs, and the subsequent benchmarking and hospital-based innovative 'best practice' programs.

In outlining a theory of abstract time I drew firstly on the work of Postone (1996) to establish that under capitalist modes of production the worker's time is constantly redetermined back to a previous measure in order to create surplus value, efficiencies or increased production. This is a necessity given that the measure of wealth is not material, but surplus value. The analogy of the treadmill best captures this process, whereby no matter how hard or long the worker labours, he or she makes little progress. The value of the worker's labouring hour moves from concrete to abstract to concrete again so that what was produced on day one is reduced in value on day two. The origins of this relationship to time can be found in the early years of capitalism, firstly in medieval modes of production, and later in industrial forms of manufacturing and automation.

In Chapter two I argued that in capitalist society there was an elective affinity between the emergence of abstract time in production and the canny (but also unfortunate) religious inventions of Purgatory and the Protestant Ethic. I drew together Weber's classic study of the Protestant Ethic, and Fenn's account of the invention of Purgatory to outline a theory of cultural change that produced a personal pre-occupation with time and accounting. Both the invention of Purgatory and the Protestant ethic provided a cure for the disease of salvation anxiety. In the case of Purgatory, the solution was to provide more time on the other side of death; in effect to shift the deadline for achieving the benchmark of salvation. However, the cure for salvation anxiety very quickly relapsed, creating what Fenn (1995) refers to as a *purgatorial complex*. This is a profound insecurity about doing enough or achieving enough in the allotted time. These ideas have been carried forward into secular consciousness and find expression in the current culture of workplace change, eloquently outlined by du Gay (2000), who notes that contemporary discourses of workplace change use the language of religious fundamentalism and charisma through calls for the production of mission and vision statements.

In many contemporary workplaces the culture of change encourages disciplinary practices of thrift, hard work and a calculating monochronic approach to time, where personal likes and dislikes must be abnegated to the enterprise. In these organisations innovation and change are

implemented with charismatic (and polychronic) fervour and enthusiasm (du Gay 2000). As I noted in Chapter 2, and outlined in Chapter 6, individuals must become charismatic innovators, able to transcend rational doubt in order to take responsibility for themselves and the future transformation of the organisation (du Gay 2000). Such individuals are able to take initiative, are self-reliant and ready to accept responsibility for events well beyond their control—such as an elderly patient with chronic respiratory disease needing a readmission in preparation for death—in a work environment where all actions are subject to calculation and constant innovation.

From ordinary everyday time to institutionally governed time

In the case study in Chapter 6 I indicated that, prior to the ‘reform’ processes of the last decade, the work of nurses and early career doctors was already highly structured around the clock. Shift work, rosters and rotation cycles for each professional group structured the working week or month, while the details of the day-to-day interactions with patients were, and continue to be, organised and monitored via attention to time. Medications, treatments, waiting periods or appointments following surgery are organised to meet the needs of the hospital as a complex bureaucracy, but also because health professionals have intimate knowledge of the time needed for bodies to heal or medications to take effect. Timing is a key skill developed in nurses and doctors caring for sick bodies, as is personal time management. Knowing when to intervene and having time to do it are key attributes of a successful health professional. Likewise knowing when to interact in familiar ways across professional boundaries is governed by the rules of time. Nurses may engage in familiar interactions with interns while both are on night duty, but rarely in the morning when the consultants have arrived and are about to begin the medical round.

Patient-practitioner interactions are also governed by structured arrangements of time. In Chapter 6 I outlined the way nurses on the cardiac ward pre-empted patient displays of distress through education or recourse to protocols. Patients were alerted to the predicted set of feelings or pain on their horizon as nurses constantly reminded them of their illness trajectories. These ‘education sessions’ also ensured that most interactions between patients and nurses were brief and free of emotional displays. Similarly, in the respiratory ward nurse-patient interactions were short and instrumental, although patient emotional displays were not pre-empted via education. Patients on Hartley ward are either in the last stages of respiratory failure or suffer from chronic conditions such as severe eczema or psoriasis—staff respond to bells with forbearance, with the view that at best all that can be prevented is a relapse.

In the case study in Chapter 7 I illustrated how these interpersonal interactions have been institutionalised and routinised through the innovative computerised workload product, Excelcare. Excelcare not only allows hospital management, but also the State and Commonwealth governments, to allocate very specific, abstract time to these patient-nurse interactions. The time allowed for these human interactions is arrived at via time-and-motion studies; the time allotted to this care produces a monochronic culture where each unit of care (UOC) is compartmentalised into minutes and seconds, independently of the patient's or nurse's social or emotional states.

Some nurses may wish to have disposable time in order to interact socially with their patients, but to do so is to operate outside the allocated UOC that determines such diverse things as rosters, the purchase of new medical technologies, or the Commonwealth's calculation of the profession's share of DRG funding. For the individual nurse, learning to care according to the dictates of a computerised care plan such as Excelcare shapes the very way caring and patient interactions are thought about and commented upon. Excelcare encourages the practice of engaging with patients, not intrinsically for themselves, but as a means to an end. Any social time is wasted and non-productive time. Just as Richard Baxter exhorted his followers to be mindful of 'Loss of time', so too, Excelcare is the means to ensure hard work and efficiency. Nursing tasks become incessant, ritualised practices, performed with one eye on the clock, rather than shaped by the desire to respond to human illness. Excelcare is the technological expression of Purgatory where it is assumed ritual and repetition will conquer time, but where in fact such clock work can only compound the disease of time scarcity.

Excelcare also provided an example of the coming together of computerised technology and neo-Fordist and Taylorist modes of management to produce macro-systems of colonisation by remote and internalised control. Where once the sister in charge of the ward or senior clinical nurse ensured that the work was done, Excelcare now provides eight-hourly up-dates on all the tasks performed by the entire hospital complement of nursing staff. This information is not only available to local hospital managers, but also to State bureaucrats who now have intimate information on patient-nurse interactions such as how many patients have bed sores, and which nurse dressed these wounds. The power of Excelcare data is its virtual capacity to carry more authority than the day-to-day interactions between nurses and their patients. Its capacity for illusion gives the appearance that staff are allocated to the ward with the rationality of a mathematical formula, but in reality Excelcare is used to continuously redetermine the hour, moving the time allocated to nursing tasks from concrete to abstract (and virtual) to concrete again.

Labour market flexibility: enterprise bargaining, resistance and abstract time

Excelcare as vehicle for facilitating enterprise bargaining—a strategy for labour market flexibility—is also discussed in detail in Chapters 6 and 7. Enterprise bargaining commits workers to engage in workplace change; so while the evidence suggests EB has, in itself, had little impact in furthering workplace ‘reform’, it does provide the framework for management to legitimately proceed with the strategies of flexible specialisation such as redundancies, outsourcing, downsizing, multi-skilling and up-skilling. It also provides opportunity to bring about numerical flexibility, an important aspect of hospital-based shift work. Also, as I indicated in Chapter 1, and demonstrated in Chapter 7, enterprise bargaining can be seen as the fairy godmother. It offers the opportunity for workers to ameliorate the work intensification resulting from the strategies of the New Public Management. However, certain conditions are necessary for EB to have this positive impact. One condition is duration. In the case study outlined in Chapter 7 I showed how the Australian Nursing Federation (ANF) was able to ameliorate previously inadequate agreements by taking time to gather the data from Excelcare and to learn the processes of negotiation. A second condition is solidarity. The differences, evident in the various rounds of EB between nurses and early career doctors demonstrates the strength of the ANF—the power of high union density—and the legitimacy EB agreements give to work bans in a climate of labour shortage.

What the case study of enterprise bargaining also illustrates is that nurses are more likely to engage in collective action through their union, the ANF, than are doctors through SASMOA. Unionised action by nurses is also more likely to be successful. This is probably a reflection of the fact that SASMOA is a union for salaried medical officers so membership is restricted to a smaller number of the profession who for the most part are in the early stages of their career. Nurses on the other hand maintain their membership in the ANF even when promoted to senior managerial positions, since they remain salaried and have no opportunity for engaging in private practice. During the 2nd EB round when the union officials held stop work meetings at Westernvale, the Director of Nursing was the only senior nurse not present. Of course nurses realise they have few other avenues for effective resistance; very few are incorporated into senior bureaucratic positions within the state apparatus, such as the Commonwealth Casemix Committee; and elite nursing lobby groups, such as the Royal College of Nursing, lack the political power that characterises the AMA.

The reliance on union action as a form of resistance against work intensification may also be a reflection of the fact that nurses working on the wards function as a highly integrated and interdependent team. Nurses’ cooperative work is the free gift of labour: other nurses

complete work not finished by team members so that for the most part everyone goes off duty at the same time, thus reducing collective overtime. It may also be influenced by patterns of leadership on the ward. While the nursing career structure is hierarchical with five grades of promotional positions, daily opportunities for team leadership are available to all levels of nurses. These leadership positions are rotated on a shift by shift basis—a team leader one shift, may be a subordinate the next—and as a consequence maintaining solidarity is important.

The nursing workload tool, Excelcare, has been the vehicle for reducing work intensification for nurses. However EB has not freed nursing work from the tyranny of abstract time; it has merely ameliorated the intensification. Likewise the creation of nurse specialist and advanced enrolled nurse positions will not significantly increase the monetary value of the nurse's hour. These promotional positions reflect the union's awareness that nurses have been up-skilled and their work made more complex as hospitals shift from nursing-controlled models of care—team, comprehensive or primary—to environments subject to managerially or medically controlled innovations. On any ward nurses now must manage complex patient arrangements that may include a same-day unit, a mini ICU and telephone hotline as well as the normal complement of patients. Compensation for this intensification of labour is brokered by the union, but the intensification is not overcome.

One solution to the long hours worked by interns and registrars would be for the medical profession to agree to allow highly qualified nurse practitioners to take over the organisation of the discharge prescriptions and summaries. However as I illustrated in Chapter 8, medical staff at Westernvale were strongly opposed to this, despite the very specialised assistance the medical team received from the two case managers, Monica and Frances. Organised medicine would rather have young doctors work extended hours, than shift certain tasks across to highly qualified nurses. The recently published *Generational Health Review* (DHS 2003a) makes recommendations for the appointment of nurse practitioners to acute care facilities, but while this may produce some blurring of the boundaries between these nurses and junior doctors, and predictably conflict, it is highly unlikely to reduce the working time of either profession. Anecdotal evidence from the few nurse practitioners employed at Westernvale and other hospitals in South Australia suggest that their working time resembles that of early career doctors, but without the possibility of gaining increased control over their labour or moving onto lucrative salaries.

Performance management systems: benchmarking, organisational and cultural change

In Chapter 4 I indicated that the Medicare incentives and casemix DRGs created the policy framework for intensifying the work of health professionals and produced an undue focus on completing tasks within a set time limit. Like the medieval church's remote, but nevertheless assured, control over the merchant class through the invention of Purgatory, the Medicare incentives and casemix are a framework for compliance. In Chapter 5 I outlined the various benchmarks established by the Commonwealth and State health authorities to measure efficiency, productivity, quality and equity of access. The majority of these benchmarks are measured through time and represent the second step towards state intrusion into clinical decision-making. Benchmarking reflects the disciplined organisation of monochronic cultures whereby targets and deadlines take precedence over relationships.

Efficiency is achieved by reducing patient length of stay; productivity is measured through salaries brokered through EB; quality is achieved through readmission rates and reduced numbers of infections that erupt post-operatively in a set number of days; and access and equity is maintained through achieving set waiting time targets in A & E or for elective surgery. The benchmarks are set, monitored and in many instances achieved through improvements in medical technology, the re-organisation of work processes based on scientific management, and changes in clinical practice based on evidence-based medicine. But this in effect is the key problem: benchmarks provide both the cure of time scarcity yet are the very disease of time shortage. Once the benchmark is achieved progress assumes that the hour will be redetermined down to a tighter benchmark, reducing the value of the worker's hour back to its previous level. All that prevents the reduction of the benchmark to zero are the limitations of the sick (patient) and the working (nurse and doctor) body. But even here with reductions in *duration* through early discharge and Hospital @ Home programs, or *speed* through same-day surgery and day-of-surgery admissions, or the application of *age* through the valuation of equipment, the timely needs of the human body for healing are passed over. These problems and related costs are shifted to the community, usually defined as the patient's relatives, the GP, a Nursing Home, Home and Community Care Services (HACC) or the patients themselves. At the structural level of funding, this is a shift in costs from State to Federally funded services. At the interpersonal level the burden of time for healing is unduly weighted towards the patient and his or her support systems (if they exist).

Exercises in benchmarking, where saved time is the marker of success, are analogous to the impact of the invention of Purgatory on the medieval soul or the doctrine of predestination on

the Protestant psyche. Just as the medieval and Protestant soul was never assured that adequate time had been redeemed, so managers, doctors and nurses cannot assume that the current benchmark will remain constant tomorrow or that meeting it will redeem them. The only valid response is to engage in continuous striving to reduce time through a flurry of activity directed towards improvements. Commitment to continuous change is the contract of EB. Activities are not directed towards care, but are a tyranny of accounting and calculation, once practised in response to religious motivations, but now secularised and hence more deeply embedded into the purgatorial and precarious self.

The *purgatorial complex* is a decidedly masochistic condition that allows health professionals to take an active part in their own oppression. This is achieved through devising ever more and more activities to redetermine the value of their working hour and then internalising them within the self. With the achievement of each new benchmark, the value of caring labour takes on a lower value. This is not just the degradation of work, but the degradation of self. The irony of this process is that health professionals and managers take up these activities with a fervour reminiscent of a religious crusade. One example of this approach to work is the cultural transformation program outlined in Chapter 6. In this situation, nurses took it upon themselves to use their own leisure time to up-skill, as if this work was a measure of personal meaning. More importantly, these nurses transformed previously collaborative, but inquisitive working relationships, into exercises in public confessions of inadequacy, compliance and competition.

Clinical pathways: scientific management and linear seamless time

In this thesis I have analysed the change processes in hospital work and suggested that managers and nurse leaders tend towards innovations that use the principles of scientific management. This is predictable since nurses do not have control over clinical decision-making: this is in the hands of doctors. Consequently managers and nurses tend to focus on the re-organisation of tasks by identifying and eliminating blockages in the system in order to speed up the process of getting patients through the system. This is usually achieved through the establishment of clinical pathways, or programs for speeding up the patient's clinical journey such as transit lounges, preadmission clinics, formal waiting lists and Hospital @ Home programs. While these innovations do speed up the processes, sometimes by taking them out of the hospital, and have been effective in reducing waiting time, they create an ever more complex division of labour for health professionals. Nurses experience this division of labour more profoundly than doctors. Doctors are more likely to follow their patient from outpatient clinic to the ward in the hospital and then to see them in follow-up visits, while

nurses are mostly confined to working in one venue and dealing with patients as items on a production line.

The term 'seamless care' is used to describe those processes that accelerate the passage of patients from waiting lists to rehabilitation. What is seamless is the sequencing of care, not the social interactions between carers and clients. Managers at this point may not control the clinical processes, but they do control the amount of time patients spend in each clinic, the time available for interacting with health professionals, and the sequencing of these events. Patient progress through their episode of care is analogous to being on a production line, where the 'commodity' of their care is produced via a division of labour that is social, temporal and geographically separated. Tasks are divided between the professions, and spread out across various sites or across clinical pathways. The unity comes from the sequencing, not from a continuity of care.

Clinical pathways: redetermining the body's healing time

Underlying clinical pathways is the idea that healing or an illness event is predictable and that medicine is a science that managers can control with the imposition of a deadline. Production targets can be set because the body is a machine in which healing is governed by the rules of linear time operating in monochronic cultures. Clinical pathways and the various innovations that attempt to reduce or prevent readmissions are also attempts to maintain the predictive capacity of linear time. If an illness recurs this is defined as a system problem: it is probably due to the fact that the patient's GP lacked the skill to handle the case; the hospital intern did not get the discharge summaries out on time; or, in the language of casemix, this was an *unplanned readmission*. The idea that illness might be a spiralling journey towards death or that some bodies are so depleted that illness has overwhelmed them is not accounted for in clinical pathways and the benchmarks that determine readmission rates. Readmission benchmarks take little account of the working body and its own cycles, capacities and limitations.

Diagnosis Related Groups (DRGs) and clinical pathways also alter the social construction of diseases. Diseases and illness exist for the time it takes to get better. Under DRG payment systems this time is now set, not by the time it takes to recuperate, but by the number of days the hospital is paid for the 'episode of care'. For the patient the illness is understood firstly, through the doctor's diagnosis and secondly, through the number of days allowed for suffering, and the sequencing of procedures. When a patient is discharged, the 'episode of care' has come to an end, or at best the patient is in rehabilitation. The fact that the patient

might still be in pain and have to deal with this in the isolation of his or her home is rarely acknowledged, except where Hospital @ Home services operate, but even here there are time limits to access and availability of the service. Prospective patients are also subject to abstract time, without formal acknowledgement that they are sick. Waiting lists are places to put patients to work. The cultural process of becoming a patient is not restricted to the time in hospital, but reaches back into the lives of future patients waiting in the suburbs for a call that will tell them they are next on the list and to begin their preparatory work. These patients learn how to re-organise their lives to fit hospital routines.

Organisational change and work intensification

At Westernvale the shift to the Johns Hopkins model of clinical directorates meant that nursing was no longer a separate department with its own budgets, but was broken up according to the logic of casemix DRGs. Between 1994/1995 and 1995/1996 nursing numbers were reduced by 10% following the introduction of casemix and financial restrictions imposed by the State government. It is not until 2001 that nursing staff numbers returned to pre 1994/1995 figures. Medicine also experienced a staffing reduction of 7% in 1995/1996, but numbers returned to 1994/1995 levels by 1997/1998 and by 1999/2000 there was a 10% increase in the number of doctors employed at Westernvale hospital. Junior doctors may be subordinate to their senior colleagues, but in the overall division of resource allocation, medicine has gained higher increases in staffing.

In a similar vein the nursing profession continues its strict division of labour between enrolled and registered nurses. The reform process at Westernvale have seen many enrolled nurses up-skilled to levels that mean the only difference between their practice and that of registered nurses is in the handling of dangerous drugs; yet their salary scales, status and opportunity for promotion or to practise independent of supervision is curtailed. The third group is the managerial class. These managers are sometimes members of the medical or nursing profession. They are now powerful players in decision-making within the hospitals, although as I illustrated in Chapter 7, in the study of Excelcare, they are also caught in a contradictory class location (Wright 1978). This is especially so for those managers who are doctors or nurses who maintain strong loyalties to their profession, but must also meet the expectations of their managerial role.

A central argument in this thesis has been that the 'reform' processes have strengthened the centralised power of the state, firstly at the Commonwealth level, then at State level. Managers have increased their power at the level of the hospital, but they are as much subject

to the controls of Medicare and casemix DRGs as the various clinical professionals. They are charged with achieving the benchmarks or are deemed incompetent. Clinical professionals incorporated into the managerial class find themselves caught in a contradiction between their role as clinical decision-makers needing to use public resources, and their role of managers of government budgetary constraint. The innovation outlined in Chapter 9 is one example of where doctors were invited by the State DHS to use their medical authority as a vehicle for decision-making about resource allocation. It illustrated the way in which this group of professionals brought together managerial and medical authority. This was through the process of PBMA and EBM.

As I indicated, PBMA is assumed to be a tool for senior bureaucrats to employ in global decision-making about resource allocation. The value of PBMA lies in its capacity to answer the question: which health care programs produce the best outcomes given limited budgets? In the PBMA exercise on Hartley the only marginal change identified as worth pursuing, to reduce readmission rates, was a modification to the Nursing Respiratory Outreach Program. Once again it is the profession of nursing that made the necessary changes to their practice; and once again it was under the direction of medicine. In my final interview with the medical scientist in 2003 he indicated that the changes to the Nursing Respiratory Outreach Program had had no impact on readmission rates—they remained significantly outside the benchmark and he was planning a new innovation.

Making time for disposable time: the question of resistance

In the four case studies in Chapters 6,7,8,9 I have identified several modes of resistance to abstract time and the concomitant intensification of work. In Chapter 7 I illustrated the way in which nurses and the ANF used Excelcare—a tool of scientific management—to challenge work intensification. In Chapter 8 I illustrated the way in which doctors use EBM as a tool of resistance against scientific management, while in Chapters 6 and 9 I outlined the individualised resistance by male nurses to task-based and rationalised work intensification. An important question to ask is: are these modes of resistance evidence of disposable time? The answer is 'No'. I have shown that nurses at Westernvale used the collective processes of unionisation and EB to resist work intensification while some male nurses refused to abandon the nursing ideal in the face of mounting domestic and task-based work. The strategies of the male nurses were not helpful to their female colleagues, and the gains made through EB merely ameliorated what had become intolerable. Nurses still work according to the dictates of Excelcare units of care; any new product will merely ensure a more sophisticated form of surveillance, with a more intense calculation of minutes and hours.

But what of the profession of medicine? The profession of medicine has maintained tight control over the organisation of its daily labour, although the workload continues to intensify. Medicine has used EBM as a strategy for resisting managerial control over its labour processes and clinical decision-making, but it has not resisted the continued intrusion of abstract time into the work processes. Further, as I have illustrated, innovations based on EBM have not freed up the time of surgeons, nor has it done much to create disposable time for nurses or junior medical staff. Nor has the incorporation of some doctors (and nurses) into the managerial class created disposable time. Neither the collective endeavours of nurses nor the scientific challenges from doctors created disposable time. The time gained for care still remains bound by the temporal nature of value in capitalism. For salaried health professionals within the welfare state this means that the benchmarks for quality, access, efficiency and productivity are determined by value—which is a function of immediate time expenditure (Postone 1996:395).

Medical resistance: autonomy under fire, but dominance assured

In the opening pages of this thesis I also made claim to the fact that the state had accelerated its control over the work of health professionals, particularly doctors. This control is a challenge to medical autonomy; it is an iron cage of policies that produce benchmarks organised at three levels: political, bureaucratic and managerial. Many of the benchmarks, such as elective surgery, readmission, waiting times in A & E, or wound infection rates, can only be improved if doctors attend to them. Nurses and allied health professionals can assist, but these benchmarks are essentially ones in the hands of medicine. I have demonstrated medical engagement in the reform processes through the Fast Track Surgery Project, the PBMA decision-making process, the re-organisation of the hospital into divisional directorates, the engagement of senior doctors in the refinement of casemix through the Federal and State casemix committees, the hospital-based committee processes for dealing with the restrictions placed on the use of advanced medical technology by the State DHS, and the constant pressure on young doctors to meet deadlines for discharging patients, writing up patient summaries and prescriptions. All these have intruded upon medical autonomy.

However, what the thesis also demonstrates is the power of medicine to position itself to avoid many of the impositions and restriction now in place. Medicine has been able to capitalise on the reform process, not necessarily to shore up its autonomy, but certainly to ensure medical dominance. The irony of this thesis account is that while on the one hand medicine is the profession with the main responsibilities for waiting times and readmission rates, it is the nursing profession that has taken the full weight of the 'reform' processes. This is demonstrated in the rates of redundancies in the early years following the introduction of

casemix at Westernvale, in the struggle to bring nursing numbers back to 1992 levels, in the impact on Personal Service Attendants who do much of the work once part of nursing, and in the innovations outlined in the later chapters.

This outcome is partly explained by the fact that the Director of Nursing at Westernvale took responsibility for the change processes and was successful in gaining funding to trial several innovations and as a consequence initially attempted a change program that was multidisciplinary in focus. But it is also a product of where each of the professions is structurally positioned. While Andrew the RN introduced in Chapter 6 is not correct in his claim that, *the doctors will continue to do what they want, regardless of the nurses; basic medical care remains the same, the bureaucracy just re-organises everything on top of this* (Field notes 17/4/98), it is true that medicine is able to minimise the negative impacts and maximise the benefits of the 'reform' processes. In the innovations described in this thesis two of the tools enabling this have been EBM and PBMA. In both cases the doctors have had the authority to re-organise the labour of nurses, while minimising disruption to their own labour.

Hence, I argue, the current reform processes have not dislodged the traditional social divisions of labour within health care. Medical dominance over nurses and allied health professionals remains, despite significant shifts in the way the work is organised, the flow of information, the transfer of some higher level skills from medicine to nursing, and despite the increased power accorded to non-medical administrators. The Fast Track Surgery Project demonstrates the power of organised medicine to achieve the desired reforms, but does so through strengthening medical dominance at the expense of intensifying nurses' working time. More research is required to examine evidence-based medicine. While it is presumed to be a positive medical response to health care reform, and a way of resisting the pitfalls of scientific management, little is yet known of the impact it has on the work of nurses and other health professionals, or the quality of life for patients. As this thesis demonstrates some EBM projects are little more than medically directed exercises in scientific management. What is also clear is that EBM achieves the political, bureaucratic and managerial agenda of speeding up the processes. The focus of all the Fast Track Surgery Project reports was on seeking solutions to budgetary problems. There was no discussion on issues of care, cure or patient comfort.

Gendered differences to working time: male nurses and the caring ideal

I have also taken the opportunity in Chapter 9 to make comment on differences between male and female nurse responses to work intensification and the practice of the nursing ideal. I have argued, contrary to the literature on gendered differences in nursing, that some male nurses resist work intensification and attempt to practise wholistic nursing such that they attend to patients' social and emotional well-being, as well as their clinical needs. In resisting the routinisation of their work, it sometimes happens that the domestic side of nursing work is left un-done, picked up by ENs or shared amongst the female RNs. The irony of this is not lost on female nurses who see that male nurses practise the ideal but, consistent with traditional views of male nurses and men within the domestic sphere of the family, have left the dirty work to women.

My observations are that for Level 1 female RNs the work is reduced to a routinised round of tasks. Higher level skills of nursing assessments, care plans or social interventions are left to either the male RNs or Level 2 Clinical Nurses, the Clinical Nurse Consultant, or a social worker. This is not a division of labour based on age or experience; many Level 1 nurses have been nursing for over 20 years. It is a division based on seniority and gender and one that differs from that outlined by Street (1992) who suggested that early career nurses routinise their work as a strategy for coping with the unfamiliar. They may, but so too do many older Level 1 RNs as a strategy for coping with the work intensity.

Of course not all male nurses I observed are successful in their endeavours to attend to patient emotional states. It depends on other factors such as the nature of the disease and medical protocols that may over-ride nursing interventions. Male nurses on Hartley may spend time with patients, but the male nurses on Mawson, a cardiac ward, are expected to be more instrumental. Nor should it be assumed that female nurses are not in control of the overall organisation of the ward. Male nurses may be left to engage in emotional care with the clients, but their access to ward co-ordination, or the right to choose what side of the ward they work on, or when they take a tea-break, is still under the control of the female team of RNs.

In this example, female RNs continue to take a global approach to the organisation of the work on the ward, even if the male RNs claim to take a wholistic view of the patient. The difficulty appears to be that female nurses caring time is contaminated with organisational demands, while for some male nurses caring time causes disarray and mess, a mess that is fixed up by their female colleagues. However it should not be presumed that this, account reduces their opportunities for advancement. As I noted above, the resistance exercised by male nurses depends on the disease or casemix. Male nurses need to know when they can

extend their clinical care to social and emotional issues. They also need to know that in doing so, they intensify the domestic work of their female colleagues. None of this is disposable time.

Methodological limitations

In Chapter 2 I outlined the theoretical underpinning of focused ethnography, including a discussion about the inherent problems of time. Drawing on the work of Fabian (1983) I argued that while on the one hand *time* supports the validity and reliability of the account, time also is a major factor in undermining the findings. Ethnographic research purports to speak to the subjects in the field in democratising ways, but in writing up the account, linear modes of communication are employed. Ethnography is a three-person linear account where the researcher communicates to other scholars what the subjects said and did in the past. Ethnography is not a three-way conversation in real time. Newer approaches to research such as critical action research, feminist and post-modern accounts make some in-roads into this dilemma, but even here it is unusual for the research participants to determine the theoretical analysis. The theoretical account is offered as the legitimate meaning behind participants' actions.

In this thesis the above problems are self-evident, as is the issue of the shortness of time in the field and the fact that the participants claimed that change was so rapid that it was difficult to see trends or make comment on allegiances. These issues are discussed in some detail in Chapter 3 and are particularly pertinent to the claims I make about male nurses. My observations of this category of worker were limited and their numbers are small within the profession, at around 8%. To make a more definitive statement about their acts of resistance would require a focused ethnographic study across more than two wards and over an extended period.

A more important issue for myself was the fact that access to events and information was often serendipitous. If I had not been shown the Excelcare book on Hartley ward, the entire construction of Chapter 7 would have taken a different turn or may not even have been written. If the three male nurses on Hartley had acted in traditional ways, I would not have sharpened my gaze towards male nurses. This begs the question of how might other interpretations have been altered if I had observed or been privy to a different set of events, or been on these wards at another time? Would the theoretical interpretation still hold?

An important component of this theoretical account has been the time taken to complete it. I began it in 1997, did field work in 1998 and then took the next five years of Saturdays and semester breaks to write up the ten chapters. In this time the Liberal State government went out of office, a third EB round occurred and I was able to observe the way in which the union used Excelcare in the bargaining processes and as a consequence change my views on the function of Excelcare. I also engaged in other research projects, one being an attempt by three public hospitals to rationalise their Excelcare services into one multi-purpose Community Hospital Information Network (CHIN). While data from that project is not included in this study, I had opportunity to sit in on interviews with DHS administrators and gain insights into their views of the product, to read the literature on similar projects in the USA and Britain and to understand the implications for the nursing profession of having a product that was out of date and unable to interface with newer technologies. Mature-age part-time students may not complete their PhD in time to ensure monetary rewards for the department, but we do have time to observe changes in the field. Such opportunities strengthen and deepen the reliability of the interpretations by providing a multiplicity of events for triangulation.

An apocalyptic ending?

The analysis offered in this thesis differs from that classic, theoretical account outlined by Alford (1975). In his account medicine was the dominant interest group, while the role of the state was to reel in the costs and challenge the professional monopolisers. Alford's arguments were embedded in capitalist understandings of the organisation of health care and made most sense within the American system dominated by private, for-profit health care. His call was for a welfare state model based on the overthrowing of inequality and class, but within the paradigm of state-interventionist capitalism.

My argument differs on two counts from Alford's. Firstly, I argue that, given the globalisation of capitalism, there has been a radical change in both the culture and structure of most welfare state health care systems. The balance of power between medicine and the state has shifted; more power is, at the moment, in the hands of the state. However, this will not remain a battle between two opposing forces. A significant component of health care 'reform' in Australia, one that has run parallel with public sector reform, has been government assistance to the private, for-profit health care system.¹⁰² I have no doubt that in the not too distant future this

¹⁰² This is not limited to government rebates to those citizens who take out private health insurance. It also includes tax rebates and research and development funds for pharmaceutical companies, the privatisation of general practice through

sector will be the monopoliser, while the state and medicine will act as bureaucratic and professional rationalisers. State-interventionist capitalism will be overridden by liberal, market and organised capitalism. Secondly, my conclusions and recommendations are not for increased state and bureaucratic control over the labour of health professionals, particularly doctors, in the interest of care for the repressed interests of the patient. I argue for a shift away from capitalist modes of organising work towards health care organised around resistance to abstract time and the embracing of disposable time.

Whither Disposable time

A post-capitalist society characterised by disposable time would be one where superfluous time was transformed into free time created by the forces of production in the service of the social and individual self. Disposable time would still be spent in working and caring for the sick or assisting people to return to health, but the time needed would be equivalent to the time allocated. Disposable time would not necessarily bring about a reduction in working time, although the possibilities of technology might reduce current production times, nor would it be premised on the domination of others—nurses by doctors, male nurses over female nurses—although there might well be a division of labour. There would still be an economy of time and a strong relationship between wealth and working time. Disposable time is not necessarily more time to work, or more leisure time. Disposable time is a shift in the worker's relationship to time itself, based on a shift in the calculation of wealth from value to material wealth. Disposable time demands a shift in the use of technology directed towards a genuine reduction in working time. Disposable time can be understood as a relationship to the job at hand, and to one's colleagues and to the material wealth it generates interacting with nature.

Disposable time would also change our relationship to nature. An integral part of all human history of production has been to achieve domination over nature. Under capitalism this has been partly achieved in what Postone refers to as a slash and burn economy of destruction that must consume nature and then move on. Capitalism destroys both the source of wealth found in nature and the source of work: the labourer. In effect the environment has been caged, but not tamed. The price has been destruction of nature and the domination of human nature through modes of production in abstract time. This is a further aspect of the treadmill effect as a number of bodily illnesses attest. An alternate relationship to time could not bypass the

dialectic between humans and the environment, but it could rejuvenate the labouring body over time. A post-capitalist society may very well produce disposable time.

A society with disposable time is not one characterised by anarchy or freedom from work, nor is it a society where technology completely dominates nature. Nor is it a society where time for leisure is more equitably disposed, but it is a society where the value of the worker's hour is both concrete and adequate to material satisfaction. It is a society free from the treadmill of abstract notions of progress that tomorrow become symptoms of the environmental disease; it is a society where health care and medical technology are in concert with emotional care, where the focus in nursing and medicine is on the healing processes rather than the clock. Disposable time would ensure that the value of what the doctor did was never measured, but it was evaluated in terms of interpersonal and clinical outcomes. Under disposable time the speed of the surgery would only be taken into account when it contributed to a good outcome, and the calculation for a unit of emotional care gently offered by a caring nurse would be determined in real time. This would be a post-capitalist society; this would be utopia.

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Silent references

APPENDICES

Appendix A Introductory statement

I am a PhD student in the Department of Social Inquiry (Labour Studies) at the University of Adelaide. I am undertaking research on the subject of 'The culture of work-time during a time of organisational change.' My particular research focus is the innovations occurring on wards at Westernvale. My methodology is focused ethnography, which involves participant observation, maintaining field notes, informal conversations and document review. At the completion of the trial of the innovations I will produce a report which I hope will be of use to ward staff and to management.

You are invited to take part in this study. This would require you to allow me to spend _____ working shifts, (and/or) attending meetings with you and to engage in informal conversations about your work.

Your involvement in the study is entirely voluntary, and non-participation will not prejudice you in any way as a staff member of Westernvale Hospital. Should you decide to withdraw from the study at any time you may do this without prejudice.

All records containing personal information will remain confidential and no information which could lead to your identification will be released to any other party. A participant in this research, suffering injury, is not automatically entitled to compensation and may have to take legal action in order to receive payment or compensation for such injury.

This study has been reviewed by the Westernvale Clinical Research Ethics Committee and the University of Adelaide Human Research Ethics Committee. Should you wish to discuss the study with someone not directly involved, particularly in relation to matters concerning policies, information about the conduct of the study or your rights as a participant, or should you wish to make a confidential complaint, you may contact the Administrative Officers-Research, Ms XXXXX on 82044507.

Any other enquires you may have concerning this project should be directed to my supervisors; Dr Barbara Pocock, University of Adelaide; Department of Social Inquiry on 83033736 or to Mr Ken Bridge, on 82724616 or to myself on 82013110 or 82786192.

Eileen Willis
PhD Student
Department of Social Inquiry
Adelaide University.

Appendix B Consent form.

I..... give consent to my involvement in the research project, "The culture of work time during a time of organisational change". I acknowledge that the nature, purpose and contemplated effects of the research project, especially as far as they affect me have been fully explained to my satisfaction by Eileen Willis and that my consent is given voluntarily. This includes understanding that focused ethnography involves participant observation and informal interviews as data gathering approaches.

I have understood and am satisfied with the explanations that I have been given. I have been provided with a written information sheet. I understand that my involvement in this research project may not be of direct benefit to me and that I may withdraw my consent at any stage without affecting my rights or the responsibilities of the researcher in any respect.

I acknowledge that I have been informed that should I receive an injury as a result of taking part in this study, I may need to start legal action in order to receive compensation.

I declare that I am over the age of 18 years.

Signature of participant.....Date.....

Signature of Witness.....

Printed name of witness.....

I, .Eileen Willis have described to
the research project and the nature of the research methods involved. In my opinion
he/she understands the explanation and has freely given his/her consent

Signature.....Date.....

Status in project.....

Appendix C Angina clinical pathway for Mawson ward

ANGINA/ MQP Risk Chest Pain	Emergency Dept	DAY 1 Admit	DAY 2	DAY 3	DAY 4	DAY 5
ASSESSMENT EVALUATION	Medical Assessment concludes Moderate Risk Chest pain appropriate for admission	Medical admission and Assessment, Nursing History, Chart requirements met, Ascertain presence of Allergies. Assess need for Allied Health.	Consultant Medical and Nursing Assessment, Chart requirements met, Review pt & families Emotional state & need for Social Work.	Medical and Nursing Assessment, Chart Requirements met, Review pt & families Emotional state & need For Social Work	Consultant Medical and Nursing Assessment, Chart requirements met. Review pt & families emotional state & need for Social Work.	Consultant Medical and Nursing Assessment. Discharge confirmed, Chart requirements met. Finalise patient &/or family discharge issues.
TESTS	ECG within 10 mins of presentation to ED. Baseline bloods, ELU's, FBE, BGL, CE's,) CXR	Review baseline Bloods, Repeat APTT (if on heparin) & CE's in 6 & 12 hrs, Fasting Lipids and other blood tests ordered, Consider Angiogram	Repeat ECG, ELU'S, CE'S, taken. Fasting Lipids taken. APTT if Required, Consider echo Perform Angiogram Otherwise determine Alternative investigations as appropriate.	ECG pm ELU's . CE's Pm APTT if applicable		
TREATMENT	Insertion of IV Cannula, Treat chest pain as Approp/iate	IV access	IV access if applicable, Due for re-siting at 48 hrs.	Remove IV access if applicable		Remove IV Cannula if one insitu.
MEDICATION	Consider aspirin, Consider Heparin	Consider Heparin Infusion, Aspirin, oral B blocker, if no contra-Indications Oxygen , IV Morphine, Anginine pm. Document Routine Medication on drug chart	Review aspirin and B blocker if no contra-Indications. Consider Cholesterol lowering Agent, Review oral medications According to condition, If Heparin infusing, cease prior to angiogram. Review anti-coagulation Status following Angiogram	Review oral drugs	Review oral drugs D/C script sent.	Review discharge drugs

OBSERVATION	Baseline BP & TPR & Pm (according to Chest pain treatment)	Admission TPR & BP, and pm then 4hrly. OID BSL's if diabetic or Elevated BGL	4 hrly BP & TPR , and pm, according to invasive procedures which maybe performed .	Tds vital signs if Applicable & prn,	Bd vital signs if applicable & prn	Bd vital signs if applicable & prn
ACTIVITY	RIB	Assist with ADLS, Rest in bed with commode privileges. 1 hrly coughing and breathing exercises, 1 hrly leg exercises.	Independent (If able). Consult Occupational Therapist/ Physio if mobility impaired Work functional deficits detected,	Independent (If able) Consult Occupational Therapist/Physi if Mobility impaired &/Or functional deficits detected.	Independent (If able)	
DIET	As tolerated	As tolerated – consider Restrictions of diabetic or Raised cholesterol. etc, Fast from midnight for Fasting lipid levels. Consult Dietician if required	Fast from food from midnight prior to angiogram, otherwise Ward diet.	Ward Diet according to patient's needs	Ward Diet according to patient's needs	Ward Diet according to patient's needs
ELIMINATION	Commode Privileges	Consider Fluid Balance if IVT insitu, Urinalysis	Consider FBC Aperients prn	Cease FBC if applicable Aperients pm	Aperients pm	
EDUCATION	Orientate to situation and explain procedures Inform family member or significant other.	Orientate to Environment, Identify Significant others, Explanation of care. Emphasis reporting of pain, etc Educate regarding new or added medications.	Revise any issues of Concern to patient Educate regarding new Or added medications. Distribute Cardiac Rehabilitation Angina package, refer to Diabetic Educator if appropriate	Family communication Ongoing. Educate Regarding new or added Medications. Invite Patient & family to attend Rehab meetings & Identify need for Individual counselling by Cardiac rehab co-ordinator.	Cont cardiac rehab education, Educate regarding new or added medications. Patient/Family communication ongoing	Cont cardiac rehab education, Patient/Family communication ongoing Educate regarding new or added medications.

OUTCOMES	Patient chest pain being treated and assessed meeting criteria for admission to ward. Patient transferred within 5 hrs of presentation to ED. Cardiology team aware of admission (or Med Reg if after hours)	Medication orders Written, and ordered from pharmacy. Patient has basic understanding of plan of care, Patient's pain is controlled, If angiogram required, Booking has been made.	Necessary referrals to Allied Health Professionals identified, Angiogram performed Today. Discharge Planning initiated, patient Aware of ongoing plan of care.	Relevant investigations Performed and awaiting Official results and Appropriate plan of Action from consultant. Patient/ Family Communication ongoing and aware of plan of care.	Patient and staff aware of results of investigations and a decision as to patient management has been made.	Patient is pain free, demonstrates basic understanding of condition and of medications. Pt informed of outpatient appointments. Patient understands how to treat their chest pain. Outpatient appointments made & D/C letter written.
DISCHARGE PLANNING	Notify ward of any issues which need follow-up by Allied Health professional	Review home situation and current supports, refer to appropriate Allied Health / Community Health professional if Required. Include resources, eg.HCH. Continue care Assessment	D/C planning cont. Continue care Assessment. Consult Allied Health Professional if required	Continue care Assessment. Consult Allied Health Professional if required. Include resources, <u>Eg.H@H.</u>	Confirm D/C date with medical staff Organise D/C drugs & Write DIC letter. Notify family of discharge date & relevant community support	Explain D/C drugs to patient Arrange outpatient appointment before 1200hrs if applicable

Appendix D Valid variance codes used at Westernvale

CATEGORY	*CODE	DESCRIPTION
CLINICIAN/STAFF RELATED	2000	Nurse related
	2010	Nurse related - Incomplete Nursing History
	2100	Nurse related - Rehab package not received by patient
	3000	Doctor-related
	3010	Doctor-related – Order not written
	3011	Doctor-related – D/C script not written
	3012	Doctor-related – D/C letter not written
	3500	Allied Health
	3501	Allied Health – late referral
	SYSTEM-RELATED	4005
4020		Sys related – preadmission clinic- service unavailable
4110		System-related- arrived >5hrs from presentation to ED
4100		System-related – Cath Lab unavailable (emergency)
4101		System-related – Cath Lab unavailable (Weekend)
4002		System-related – Bed not available in ward
4200		System-related – Pharmacy
4300		System-related – Medical Imaging
PATIENT/FAMILY RELATED	151	Patient Condition – Infectious and Parasite
	351	Patient Condition – circulatory system
	355	Patient Condition – cardiac
	360	Patient Condition –Arrhythmia for monitoring
	601	Patient Condition –Prolonged Ventilation
	1210	Patient Condition –Heparin not required
	1200	Patient Condition – Angio not required
	1220	Patient Condition – Does not suit pathway
	1230	Patient Condition – Early discharge
	1235	Patient Condition – Returned to Theatre
	601	Patient Condition –Respiratory
	751	Patient Condition – Digestive system
	801	Patient Condition – Hepatobiliary system
	1240	Patient Condition – Preadmission clinic pt unavailable
	1201	Patient/Family availability
	1301	Patient/Family decision
COMMUNITY RELATED	6000	Ambulance delay
	6100	Community services availability
		- RDNS unavailable

* Code numbers are part of the Excelcare clinical pathway program