Exploring communication and men's health service use on an Australian health helpline

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Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, 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.

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Signed: _ _ **Date:** 08-06-2020

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List of publications arising from this thesis

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List of conference presentations based on this thesis

LeCouteur, A., Lopriore, S., Ekberg, S. & Ekberg, K. (2019, June). *Initial actions to establish 'reason for calling' in opening sequences of calls by men to a national health helpline* Presentation at the 16th International Pragmatics Conference, Hung Hom, Hong Kong.

Lopriore, S. & LeCouteur, A. (2016, December). *Accomplishing physical assessments on a health helpline*. Presentation at the 10th Australasian Institute of Ethnomethodology and Conversation Analysis, Melbourne, Australia.

Lopriore, S. (2016, February). *Healthcare at a Distance: The Social Organisation of Delivering Healthcare via a Telephone Helpline.* Presentation at the Doctoral Students Conference on Conversation Analysis, Melbourne, Australia.

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Presentation at the 5th International Conference on Conversation Analysis and Clinical Encounters, Loughborough, England.

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Disclaimer

The views expressed in this thesis are the researcher's own and do not necessarily reflect those of *Healthdirect Australia*.

Abstract

The present thesis qualitatively examines a corpus of 196 calls to an Australian health helpline. The analysis focuses on exploring how the social action of delivering healthcare at a distance via telehealth (like helplines) is accomplished, as well as investigating the ways in which men, specifically, seek help using helplines.

Telehealth is an emerging area of health service delivery that is growing in popularity due to its accessibility for patients who cannot or choose not to attend medical visits in-person. Health helplines are one form of telehealth that involves the provision of health information and advice over-the-telephone. Helplines exist for a huge number of health concerns, ranging from general counselling to more specialised medical information and support. Some helplines offer similar services to primary case consultations; for example, triage, physical assessment, and medical advice provision. However, helplines differ from face-to-face medical services due to the absence of visibility and reliance on verbal communication in order to accomplish the social action of help-seeking and healthcare provision. The ways in which helplines overcome this absence of visibility in order to deliver healthcare is not well reported in the current literature. In addition to this gap in knowledge, there is also little research that specifically explores men's use of health helpline services. Men have been highlighted as a group who have much to benefit from telehealth services due to the consistent low uptake of traditional healthcare services by men globally. In contrast to traditional healthcare services, helplines are argued to suit men's help-seeking preferences due to offering access to low cost, expert medical advice without the need to visit services in-person. Little is known, however, about how men use helplines for their healthcare needs.

The analyses in the present thesis aim to bridge the gaps in knowledge described above. Conversation Analysis and Thematic Analysis were used, respectively, to analyse men's calls to the Australian government-funded health helpline, *Healthdirect Australia*. These qualitative approaches were selected as they allowed for a focus on the social patterns and themes that underlie healthcare delivery and help-seeking. This thesis consists of three analytic chapters that explore the social actions, interactional strategies, and help-seeking behaviours deployed in the helpline data. The analytic findings indicate that:

- Health helpline calls are highly structured medical encounters that have a similar organisational structure to primary care encounters (e.g., consist of problem-presentation, information-gathering, assessment, etc.), but also have inherent differences due to the nature of telephonic interaction and system design;
- Specific social actions associated with medical encounters, like physical examination, require modification in order to be accomplished successfully in a health helpline environment;
- Men's actual health help-seeking behaviours are more versatile than the current rhetoric surrounding men's health would suggest, which routinely positions men as a homogenous group who are disengaged from healthcare and reluctant to seek help for medical issues.

The findings presented in the present thesis have important consequences for both clinical practice and future research. In terms of clinical practice, many of the findings included in the present thesis have practical applicability to telehealth service and call-taker training. Training call-takers to be mindful of the language they use when initiating medical tasks that may not be intuitive to callers is important for smooth call progression, and (if done well) could mitigate the need for frontline staff to manage administrative tasks. In addition,

assisting call-takers to be more competent around collaboratively accomplishing self-examination may also lead to an increase in telehealth service use, as a lack of confidence in this area can prevent clinicians from offering telehealth such services. In terms of research, the present thesis highlighted the importance of examining naturally occurring instances of health interaction, particularly for the investigation of men's help-seeking behaviours. The findings derived from men's actual health interactions suggest that there is far more versatility within men's help-seeking than mainstream literature suggests. Future research may build upon the findings in the present thesis by examining other interactional practices associated with successful telehealth delivery, as well as exploring the impact of cohort differences (e.g., age) on men's health behaviours.

The structure of this thesis

This thesis is formatted as a 'thesis by publication', allowed for under the guidelines set down by The University of Adelaide Graduate Centre. I have chosen this style of thesis for a number of reasons. Firstly, I wished to share my work in relevant journals with peers as soon as I practically could. Second, I believed that the publishing process, and in particular the peer review process, would provide me with valuable feedback from experienced academics during the course of my candidature, ensuring that the work I produced was of the highest quality. As such, this thesis is comprised of three analytical chapters. The chapters were written in the order found in this thesis in order to tell the following story: a) what happens during health helpline encounters, b) how do interactants accomplish medical activities at a distance, and c) how do male callers engage with help-seeking in a helpline environment. The position of each chapter works to convey the overall narrative of my thesis – how do callers and call-takers jointly manage and accomplish the delivery of healthcare at a distance, and what are the implications for men's health? Chapters are also presented in the order in which they were written and published. It is acknowledged that there is some overlap in regard to the methodology sections in the analytic chapters due to the need to outline these procedures in each paper for publication purposes.

Chapter 1: Introduction and contextualising the research

Overview

This thesis explores communication and men's health service use in the context of an Australian health helpline. Calls are qualitatively explored using Conversation Analysis (CA) and Thematic Analysis (TA), respectively. Analysis focuses on exploring the ways in which healthcare is delivered at a distance, as well as the way male callers engage in help-seeking using the telephone helpline service.

By analysing caller and nurse call-taker interaction, I demonstrate how helplines are organised to deliver healthcare at a distance, both through the structural organisation of the interaction and through the way call-takers design their turns to overcome an omnipresent absence of visibility. I also highlight how male callers seek help for medical concerns using helplines, as well as exploring the extent to which men's actual help-seeking behaviours match the narrative conveyed by men's health literature.

This introductory chapter provides a background on both the delivery of healthcare using telehealth services, and men's health and help-seeking behaviours. I begin by providing an overview of the current literature on telehealth. I will focus specifically on the problems that have been identified with using telehealth as a healthcare delivery medium, as well as highlighting the idea that telehealth services may be ideal for male health consumers. The chapter then shifts to focus specifically on past studies of helpline interaction, with this literature acting as a foundation for the CA studies undertaken in the present thesis. An additional aim associated with providing this overview of literature is to highlight that the majority of past research on helpline interaction has focused on services which aim to provide

support and counselling, rather than deliver healthcare at a distance. Providing this background highlights a gap in the literature, and provides a rationale for analysing *Healthdirect Australia's* institution-specific goal of delivering triage, medical information and treatment advice over-the-telephone.

Following this, I will provide an overview of men's health and help-seeking. This overview will involve discussion of the reported crisis in men's health, whereby men are consistently reported to experience higher morbidity and mortality rates in comparison to women, while simultaneously being less likely to access help for their health concerns. A further aim of providing this background is to highlight the reliance on interview and focus group data when qualitatively investigating men's help-seeking behaviours, as opposed to naturalistic data (which have been utilised in the present thesis). To date, few qualitative studies have explored men's actual engagement and interaction with health services, particularly helplines. As such, there is currently a gap in knowledge regarding how men, specifically, present their health concerns or interact with health professionals. Therefore, providing background on the literature focusing on men's help-seeking is necessary in order to position the analyses within this thesis.

The chapter concludes by providing a summary of the aims of the present thesis, as well as providing an outline of each subsequent chapter. First, I provide an overview of the mainstream literature on telehealth.

Telehealth – usefulness, associated problems, and implications for men's health

Before offering a review of relevant literature, it is important to define how the analysis within this thesis is conceptualised within the broader landscape of telehealth. The term "telehealth" encompasses a variety of technologies that are used in the delivery of health

services, and is often used synonymously with a number of other terms (e.g., telenursing, telecare, telemedicine). While 'telehealth' is the commonly used term in Australia, it is important to acknowledge the broader terminology used in other parts of the world. Globally, the term "digital health" is used to describe the use of digital technologies for the purpose of healthcare (World Health Organization [WHO], 2019). The term "eHealth" is also considered to sit within the umbrella of digital health, and refers to the use of information and communications technology to support and implement healthcare delivery (WHO, 2019). Therefore, within the scope of this definition, health helplines (the focus of the present thesis) sits within the umbrella of 'eHealth'. While the present thesis analyses telehealth communication delivered via telephone helpline, literature pertaining to other types of telehealth remain important and will also be explored within the present chapter.

As described above, telehealth services use information and communication technologies to deliver health service and health information at a distance. In other words, it is about transmitting images, data, or voice to deliver healthcare, rather than requiring health professionals to attend to patients' in-person (Wootton, Patil, Scott & Ho, 2009; WHO, 2019). There are many ways that telehealth can be delivered, including via video-conferencing, the internet (e.g., Skype), or over-the-phone (i.e., helplines or via apps). Telehealth is becoming an essential aspect of contemporary health service delivery, with the WHO recently making a statement that, "harnessing the power of digital technologies is essential for achieving universal health coverage" (WHO, 2019). In many countries, use of telehealth is rising steadily (Sabesan & Kelly, 2015; The Helplines Partnership, 2014) due to its accessibility for patients who cannot attend medical visits in-person (e.g., due to geographical restrictions, a medical condition, etc.). These services can be used from home for a variety of medical activities, including: symptom management, support and advice, continuity of care, and provision of specialist care. Overall, telehealth as a medium for

healthcare delivery is recognised as having the potential to provide a solution to inequity of access to care, as well as maintaining continuity of care (Bradford et al., 2014; WHO, 2019). However, despite the many uses of telehealth services, it has not been embraced widely, both in Australia and internationally (Brewster et al., 2014; WHO, 2019). Research has typically highlighted practitioner resistance to adopting telehealth rather than patient resistance, who have historically reported satisfaction with such services due to convenience and perceived quality of care (Polinski et al., 2016; Wilkinson et al., 2016). In the following section, I review the research pertaining to problems associated with telehealth service delivery, with an overarching aim of highlighting the importance of clinician-patient communication during this process. As will be highlighted throughout the analytic chapters in the present thesis, successful communication during telehealth encounters appears imperative for service delivery and future service use. As well as providing this background on the perceived difficulties associated with telehealth, I address the potential that telehealth has for improving men's health service use, particularly in regard to telephone helplines.

Problems associated with telehealth

The slow uptake of telehealth has generally been attributed to a lack of practitioner acceptance of such services due to perceived problems and subsequent resistance to working within such frameworks. A systematic review of telehealth technologies by Brewster et al. (2014) identified the following factors as impacting front-line staff acceptance of such services: negative impact of service change (i.e., problems implementing telehealth), difficulties with staff-patient interaction, low expectations of a patient need for telehealth (i.e., the belief that patients' healthcare needs could be better managed in a face-to-face setting), and technical issues. Similar categories were also identified in a recent systematic review of qualitative papers relating to telehealth barriers (Koivunen and Saranto, 2017). In addition to those challenges identified by Brewster et al, Koivunen and Saranto found that

nurses' negative attitudes towards telehealth presented as a barrier for service uptake, as well as poor and low quality communication. In contrast (and perhaps unsurprisingly), it was highlighted that good quality communication was a facilitator for telehealth use. The authors concluded that nurses' attitudes towards telehealth use continues to remain somewhat negative, and that further research is required to determine how new healthcare technologies may be better accepted and implemented into nursing practice.

When it comes to telehealth challenges, the limits of staff-patient interaction are frequently presented as a perceived barrier to health service delivery. Mair et al. (2008) identified that staff perceive job satisfaction from having the opportunity to have face-to-face contact with patients. As such, a departure from the traditional face-to-face model of healthcare delivery is perceived as a challenge for workers to have a successful relationship with patients (Giordano et al., 2011; Oudshoorn, 2009). Due to this, telehealth has been reportedly perceived by nurses as non-client-focused (Giordano et al., 2011). Research exploring the patient experience also regularly highlights the importance of successful communication during telehealth encounters (Koivunen & Saranto, 2017). A quantitative British study that explored outpatient experiences of utilising telehealth for cancer support found that patients rated ease of communication as an important aspect of their care, and indicated that problematic communication or technology issues presented as barriers to service engagement (Cornwell, Moore & Plant, 2008). Findings such as these seem to share a general theme – that the delivery of healthcare requires successful communication, and that communication delivered via technology can be problematic.

Problematic communication during telehealth service provision has been highlighted in a number of studies (Bratton, 2001; Mair et al., 2005; Pappas & Seale, 2010; Pettinari & Jessopp, 2001). A study of medical consultations conducted via video-conferencing reported

that practitioners found physical examination particularly difficult to complete in a telehealth setting, and often relied on nurses (who were physically co-present with the patient) to complete examination activities, rather than instructing patients to report information themselves (Pappas & Seale, 2010). Research on patient perspectives of telehealth has also highlighted concerns about the feasibility of conducting physical examination at a distance. In a qualitative content analysis of patients' experience using telehealth for primary care consults, patients' expressed concerns about clinicians' ability to conduct physical examination verbally via telehealth, as well as expressing a belief that such medical activities would need to be completed during in-person visits (Powell, Henstenburg, Cooper, Hollander & Rising, 2017). Other studies have reported that clinician satisfaction with telehealth encounters is generally low due to perceived difficulty of understanding patients' medical problems (Mair et al., 2005; Bratton, 2001). It would seem, then, that communication difficulty is perceived as a practical challenge to using telehealth services.

In telehealth services that do not make use of video-conferencing, practitioners face the additional challenge of an absence of physical cues (i.e., patients and practitioners alike cannot see each other). This is particularly relevant in the environment of telephone-mediated telehealth (i.e., helplines), where practitioners are limited to verbal descriptions of patients' health concerns. A study of the UK-based *NHS Direct* helpline highlighted this absence of visual cues as a barrier to accurate performance of health assessments (Pettinari & Jessopp, 2001). In order to assess patients' symptoms over-the-telephone, practitioners have been reported to attend to auditory nonverbal cues, such as the degree of breath control and the general conversational tone (Edwards, 1994). Call-takers interviewed in Pettinari and Jessopp's (2001) study reported several additional strategies for managing the absence of visibility, which included the following: (a) caller self-tests (i.e., asking the caller to conduct examinations on themselves), (b) associate-assisted testing (i.e., asking someone present with

the caller to report physical information), (c) listening for physical signs (e.g., raspy breathing), and (d) monitoring voice quality for symptom deterioration/ patient mood. However, despite these strategies, the absence of physical cues remains a significant challenge to telehealth, and again highlights the importance of successful communication during such encounters.

Past studies of over-the-phone telehealth interaction

There has been a wealth of studies examining over-the-telephone helpline communication. In order to contextualise the analyses provided in the present thesis, the following review will focus on studies that have sought to explore the specific interactional strategies related to successful communication during over-the-telephone health-related encounters.

Many studies exploring over-the-telephone interaction have focused on the process of 'advice-giving', and how institutions tend to place limitations around these processes in telehealth environments (e.g., sometimes restricting call-takers from providing diagnoses or direct advice). Numerous studies (Butler et al., 2010; Emmison, Butler & Danby, 2011) have explored the Australian service *Kids Help Line* for this reason, due to the institutional mandate that call-takers should be non-directive in their approach to providing support (in other words, avoid direct advice-giving). Researchers found that one routine way that call-takers managed the mandate of non-directiveness was to ask callers questions about their experiences, and embed possible solutions into these questions. In a CA study, Butler et al (2010) referred to this style of interrogative as 'doing suggesting' as opposed to direct advice-giving, as it prioritised the caller's epistemic authority over the call-taker's, therefore empowering the caller. Another way that advice was observed to be indirectly provided on *Kids Help Line* was through the use of 'script proposals', which Emmison et al (2011) described as an interactional strategy for packaging advice into a hypothetical script that a

caller could re-enact to a third party. For example, call-takers may offer word-for-word suggestions around how to ask a teacher for help (i.e., a script) in response to bullying or other peer-related concerns. The authors identified that these script proposals similarly worked to empower callers as they contained suggestions for what callers could say/do in future scenarios, rather than directly telling callers what to do.

The dilemma of advice provision was also explored by Butler, Danby, Emmison and Thorpe (2009) in a CA study of the *Child Health Line*, which is an Australian helpline that offers developmental information and support to families. While the helpline is staffed by nurses, there is an institutional mandate to avoid medical advice provision. In this study, nurse call-takers were observed to manage the dilemma of providing support but avoiding medical advice-giving through use of particular interactional strategies. First, call-takers were noted to emphasise their identity as 'nurses', and highlight the limitations associated with their ability to provide medical diagnoses, thereby encouraging callers to seek additional advice from other health professionals (e.g., doctors). Second, call-takers routinely emphasised the decision-making authority of parents, and privilege the capacity of parents to make informed decisions around their children's healthcare. Finally, nurses were noted to reformulate callers' concerns as child development issues as opposed to medical issues. This allowed nurses to specifically provide advice and information relevant to child development (i.e., their area of expertise), and avoid a provision of medical advice.

'Warm lines' represent another over-the-telephone telehealth context that has received some research effort. In contrast to counselling-focused helplines, warm lines aim to provide general social support and companionship. In a series of CA studies, Pudlinski (1998, 2001, 2008) explored the ways in which institution-specific goals could be seen to shape calls to warm lines, and identified that the following themes were prioritised by call-takers: a) non-

directiveness, which prioritised caller empowerment over direct advice-giving, b) problem-solving, whereby call-takers assisted callers to discover solutions to their own problems, and c) connectedness, which focused on the encouragement of establishing and maintaining social support networks. Pudlinski (1998) also explored the ways in which call-takers attempted to uphold these institution-specific goals, while still providing support. They found that call-takers used the following interactional strategies to avoid direct advice-giving: a) embed a possible solution into a question, b) describe a similar problem and solution that they have personally experienced, and c) provide information that is associated with a potential solution for the caller's presenting concern (e.g., information about support groups, etc).

Home birth helplines have also been explored in regard to interactional strategies employed by call-takers to facilitate successful communication. Shaw and Kitzinger (2007) explored ways that call-takers managed advice provision during calls to a British telephone service for home birth information, which generally had an institutional goal to empower women around making decisions in favour of home birthing. They found that call-takers generally met this institutional goal through use of positive assessments (e.g., positive appraisals of women's plans to home birth, like "I admire what you're doing"), rather than through direct advice provision. The authors argued that these positive assessments enabled call-takers to remain in line with the philosophy of the helpline to empower and assist families to enact their right to organise a home birth.

Finally, the United Kingdom-based cancer support helpline, *Macmillian Cancer Support*, has also been explored in regard to communicative practices employed by nurse call-takers. Similar to other helplines, the *Macmillian* line has an institutional-mandate that call-takers provide information and support, rather than explicit medical advice. A CA study conducted by Woods (2016) explored the ways in which call-takers managed this mandate, particularly

in the context of prognosis-related requests from callers. Findings from this study highlighted that call-takers managed this mandate by providing prognosis information that was general and often vague, rather than providing information that was directly related to the caller's individual experience. In addition, Woods found that call-takers typically prioritised their professional membership as a nurse and the competencies related to this, and encouraged callers to speak with their doctors about personal health matters.

The potential for telehealth to improve men's health

Telehealth is generally considered popular amongst consumers due to its accessibility and convenience, particularly with rural and elderly populations who cannot attend face-to-face services (Gellis et al., 2012; Grubaugh et al., 2008; Eley & Moffatt, 2009). It would seem, then, that telehealth may also appeal to populations who face difficulty attending face-to-face medical appointments for other reasons – men. In a narrative literature review of telehealth service use, Filiault and Drummond (2009) concluded that men demonstrate an overall willingness to utilise technology for healthcare needs. They speculated that men's health outcomes may be enhanced through increased use of such services, and that further research was required in this space. Telehealth services are also noted to circumvent many of the environmental barriers known to restrict or prevent men's help-seeking, including the inability for men to access health services outside of working hours (Leishman & Dalziel, 2003; Malcher, 2006; Monaem et al., 2007), the inability of GPs to adhere to strict appointment times (Leishman & Dalziel, 2003), and the perception that primary care environments tend to be geared towards women's health, and lack health education resources targeted at men (Kaye et al., 2008; O'Kane et al., 2008).

In order to demonstrate the potential usefulness of telehealth for men's healthcare needs, I will first provide a review of men's health and help-seeking behaviours. This background is

positioned prior to a review of the current literature exploring men's telehealth use as the reasons for why men may prefer telehealth over traditional face-to-face services are complex. As such, the focus of the below review is to provide a narrative around the findings that have led to a positioning of men as a group in crisis, and why studies investigating telehealth interactions may help to address this.

Men's health, help-seeking behaviours and masculinity

Past literature exploring men's health outcomes and help-seeking behaviours have typically highlighted gender differences relating to health service engagement, the medical complaints that trigger health help-seeking, and men's reported preferences during health encounters. The following section will provide an overview of this research, with a particular focus placed on studies that describe: (1) the generally poorer health outcomes in men and a presumed reluctance to use health services, (2) gender differences in help-seeking, (3) the concept and relevance of masculinity on men's health help-seeking, and (4) men's purported preference for solution-focused health outcomes, and the emerging qualitative literature which challenges this preference. As well as providing background for the analyses in this thesis pertaining to men's health, an underlying aim here is to highlight the reliance that past literature has had on interview and questionnaire data. I describe the limits associated with particular qualitative methodologies for investigating the complexities of social action and interaction, as well as highlighting the advantages of using naturalistic data that allows for moment-by-moment analysis of men's help-seeking practices.

The crisis in men's health

Men's health behaviours have been under the spotlight in recent years due to consistently poorer health outcomes and reduced health service use when compared to women. One of the most widely reported gender discrepancies in health is life expectancy for men and women.

In Australia, men live approximately five years less than women on average (Australian Institute of Health and Welfare, 2019). This gender discrepancy in terms of life expectancy is also evident in other counties, including New Zealand (McKinlay, 2005), the US, Canada, Japan (Australian Institute of Health and Welfare, 2019), and a number of European countries (White & Cash, 2004).

In addition to life expectancy discrepancies, there are a number of other health indicators that suggest men experience generally poorer health outcomes in comparison to women. For example, Australian men are more likely than women to experience a number of medical and mental health conditions, including heart disease, accidental injury, diabetes, liver disease, and substance-abuse disorders (Australian Bureau of Statistics [ABS], 2010; Schofield, Connell, Walker, Wood & Butland, 2000; White, 2002; Broom, 2004; Mahalik, Levi-Minzi & Walker, 2007). Again, a similar pattern has been identified internationally, including in the US (Courtenay, 2003), New Zealand (McKinlay, 2005), and several European countries (Galdas, Cheater & Marshall, 2005; White & Cash, 2004).

One explanation for these poorer health outcomes is that men underuse health services in comparison to women. Using data obtained from the 2007/ 2008 National Health Survey (i.e., the most recent Australian cohort data at the time of writing), the ABS found that Australian men were less likely than women to have GP check-ups at least annually, with this gendered gap in service use being particularly pronounced for men aged 15-24 years and 24-44 years (ABS, 2010). Findings from this study found that the discrepancy in health service use remained even when comparing men and women who rated health as ‘poor’, which suggests that men are less likely to visit GPs despite experiencing ill health. Wang, Hunt, Nazareth, Freemantle and Petersen (2013) also reported similar patterns of primary care usage in a UK large scale cohort study, with men consulting 32% less than women. While there is some

evidence that this gendered gap reduces when accounting for visits relating to women-specific health issues like reproductive health (Bayram, Valenti & Britt, 2016), other studies have found that the discrepancy remains significant despite accounting for these types of gender-specific contacts (ABS, 2010; Wang, Hunt, Nazareth, Freemantle & Petersen, 2013).

Men have also been found to frequent other types of health professionals less than women, including mental health professionals (Courtenay, 2000; Galdas et al., 2005; Harris et al., 2015; Mansfield, Addis & Mahalik, 2003; McKinlay, 2005; Parslow & Jorm, 2000). Reavley, Cvetkovski, Jorm and Lubman (2010), for example, analysed data from a large scale cohort study and found that only 13.2% of young Australian men (aged 16-24) accessed mental health services despite being diagnosed with a mental illness. They reported that use of services was particularly low for men diagnosed with substance use disorders, despite finding a higher prevalence for this disorder within younger men. Australian women, by comparison, are 14% more likely to access mental health services compared to men (ABS, 2010; Bayram, Valenti, & Britt, 2016), with similar rates of engagement disparity found globally (McManus, Bebbington, Jenkins & Brugha, 2016; Wang et al., 2005). While recent research by Harris et al (2015) has found that men's mental health service use has substantially increased in the past decade (i.e., from 32% to 40%), it remains significantly less than that by women. In addition to this, Addis and Mahalik (2003) highlighted that men have consistently been reported to hold negative attitudes towards accessing mental health services in a literature review of men's healthcare engagement. Given these difficulties in accessing mental health support, it is perhaps of little surprise then that men, sadly, are 1.8 times more likely to die by suicide (WHO, 2016).

As well as gender differences regarding the frequency of visits to health services, previous researchers have also reported gender differences relating to the types of problems for which

help was sought. In primary healthcare, men are more likely to for present medical complaints relating to physical symptoms, and less likely to seek help for psychological symptoms relating to mental health (Schofield, Connell, Walker, Wood & Butland, 2000; Smith, Braunack-Mayer & Wittert, 2006). Similarly, medical professionals have been demonstrated to display implicit biases when assessing male patients, and are more likely to investigate for physical diseases rather than psychological pathology (Fitzgerald & Hurst, 2017).

Men have also been shown to have negative perceptions of other men who seek help, as well as a belief that male GPs view male patients negatively. This finding was identified in a qualitative study exploring the experiences of British men with prostate problems (Hale, Grogen & Willott, 2007), with participants reporting a belief that men who sought medical help were "time wasters who just wanted a sick note" (p. 699). They also reported a belief that male GPs were likely to perceive male patients as "soft" or "moaning" when they sought help (p. 699). The researchers concluded that male patients seem to be influenced by a need to appear strong, independent, and in control - especially during instances where a GP was also male. While male GPs have generally not been reported to have categorically negative views regarding male patients, a thematic analysis study conducted by Hale, Grogen and Willott (2010) found that GPs perceived patients more favourably when they exhibited traditional masculine traits. For example, they established that male GPs held a perception that working men (i.e., those engaged in active employment) tended to present with 'real' health problems, whereas men who were unemployed were more likely to present with frivolous concerns. The authors concluded that male GPs in the study shared an attitude that frequent presentations to primary care (particularly from unemployed men) represented non-masculine and, therefore, non-desirable behaviour. They speculated that this attitude may unknowingly influence male GPs interactions with male patients, causing them to feel

negatively evaluated and potentially less likely to attend in the future. Similar findings were highlighted by Seymour-Smith, Wetherell and Pheonix (2002) in a qualitative study of doctors' and nurses' attitudes towards male patients. They demonstrated that both doctors and nurses held negative attitudes about men which appeared to indulge traditional masculine behaviours, such as the belief that male patients will not want to discuss emotional issues and that female partners must coerce men into making and attending medical appointments. The authors concluded that these attitudes would undoubtedly impact male patients during health encounters, and may have implications for men who may transgress traditional masculine stereotypes.

Men are also reported to express certain conditions differently to women, which is also argued to lead to poorer health outcomes due to conditions being more difficult to detect and treat (Addis, 2008). The male presentation of depression, for example, is reported to involve less reassurance seeking and greater emotional suppression, which makes the condition more difficult to detect by others (Addis, 2008; Flynn, Hollenstein & Mackay, 2010; Seidler, Rice, Dawes, Oliffe & Dhillon, 2016). In addition to this, systematic review of men's help-seeking for depression by Seidler et al (2016) has demonstrated the general difficulty that men experience when seeking help for depression. The authors highlight the conflict between symptoms of depression and masculine ideals (e.g., that of stoicism, strength, and success) and the perception that many treatments for depression, like therapy, are feminine due to the need to engage in behaviours that may contradict masculine norms (e.g., emotional disclosure). Male depression also tends to be highly comorbid with substance use issues and other problematic externalising behaviours (e.g., anger dyscontrol), which can result in underlying depression being left undiagnosed or untreated (Addis, 2008; Cochran & Rabinowitz, 2003). These findings suggest that it is possible that some male conditions are

being missed by others, including health professionals, despite men having some engagement with health services.

One of the theories that attempts to explain men's poorer health outcomes and underuse of health services relates to the social and cultural norms that are typical for Western countries. In other words, it is theorised that Western cultural norms (e.g., that men should be strong, independent, and self-sufficient; Addis & Mahalik, 2003) perpetuate men's reluctance to seek help for health concerns, or are associated with barriers that make help-seeking more difficult. I turn next to an examination of one of the most popular theoretical explanations provided in help-seeking literature to account for gender differences in health service use – hegemonic masculinity.

Hegemonic masculinity

Hegemonic masculinity is a concept used to describe what is typically viewed as the traditional and idealised version of masculinity in Western culture (Connell, 1995). The concept is associated with a set of prescribed social norms that dictate men's behaviour in all contexts (Wetherell & Edley, 1999). Although the social norms associated with hegemonic masculinity are extensive, they are commonly reported to include the prescriptive that men should be strong, controlled, self-sufficient, stoic, emotionally inexpressive and independent (Addis & Mahalik, 2003; Cameron & Bernardes, 1998; Davies et al., 2000; Galdas et al., 2005; George & Fleming, 2004; Mahalik, Good, & Englar-Carlson, 2003; Möller-Leimkühler, 2002; O'Brien, Hunt, & Hart, 2005; Smith, Braunack-Mayer, Wittert, & Warin, 2007, 2008; White, 2002). Hegemonic masculinity has also been associated with professionalism and active employment, including the notion that men should be financial 'bread winners' within their respective family systems (Connell, 1987; Hunter, Riggs & Augoustinos, 2017).

Research investigating men's reluctance to seek help typically supports the notion that hegemonic behaviours and beliefs delay men from engaging with health services. Research suggests that such reluctance can be due to negative attitudes or beliefs related to help-seeking, for example, that caring about one's health is more so associated with femininity and, therefore, a non-masculine behaviour (Del Mar Garcia-Calvente, et al., 2012; Galdas, Johnson, Percey & Ratner, 2010; Smith et al., 2006). Other research has demonstrated that social expectations borne from hegemonic masculinity can limit men's ability to seek help. For example, Doherty and Kartalova-O'Doherty (2010) found that full-time employment was associated with lower help-seeking from men. Further research has also found that men report having limited time to access health services due to their employment, with a number of studies suggesting that men are frequently deterred from accessing primary care due to limited opening hours (Baker, 2012; Davies et al., 2000; McKinlay, Kljakovic & McBain, 2009; Smith et al., 2008).

Other studies have identified that fears of being perceived as weak or vulnerable prevent men from seeking help (Chapple, Ziebland & McPherson, 2004; Davies et al., 2000; George & Flemming, 2004). An American focus-group study supported these findings, identifying that male college students perceive the desire to be viewed as independent and devoid of vulnerability as the greatest barrier to help-seeking (Davies et al., 2000). It was also highlighted that male students feared seeking help for medical complaints that were inappropriate (i.e., conditions that do not require medical assistance), while simultaneously fearing negative judgement from peers. Similar patterns of male help-seeking perceptions have also been reported in older Australian males, where participants expressed their hesitancy to seek help as associated with a desire to remain independent and in control (Smith et al., 2007).

Such patterns have also been reported in the UK from interview-based studies of men's reluctance to seek help for health concerns. In a sample of men who had delayed treatment for testicular cancer, it was identified that reluctance to engage with health services earlier was due to fear of appearing as weak, a hypochondriac, or not being perceived as masculine (Chapple et al., 2004). These findings were also supported in a study of Irish men's reluctance to engage with services for early detection of prostate cancer, which found that participants negatively viewed men talking opening about their health (George & Flemming, 2004). Again, semi-structured interviews with participants highlighted that men did not seek help due to fears of being perceived as a hypochondriac, and therefore not masculine. Participants also expressed fears of wasting health professionals' time, endorsing the perception that health services are overburdened and only required for medical complaints that are severe. This perception has been supported by other studies investigating men's reluctance to seek help, which report that men delay visiting health services until problems become severe and intolerable (e.g., requiring hospitalisation or interfering with ability to work), or until they are encouraged by a female partner to seek help (Broom, 2004; Cameron & Bernardes, 1998; Chapple et al., 2004; Coles et al., 2010; Davies et al., 2000; Galdas et al., 2005; George & Fleming, 2004; O'Brien et al., 2005; Smith et al., 2008).

Exploration into men's health service utilisation has also suggested that men typically prefer a "solution-focused" style of interaction that is consistent with the ideals aligned with hegemonic masculinity. This purported preference is argued to stem from the coping styles endorsed by hegemonic masculinity, which focus on problem-solving rather than the expression of emotion (Adamsen, Rasmussen & Pederson, 2001). In the following section, I provide an overview of the literature that suggests a male preference for particular styles of communication modes. This background is important as it lays the foundation for a set of

assumptions about men's help-seeking preferences, which emerging research is beginning to question and challenge.

Hegemonic masculinity and men's purported health communication preferences

It is worth noting that there is a wealth of literature that reports on communication preferences for men. Rather than providing an exhaustive review of this literature, the present thesis will instead comment on communication preferences that are commonly linked to men's engagement with healthcare encounters. It will be demonstrated that these communication styles appear to be largely influenced by hegemonic masculinity, and often attempt to bypass hegemonic ideals that may otherwise limit men's engagement with healthcare.

Literature on men and masculinities suggests that humour can be particularly useful for engaging men with healthcare. It has been widely reported that humour is important to men and is often used as a mechanism for connecting socially with others (Coates, 2003; Williams, 2009). In regard to healthcare, past studies have found that men typically utilise humour as a means of avoiding emotional intimacy or diverting attention away from emotional issues related to their health concerns (Chapple & Ziebland, 2004; Williams, 2009). Williams (2009) found that humour was typically used by men to avoid emotional disclosures related to health due to the belief that such disclosures signified vulnerability or weakness. Men have also been reported to value use of humour by clinicians during health visits. Smith, Braunack-Mayer, Wittert & Warin's (2008) qualitative analysis of Australian men identified that humour was valued due to the perception that it reduced tension and lessened the seriousness of the encounter. This finding, again, suggests that humour is preferred by men due to its usefulness for diverting attention away from or displays of vulnerability, either physical or emotional.

Literature on men's health also frequently purports a male preference for practical outcomes and solutions when engaging with health professionals (Adamsen et al., 2001; Klemm, Hurst, Dearhold, & Trone, 1999; Robertson & Fitzgerald, 1992; Smith, Braunack-Mayer, Wittert, & Warin, 2008; Vingerhoets & Van Heck, 1990). An early example of this finding came from Vingerhoets and Van Heck (1990), who, using self-report questionnaire methods, identified a male preference for active, problem-focused coping strategies, and a female-preference for emotion-focused coping. This preference has also been identified in mental health contexts, where male college-age students in a focus-group study highlighted a preference for counselling that involved self-help materials, classes and workshops, as opposed to more traditional counselling involving self-awareness and self-disclosure (Robertson & Fitzgerald, 1992). This research concluded a strategy for encouraging men with highly masculine attitudes to use mental health services could involve advertising such services with a focus on action-orientation (e.g., using terms such as classes, workshops and seminars).

Men's preference for action-orientation and solution focused outcomes has also been identified within the context of a health intervention. Adamsen et al (2001) explored Danish men's participation in a well-being group for men with cancer, where participants regularly engaged in a series of physical activities including Tai Chi. Researchers observed that men readily engaged in the action-oriented activities, but rarely spoke about their medical conditions in terms of pain, suffering and symptoms. Given participants' post-intervention reports of increased energy and self-confidence, it was concluded that the positive benefits observed in the study confirm the appeal of action-orientated interventions for men with cancer.

Similar findings have also been identified in an Australian context regarding men's purported preference for action-oriented healthcare and solution-focused outcomes. South Australian

men were recruited for a study investigating the qualities that men value during healthcare encounters with doctors or other medical professionals (Smith et al., 2008). A preference for a 'frank' approach (i.e., concise language that was devoid of medical jargon) when communicating about health matters was endorsed, with researchers arguing that this preference was consistent with masculine values of "direct, result-oriented and decisive communication" (Smith et al., 2008, p. 619). Research has also suggested that clinicians avoid providing support through use of emotion-focused language, and instead focus on support that is oriented towards solutions and outcomes (Coles et al., 2010).

Researchers are beginning to argue that contemporary masculinity is transforming and allowing for men to engage in traditionally feminine behaviours without risking their position as a masculine male (Christensen & Jensen, 2014). Generally, this argument is hinged on a movement away from hegemonic masculinity (which has been the long-standing theory of masculinity), and towards a more flexible masculinity sometimes referred to as the 'new man' (Connell, 2005). Given the relevance of masculinity to men's help-seeking behaviours, these newer concepts of masculinity will be explored in the following section.

Emerging masculinities

It has long been argued that masculinity is a social construct that is built, shaped, and maintained by social knowledge and interactions (Connell & Messertschmidt, 2005). However, in recent years researchers have begun arguing that newer constructs of masculinity are emerging which allow for greater flexibility around what is considered 'masculine'. Currently, there are a number of emerging gender theories that address this apparent shift around what being masculine means for contemporary men. For example, 'hybrid' masculinity (Bridges & Pascoe, 2014), 'inclusive' masculinity (Anderson, 2005), and 'caring' masculinity (Elliott, 2015), to name a few. These theories have some differences

in how they conceptualise masculinity, but share a common rejection of the rigidity inherent to hegemonic masculinity, as well as embracing core values such as "positive emotion, interdependence, and relationality" (Elliott 2015, p. 240). Men who uphold and prioritise these emerging masculinities are viewed as a form of "new man" (Wetherell & Edley, 1999; Smith, 2016; Singleton & Maher, 2004). It is theorised that men embody these constructs of masculinity through behaviours such as willingness to be primary care-givers, caring about appearance, embracing other men who are marginalized in regard to their masculine behaviour (e.g., gay and bisexual men), and being active participants in matters about their health (Anderson, 2008; Miller, 2011). There is also research that suggests men embody masculine 'scripts' dependent on the situations they are in, as opposed to embodying a global, fixed masculine identity. Mahalik, Good, and Englar-Carson (2003) identified various masculine scripts common to psychotherapy, which included the 'strong-and-silent script', the 'tough-guy script' and the 'winner script', among others. The authors highlighted strategies for engaging men who presented with various masculine scripts, and highlighted the strengths and pitfalls of each in a therapy context. The research concluded by emphasising the various and interchangeable masculine identities that men can portray in therapeutic environments, and the importance of working with these identities rather than attempting to apply a homogenous, 'one-size-fits-all' approach.

Although men are argued to be embodying flexible forms of masculinity, there remains evidence that help-seeking and related health-promoting behaviours continue to be perceived as problematic (including amongst men who orient towards more flexible masculine identifies). In a case study analysis, Elliott (2015) argued that men who appear to embrace a caring masculinity viewed providing care for others as less problematic than caring for themselves. The study concluded that while men are now more open to taking on traditionally feminised attributes such as providing care for others, problems remain when it comes to

seeking help for themselves. Similar problematic themes were also identified in a qualitative study conducted by Sloan, Gough and Conner (2010), who interviewed men who self-identified as "healthy". While participants were found to be open about their desire to have good physical health and engage with health-promoting behaviours (e.g., regular exercise, low or no alcohol intake, etc.), their constructions of these behaviours was noted to align with hegemonic masculinity. For example, it was highlighted that participants continued to disavow a direct interest in talking or thinking about health as this was perceived as feminine, and instead positioned their health-promoting behaviours as bound to a preference for action-orientation, sporting targets, and personal autonomy (i.e., largely hegemonic ideals).

An underlying preference for hegemonic masculinity has also been found to operate in other areas where alternative masculinities appear, at surface-level, to be encouraged. Hunter, Riggs and Augoustinos (2015) found that parenting books written for primary caregiving fathers (or 'stay-at-home-dads') continued to reproduce hegemonic accounts of fathering, despite claiming to promote more involved models of fathering. The authors argued that hegemonic masculinity continues to be a dominant masculinity construct, and that behaviours that transgress this concept (e.g., such as being a primary caregiving father) are often socially transformed so that they continue to 'fit' hegemonic masculinity – for example, constructing an account of primary caregiving fathers as continuing to be powerful and a financial 'bread winner', despite engaging in a traditionally 'feminine' behaviour.

One area where men appear to be adopting more 'feminine' behaviours without underlying hegemonic ideals is the on-line world. In a qualitative content analysis of anonymous online fathering blogs, men's posts were found to contain high expressed emotion in which they talked about the emotional toll of parenting. This finding speculates that men (particularly those with limited access to traditional healthcare) may be more open to being emotionally

expressive in environments where an option for anonymity exists, such as in on-line environment or certain telehealth contexts (Filiault & Drummond, 2009). While men's use of such health services has received only little research attention, there has been some effort to explore this emerging area. As such, the existing literature exploring men's use of telehealth will be reviewed next.

Men's use of telehealth services

As described earlier, reports have found that men express a general willingness to use telehealth for their health needs. For example, literature from the United States has found that men rated access to telephone information services for health and emotional issues as one of their 'top 10' suggestions for improving men's health (Davies et al., 2000). Similar findings were also identified in an interview-based study from the United Kingdom (Branney, Witty, Bagnall, South & White, 2012), in which some men identified a willingness to contact the government-funded helpline *NHS Direct* as an alternative to seeing a GP. In Australia, men are reported to be using health helpline services at an increasing rate (Healthdirect, 2018). Male-specific counselling helpline services (e.g., those that advertise themselves as only servicing men for gender-specific issues) have also proven popular, which indicates that males are also willing to seek help for emotional issues using telehealth services (Tomlinson, Fernandes & Wylie, 2011). For example, in a quantitative exploration of men's use of a sexual health helpline and e-mail service, it was highlighted that a substantial portion of men had not sought help for their sexual health issues prior to contacting the service. The authors concluded by highlighting the potential of such services to increase men's willingness to seek help for delicate or sensitive medical matters, in which men may have difficulty discussing in a traditional face-to-face primary care settings (Tomlinson, Fernandes & Wylie, 2011). Findings such as these suggest that men are both willing and currently utilising telehealth services for their healthcare needs. In addition to this, research has found that men are willing

to utilise telehealth services for the needs of others, such as partners or children. An analysis of calls to *NHS Direct* (a UK-based telemedicine service) found that males were likely to contact the helpline for the health needs of another person, such as an aging parent, an unwell spouse, or a child (*NHS Direct* Site-SpecificStatistics Report 2002, as cited in Goode et al. 2004, p. 318). Findings similar to those listed above remain constant in the context of Australia (Healthdirect, 2018), which continues to see a gap in uptake for men contacting helpline services for their own needs.

A very small number of studies have qualitatively investigated men's experiences or perceptions of telehealth services. Goode et al (2004), for example, thematically analysed interview data from 10 male users of *NHS Direct* in the United Kingdom. The study explored men's reasons for contacting the health helpline, and identified three broad caller types: the 'assertive caller', the 'new dad', and the 'reluctant patient'. Findings from the paper suggest that men are willing to engage with healthcare services when contacting the service about others' health, but reticent to use the service for their own healthcare needs. Goode et al also noted that help-seeking was largely determined by the influence of female significant others, or by symptoms becoming severe enough to impact the ability to engage in employment activities. Overall, the authors concluded that while men were exhibiting some departures from the dominant men's health narrative around help-seeking, it appeared that help-seeking using *NHS Direct* continued to align with hegemonic masculine ideals.

Feo and Lecouteur (2013) have also qualitatively explored men's use of helplines. In contrast to previous explorations, the data in their study involved men's actual interactions on the helpline *MensLine Australia* - a gender-specific counselling helpline. Using a CA approach, the authors identified a pattern of help-seeking, in which men appeared to prefer an emotion-focused counselling style as opposed to a solution-focused one. Additionally, they found that

when a solution-focused style was prioritised by call-takers, interactional difficulty ensued due to the male callers' resistance of problem-solving. The authors concluded that these findings were at odds with the solution-focused style of communication routinely described as what men prefer in the men's health literature (Adamsen, Rasmussen & Pederson, 2001), and suggested that further qualitative studies utilising men's actual healthcare interactions may be useful for future research.

At this point, it may have become noticeable that much of the past literature exploring men's help-seeking has employed methodologies that focus on self-report, interview or focus group data. Although these methodologies are useful for understanding men's perspectives of their help-seeking and health service engagement, there are limitations associated with these methodologies which may have influenced the negative narrative of men as help-seekers. In the next section, I provide an overview of limitations associated with the methodological procedures typically employed in past studies of men's help-seeking. As a means of overcoming these limitations, I highlight the advantages of examining men's help-seeking practices *in situ* through investigation of naturally-occurring, real life healthcare interactions.

Limitations of largely employed methodologies for men's help-seeking

The majority of qualitative studies that have explored men's healthcare attitudes or behaviours have employed self-report methods. While such studies yield interesting findings, a range of problems have been associated with using such methods in social research (Edwards & Stokoe, 2004; Ten Have, 2004; Silverman, 2001). Potter and Hepburn (2005), for example, claimed that self-report data (including questionnaires, focus groups, and interviews) rely on the assumption that people have the ability to accurately report on "events, actions, social processes and structures, and cognitions" (p. 298). The authors base this argument on the belief that producing self-report data represents a specific type of social

interaction, whereby talk or a response is occasioned for a particular purpose (e.g., within a research interview, etc.), rather than occurring organically. In other words, the ways that participants may talk about and embody particular social constructs in research interviews may not accurately represent a real-life embodiment of that construct. Despite this notion, many researchers treat self-report data as the actual thoughts, beliefs, and attitudes of participants, rather than viewing them as a potential product of the research context in which they were obtained.

The limitations of self-report data methodology have been highlighted within the context of men's health. Seymour-Smith (2008), for example, argued that men's apparent preference for solution-focused communication may actually be more linked to "the presentation of a hegemonic masculine identity than to a real preference for action" (p. 795). In other words, men may be performing 'being masculine' during such research scenarios, and aligning themselves with notions that are prioritised within hegemonic masculinity, despite not displaying such behaviours in the real world. Again, this is not to say that such studies are not useful or valuable – the point here is more so focused on the potential that such studies may not always reflect men's real life health behaviours or preferences due to being bound in social performances related to masculinity.

Due to the reliance on self-report data in much of the men's health literature, there remains a potential gap in our knowledge about men's health-related behaviours. Given the largely negative narrative perpetuated within men's health literature about men's reluctance to engage with healthcare, this gap in knowledge is problematic as it is possible that this narrative may be refined (and potentially improved) by studies of men's actual healthcare interaction (Feo & LeCoutuer, 2013). As such, research exploring men's actual health behaviours may be helpful for providing additional insight into help-seeking behaviours and healthcare engagement.

Aims of thesis

The present thesis examines the ways in which the healthcare is delivered at a distance using an over-the-telephone telehealth service, as well as investigating the ways in which male callers engage in help-seeking behaviours using the helpline service. By analysing the interactions that take place between male callers and nurse call-takers to the Australian health helpline specialising in over-the-telephone assessment of medical concerns, I explicate the following: a) how the helplines are organised to deliver healthcare at a distance through the structural organisation of interactions, b) how nurse call-takers overcome the omnipresent absence of visibility by through specialist interactional practices that facilitate physical examination, and c) how male callers seek help for medical concerns using helplines, as well as investigating the extent to which men's actual help-seeking behaviours match the narrative conveyed by men's health literature.

Thesis overview

This thesis is formatted as a 'thesis by publication', allowed for under the guidelines set down by The University of Adelaide Graduate Centre. This style of thesis was chosen as it enables research to be peer-reviewed and disseminated, as well as allowing for an overall cohesive 'story' to be told.

The present chapter has provided an overall background and context to the issues under consideration in this thesis, with a specific focus on telehealth service use and men's health. Further, the aims and focus of this thesis have been outlined, above.

In the next chapter, Chapter 2, an in-depth overview of the methodology utilised for the analytic chapters of the thesis will be presented. This includes information about the data collection procedures employed for the present study, as well as information about the qualitative approaches used to analyse the data.

Chapters 3-5 are analytic papers that explore various features in a single corpus of 196 calls to the health helpline. Specifically, Chapter 3 focuses on the social organisation of calls to the helpline, and explores the degree to which this structure differs to primary care encounters. This paper utilised a CA approach to demonstrate that calls to the helpline are highly structured medical encounters that have a similar 'shape' when compared to primary care encounters (e.g., consist of problem-presentation, information-gathering, assessment, etc.), but also have inherent differences due to the nature of telephonic interaction and system design.

Chapter 4 also utilised a CA approach, and investigates the ways that call-takers modify medical activities in order to suit the over-the-telephone environment. Specifically, the paper focuses on the medical activity of physical examination, and explicates the specific ways that nurse call-takers design their talk to accomplish such assessments collaboratively with callers.

Chapter 5, the final analytic paper, explores the way that male callers to the helpline position themselves as help-seekers. The paper utilised a TA approach in order to investigate the themes associated with men's help-seeking. The paper highlights the versatility of men's help-seeking practices, and contrasts findings with the current rhetoric surrounding men's health, which routinely positions men as a homogenous group who are disengaged from healthcare and reluctant to seek help for medical issues.

Chapter 6 is the concluding chapter of this thesis. In this chapter, the findings of chapters 3-5 are summarised, and the ways in which these analyses contribute to existing literature are discussed. Further, the practical implications of these findings are explored, as well as some limitations and recommendations for future research. Overall, conclusions are offered regarding the ways in which this thesis contributes to understandings of telehealth service provision and men's health, as well as providing suggestions for future research.

Chapter 2: Methodology

Overview

This chapter provides an overview of the various methodological procedures utilised within the present thesis, and begins with a description of helpline in which caller and call-taker data was sourced - *Healthdirect Australia.* The chapter also provides information about the processes of data collection and use of transcription for analysis. Following this, the chapter provides an overview of the two methodological and analytic frameworks used in the present thesis – Conversation Analysis (CA) and Thematic Analysis (TA).

Data source

The data used for analysis in the present thesis were taken from of a corpus of recorded telephone calls made to the helpline *Healthdirect Australia* (hereafter, *Healthdirect*). *Healthdirect* is a national, government-funded health-information helpline service. The *Healthdirect* vision is to provide "all Australians with access to trusted professional health information without time or geographic restrictions" (*Healthdirect*, 2014).

Healthdirect was first introduced with the aim of reducing the number of patients presenting with non-urgent conditions at hospital emergency departments. The success of the helpline led to its use in six Australian states, including: the Australian Capital Territory, New South Wales, the Northern Territory, Western Australia, South Australia, and Tasmania (*Healthdirect*, 2014). The *Healthdirect* helpline service runs 24 hours a day and is staffed by paid registered nurses. These call-takers use decision-support software to perform assessments of callers' symptoms and determine whether they require emergency hospital treatment, non-urgent General Practitioner (GP) treatment, or at-home treatment. The types of health problems that can be dealt with through the helpline include emergency triage services,

provision of general health information, or provider referral, which can either be completed for the caller themselves, or for a third-party (i.e., partner, child, etc.). Call-takers are not permitted to provide over-the-phone diagnoses of medical conditions, only health advice and information.

In 2014, approximately 800,000 calls were answered by *Healthdirect*. Of these calls, 58% of patients were female, and 38% were male. 26.7% of calls were made on behalf of a child. Topics addressed in the helpline calls involved a number of clinical issues, including (but not limited to): medication queries, postoperative problems, abdominal pain, chest pain, head trauma, fever, cough, colds, diarrhoea, miscarriage, headache, nausea/ vomiting, rashes, dizziness/ vertigo, back pain, and inexplicable bleeding (*Healthdirect*, 2014). Treatment advice issued by call-takers for these medical concerns included: referral to an after-hours GP helpline, self-care at home, attend emergency department immediately, see a doctor/ health provider (either immediately, within 4 hours, within 24 hours, within 72 hours, or within 2 weeks), call Poisons Information Centre immediately, or, see a mental health provider immediately.

Healthdirect phone rooms operate in the majority of Australian states, including: Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Tasmania and Western Australia. The number of counselling staff working at one time depends on the time of day, as calls tend to come in at a higher volume at particular times. During 2014, the most frequent call time was 8:00pm (Australian Eastern Standard Time), while the least frequent call time was 5:00am (Australian Eastern Standard Time). The period 5:00pm-11:00pm had the heaviest call traffic (41%).

Call-takers collect a wealth of information from patients during calls, both demographic and health-related. The majority of demographic information is collected in the form of a

'confidential file'. The creation of a confidential file is a mandatory task which all call-takers must complete in order to move forward to the medical assessment stage of calls. During this sequence, call-takers ask a number of demographic questions, including questions regarding the caller's contact information, current location, and whether they identify as an Aboriginal or Torres Strait Islander. The purpose of the file is to ensure that *Healthdirect* has current information on all patients so that they can be rapidly connected to emergency services (if required), and also so that call-takers have access to up-to-date medical histories if the caller has used the service before. Despite the confidential file being a mandatory task of *Healthdirect* calls, it was not always possible to make out caller demographic information from call audio. Some calls contained limited information due to lack of questioning by call-takers or non-discernible audio which limited the practicality of including such information for analysis (see the Discussion chapter for further limitations of the thesis). Call-takers also gather medical information from callers during the medical assessment stage of calls, which involves a number of diagnostic questions in order to give patients the best advice for their medical concerns. Questions here vary depending on the caller's initial presentation of their medical concern.

While the majority of the calls in the current corpus are from male patients who contact *Healthdirect* for their own health concerns, a smaller number involve females calling on behalf of a male (but where the male eventually participates in the call himself), and calls where a male calls on behalf of a child.

Data recording and collection

The data utilised for the present thesis were 196 telephone calls to *Healthdirect*, amounting to just over 35.5 hours of audio recording. The calls were collected over a two year period from 2010-2012, and range in length from 1:48 to 23:06 minutes, with an average call length of 9

minutes. As highlighted previously, all calls in the data corpus are from men, with the exception of 20 calls where a female initiated contact with *Healthdirect*, but eventually passed the phone onto the male patient.

A previously negotiated agreement between SA Health and the Freemasons Foundation Centre for Men's Health at the University of Adelaide granted researchers within the School of Psychology access to the 196 *Healthdirect* calls. All call recordings to *Healthdirect* are recorded and stored for research and quality control purposes by the service provider – *Medibank Health Solutions*. Callers were informed that their calls were being recorded via a pre-recorded message. Consent was also given by call-takers and callers for the call recordings to be released to the University of Adelaide for research purposes. This was done via a call-back procedure, initiated by *Medibank Health Solutions*. Ethics approval for access to these recordings for the current research was granted by the University of Adelaide's Human Ethics Committee and the Human Research Ethics Committee of SA Health, following detailed description of the service requirements and research procedures (see below). Both committees have strict regulations regarding storage of, and access to, research data.

Medibank Health Solutions was responsible for performing the following services:

> 1) Identification of male callers who have previously called *Healthdirect* seeking triage or health information, either as a caller or on behalf of another person, and had previously consented to being contacted for the purposes of customer satisfaction as part of the standard 'consent to record for purposes of quality control' call message that precedes every *Healthdirect* call.
>
> 2) Making contact with the identified male callers via outbound call to seek consent to use the recording of the previous call for the current study.

3) Training of the outbound call-handlers in regard to familiarisation with the study and the process for requesting consent from callers.

4) Provision of a 'Fact Sheet' (Appendix B) to call-handlers to provide additional information to callers as necessary.

5) Confirming call-handlers sign a consent form for ethics and privacy purposes (see Appendix D).

6) Transfer of call recordings to the University of Adelaide researchers.

Medibank Health Solutions ran a series of reports at regular intervals over a 6-month period identifying *Healthdirect* calls handled within the previous 7 days that involved a male caller. Callers were required to be 18 years of age and over, and to have had completed a health information triage call where they consented to being contacted for a customer satisfaction survey. The service provider then contacted the identified male callers via outbound call using a standardised script in order to request consent for use of the recording of their previous call for the purpose of the current study. The script was as follows:

"Thank you for your recent call to Healthdirect Australia, I am calling from Healthdirect Australia and want to ask if you would do something else to help us to develop our service. We are currently conducting research to help improve the delivery of services to men in Australia. May I ask whether you would be willing to have the recording of your previous call included in a study that researchers at University of Adelaide are doing into men's use of Healthdirect? The research is looking at details of the way men make calls to Healthdirect, but no individuals will be identified - all callers' details will remain strictly anonymous. Would you be

willing to allow the researchers to make use of the recording of your call in this way?"

If callers wanted more detailed information, the phone number for the University of Adelaide's School of Psychology was provided. Further details regarding the study were provided in the form of a Fact Sheet for the call-handler's reference. This process required call-handlers to be trained and familiarised with the requirements of the study. Call recordings were then electronically encrypted and transferred to the University of Adelaide. Consistent with the ethics approval for the study, call recordings used in the study are required to be kept by the service provider for a minimum of 10 years. Once consent was obtained, recorded calls were encrypted and transferred via secure File Transfer Protocol site to a secure server at the University of Adelaide.

Data transcription

The transcription of raw data (i.e., audio recordings of helpline calls) was facilitated through the use of Wavepad Audio software, which allowed for audio playback of the data. All calls in the corpus were transcribed verbatim, which involved transcribing the general content of interaction but omitting the in-depth details of speech (e.g., the length of pauses or changes in pitch). While the majority of calls in the corpus were transcribed verbatim by the first author of the present thesis, a research assistant was contracted to assist with the transcription. While transcription at this level was sufficient for TA, analysis using CA required additional transcription. As such, sections of calls that were required for the CA chapters were re-transcribed by the first author of the present thesis using the Jeffersonian Transcription system (Jefferson, 2004), which permits analysis at the level of tone, pitch, simultaneous speaking, fractions of words, and provides precise information about length of pauses in conversation (Appendix A provides an outline of the symbols used in the CA chapter of the

present thesis). In order to protect participant anonymity, all potentially identifying information (e.g., names, locations, ages) were omitted or replaced by pseudonyms during the transcription process.

The present thesis utilised two distinct qualitative approaches for data analysis – Conversation Analysis and Thematic Analysis. An outline of these approaches is provided below.

Conversation Analysis

Conversation Analysis (CA) involves examining conversational features in fine detail to uncover systematic regularities in talk (Hutchby & Wooffit, 1998). In this sense, 'talk' becomes a site for the empirical observation of social order. The main tenets of CA are that:

> *"…social actions are meaningful for those who produce them and that they have a natural organisation that can be discovered and analysed by close examination".*
> (Psathas, 1995, p. 2)

An advantage of this approach is that it allows for *in situ* exploration of talk, rather than relying on retrospective accounts of what people say they do in interaction. Due to CA work being focused on the minute detail of interactions, interactional data must be audio and/or video recorded rather than reliant on notes, codes or recollections. This method of data collection allows for researchers to analyse the actual moment-by-moment unfolding of talk, as opposed to relying on memory or personal categorisation systems (i.e., via note-taking), and thus subjecting the data to individual biases. The step-by-step procedure for conducting CA research varies, but generally commences with the unmotivated examination of behaviour in social interaction (Sacks, 1984; Sidnell, 2013). Once a focal phenomenon of interest is identified through this process, a search is undertaken to build a collection of instances in

which this phenomenon occurs. Specialised transcription is then applied to capture a range of features that have been shown to be relevant to participants in interaction, such as changes in pitch, tone, speed of delivery, silence, and overlapping talk (Hepburn & Bolden, 2013; Jefferson, 2004). Detailed and systematic analysis within and across cases in the collection enables identification of the typical ways in which the focal phenomenon functions, as well as how it can be adapted to suit specific contexts. The insights gained from identifying these characteristics enable better understanding of how people manage the moment-by-moment progress of social interactions. Given that the activity of healthcare involves a great deal of social interaction, understanding how people manage these interactions provides insight into how health services function.

A conversation analytic approach was used for the first two analytic chapters of the present thesis due to its usefulness for investigating healthcare activities – much of which are achieved through talk (e.g., the taking of patient histories, conducting physical examination, and delivering diagnoses; Maynard & Heritage, 2005). CA has a long history of investigating institutional talk which, in essence, is talk that occurs outside of every day (or mundane) conversation. Draw and Heritage (1992) describe three basic elements that define institutional talk:

1. Interaction is centred around a specific goal orientation (e.g., receiving medical treatment) that is connected to institution-specific identifies (e.g., doctor and patient);

2. There are boundaries around what is considered as appropriate or allowable contributions from participants, based on both the context and institution-specific identities (e.g., it would generally be considered inappropriate for a doctor to commence talk about their own health concern with a patient, or for a patient to attempt to use medical instruments during a consult);

3. The interaction is driven by inferential frameworks and procedures that are specific to the context in which the interaction is occurring (e.g., ‘going to the doctor’ for medical treatment involves a number of steps, such as booking an appointment, checking-in with reception, explaining medical concerns, etc.).

CA was first developed through analyses of calls to a suicide prevention hotline (Sacks, 1992). This early work led to the development of the core tenants of CA, which include (but are not limited to) turn-taking, adjacency pairs, and storytelling (see Schegloff 1992a and 1992b for an overview). Since this seminal research, CA has been applied to talk in a variety of contexts, including the talk that takes place in every day (or mundane) situations. While these core tenants have been elaborated on considerably, the basic elements of turn-taking, sequence organisation, sequence-expansion, and preference organisation remain largely unchanged. These core principles of CA will be briefly discussed in order to explicate how they are relevant to the analysis in the present thesis.

Turn Taking

A fundamental organising principle of social action from CA perspective is turn-taking within interaction (Schegloff, 2007). The term ’turn-taking’ refers to the ways in which interactants normatively position their turns-at-talk to allow for minimal gap and overlap between speakers (Schegloff, 2007). Usually, turn-taking is governed by the principle that one person talks at a time, with the next interactant beginning their turn once the prior turn is audibly complete (Hutchby & Wooffitt, 1998). Turns-at-talk consists of numerous components or sequences of talk, which are referred to as turn-constructional units (TCUs). TCUs can build upon each other to constitute social action, such as initiating a greeting or request (Sacks, Schegloff & Jefferson, 1974). For example, the turn, “Hello Louis, may I speak to your mother?” contains two TCUs – a greeting and a request for action.

The completion of a TCU provides for the relevance of speaker transition, also referred to as a 'transition-relevance place' (TRP) (Hutchby & Wooffitt, 1998). Generally, a TRP will occur between the completion of one TCU and the beginning of another. Although a TRP represents a place where a transition may occur, it does not necessarily mean a transition will take place (Sidnell, 2010). For example, if a transition does not occur (i.e., the second speaker bypasses a turn-at-talk), then the speaker who produced the TCU may continue their turn-at-talk without having transgressed normative turn-taking procedures. This means that turns-at-talk can comprise of multiple TCUs from a single speaker before a transition occurs.

Talk can also be organised in regard to 'sequence', which refers to the ways in which turns-at-talk (and the actions they implement) are connected to one another (Arminen, 2006). The next section provides an outline of sequence organisation.

Sequence organisation

Within the methodology of CA, 'sequences' are thought to be the means by which social actions are accomplished (Schegloff, 2007). An 'adjacency pair' (Schegloff, 2007) is one of the most basic examples of a sequence, which involves two adjacently placed turns-at-talk that are produced by different speakers. The turns that comprise an adjacency pair are "relatively ordered" (Schegloff, 2007, p. 13), meaning that the turns contain sequentially ordered parts: a first pair part (FPP) which initiates a particular action (e.g., a request), and a second pair part (SPP) that responds to that action (e.g., permitting the request, or refusal). Adjacency pairs are also pair-type related, meaning that particular SPPs must follow particular types of FPP. For example, a FPP that contains a question must be followed by a SPP that provides the information requested (e.g., Speaker 1: "What is your name?", Speaker 2: "My name is Jim").

While the adjacency pair is a basic tenant of sequence organisation and commonly used, not all sequences will involve this simple, two-turn formula. For example, adjacency pairs can be expanded upon, leading to the production of long stretches of talk. This practice, known as sequence-expansion, will be discussed next.

Sequence-expansion

Sequence-expansion is most commonly observed in three different locations in talk: (1) prior to the FPP of an adjacency pair (termed 'pre-expansion'), (2) between the FPP and SPP (termed 'insert expansion'), and (3) directly following the SPP (termed 'post-expansion') (Schegloff, 2007).

Pre-expansion sequences tend to be initiated by the speaker of the FPP, and often work to prepare the second speaker for the forthcoming action (Schegloff, 2007; Sidnell, 2010). For example, a doctor might prepare a patient for an extended question-answer sequence by saying something along the lines of, "I'm going to ask you a number of questions about your health". The pre-expansion, in this example, works to project that an information-gathering sequencing is forthcoming which (given the nature of question-answer adjacency pairs) will require specific answers from the second speaker (in this case, the patient).

Insert expansion sequences are most commonly initiated by the recipient of the FPP (i.e., the speaker for whom the FPP was intended). Although insert sequences might delay the production of a SPP, they execute preliminary work that facilitates the successful production of the SPP. An insert sequence typically addresses matters relating to the production of the FPP or the upcoming SPP. Insert expansions relating to the FPP are labelled as 'post-first' expansions (Liddicoat, 2011; Sidnell, 2010), and typically constitute repair sequences relating to problems understanding the FPP. Insert expansions that are directed towards the SPP are called 'pre-second' expansions (Liddicoat, 2011; Sidnell, 2010), with these sequences often

accomplishing interactional work that is relevant to the upcoming SPP. If a FPP contains a request for action (e.g., a request for information), then a pre-second insert expansion might relate to preparatory work that will facilitate the granting or refusal of that request (Liddicoat, 2011). For example, in order to answer the question, "do you have any pre-existing illnesses", a patient may initiate a pre-second insert expansion to clarify, such as, "should I tell you about mental illness as well" before answering the question and disclosing their health history.

Post-expansion sequences can be minimal (i.e., sequence-closing thirds like "oh" and "okay) or extended, where other interactional work is done such as rejecting/ challenging/ disagreeing with the SPPs or reformulating the FPP (Schegloff, 2007). For example, where a request is refused, a post-expansion might be produced where the speaker who produced the base FPP (i.e., the request) challenges the grounds for refusal offered by the second speaker. Linked to sequence organisation and sequence-expansion is another core tenant of talk-in-interaction: preference organisation. This interactional practice will now be discussed.

Preference organisation

Although there are a range of potential SPPs that can follow a FPP, some responses will be preferred and others will be dispreferred. Responses that are preferred generally work to further the action-trajectory made relevant by the FPP (Schegloff, 2005). In contrast, dispreferred responses work to delay or reject the accomplishment of the action composed in the FPP. For example, granting a request for action works to advance the accomplishment of the said action, therefore making this response preferred over responses that refuse the request (and, therefore, undermine or hinder action accomplishment). In other words, a speaker who asks someone to hand them an object does so because they want access to the object. Therefore, granting this request (or, agreeing to hand them the object) is preferred in

this instance, as refusing the request would hinder the speaker from accessing the desired object.

FPPs are often designed in ways that make salient which type of answer is preferred. A basic example of this involves a 'yes/ no' interrogative, which is designed by the speaker to set a preference for either a "yes" or "no" response. For instance, a doctor asking a patient, "can you tell me about your rash?", invites a "yes" or granting response (Schegloff, 2007; Raymond, 2003), whereas the question "you haven't been vomiting, have you?", anticipates a "no" response. As such, second speakers who produce SPPs are usually aware of whether their response is going to be preferred or dispreferred by the first speaker based on the way the FPP has been grammatically designed, and demonstrate this awareness in their responses (Sidnell, 2010).

Preferred responses tend to be produced immediately, whereas dispreferred responses are often accompanied by an account, excuse or disclaimer (Schegloff, 2007). In this way, dispreferred responses are somewhat disruptive in conversation as they break contiguity with the FPP through silences, pre-pausals (e.g., "um", "well", "ah"), hedges (e.g., "I don't know"), anticipatory accounts, and palliatives (e.g., tokens of appreciation or apologies that attempt to mitigate the disaffiliative effect produced by the dispreferred response; Schegloff, 2007; Sidnell, 2010). Therefore, dispreferred responses often make relevant sequence-expansion, whereas preferred responses work to close a sequence, thereby signalling a TRP by which a new line of conversation can be initiated.

As described above, the first two analytic chapters of the present thesis utilise a conversation analytic approach, as the goal of these analyses were to explore the ways in which healthcare can be delivered at a distance through nurse-patient interaction. The third analytic chapter

utilises a different qualitative approach – Thematic Analysis. This approach is described, below.

Thematic Analysis

Thematic analysis (TA) is a qualitative methodology that is used to identify, explore, and report recurrent patterns within data (or in other words, 'themes'). While it is common for TA to be conducted using responses from self-report measures (e.g., interviews or questionnaires), it can also be applied to naturally occurring data. The advantage of TA is that it allows for an analysis of content (i.e., what it being said), and can be used to make interferences about the attitudes, behaviours, or beliefs of participants. TA was utilised for the final analytic chapter in the present thesis due to the research aim of understanding how men seek help while using *Healthdirect*. This research question went beyond the scope of CA, which is more so concerned with in-depth analysis of social actions rather than the constructs that could be underpinning or informing interaction (e.g., constructs like masculinity ;for more on CA's limits for exploring gendered interaction see Stokoe & Smithson, 2001). While there are various ways to 'do' TA (as well as aspects of it appearing in other approached such as grounded theory or interpretative phenomenological analysis), the present thesis utilised the approach outlined by Braun and Clarke (2006) for analysis psychological data.

Braun & Clarke's (2006) approach

In their seminal 2006 paper, Braun and Clarke outlined a step-by-step approach to conducting TA. Prior to the release of this work, there was less consensus around a clear definition of TA and critiques that 'anything goes' when it came to conducting analyses (Antaki, Billig, Edwards, & Potter, 2002). In response to this, Braun and Clarke set out clear guidelines for conducting TA, as well as highlighting the value of using TA independent of any particular theoretical framework (like grounded theory or IPA). Prior to conducting analyses, Braun and

Clarke recommended that researchers make various decisions about how they would approach the data. As such, these decisions (and their relevance to analyses in the present thesis) with be discussed briefly, prior to outlining the step-by-step TA approach.

Defining what counts as a 'theme' and social constructionism

Braun and Clarke (2006; 2013) proposed that researchers consider how they would define a pattern or a theme prior to commencing coding. They emphasised that the frequency of a theme within the dataset should not necessarily define the salience of the theme – rather, they suggested that themes could be meaningful whether they are frequent or only appear a small number of times. As such, researchers were encouraged to consider from the outset of the research how they would make consistent judgements about theme definition. While they did not endorse the requirement to follow specific protocols regarding this, the TA chapter in the present thesis was largely informed by the theory of social constructionism when it came to defining what 'counts' as a theme. Social constructionism is a theory that proposes that cultural practices, beliefs, and behaviours are socially built (Lupton & Barclay, 1997). The notion of 'masculinity', for example, is considered to be a socially constructed concept, rather than something that is biologically predetermined. A social constructionist view, therefore, proposes that masculinity is not an attribute of men or something that exists separate from men – rather, it is a construct that is performed by men (Connell & Messerschmidt, 2005; Hunter, 2018). Viewing masculinity through this lens enables researchers to explore the conditions in which different types of masculinities may emerge, and emphasises the notion that masculinity is a construct that is able to fluctuate rather than remain stoic. In other words, researchers can focus on what it means to socially perform masculinity, rather than assuming that masculinity (or how men think and act) is inherit with being biologically male.

Following in line with a social constructionist approach, themes were derived from the constructs around help-seeking presented by male callers to *Healthdirect*.

Inductive vs theoretical analysis

Braun and Clarke (2006) proposed that researchers also decide whether they would take a theoretical or inductive approach to the analysis prior to commencing coding. They described a theoretical analysis as being analyst-driven (sometimes referred to as 'top-down'), whereby researchers approach the data with a specific research question in mind (e.g., "is men's help-seeking aligned with the theory of hegemonic masculinity?"). In contrast, an inductive TA was described as being data-driven (sometimes referred to as 'bottom-up'), whereby data are coded without attempting to fit themes into a pre-existing coding frame or specific research question (e.g., "how do men enact help-seeking?"). The present thesis took an inductive, data-driven approach to analysis as the research interest was focused on exploring the various ways that men sought help on the helpline, rather than attempting to fit men's help-seeking behaviours into pre-existing codes that reflect specific theories. This led to the evolution of specific research questions, particularly around men's adherence (or not) to popular help-seeking theories established in men's health literature.

Conducting a Thematic Analysis: Braun & Clarke's (2006) 6-step model

Braun and Clarke's (2006) model for conducting TA consists of 6-steps (see Table 1). The first step of the process involves familiarisation with the data through transcription and repeated reading. After familiarisation, researchers should then begin generating initial codes based on interesting features in the data. While it is common to use computer assisted qualitative data analysis software (e.g., Nvivo) for this stage of the TA process, coding can be completed 'manually' using written methods (e.g., creating themes and sub-themes with pen and paper) or computer-assisted methods (e.g., using Microsoft Excel). The next step of the process involves collating codes into potential themes, followed by a review of these themes against the exemplar extracts and the dataset as a whole. Researchers must then begin

refining themes through the development of clear definitions and names for each of the themes generated. Once the above process has been completed, researchers can produce a report of their findings utilising a selection of compelling extract examples, and relating these findings back to the original research question. The present thesis utilised a manual method for creating, refining, and reviewing all of the themes and sub-themes included in Chapter 5.

As described earlier in this section, the final analytic chapter in the present thesis utilises a thematic analysis approach to study men's help-seeking behaviours in calls to *Healthdirect*.

Table 1. Braun and Clarke's (2006) 6-steps for conducting thematic analyses

Phase	Description of analytic processes
1. Familiarising with the data	- Transcribing data - Repeated reading of the data - Noting initial ideas
2. Generating initial codes	- Searching for interesting features in the data, and developing a code for these features
3. Searching for themes	- Collating initial codes into broader themes
4. Reviewing themes	- Cross checking themes in relation to coded extracts, and applicability to the entire dataset
5. Refining, defining, and naming themes	- Refining characteristics of themes until clear definitions are formed - Selecting names/ labels for themes that accurately capture characteristics
6. Producing a research report	- Selecting compelling examples of themes from data extracts - Producing a written analysis of themes using these examples, and relating findings back to original research question

Chapter summary

The present chapter has outlined and described of the methodological procedures utilised in the present thesis, including data recording, collection, and transcription, as well as provided information about the data source – *Healthdirect*. The present chapter also provided an overview of the methodological frameworks utilised to analyse men's helpline data – conversation analysis and thematic analysis.

As such, the thesis now moves on to the analysis of the data corpus. The general focus of the analysis involved the following: a) exploring how helplines are organised to deliver healthcare at a distance through the structural organisation of interactions, b) investigating how nurse call-takers overcome the omnipresent absence of visibility by through specialist interactional practices that facilitate physical examination, and c) exploring the ways in which male callers seek help for medical concerns using helplines, as well as addressing the extent to which men's actual help-seeking behaviours match the narrative conveyed by men's health literature. The first analytic chapter, Chapter 3, provides an exploration of the overall structural organisation of *Healthdirect* calls, contrasting this structure with physically co-present (i.e., face-to-face) primary care, and paying particular attention to the ways in which call-takers interweave mandated institutional tasks between medical activities.

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Name of Principal Author (Candidate)	Stefanie Lopriore		
Contribution to the Paper	Performed analysis on all samples, interpreted data, wrote manuscript and acted as corresponding author.		
Overall percentage (%)	85%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
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Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

i. the candidate's stated contribution to the publication is accurate (as detailed above);

ii. permission is granted for the candidate in include the publication in the thesis; and

iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

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Chapter 3: Analytic Paper 1

Delivering healthcare at a distance: Exploring the organisation of calls to a health helpline

Background: Health helplines are integral to contemporary healthcare, offering fast, low-cost, and geographically unrestricted access to health information and advice. Although some health helplines offer support services (e.g., counselling), many function in ways that are similar to physically co-present (i.e., face-to-face) primary care consultations. However, due to the lack of physical presence, there are differences in the way health consultations are routinely managed on the telephone. This article explores some ways in which healthcare is managed at a distance, on a telephone helpline.

Methods: Data are 196 recorded calls from the helpline, *Healthdirect Australia*. Using conversation analysis, this paper compares the delivery of healthcare over the telephone with what is known about physically co-present primary care consultations.

Results: Through an exploration of the overall structure of these helpline calls, we show how *Healthdirect Australia* calls are organised in terms of eight distinct phases: call opening, establishment of reason-for-calling, check of caller safety, creation of a confidential patient file, medical information-gathering, health advice, caller survey questions, and call closing. We demonstrate how interactants organise their talk around these phases, with a particular focus on the shift between mandated administrative tasks and traditional medical tasks.

Conclusions: Findings from this study suggest that there are systematic differences between the overall structure of health helplines and physically co-present primary care consultations. We demonstrate that the delivery of health information and advice via helplines can be

challenging, but that service can be enhanced through continued efforts to inform understanding about how medical encounters routinely unfold in over-the-phone environments

Introduction

Telehealth services are an important aspect of contemporary healthcare, with use rising steadily in recent years (Baker, Emmison & Firth, 2005; Sabesan & Kelly, 2015). Health helplines are particularly popular because of the fast, low-cost, and, typically, anonymous access to health information and advice that they provide. They also offer a means of addressing overcrowding in hospital emergency departments, a global problem that has negative consequences for quality of care, efficiency and the economy (Rooney & Schilling, 2014). In particular, health helplines are argued to reduce the number of patients presenting to emergency departments with non-urgent medical conditions (Jensen & Crane, 2014). Despite their putative utility, there is little existing evidence about the moment-by-moment delivery of healthcare on health helplines. Given that helpline use is increasing, there is a need to understand how these alternative healthcare interactions are structured. Examining the nature of interaction between callers and call-takers on health helplines can shed light on how healthcare can be successfully delivered at a distance, as well as exposing routine challenges in service delivery.

Specialised health helplines offer similar services to primary care consultations, for example: triage, physical assessment, and treatment recommendations. However, helplines differ from physically co-present (i.e., face-to-face) primary care services, with which most people have become acquainted throughout a lifetime of use (Roberts, Sarangi & Moss, 2004). One challenge to achieving successful communication on such helplines is callers may not be familiar with the specific type of service provided. Callers to helplines may be confused, for instance, by the need for call-takers to complete administrative activities in conjunction with their primary care duties. It has been noted, for example, that the inclusion of ethnic-monitoring questions may be perceived as inappropriate by callers and result in resistance to non-health-related activities (Leydon et al., 2013). In order to accomplish both medical and

non-health-related activities successfully, callers and call-takers must manage their interactions in ways that address the challenges of delivering healthcare at a distance.

Exploring healthcare communication

Although previous research has studied health helpline use, most work has relied on quantitative surveys or retrospective accounts to generate data (e.g., Goode et al., 2004; Lechner & De Vries, 1996; Murdoch et al, 2015). Such studies offer little insight into the nature of actual interaction on health helplines. Recordings of naturally occurring interactions (i.e., those produced in the absence of a researcher) are ideal for studying helpline interaction, as the production, negotiation and maintenance of these interactions is, in itself, the 'help' that is provided (Baker, Emmison & Firth, 2005).

Conversation analysis (CA) is a method for investigating naturally occurring social interaction that focuses on how particular communicative practices are designed to suit preceding contributions to that interaction, and in turn, shape what follows. CA is frequently used to analyse healthcare interaction (Drew, Chatwin & Collins, 2001; Heritage & Maynard, 2006). One contribution of CA has involved identifying how such interactions are routinely organised into recognisable phases (Ten Have, 1995; Heritage & Stivers, 1999; Robinson, 2003; Heritage & Robinson, 2006b; Boyd & Heritage, 2006), and how participants routinely design their interactions to adhere to these phases. The routine phases of health encounters, therefore, have an impact on how interactants behave at particular points in the interaction. Byrne & Long (1976) introduced the concept of functionally oriented-to 'phases' in primary care, describing consultations as involving: 1) an opening, 2) the establishment of a medical complaint by the patient, 3) an examination of the patient, 4) a problem diagnosis, 5) treatment recommendations, and 6) a closing. Subsequent research has continued to investigate overall structural organization of primary care encounters (Robinson, 2003), as

well as exploring interactional patterns that occur during particular medical phases, such as the delivery of good or bad news during diagnosis (Maynard & Frankel, 2006), patient responses to treatment recommendations (Stivers, 2005) and aspects of terminating medical visits (West, 2006). Overall structural organization has also been explored in other health-related contexts, including specialist medical appointments (Henry et al., 2013) and child mental-health consultations (O'Reilly, Karim, Stafford & Hutchby, 2014). Although there is now considerable detailed knowledge about how healthcare is delivered in settings where the participants share physical proximity, less is known about delivery of healthcare at a distance, such as via telephone helplines. Given the impact of oriented-to phases in primary care encounters, it is important to explore this fundamental aspect of health helplines, as well as exploring how interactants display their expectations of how they should behave during the healthcare encounter, and how these expectations are managed within the interaction.

Due to lack of physical proximity on health helplines, it is unclear whether findings from CA studies of physically co-present healthcare encounters can be applied to this context (Arminen, Licoppe & Spagnolli, 2016). Most health helplines that have been studied to date have been concerned with provision of information and support rather than with medical advice and triage to medical services (e.g., cancer information helplines, Leydon, Ekberg, Kelly & Drew, 2013; pregnancy information helplines, Shaw & Kitzinger, 2007; and telephone counselling services, Feo & LeCouteur, 2013; Danby & Emmison, 2014). The small number of studies that have described triage-focused helplines have focused on specific aspects of service delivery, such as the provision of recommendations (Pooler, 2010), call-takers' use of computer-directed software (Murdoch et al., 2015), and the types of callers who use health helplines (Goode et al., 2004). Further, the question of how helpline interactions are managed to accomplish the dual tasks of providing medical assistance and mandated administration has yet to be investigated.

Our aim in this paper is to explore how healthcare is delivered over the telephone, examining how it unfolds, and comparing findings with what previous research has identified in physically co-present primary care. This analysis will include examining how the overall structure of helpline interaction compares to Byrne & Long's (1976) seminal descriptions of physically co-present primary care consultations. Understanding how healthcare is delivered at a distance, using helplines, has important implications for both health-service providers and consumers. Given that helplines have potential to reduce the burden on physical services, such as hospital emergency departments, it is important to understand how helplines efficiently and effectively fulfil their purpose. Understanding more about health helpline interaction will assist with their design, and with operator training. Identifying evidence of gaps between what callers expect and what a service provides is also beneficial for service delivery. It is also important that telehealth researchers (as well as service providers) understand the overall structure of health helplines, as well as how callers and call-takers negotiate oriented-to phases while delivering/ receiving healthcare at a distance.

Method

Data for this study were collected from *Healthdirect Australia* (hereafter *Healthdirect*), a health-information helpline service funded by the Australian Government. Call-takers are registered nurses who use computer decision-support software (CDSS) to perform assessments of callers' symptoms and provide treatment advice. The CDSS provides call-takers with symptom-based, age-specific algorithms that assist in providing recommendations regarding appropriate levels of care. Although CDSS guides the topics of call-takers' questioning, their turns are not premeditated or scripted. However, call-takers are required to design their talk in accordance with *Healthdirect's* institutional policies, including the requirement that call-takers do not provide over-the-phone diagnosis of medical conditions - only health advice and information are permitted.

The data were 196 telephone calls, involving just over 35.5 hours of audio recording, collected between 2010 and 2012. Calls ranged in length from 1:48 to 23:06 minutes, with an average duration of 9 minutes. Due to a previously negotiated agreement between SA Health and the Freemasons Foundation Centre for Men's Health at the University of Adelaide (which granted researchers access to the calls), all calls in the corpus were from men, with the exception of 20 calls where a woman initiated contact, but eventually passed the telephone to a male patient.

Ethics approval for the study was provided by the Human Research Ethics Subcommittee of the School of Psychology at the University of Adelaide. Written consent was obtained from call-takers, and verbal consent from callers. All personal information was omitted or replaced with pseudonyms during transcription to protect participant anonymity.

A conversation analytic approach (Sacks, Schegloff & Jefferson, 1974; Sidnell & Stivers, 2012) was used to explore how calls to *Healthdirect* naturally unfolded. CA allows for exploration of the organisation of talk, as well as highlighting systematic patterns of interaction that might otherwise go unnoticed. Institutional encounters (such as medical visits) tend to exhibit a highly structured organisation, meaning that talk takes on a certain shape due to adherence to particular phases (Heritage & Maynard, 2006). Exploring this organisation is a fundamental task of conversation analytic studies of institutional interaction (Heritage, 2004). Identification of the oriented-to phases of health helpline calls is necessary in order to understand the systematic features of these alternative health encounters. This paper deals primarily with the overall structural organisation of *Healthdirect* calls, with analyses of specific call characteristics forthcoming in future papers.

Although CA is most often used for fine-grained analysis of specific features of talk, its use here is appropriate to our aim of revealing the *in situ* management of health helpline calls,

comparing these findings with what is known about the structure of physically co-present health encounters. Consistent with the CA approach, calls were transcribed using the system developed by Jefferson (2004; glossary of conventions in Appendix A).

Analysis

Although there was minor diversity in the way *Healthdirect* calls were managed, a general level of organisation was recurrent across calls. Although comprehensive analysis is beyond the scope of a single paper, we focus here on the most common aspects of these calls. In what follows, we describe the organisation of *Healthdirect* calls in terms of eight distinct phases: (1) call opening, (2) establishment of reason-for-calling, (3) check of caller safety, (4) creation of a confidential patient file, (5) medical information-gathering, (6) health advice, (7) caller survey questions, and (8) call closing.

A number of differences were evident in the way *Healthdirect* calls were negotiated when compared to previous findings on physically co-present primary care consultations. Although calls involved medical phases similar to those described by Byrne & Long (1976), the management of medical activities differed in various ways. Furthermore, in most cases, health helpline interaction involved delivery of health advice about treatment, rather than provision of a diagnosis.

In what follows, we outline the interactional processes involved in various phases of *Healthdirect* calls comparing, in each case, with what is known about interaction in primary care consultations.

Call openings

Previous research has described how, in primary care consultations, clinicians typically open the visit by attempting to establish an ‘interactional relationship’ with patients before the first

topic of talk is initiated, usually through an exchange of greetings and personal-state inquiries (Byrne & Long, 1976; Heritage & Robinson, 2006b). This order of initial encounters, termed a 'how-are-you' (HAY) sequence, has also been reported in mundane (i.e., 'everyday') telephone interaction where reciprocal greetings and personal-state inquiries precede the first substantial topic of discussion (Sacks, 1992). Previous CA research has found that HAY sequences are sometimes absent from institutional telephone interaction (Watkin & Zimmerman, 1999). As can be seen in the two extracts below, *Healthdirect* call-takers' institutional call openings (indicated with →) were typically expressed in the form of three elements: institutional identification, personal identification, and an offer to assist.

Fragment 1: Call 7

1 →	Call-Taker:	Heal:thdirect Australia this is Kal how can I help?
2	Caller:	Um ye:s my hus:band: <has> got a big graze on his le:g

Fragment 2: Call 10

1 →	Call-Taker:	Healthdirect Australia this is N:at how can I help you?
2	Caller:	hH:ey my name's Carl how are you this morning?
3	Call-Taker:	I'm goo:d and you?
4		(0.6)
5	Caller:	hhhTroubled

Following call-takers' three-part opening turns, callers' routinely responded in one of two ways: (a) with a HAY sequence followed by a problem-presentation, or b) with a problem-presentation (i.e., skipping the HAY sequence). Opening sequences were therefore short, with callers typically transitioning quickly into the next phase of the call: providing a reason-for-calling.

Reason for calling (RFC)

In primary care consultations, health professionals often take the role of eliciting a reason for attending from patients, using questions like, “What can I do for you today?” (Bates, Bickley, & Hoekelman, 1995; Heritage & Robinson, 2006a). In *Healthdirect* calls, this action was accomplished within the call-takers' initial turn through an offer of assistance, that was routinely treated by callers as soliciting their RFC.

The presentation of medical concerns in physically co-present primary care has been described as involving problems that are either ‘known’ (involving previously experienced medical conditions) or ‘unknown’ to patients (Heritage & Robinson, 2006a). In *Healthdirect* calls, RFC presentations were also designed in ways that distinguished between known and unknown medical problems. This pattern can be observed in the following two extracts, which feature the presentation of an RFC that is known (Extract 3) and unknown (Extract 4).

Fragment 3: Call 13

1	Call-Taker:	Healthdirect Australia Teresa speaking how
2		>can I< help y:ou
3 →	Caller:	YeaH: HI um (.) I trod on a rusty n:ail this
4		morn:ing an(d) I wasn’t sure whether it penetrated
5		my foot<I’ve just taken my sock off and it h::as
6		(0.4)
7	Call-Taker:	Yep
8	Caller:	Ah::mm:: would it- would it be okay to go down
9		an(d) get a tet:anus needle tomorrow?
10	Call-Taker:	Okay first of all ah:: is there any bleeding there now?

Fragment 4: Call 23

1	Caller:	I’ve had a little problem with my:self
2	Call-Taker:	Ye:ah how can I help you

```
3 → Caller:       Ah:: just before lunch today I was bleeding out of my
4                 back passage
5    Call-Taker:  Yeah okay: are you still bleeding now?
6    Caller:      Um:: I was when I had a shower a couple hours ago
7    Call-Taker:  O:kay can I just ask are you having any trouble
8                 brea:thing at the moment?
```

It was common for callers to present their RFC in a multi-unit narrative form with description of symptoms across a timeline. This multi-unit narrative form can be seen in Extracts 3 and 4, where both callers explain the circumstances around their presenting medical concerns. Although RFCs were designed differently based on whether they involved known or unknown problems, this distinction was not attended to by call-takers who, in each of the examples above, treat the completion of the caller's RFC as a space to transition into the safety check phase. This was the next activity across all calls in the data set.

The safety check phase was the first point in *Healthdirect* calls where there was an observable transition from medical talk to administrative talk. The transition to administrative talk here is a point of difference in terms of what is known about physically co-present consultations, where a problem-presentation would most likely be followed by history-taking or a physical examination (Byrne & Long, 1976).

Safety check

In physically co-present medical encounters, it is generally obvious from the outset if a patient is severely unwell or experiencing a medical emergency. Health professionals have access to a range of physical and visual cues, making formal safety checks unnecessary as a routine part of primary care (Byrne & Long, 1976). However, on health helplines, safety must be assessed verbally through a series of questions. Such questions are institutionally

mandated, and as such, occurred in all calls in the corpus regardless of callers' health concerns. Due to the institutional requirement that safety checks be completed as soon as possible, call-takers routinely had to manage a transition away from talk about the caller's focal health issues (as introduced in the RFC) to a mandated task. Extract 5 illustrates the design of the safety check:

Fragment 5: Call 163

1	Caller:	I'm just calling for my mum .hh and she just
2		wants to know whether she can take Panadol
3		with Tel:fast
4 →	Call-Taker:	Ah okay I can certainly help with that quest:ion
5		I just need to ask some safety questions<so your mum's
6		not having any difficulty breathing at the moment?
7	Caller:	No: no
8	Call-Taker:	And she's not feeling f:aint or like passing out
9	Caller:	N::o

Safety checks involved asking a series of questions that assessed callers' vital signs, such as breathing and level of consciousness. Such questions typically took the form of negative declaratives, a formulation that anticipates a response confirming absence (rather than presence) of symptoms (Heritage, 2010). In Extract 5, the caller has requested over-the-counter-drug-interaction information – a request that carries a low likelihood of immediate medical risk. Nevertheless, the call-taker asks the mandatory safety questions around breathing and consciousness, formatted as negative declaratives through lines 5-8. Here, the safety check is described as "some safety questions" that "need" to be asked (line 5). This turn positions the safety check as a preliminary necessity, as opposed to something that is medically urgent. It was typical for call-takers to use institutional accounts (such as, "I just need to ask…") to manage transition into the safety check phase of calls. The use of

institutional accounts to transition from medical talk (in the RFC phase) to mandated talk suggests that call-takers anticipate that this transition may be unexpected. Such framing is understandable in the sense that a switch to administrative duties at this point in the health encounter contrasts with what patients experience in physically co-present consultations.

Once call-takers were able to ascertain that a call did not involve an emergency, they typically transitioned into the second administrative phase of the call: establishment of a confidential patient file.

Confidential patient file

In most physically co-present healthcare encounters, the creation of a confidential patient file (involving name, date of birth, address) is managed by administrative staff, outside of interaction with a medical professional. On *Healthdirect*, calls are handled by a single call-taker who is responsible for creating files for new callers or retrieving previously created files. The confidential file contains caller details and medical history, and facilitates call-takers' communication with emergency services if required.

In the present corpus, most callers had not previously used the *Healthdirect* service. Extract 6 illustrates how call-takers routinely negotiated the activity of creating a confidential file by asking a series of questions relating to patient demographics.

Fragment 6: Call 12

```
1 → Call-Taker:  Alright I just need to get a file open and get some
2                ba:sic details an' then I'll ask you some more questions
3                about what's going on there okay?
4    Caller:     Yep
5    Call-Taker: Alright have you phoned us before?
6    Caller:     No I haven't
7    Call-Taker: What's your first name?
```

8 Caller: Ste:ven

9 Call-Taker: With a vee?

10 Caller: Yep (.) ee v:ee ee en=

11 Call-Taker: =And ya last name?

12 Caller: Lin:coln e:l eye en c:ee oh el en=

13 Call-Taker: =And your date of birth?

Call-takers tended to introduce the confidential-file sequence in a similar way to the safety check – as a preliminary necessity that needed to be completed. This format is evident in Extract 6 (lines 1-3). Here, the call-taker's use of a turn-initial "alright" signals a shift to a new task (Turner, 1999; Filipi & Wales, 2003), with the description that follows designed to manage the caller's expectations about what the confidential file will contain, and when his medical issues will be addressed.

Consistent with previous research (Leydon et al., 2013; Wilkinson, 2011), interactional difficulty was noted during the confidential-file sequence in a small number of calls where callers expressed confusion as to why such questions were necessary. An example of this trouble is illustrated below:

Fragment 7: Call 129

1 Call-Taker: Steven:: what is the address there please?

2 → Caller: .hhh (0.3) Is this really important?=

3 Call-Taker: =Um yes because if you've used our service before: there

4 may be a possible record here already that I just need to

5 open up.

6 Caller: Yep. (.) it's: six Bright Avenue

Extract 7 comes after the call-taker has requested the caller's address – a standard question in the confidential file phase. However, instead of providing his address, the caller audibly inhales and challenges the necessity of the question by asking, "Is this really important?" (line 2). In response to this request for clarification, the call-taker provides information about why the collection of this information is necessary (i.e., to locate the caller's pre-existing file). Apparently satisfied with this explanation, the caller provides his address and the confidential file continues without further trouble. Although comprehensive analysis of interactional difficulty in *Healthdirect* calls is not the focus of the current paper, evidence of such difficulty suggests that callers may not expect to provide demographic information in health helpline interactions and hence do not recognise such questions as necessary or relevant at this point in the call.

Medical information-gathering

Medical information-gathering routinely followed the confidential file questions, and marked a shift from 'administrative' talk back into 'medical' talk. The content of call-takers' questions was determined by CDSS prompts which (like the safety check) function to rule out potentially severe medical conditions. During this phase, call-takers were prompted by CDSS to collect information about the caller's current health concern (Extract 8) and general medical history (Extract 9).

Fragment 8: Call 16

```
1 → Call-Taker:  How long ago d(o)<ya notice the pain and the swelling
2                to your foot?
3                (0.2)
4    Caller:     Ah::: (f).hhh bout Mon-Mond:ay
```

Fragment 9: Call 14

1 →	Call-Taker:	You haven't had any surgery at all?
2		(0.4)
3	Caller:	Nah
4 →	Call-Taker:	No:: and you've got no pa:in
5		(0.8)
6	Caller:	Na::h

Medical information-gathering was accomplished through a series of questions framed as either *wh*- questions (i.e., "what", "when", "why" and "how") or yes/ no interrogatives. An example of *wh*- question use is shown in Extract 8, where the call-taker asks a 'how'-prefaced question regarding the caller's current health concern (i.e., a swollen foot). The design of yes/ no interrogatives tended to anticipate a particular response, with positively framed questions anticipating confirmation, and negatively framed questions anticipating disconfirmation (Boyd & Heritage, 2006). This pattern is evident in Extract 9, where the negative framing of both call-taker questions (lines 1 and 4) anticipates the negative response (disconfirmation) from the caller in both instances.

Healthdirect call-takers also collected specific medical information by instructing callers to conduct physical self-assessments. Physical-assessment-by-proxy allowed call-takers access to information about callers' or third-party patients' (e.g., children's) physical state. By instructing callers, call-takers were able to perform complex diagnostic work that would otherwise be performed by health professionals in physically co-present encounters. This feature is illustrated in the following extract, which involves a possible heart attack (Extract 10).

Fragment 10: Call 47

1 →	Call-Taker:	Okay mo:ve your arms about<lift your arms up and about
2		wave them around whatever you need to do Tom:: so that
3		you're moving them up above your chest again for me::
4		=does the pain get worse when you do that at all
5		(1.2)
6	Caller:	No
7	Call-Taker:	Okay and do you feel any degree of shortness of breath

Medical information-gathering in physically co-present consultations occurs in a similar fashion to that observed in *Healthdirect* calls. Analysis of clinician-patient interaction also shows clinicians design their questions grammatically to prefer responses that confirm the absence of unfavourable health conditions. This pattern has been described as 'optimization', and is the default principle of medical questioning, as it functions to gather large amounts of information rapidly (Heritage, 2010). When clinicians share physical proximity with patients, medical information-gathering is often a combination of verbal questioning and physical examination (Byrne & Long, 1976; Stivers & Majid, 2007; Heritage, 2010). In contrast, information-gathering in *Healthdirect* calls was limited to verbal questioning and reporting. However, call-takers were afforded some physical information through verbally-reported caller self-tests by means of physical-examination-by-proxy (present authors, forthcoming).

In *Healthdirect* calls, the activity of medical information-gathering concluded when call-takers had collected sufficient information for the CDSS algorithm. Once adequate information was obtained, *Healthdirect* call-takers transitioned into another activity: the provision of health advice.

Health advice

Diagnosis is an expected element of primary care consultations, and is considered a central objective for health help-seeking (Byrne & Long, 1976; Robinson, 2003). However, *Healthdirect* call-takers are not authorised to offer diagnoses[1]. Operating within this institutional constraint, call-takers instead delivered health advice to callers as suggested courses of action in the majority of calls. These courses of action appear on call-takers' screens based on information collected in previous phases of CDSS-assisted questioning.

Five types of suggested action were used by call-takers in the corpus: (1) visit the hospital emergency department, (2) consult a General Practitioner (GP), (3) contact an after-hours GP service, (4) contact the poisons information helpline, or (5) manage the condition with home-based self-care. An example of a suggestion course of action involving a GP recommendation is shown in Extract 11.

Fragment 11: Call 13

1 →	Call-Taker:	So what I would suggest you do: Carl is that<yes you do
2		need to see a doctor within the next twen(t)y four hou:rs
3		(0.3)
4	Caller:	R:ight
5	Call-Taker:	=And you must have a tetanus w- >ah< if you don't-
6		if you're not ah: (.) tet tox ah covered you need
7		one within seventy two hours from the time of the
8		puncture wou:nd
9	Caller:	Yeah
10	Call-Taker:	Okay? [Now:]

[1] Provision of diagnoses is not generally a feature of health helplines, with similar helplines (e.g., *NHS Direct*) also operating within this framework (Pooler, 2010).

11 Caller: [I'll] ring (first aid) in the morning yep
12 (0.5)
13 Call-Taker: Erm: (.) where<erm: Renmark wha- d- do that- does that
14 have like medical centres? or er- is it only a nursing
15 post ( ) where you a:re or::
16 Caller: Just a nursing post<well not even a nursing post it's
17 a St John's bu- they don't use it as a nursing post
18 (0.4)
19 Caller: But we've got doctors down the hill
20 Call-Taker: You have?
21 Caller: Yep
22 Call-Taker: =Okay y- you've got a doctor that you can go: to?
23 Caller: Ye::ah I'll go see our normal doctor tomorrow or the
24 nurse out the back (.) whichever

In this case, the call-taker suggests that the caller consult a doctor for a tetanus vaccination, and provides recommended timeframes for this course of action. Although the health advice is formulated as a suggestion at line 1, the call-taker persists in ensuring that the caller has the means to implement the suggestion (due to his rural location), until the caller makes it clear that he will see a doctor the next day (line 23). By delivering health advice as suggested courses of action, *Healthdirect* call-takers were routinely able to offer callers expert opinion on how to manage their health concerns without providing diagnoses.

Although call-takers are not authorised to provide diagnoses, there were some calls in which diagnoses were provided, nonetheless. In every case, this involved calls in which health problems were assessed as being appropriately managed with home-based care. This pattern is demonstrated in Extract 12, where a caller is inquiring about her daughter's gastrointestinal condition.

Fragment 12: Call 31

```
1    Call-Taker:  So at this stage I think it- it's fi:ne to keep her at
2                 ho:me oka::y that she's quite safe to be kept at home
3 →               .hh and it sounds like she's got a bit of a (.) gas:tro
4                 sorta thing especially if she's had a bit of loose bowels
5                 as we:ll
6    Caller:      Yeah
```

In instances where call-takers did provide diagnoses, 'sounds like' formulations were regularly used to convey that claims were inferences based on a prior description (Ekberg et al., 2016). A 'sounds like' formulation is demonstrated in Extract 12, where it works to support the recommendation of home care. Despite not being institutionally authorised, it seems there are benefits to these types of qualified diagnoses, as they assist call-takers in delivering low-level care advice.

In all calls, the provision of health advice by call-takers, and callers' acknowledgement of this, generally signalled the end of substantive discussion. From here, transition was made back to administrative tasks through the initiation of a sequence of survey questions.

Caller survey questions

Caller survey questions on *Healthdirect* are designed to assist evaluation and institutional reporting about the service. Two questions are asked: a hypothetical 'what-would-you-have-done' question (Extract 13), and a caller-consent question (Extract 14).

Fragment 13: Call 27

```
1 →  Call-Taker: Al:right and what would you have done if you didn't
2                call us tonight?
3                (0.4)
```

```
4     Caller:     A:::h probably would've toughed it out til the morning
```

Fragment 14: Call 5

```
1 →  Call-Taker:  May I ask you a question before you go:
2    Caller:      Sure yes
3 →  Call-Taker:  W:e ran:domly survey our callers.
4                 (.)
5     Call-Taker: If you <con:sent> infor:mation relating to this call will
6                 be provided to a third par:ty in order for us to improve
7                 ou:r services<is this okay with y:ou
8     Caller:     Ye::ah that's al:right
```

Call-takers tended to transition into the survey questions in ways similar to that evidenced in prior administrative tasks in calls (e.g., the confidential file task). Transition markers in turn-initial position, like "al:right" in Extract 13, were frequently used to signal a forthcoming shift into a new activity (Turner, 1999; Filipi & Wales, 2003). Although responses to the 'what-would-you-have-done' question varied, most responses involved callers describing a hypothetical delay in seeking medical treatment (as in Extract 13). All responses to the 'caller-consent' question involved provision of consent.

The caller survey questions constituted the final activity before closing, in all calls in the corpus. The questions were commonly prefaced with closing projections that indicated the impending end of the call. This feature can be seen in Extract 14, where the call-taker prefaces the 'caller-consent' question with "May I ask you a question before you g:o" (line 1). The design of this 'pre-question' (Schegloff, 2007) both projects call closure as upcoming, and postpones it to enable asking the projected question.

Closing

The act of closings in physically co-present medical encounters is known to require complex interactional work from all parties, including physical activities (like sitting, standing, etc.) and the possibility that patients will attempt to initiate additional medical talk (i.e., 'door-handle' remarks, Byrne & Long, 1976; Robinson, 2001). In contrast, closing on *Healthdirect* was typically achieved straightforwardly in a few short turns. Closing often involved a combination of optimistic projections about future health, exchange of appreciation, and a terminal sequence implemented through a farewell exchange. Extract 16 demonstrates the pattern of the majority of closings in the corpus. Prior to closing, the call-taker had provided home-based recommendations for the caller, who had contacted the service with concerns about his young daughter's finger pain.

Fragment 15: Call 11

```
1 → Call-Taker:  Oh:kay well look I hope your daughter's finger gets
2                better if she can at lea:st sleep with it not so s:ore
3                (0.4)
4    Caller:     Alright
5 → Call-Taker:  =Oh- okay and um: thank you for your call
6    Caller:     Thank you so much
7 → Call-Taker:  Thank you: (.) goodnight
8    Caller:     Goodbye
```

Here, the call closing involves: an optimistic projection regarding the caller's daughter and her injured finger (lines 1-2), an appreciation (line 5), and a terminal exchange sequence (lines 7-8). By participating in this exchange, both caller and call-taker acknowledge that no further talk will take place, making the actual closing of the call the next relevant activity (Jefferson, 1988).

Discussion

Although some effort has been made to explore helplines (Shaw & Kitzinger, 2007; Feo & LeCouteur, 2013; Leydon, Ekberg, Kelly & Drew, 2013; Danby & Emmison, 2014), a substantial gap in understanding exists regarding the overall structure of these services. Contributions from the present study address this gap in knowledge by identifying distinct phases that callers and call-takers orient to throughout calls, and highlighting challenges that participants face in the negotiation of these phases. Together, these findings provide useful information about the overall structure of health helpline services, and extend knowledge regarding how healthcare is delivered at a distance.

One feature of the health helpline overall structure examined here was the inclusion of mandated administrative tasks in calls. Call-takers were required to interweave medical activities with mandated tasks, and this resulted in repeated transitions into and out of health-related talk. These transitions were often managed by turn designs that acknowledged the mandated nature of the upcoming sequence (e.g., prefacing administrative turns with, "I just need to ask…", etc.). Patients progressively become acquainted with the format of health encounters through repeated exposure to healthcare services (Roberts, Sarangi & Moss, 2004). Given that physically co-present medical encounters routinely involve administrative tasks that patients undertake with clerical staff prior to consulting a clinician, the interweaving of medical and administrative tasks during *Healthdirect* calls may be unexpected by callers, and thus result in some interactional trouble. Misalignment of caller expectations and service requirements may explain why interactional trouble occasionally manifested during the confidential file phase, given that callers may not expect to divulge personal information at this point in the encounter. The way in which call-takers routinely transitioned into administrative phases by highlighting the mandated nature of the

forthcoming task using prefacing was one way in which they managed the potential for misalignment around administrative tasks.

The inclusion of administrative tasks during calls results from the absence of initial call-handling in the *Healthdirect* system. Previous exploration of a triage-focused health helpline has described an overall structure that is similar to primary care consultations (Pooler, 2010), rather than displaying the additional administrative call phases of *Healthdirect*. This difference in structure is due to the inclusion of front-line call-handlers on *NHS Direct* who perform administrative tasks before discussion with a medical professional takes place. It is this form of front-line administration that is likely to account for previous findings that health helplines share broad organisational features that are comparable to primary care consultations.

Healthdirect call openings and closings also displayed some differences from what has been found in their physically co-present counterparts. Generally, these phases unfolded in a straightforward manner, mirroring service call opening and closing (e.g., skipping the HAY sequence) rather than physically co-present primary care opening and closing (which is reportedly complex; Byrne & Long, 1976; Watkin & Zimmerman, 1999; Heritage & Robinson, 2006b). The streamlined opening and closing sequences observed in *Healthdirect* calls allow for rapid initiation and termination of an exchange – something that is necessary in a health helpline environment where call-takers do not have physical access to the patient, and therefore must move through calls quickly to assess safety. Additionally, this difference could be due to *Healthdirect* callers' transient relationship with the service. It is unlikely that callers will encounter the same call-taker more than once, which stands in contrast to patients who physically attend primary care services, where they are more likely to have long-standing relationships with health professionals. Therefore, physically co-present clinician-

patient openings and closings may exhibit conversational practices that are more reflective of mundane talk (e.g., HAY sequence; Sacks, 1992) due to already having established, or being in pursuit of, a long-term working relationship (Byrne & Long, 1976).

In *Healthdirect* calls, medical information-gathering activities were accomplished verbally, without touch, to suit the telephone-mediated environment. This pattern was particularly noticeable during physical examination sequences. In order to collect physical information, call-takers had to instruct callers verbally on how to perform certain self-tests that, in a physically co-present environment, would usually be performed by a health professional. This meant that callers were required to take on an active role in the assessment process, contrasting with the rather passive role that is usually expected of patients in physically co-present physical examination sequences (Byrne & Long, 1976). This feature of calls is examined in more detail in future research (current authors, forthcoming).

Another important feature identified in the present study involves the limitation on offering diagnoses for *Healthdirect* call-takers. To overcome this limitation, call-takers routinely packaged health advice as a suggested course of action, thus allowing callers access to expert opinion on how to manage their health concerns without the delivery of an actual diagnosis. In calls where call-takers bypassed the institutional restriction on providing diagnoses, 'sounds like'- formulated inferences were used to convey possible diagnoses regarding low-risk health concerns. Although these types of diagnoses are not part of the *Healthdirect* mandate, they served to facilitate the provision of low-level care advice (e.g., home-based care). This finding suggests that attenuated diagnoses (in the form of 'sounds like' formulations) may be of use in managing misalignments between call-takers and callers around the level of care required in response to a health concern. The service being provided on *Healthdirect* calls thus differs from what is known about physically co-present primary

care consultations where a diagnosis would be expected by the patient as a key aspect of the encounter (Byrne & Long, 1976; Raymond, 2003).

The analysis reported here identified a number of important differences between physically co-present primary care consultations and health helpline calls. It is important for researchers, policy makers, and practitioners to be clear about the nature of these differences. The present study enables different stakeholders to identify where and how these differences are likely to impact the interaction. The differences identified in the present study can be separated into two categories: those that are intrinsic to telephonic interactions (i.e., a result of gathering all medical information verbally), and those that have been engineered through the design of the service (e.g., the requirement to create a confidential patient file at the outset of the conversation). Identifying and understanding these intrinsic and engineered differences enables health helpline system designers to reflect upon the interactional consequences of certain design choices, and identify areas where system changes could be implemented for enhanced service delivery.

Notwithstanding the identified differences between health helpline calls and primary care interactions, similarities were evident. These included the ways in which callers tended to frame their health problems (i.e., as 'known', routine or recurrent problems as compared to 'unknown' problems) and the occurrence of similar identifiable medical phases (e.g., verbal aspects of the medical information-gathering phase is similar to Byrne & Long's "examination" phase). These similarities are likely to result from the programmed CDSS structure mirroring the medical model of diagnosis discovery, a framework that underpins the organisation of most Western healthcare encounters (Swash, 1989). Callers' previous experience of physically co-present health services could also account for occasional displays

of difficulty, on part of callers, in completing tasks not typically required in traditional medical encounters (e.g., the confidential file activity)(Roberts, Sarangi & Moss, 2004).

Investigating naturally occurring data has advantages over retrospective self-report accounts (such as surveys and interviews), as it allows for exploration of the moment-by-moment delivery of health services (O'Reilly, Karim, Stafford & Hutchby, 2014). The present study bridges a gap in knowledge regarding the overall structure of health helplines, which is necessary to understanding the social production and utility of such services. Here, we have outlined the structural organisation of health helpline calls and described how activities are negotiated within these calls, including how call-takers transition into and out of mandated administrative and medical tasks during calls. Findings from this study can be used for service training to educate call-takers on the complex nature of delivering healthcare at a distance. For example, in services such as *Healthdirect* where there are no front-line call-takers to collect administrative information from callers before triaging them to a nurse call-taker, training call-takers to manage transitions into and out of administrative tasks may assist smooth progress of calls, while preserving the economic benefit of not having to employ additional staff. Callers may also benefit from dissemination of information from the analysis presented here, as aligning health consumers' expectations with what services are able to provide (e.g., diagnosis versus treatment recommendations) is important for ensuring satisfaction and continued use. Identifying how healthcare is managed at a distance using heath helplines opens avenues for future research exploring specific call features. Future research might consider how particular medical activities are achieved at a distance (e.g., diagnosis, where permitted), as well as exploring the overall structure of other formats of telehealth service.

Conclusions

Health helpline calls are highly structured medical encounters, displaying similarities to what is known about physically co-present primary care encounters, but also important differences. Although some of the differences between physically co-present primary care and health helplines are intrinsic to telephonic interaction, some are the consequence of system design. By identifying and understanding these differences through close examination of actual interaction, areas that may benefit from re-design or informed call-taker training become evident. Improving communicative practices to facilitate smooth progression of calls could enhance consumer satisfaction with health helplines, thereby leading to continued use and, potentially, increased uptake of telehealth services.

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By signing the Statement of Authorship, each author certifies that:

iv. the candidate's stated contribution to the publication is accurate (as detailed above);

v. permission is granted for the candidate in include the publication in the thesis; and

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Chapter 4: Analytic Paper 2

"You'll have to be my eyes and ears": A conversation analytic study of physical examination on a health helpline.

Aims and Objectives: This paper explores the accomplishment of physical examination on a health helpline. By focusing on the ways in which callers are asked to examine themselves and report information to nurses, we aim to provide insight into how physical examination at a distance is achieved.

Background: Physical examination is a routine feature of healthcare encounters. In face-to-face settings, patients are subject to professional scrutiny through talk, touch and observation. Health professionals working on helplines face challenges in assessing signs of illness when they do not have physical access to patients.

Design and Methods: Conversation analysis was used to explore sequences of interaction between nurses and callers that involved physical examination.

Analysis: Analysis examined how physical examination was routinely accomplished in a helpline environment. Nurses typically guided callers in self-examination by drawing on gross categorisations that required reporting of large-scale characteristics of symptoms (e.g., whether a body part looked 'normal'). Physical examination was also regularly accomplished by nurses through two-component speaking turns: a prefacing component that involved instructions about self-examination; followed by a second component that included an information-soliciting question. These practices resulted in callers successfully accomplishing physical examination, despite their lack of professional medical knowledge.

Conclusions: This paper identifies the communicative practices used by nurses to accomplish physical examination in helpline calls. Such practices involved asking questions that sought general, rather than specific, information, and the prefacing of questions with simple instructions on how to undertake self-examination.

Relevance to clinical practice: Previous research indicates that physical examination in telehealth can be challenging, particularly in environments where clinicians need patients to examine themselves. The present study identifies how nurses on a helpline manage this challenge. The findings highlight ways in which nurses can recruit patients to undertake tasks that would typically be undertaken by clinicians in physically co-present consultations.

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Introduction

"The physical examination, the "laying on of hands," is integral to the [consultation], making it possible to understand the objective findings—the disease—but also the great variety of subjective findings that modify the patient's experience with the disease."

– Ball et al. (2017, pp. 619)

Direct physical examination is an important feature of healthcare encounters and is considered a key aspect of diagnosis and treatment planning. In physically co-present (i.e., 'face-to-face') settings, clinicians rely on observation and touch, in addition to talk, in order to subject patients to what Goodwin (1994) described as their 'professional vision'. Application of professional vision involves use of knowledge from a particular community of practice (in this case, medicine), in a particular domain of scrutiny (in this case, patients), within a specific activity (in this case, physical examination).

Professional vision typically involves the coding of information into categories that are not usually meaningful to non-professionals (Goodwin, 1994). Physical proximity is an important aspect of this practice, as clinicians gather information through activities involving touch and bodily manipulation (Seidel et al, 2011). However, many healthcare encounters now take place in settings where there is no physical proximity between professionals and patients. In this paper, we explore how professional vision can be applied in one such healthcare context: a telephone health helpline**.**

Telehealth and helplines

Telehealth – the use of technology to provide healthcare over a distance (Bradford, Caffery & Smith, 2016) – is an important aspect of contemporary medicine that is increasing in use in Western countries (Baker, Emmison & Firth, 2005; Sabesan & Kelly, 2015). In particular, the provision of healthcare via the telephone has been argued to provide fast, low-cost access to

health information and advice for patients, as well as offering the potential to ease demand on emergency and general practitioner services (Bunn, Byrne & Kendall, 2009). It is recognised, however, that delivery of healthcare over the telephone can be challenging due to the lack of physical proximity between interactants, and the resulting reliance on patients' (and those calling on their behalf) verbal descriptions (Drew, 2006). A study of the UK-based *NHS Direct* helpline highlighted the absence of visual cues as a barrier to accurate performance of health assessment (Pettinari & Jessopp, 2001). Call-takers interviewed in the study suggested the limitation could be overcome by recruiting callers to conduct physical examination of themselves. By following call-takers' instructions, callers can contribute to the process of subjecting aspects of their physical presentation to professional vision.

More generally, the use and receipt of instructions in clinical settings has been examined in physically co-present contexts, such as pharmacist consultations (Watermeyer & Penn, 2009), during surgery (Koschmann, et al., 2007) and in the training of dental students (Hindmarsh, Reynolds & Dunne, 2011). However, little is known about the use of instructions in healthcare settings where the interactants do not share physical proximity. To address this gap in knowledge, the present paper focuses on the practices that facilitate physical examination in actual helpline interactions. In particular, the aim is to highlight how health professionals gather the information they need by directing patients to self-examine. We start with a brief review of what is known about information-gathering in physically co-present consultations with a focus on the function of questions, and then examine how this activity is routinely accomplished by nurses in a helpline context.

Health information-gathering

Questioning is key for gathering information in physically co-present health settings. Health professionals use questions for a variety of information-gathering purposes, including

soliciting patients' presenting concerns (Robinson, 2006), obtaining medical histories (Heritage, 2010), and testing differential diagnoses (Elstein, Shulman, & Sprafka 1978; Kassirer & Gorry 1978). Yes/No designed interrogatives have been observed to occur frequently in physical examination sequences, together with some kind of bodily manipulation, usually initiated and completed by the health professional (Boyd & Heritage, 2006). For example, in the interaction below, reported by Heritage and Stivers (1999), a doctor performs a physical examination on a child presenting with ear pain, using a combination of touch and questioning (see Appendix A for a glossary of transcription symbols):

Fragment 1 (Heritage & Stivers, 1999: 1512)

```
1     DOC:        Does it hurt when I move your ears like that?
2                       (0.5)
3     GIR:        No:.
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In this fragment, the physical examination is referenced in the doctor's information-soliciting question (i.e., "Does it hurt when I move your ears like that?"), and the patient's contribution involves a disconfirmation. Although this physical examination in a co-present encounter is accomplished straightforwardly, previous research, as discussed above, has suggested the activity can be disrupted when healthcare is delivered at a distance (Pettinari & Jessop, 2001).

Nurses who operate within telehealth environments are constrained in terms of how they accomplish physical examination. Some telehealth technology allows consultations to be supplemented with video, although even this can be challenging. A study of consultations conducted by doctors via video-conferencing demonstrated that they relied on nurses who were with the patient to perform physical examinations (Pappas & Seale, 2010). The researchers suggested that the slow uptake of telehealth services by health professionals could

be attributed to a perception that physical examination was difficult to perform in such settings. Other studies have reported that professional satisfaction with telemedicine is generally low due to perceived difficulty in understanding patients' health problems (Bratton, 2001; Mair et al., 2005). These findings suggest that it remains unclear how physical examination is typically accomplished in helpline settings where there is an absence of visibility. Although previous research has suggested that call-takers can recruit callers to conduct physical examination on their behalf (Pettinari & Jessopp, 2001), no research has identified how physical examination is routinely accomplished in actual helpline settings.

This question constitutes the focus of the present analysis: How do health professionals – in this case, nurse call-takers - design their talk so that callers' reported symptoms can be subjected to their professional vision? In other words, we examine the routine practices nurses use to accomplish physical examination of patients over the telephone. With use of telehealth services increasing (Baker, Emmison & Firth, 2005; Sabesan & Kelly, 2015), there is a need to know more about how healthcare is delivered at a distance. Given that prior research has suggested that physical examination in telehealth settings can be challenging (Pappas & Seale, 2010), developing a better understanding of how this routine healthcare activity is achieved over the telephone is important. In addition, most health helplines studied to date have been concerned with provision of support, rather than with the assessment of health symptomology (e.g., cancer information helplines, Leydon, Ekberg, Kelly & Drew, 2013; Woods, 2016; pregnancy information helplines, Shaw & Kitzinger, 2007; and telephone counselling services, Danby & Emmison, 2014; Feo & LeCouteur, 2013). The small number of studies that have investigated helplines offering health assessment have focused on particular aspects of healthcare delivery, such as the provision of treatment recommendations (Pooler, 2010) and call-takers' use of computer-directed software (Greatbatch et al., 2005; Murdoch et al., 2015). There remains a substantial gap in knowledge

about how such triage services (which rely on physical examination) are provided successfully at a distance.

Method

Data for this study were 196 telephone calls collected from an Australian health helpline service. Call-takers on the helpline are registered nurses who use computer decision-support software (CDSS) to assess callers' health concerns and provide information regarding treatment options based on age and symptom-specific algorithms. Although CDSS guides call-takers through calls via a general consultation template based on individual caller characteristics (e.g., age) and reported symptoms, talk is not scripted.

Just over 35.5 hours of audio-recorded calls to the helpline were used in analysis. Calls ranged in length from 1:48 to 23:06 minutes, with an average duration of 9 minutes. Twenty-four nurse call-takers took part in the study (22 female, 2 male). Due to a previously negotiated agreement with the regulatory body responsible for data collection and the service provider, all calls in the corpus were from men - with the exception of 20 calls in which a female caller initiated contact, but eventually passed the telephone to the male patient. The data are part of a broader research project exploring men's use of telehealth services. Call-takers provided written informed consent prior to the collection of data, and callers provided verbal informed consent for the use of their recorded call in response to follow-up contact by the service provider (1-2 weeks after their initial call to the helpline). Approval for the study was provided by the Human Research Ethics Subcommittee of the School of Psychology at the University of Adelaide. To protect caller and call-taker anonymity, any identifying information was changed during transcription.

Conversation Analysis (CA) (Sacks, Schegloff & Jefferson, 1974; Sidnell & Stivers, 2013) was used to examine calls. This approach involves detailed examination of naturally

occurring interaction in both mundane (i.e., everyday) and institutional settings. Across these settings, CA research uses a detailed observational approach to examine the methods people use to organise social interaction (Sacks, 1984). CA is an established approach to the study of helpline interaction (Danby & Emmison, 2014; Feo & LeCouteur, 2013; Firth, Emmison & Baker, 2005; Leydon, Ekberg, Kelly & Drew, 2013; Shaw & Kitzinger, 2007), with application to patient-nursing interaction more generally (Jones, 2003). Much of the activity of healthcare involves interaction: the taking of patient histories, conducting physical examination, and delivering diagnoses (Maynard & Heritage, 2005). By examining the detail of how these activities are undertaken, and what aspects make them more or less successful, CA provides insights that can be used to support evidence-based practice.

CA research typically commences with the unmotivated examination of behaviour in social interaction (Sacks, 1984; Sidnell, 2013). Once a focal phenomenon of interest is identified through this process, a search is undertaken to build a collection of instances in which this phenomenon occurs. Specialised transcription is then applied to capture a range of features that have been shown to be relevant to participants in interaction, such as changes in pitch, tone, speed of delivery, silence, and overlapping talk (see Appendix A; Hepburn & Bolden, 2013; Jefferson, 2004). Detailed and systematic analysis within and across cases in the collection enables identification of the typical ways in which the focal phenomenon functions, as well as how it can be adapted to suit specific contexts. The insights gained from identifying these characteristics enable better understanding of how people manage the moment-by-moment progress of social interactions. Given that the activity of healthcare involves a great deal of social interaction, understanding how people manage these interactions provides insight into how health services function.

Conversation analysis was used to examine and explain the recurrent interactional practices that underlie accomplishment of physical examination in a telehealth context. Physical examination sequences within the current helpline data were identified as being initiated by directives from call-takers that required callers to report on specific bodily signs and symptoms. In this way, talk was classified as involving a physical examination sequence when it involved call-taker directives that were designed to assess a caller's (or third-party's) physical presentation. Deviant case analysis, a well-established procedure within CA research (Maynard & Clayman, 2003), is also used to contribute to the robustness of our analysis. Deviant case analysis involves searching for instances that do not conform to the normative patterns of interaction demonstrated by participants in the corpus. Deviant cases can be examined to provide further evidence of normative practices, in the sense that "such norms are typically observed in the breach" (Garfinkel, 1967, p. 37). Similarly, evidence of what is normative in interaction comes from the fact that "non-normative responses are heard and responded to as such" by interactants (Edwards, 2006). Here, deviant case analysis is used to demonstrate how call-takers' practices for recruiting callers to conduct physical examination on their behalf are differentially designed to suit the local context of their production.

Analysis

Physical examination sequences occurred during the safety check and information-gathering phases[2] of the helpline calls (Lopriore, LeCouteur, Ekberg & Ekberg, 2017). Physical examination was primarily used to collect additional information about callers' presenting concerns, and to inform nurse call-takers' decisions about whether immediate medical attention was warranted (e.g., at a hospital emergency department or a general practitioner),

[2] Helpline calls typically contained 8 distinct phases: (1) call opening, (2) establishment of a reason-for-calling, (3) check of caller safety, (4) creation of a confidential patient file, (5) medical information-gathering, (6) health advice, (7) caller survey questions, and (8) call closing.

or whether home care would suffice. Two features recurred in the design of call-takers' turns within these sequences that allowed callers, as non-professionals, to conduct physical examinations and provide call-takers with the information required. First, nurse call-takers routinely made use of gross categorisations when instructing callers to report on signs and symptoms, most commonly asking callers whether bodily features appeared 'normal', and also asking callers to report physical symptoms in terms of extremity (i.e., reports of large-scale symptoms as opposed to nuanced features). Second, nurse call-takers routinely used two-component turns to facilitate physical examination. These turns included an instruction component, and an information-solicitation component. Despite the lack of proximity between nurse and patient, these design features of gross categorisation and two-component turns occasioned successful physical examination in these helpline interactions. In what follows, we describe physical examination sequences in detail.

Assisting callers to report visible health signs and symptoms

Medical symptomology is typically nuanced and, in most cases, requires professional knowledge to assess accurately (Seidel et al., 2011). It is possible, however, for non-professionals to contribute to the application of professional vision (Goodwin, 1994; Hindmarsh, Reynolds & Dunne, 2009). Callers to the helpline were asked to collaborate in the act of examination by reporting on their physical presentation in terms of gross categorisations (i.e., reporting general or non-detailed symptomology). Such categorisations allowed callers to relay important physical information to nurse call-takers, without requiring the nuanced knowledge used by health professionals.

The form of gross categorisation used most frequently by call-takers involved questioning whether specific features appeared 'normal' to the caller. 'Normal' is a category descriptor that denotes a set of standardised characteristics based on the context in which it is used

(Sacks, 1992). Here, it seeks information that callers are entitled to know, and are expected to be knowledgeable about (Heritage & Raymond, 2005). An example can be seen in the following fragment where a nurse call-taker asks whether the lips of the caller's child appear 'normal' in colour. The fragment comes from the safety-check phase of the call, in which physical examination sequences commonly occurred.

Fragment 2: Call 19

[05:38-06:26]

1 Call-Taker: Okay so um::=is he there with you at the mo:ment?
2 Caller: Na:h he's just in:side=I can go back in:side¿
3 Call-Taker: Ye:ah I- I just need you to: have a:: um be able to see::
4 → hi:m just so I can assess him proper:ly=so you'll have to
5 → be my eyes and ears for me, °if° that's okay?
6 Caller: Ye:p.
((35 seconds omitted))
7 Call-Taker: Okay (.) so at the moment is he::=is he still o:kay
8 with hi- his breathing=and he's able to cry::: or
9 ta::lk or::,
10 Caller: Yeah he's (.) breathing and he:: (.) sounds a bit wheezy,
11→ Call-Taker: Yeah: and his lips are er: still nor:mal col:our?
12 Caller: °Yep°.
13 Call-Taker: °Okay° um::: .hh and this- this croo:py cough didn't
14 start after taking a med:icin:::e or an allergic food
15 did it::?

In Fragment 2, the physical examination of a third-party patient (the caller's young son) is prefaced by the call-taker's recruitment of the caller (Kendrick & Drew, 2016) to be her "eyes and ears" (lines 4-5). She asks if the child's lips are "still nor:mal col:our" (line 11), facilitating the caller's provision of a response based on his own knowledge and experience

of his child. This formulation facilitates the provision of information that is needed by the nurse to determine whether immediate medical care is required. In this example, the hesitation that occurs prior to the nurse's 'normal' formulation (an elongated "er:" at line 11) is indicative of a 'word search' (Lerner, 2013; Schegloff, Jefferson & Sacks, 1977), in that she momentarily suspends the progress of her turn at talk until she produces an utterance that resumes this progress. The hesitation is indicative of the nurse taking care in designing her question to suit its recipient, thus facilitating the successful conduct of a physical examination.

Call-takers also used gross categorisations that referenced readily apparent symptoms. This practice involved asking callers to report on symptoms and signs that were outside the parameters of normality. For example, ascertaining the exact boundaries for what is problematic in relation to a sign like pulse rate requires professional knowledge. Nevertheless, a non-professional can generally identify large-scale departures from what is 'normal' (e.g., whether the pulse is too fast or too slow). The ability of non-professionals to identify such large-scale departures was routinely used by call-takers in accomplishing the activity of physical examination, thus allowing them to apply their professional vision without having to explain nuances of symptom presentation. An example can be seen in the following fragment, where a caller is instructed to perform a physical examination of his fingertips.

Fragment 3[3]: Call 87

[08:22-08:37]

1 Call-Taker: I'm just going to ask you some more ques:tions there::

[3] The term 'normal' was sometimes deployed during general information-gathering without an observable word search (e.g., the breathing question at lines 7-8). As such, thoughtful selection of the term 'normal' appears to be restricted to physical examination sequences.

```
2 →                 Dan o::kay, .hhh n:ow at the moment could I just get you
3 →                 to squeeze your finger:tips an:::d tell me if the colour
4 →                 comes back into them quickl:y,
5                   (1.2)
6    Caller:        Y::ep,
7    Call-Taker:    Yep a:nd are you breathing at a normal ra:te (.) and
8                   depth?
```

In this fragment, the caller is asked to report whether the colour returns *quickly* to his squeezed fingertips (lines 2-4). Thorough and detailed examination of capillary refill requires professional knowledge to determine whether the process is normal or abnormal. However, reporting a rapid return of colour to the skin usually indicates healthy function. The requested test does not require the caller to have any knowledge about capillary refill, nor does the call-taker identify the test using its professional label – the caller simply needs to be able to report whether colour returns to his fingertips quickly. By reporting on this readily apparent sign, the caller assists the nurse in subjecting his symptoms to her professional vision, and she can decide whether immediate medical care is required.

In summary, asking callers to evaluate signs and symptoms in terms of gross categorisations was one way in which nurse call-takers routinely applied their professional vision to callers' health concerns when conducting physical examinations over the telephone. As seen in Fragment 3, call-takers also designed their talk in ways that allowed callers to conduct manipulations of their own bodies in order to accomplish physical examinations. The latter practice will be explored in greater detail in the following section.

Assisting callers to perform bodily manipulations

For signs and symptoms that could not immediately be seen, call-takers typically instructed callers to perform various forms of bodily manipulation as part of the physical examination

(as seen in Fragment 3 above). Attempts to get callers to undertake bodily manipulations routinely involved single turns at talk that consisted of two components:

(1) an *instruction* that explained what the caller needed to do;

(2) an *information solicitation* that highlighted the nature of the information required from the caller.

This two-component turn design, used in respect of bodily manipulations, can be seen in the following example, which involves an assessment of respiratory pain.

Fragment 4: Call 47

[04:48-05:06]

```
1 →  Call-Taker:  O:kay now if you:: take a really exaggerated deep
2 →               breath in for me:=really- really: exaggerated=so you're
3 →               moving your chest mus:cles=I wanna know whether that
4 →               brings the pai:n on or not,
5                 (0.4)
6    Caller:      .hhhhhhhhh hhhhhhhhhh ((coughs)) .hhhhhh hhhhhhhhhh
7                 (0.4)
8    Caller:      No.
9    Call-Taker:  No=okay have you ever had (a) heart attack or any
10                prob:lems with your heart befo::re?
```

Here, the nurse asks the caller to inhale deeply in order to move his chest muscles. The physical examination involves an instruction, formulated as a directive, constituting the first component (lines 1-3). This is immediately followed by a solicitation of information as a second component of the turn ("I wanna know whether that brings the pain on or not", lines 3-4). In this instance, the physical examination is facilitated through several aspects of its design. First, the call-taker projects a compound turn by using a conditional ("if…then")

sentence design (Lerner, 1991). Second, the call-taker uses rush-throughs (Schegloff, 1982) on numerous occasions, which minimise the space available for the caller to initiate a turn at talk. Again, gross categorisation can be seen to facilitate the physical examination, with the caller being provided with two readily-apparent alternatives to choose from (the presence or absence of pain). At line 6, the caller performs the activity requested by the nurse call-taker through audible breathing, and then provides a disconfirming response (line 8). This example demonstrates how inclusion of the two components allows her to express what is required for the physical examination in a way that is undertaken by the caller without difficulty.

Use of a two-component turn design was common across the corpus, including calls where a person had contacted the helpline on behalf of another (e.g., a child). These calls involved nurses instructing callers on how to conduct physical examinations involving bodily manipulation on someone other than themselves. Third-party physical examinations generally involved children who were too young or unwell to speak to the call-taker. An example can be seen in the following fragment, which features a caller performing a physical examination designed to assess his daughter's skull.

Fragment 5: Call 15

04:28-04:40

1 →	Call-Taker:	°Okay° I'd like you to run your hand::s over her s:kull
2 →		for me:: , and just tell me if you can feel an:y den:ts
3 →		at all?
4		(0.5)
5	Caller:	O:kay,
6		(2.8)
7	Caller:	Na:h she's fi:ne,

The fragment comes from a call about a child who had fallen from a change table. The physical examination begins (arrowed) with the instruction component, “run your hands over her skull”, followed by an information solicitation that asks the caller to examine his daughter’s skull. Similar to previous examples, the nurse designs the sequence for a non-professional, asking the caller to report the presence of readily apparent “dents” rather than anything more nuanced. In this case, the examination directive includes a negative polarity item, “at all”, that has been shown to anticipate a disconfirming response (Boyd & Heritage, 2006). After acknowledging the directive with an “okay,” (line 5), the caller takes some time to conduct the examination before responding with a disconfirmation of signs. Despite the examination involving a search for possible significant injury (e.g., brain trauma), the encounter is completed with no observable difficulty on the part of the interactants, and provides the call-taker with the necessary information for decision-making.

Although the majority of physical examination sequences involving manipulation were completed without problem, callers occasionally oriented to some trouble in conducting physical examinations on behalf of the call-taker. In these instances, further explanation was required from nurses. An example can be seen in Fragment 6, following a nurse’s request for the caller to report the sensation in his temples:

Fragment 6: Call 25

13:38-13:53

```
1 → Call-Taker:   J↑ust fee::l your tem:ples, (.) are they ten:der?
2                 (0.6)
3   Caller:       ((clears throat))
4                 (1.2)
5 → Caller:       How do you tell if your: temples are ten:der?=
6   Call-Taker:   =You just push gently on your temple, .hh can you
7                 feel any pa:in or no.
```

```
8                  (0.4)
9    Caller:       No.
```

In this fragment, evidence of the difficulty faced by non-professionals in undertaking tasks that require professional vision (Goodwin, 1994) comes from the caller's apparent need for additional procedural instruction on how to assess temple tenderness. The caller's trouble is made manifest, initially, through hesitancy in responding to the nurse's directive across lines 2-4 (Jefferson, 1989). This hesitation is followed by a repair initiation at line 5 (Schegloff, Jefferson & Sacks, 1977). The caller's question results in a repair solution (i.e., a reformulation of talk) from the nurse, that is designed as a re-wording of both components of her prior turn (lines 6-7). Once the instruction and information-soliciting question have been repaired to provide more detail, and the term, "tender" (line 1) has been replaced by "pain" (line 7), the caller is able to complete the examination. This example highlights how physical examination could be problematic for callers when they did not appear to understand terms employed by call-takers during physical examination activities.

In almost every instance in the corpus, physical examination sequences that involved bodily manipulation involved the provision of instructions by call-takers. However, an exception occurred when callers had displayed relevant health knowledge, or some understanding of the nature of the physical examination required, during an earlier part of the call. These instances are discussed in the following section.

Deviant case: Caller-demonstrated competence

Calls in the corpus that involved instances where callers had already demonstrated their competence to conduct specific health activities at an earlier point[4] did not follow the pattern of two-component turn design. In these cases, callers were able to complete self-examination *without* specific nurse instruction on how to accomplish the target medical activity. This pattern manifested in calls where callers described their reason-for-calling as resulting from their use of medical instruments (in one, a thermometer, and in another, a blood glucose monitor). In instances where callers highlighted their experience in conducting particular healthcare activities, they were treated by call-takers as having the knowledge to understand their physical presentation relevant to that activity. This is an example of a deviant case that demonstrates the same underlying principle as other instances in the corpus: if a nurse anticipates that a caller may lack technical knowledge and competence (i.e., the professional vision) required to accomplish physical examination independently, then talk is designed to facilitate the application of professional vision from a distance. The principle is illustrated in Fragment 7, where a male caller's adult daughter has contacted the helpline on his behalf after he recorded several high blood-glucose readings.

Fragment 7: Call 12

[00:03-05:19]

1 Caller 1: Hi:: um I was wondering if you could help=my dad's
2 got dia:betes: and he's:: done a high few readings=I'll
3 put him on so (he) can °explain it better°.
((1 minute omitted: daughter passes telephone to father))
4 Call-Taker: So you're calling about your dia:betes?

[4]Two deviant cases were observed in the corpus – one involving blood sugar reporting and one involving body temperature measurement.

5 Caller 2: Yeah, it's really hi:gh,

6 Call-Taker: What is it at the moment?

7 Caller 2: Pardon?

8 Call-Taker: What is it at the moment?

9 Caller 2: About twenty=one=eight.

10 Call-Taker: Twenty=one=point=eigh::t ri::ght okay,

((4 minutes omitted))

11 Call-Taker: So it's gone up in the last- have yo:::u (0.2) have you-

12 did you wash your han::ds and re:test it?

13 (0.5)

14 Call-Taker: When you got this twenty=one point eigh:t?

15 Caller 2: Oh:: maybe I should do that °maybe°.

16→ Call-Taker: Could you do that wh:ile we're on the pho::ne

17→ because some:times you can have a trace of something

18→ on your han::ds (so),

19 Caller 2: =O- oh okay:: alright well [I'll just-]

20 Call-Taker: [You wanna:] just do:: that

21 wh:ile I wait?

22 Caller 2: °I'll° give the phone to me daughter and wash me

23 hands and do:=it.

24 Call-Taker: So it was jus:t in the last ten min:utes that you

25 measured this hi:gh reading was it?

26 (0.3)

27 Caller 2: Ye::ah,

28→ Call-Taker: Okay, (.) alright do you wanna jus::t wash those and

29 re:test it¿

30 Caller 2: Okay.

31 (18.0)

32 Caller 1: °Just counting down::° (.) (shouldn't be much longer)

```
33                  (1.0)
34   Caller 2:      Twenty.
35                  (0.5)
36   Call-Taker:    Twenty¿=even though you've wash:ed your han::ds?
37   Caller 2:      Y::ep.
```

On taking the telephone, the man reports that his most recent reading indicates a high concentration of blood sugar. Later in the call, the nurse refers to the possibility that the high reading may be due to the caller having contaminating material on his hands (lines 11-12). The physical examination directive follows this exchange at line 16, with the nurse asking the caller to perform the test again. Unlike previous examples of physical examination, the nurse does not design her request using a two-component structure. Rather, she re-formulates her previous information-soliciting question ("have you- did you wash your han::ds and re:test it?", lines 11-12) as an embedded imperative request for action ("could you do that wh:ile we're on the pho::ne", line 16), along with an account of why this is necessary (lines 17-18). So, in this instance, the nurse is able to provide a directive for the caller to perform the test without the need for both an instruction and information-soliciting component. Ultimately, this allows the nurse to obtain information to decide whether the caller requires urgent medical care. The turn design of the physical examination suits the local context of its production because the caller has already demonstrated his capacity to conduct this type of examination, and so does not require additional instruction. Again, although instances such as this fragment may appear different in their organisation to that of physical examinations (involving bodily manipulation) that was recurrently observed across the corpus, they do orient to a shared underlying principle. The principle, in both cases, involve the apparent presence or absence of technical knowledge, on the part of the callers, to accomplish the physical examination.

Discussion

Physical examination is an important aspect of information-gathering in health helpline contexts. It enables nurse call-takers to obtain information that helps them decide whether callers require immediate medical care. The present study examined the ways in which nurses and patients successfully accomplished physical examination on a health helpline. First, analysis demonstrated how nurses mobilised gross categorisations that allowed callers to report on signs and symptoms using their non-professional vision. This practice primarily took the form of asking whether signs and symptoms were 'normal', or referencing symptom extremity. Second, analysis demonstrated how nurses routinely constructed physical examination sequences to include two components (i.e., an instruction followed by information solicitation). Additionally, analysis highlighted how this two-component structure was used to facilitate physical examination involving bodily manipulation, as well as demonstrating instances where, due to caller-demonstrated competence, this turn design was not required.

These findings offer insight into how physical examination is routinely conducted in health helpline contexts. The patterns identified here support Pettinari and Jessopp's (2001) proposal that call-takers' recruitment of callers to conduct physical examination on their behalf may be useful for overcoming the absence of visibility in telehealth environments. The findings demonstrate how this examination is routinely accomplished *in situ,* and how the lack of shared physical and visual access in telephone health encounters can be overcome. In addition, our findings show how call-takers' attempts to get callers to conduct physical examination on their behalf are carefully designed. In particular, on occasions where nurses ostensibly determine that callers may require guidance to undertake a particular physical examination activity, they support this activity by providing simple instructions that callers are likely to be able to follow.

Health professionals can be challenged by the need to manage physical examination in telehealth environments (Pappas & Seale, 2010), as patients need to act as call-takers' "eyes and ears". In addition, nurses are essentially required to instruct callers to conduct healthcare tasks that, in physically co-present settings, would be undertaken by a skilled professional. Confronted with these challenges, it is not surprising that health professionals are reportedly hesitant to adopt such service delivery (Bratton, 2001; Mair et al., 2005; Pappas & Seale, 2010). However, the practices outlined in the present study provide evidence of how skilled nurse call-takers routinely manage these tasks effectively over the telephone.

In addition to the contribution such evidence can make to professional training, the present study adds to the growing body of conversation analytic research on the nature and characteristics of telehealth interactions. Although there has been some examination of interaction in telehealth settings, studies have focused on specific aspects of service delivery (e.g., health helpline treatment recommendations, Pooler, 2009; implications of computer software for health helpline interactions, Murdoch et al., 2015), or on contexts where clinician-patient interaction is supplemented by streamed video data (e.g., call openings and physical examination in video-link telemedicine consultations, Pappas & Seale, 2010). The present study, by comparison, offers specific insight into *how* physical examinations are accomplished on a health helpline where interactants do not share physical or visual access. Given that use of health helplines is increasing, world-wide (Baker, Emmison & Firth, 2005; Sabesan & Kelly, 2015), improved understanding of how medical activities are accomplished in such environments is timely.

The present study also contributes to existing demonstrations of what conversation analysis can bring to nursing research. The usefulness of CA for analysing collaborative, nurse-patient accomplishment of medical activities has been highlighted (Heritage & Maynard, 2006; Jones, 2003). Here we have shown how nurses expertly design their talk in the challenging

activity of providing healthcare at a distance. In this sense, our research responds to calls for increased understanding of how communication underpins effective nursing practice (Jones, 2003).

A final contribution of the study concerns the conversation analytic exploration of the role of instructions in clinical encounters. Although clinical instructions have been examined in some physically co-present health settings (Koschmann, et al., 2007; Watermeyer & Penn, 2009), instructions in a telephone-mediated telehealth environment have not been examined. Given the marked difference between physically co-present instructions and instructions delivered at a distance (such as in telehealth), this area is ripe for further investigation, and the present study provides a starting point for future work in this area.

Conclusions

Physical examination plays a key role in health consultations. This study highlights how nurse call-takers manage interaction in order to apply their professional vision to the activity of physical examination over the telephone. In particular, we identify how nurse call-takers design questions to evaluate the normality of health signs and symptoms, as well as designing turns to include both instruction and information solicitation components so that callers can accomplish physical examination on call-takers' behalf. These interactional strategies allow nurses to obtain valuable information that aids decision-making, such as whether or not callers require emergency care. It is important to understand how physical examination sequences typically unfold given that previous research has suggested that challenges associated with physical examination may be responsible for the slow uptake of telehealth services by professionals (Pappas & Seale, 2010). Findings from the present study have application in nurse training for telehealth services, as well as in other health services that require efficient over-the-telephone physical examination (e.g., emergency service calls).

Training health professionals about how physical examination is successfully accomplished using the specific practices employed by skilled nurse call-takers may also promote increased professional acceptance of this alternative style of health service provision.

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Name of Principal Author (Candidate)	Stefanie Lopriore		
Contribution to the Paper	Performed analysis on all samples, interpreted data, and wrote manuscript.		
Overall percentage (%)	90%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
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Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

i. the candidate's stated contribution to the publication is accurate (as detailed above);

ii. permission is granted for the candidate in include the publication in the thesis; and

iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

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Chapter 5: Analytic Paper 3

A thematic analysis of men's help-seeking on an Australian health helpline.

Aims and Objectives: The current study aims to qualitatively explore men's help-seeking behaviours by analysing male callers' talk on an Australian health helpline. The focus for analysis is to thematically identify the ways in which men position themselves as help-seekers, and the extent to which these themes deviate or conform to those commonly reported on in the men's health literature.

Background: Research exploring men's health has highlighted that men typically experience a greater range of health issues than women, but engage with primary health services less frequently. This had led to a largely negative narrative within men's health that positions men as a homogenous group that is reluctant or unwilling to seek help. The low frequency of men's contact with primary healthcare has led to considerations about whether alternative mediums for healthcare may be better suited to men's help-seeking preferences. One such alternative form of healthcare are telephone helplines, which are increasingly used in the modern healthcare landscape to offer distributed support, advice and information for medical matters. Despite the proposal that helplines may assist men with help-seeking, few studies exist that explore men's experience with these alternative services.

Design and Methods: The present study utilised naturally occurring instances of men's help-seeking during calls to an Australian health helpline – *Healthdirect*. Thematic analysis was used to explore recurrent patterns in men's help-seeking interactions during helpline calls.

Analysis: The analysis yielded three broad themes, which were formulated as caller 'types'. These types included the 'reluctant caller', the 'unwell patient' and the 'concerned carer', as well as a number of associated sub-themes within these broad categories. Generally, the findings demonstrate that male callers sought help in a variety of different ways, rather than prescribing to a homogenous pattern of help-seeking. However, it was also acknowledged that some patterns in the data remain aligned with popular narratives around men's help-seeking (namely, that men can be reluctant or unwilling to engage with their own health).

Conclusions: The present study contributes to men's health literature by identifying the various 'types' of male callers who accessed an Australian health helpline, and provides insight into the various social devices used by men to facilitate help-seeking. Taken together, the finding from the present study represents a landscape of both continuity and change in regard to men's help-seeking.

Introduction

Men's health has been a popular topic of academic exploration in recent years. Research exploring men's health has highlighted that men typically experience a greater range of health issues than women, but engage with primary health services less frequently (Barney, Griffins, Jorm & Christensen, 2006; Meryn & Jadad, 2001; Parslow & Jorm, 2000). This gendered pattern of help-seeking exists despite men experiencing lower life expectancy in comparison to women (ABS, 2010) and greater preventable health issues (Broom, 2004; Mahalik, Levi-Minzi & Walker, 2007; White, 2002). The low frequency of men's contact with primary healthcare has led to considerations about whether alternative mediums for healthcare may be better suited to men's help-seeking preferences (Goode et al., 2004; Pooler, 2010). One such alternative form of healthcare are telephone helplines, which are increasingly used in the modern healthcare landscape to offer distributed support, advice and information for medical matters (Baker, Emmison & Firth, 2005). Telephone helplines typically offer access to 24/7 medical advice, are often free, and can be utilised without the need to leave home. To date, the majority of research exploring men's help-seeking has employed focus group, interview, or survey methods (Edwards & Stokoe, 2004; Ten Have, 2004; Silverman, 2001) rather than directly examining how men use these services. The current study focuses on men's help-seeking on an Australian health helpline, and explores how men position themselves as help-seekers in a telehealth setting. Through this focus, the current study will provide evidence to inform understandings of men's health and help-seeking behaviours.

Men's health and help-seeking

Men's health literature often endorses a homogenous perception that male patients are, "unreliable, irresponsible, and unwilling to be helped" (Banks, 2004, p. 155) due to their apparent lack of help-seeking behaviours. One popular explanation for why men seek help

less than women involves hegemonic masculinity (Del Mar Garcia-Calvente, et al., 2012; Galdas, Johnson, Percey & Ratner, 2010; Smith et al., 2007). The concept of hegemonic masculinity is associated with prescribed social norms that are argued to dictate men's behaviour (Wetherell & Edley, 1999), such as the prescription that men should be strong, self-sufficient, and emotionally inexpressive (Addis & Mahalik, 2003; Cameron & Bernardes, 1998; Courtenay, 2000). This concept is largely underpinned by social constructionism, which stipulates that social practices (including masculinity and fathering; Hunter, Riggs & Augoustinos, 2017) are not biologically determined – rather, they are constructs which are built, shaped, and maintained by social knowledge and interactions (Connell & Messertschmidt, 2005).

Adherence to hegemonic ideals is argued to prevent men from engaging in health help-seeking behaviours, as being concerned about health denotes femininity (Addis & Mahalik, 2003; Courtenay, 2000; Del Mar Garcia-Calvente, et al., 2012; Galdas, Johnson, Percey & Ratner, 2010; Smith et al., 2006). It has also been suggested that norms of hegemonic masculinity impact on the way men interact as patients during healthcare encounters, including what they seek to obtain from clinicians during such encounters. For example, it is argued that men prefer solution-focused interaction, where goal-oriented talk is prioritised and emotion-focused talk is avoided (Adamsen, Rasmussen & Pederson, 2001). Findings such as these have led to the proposal that alternative models of healthcare delivery, such as helplines, may be useful for engaging men (Banks, 2004).

Telephone helplines for men's health needs

Over the past decade, there has been a dramatic increase in the number of helpline services on offer (Baker, Emmison & Firth, 2005). Telephone helplines exist for many health concerns, ranging from mental health counselling (Danby & Emmison, 2014; Feo &

LeCouteur, 2013) to physical health information and support (Leydon, Ekberg, Kelly & Drew, 2013; Pooler, 2010; Woods, 2016). Health helplines offer a means for delivering professional health information and advice that consumers report high levels of satisfaction with (Li et al., 2015; Payne et al., 2003). Health helpline services also appear to be well-suited to men's needs as they are easily accessible and allow for a degree of anonymity (Goode et al., 2004; Pooler, 2010). Men have been reported to use helpline services to discuss sensitive health topics such as impotence and erectile dysfunction, which suggests that confidential, telephone-based service may appeal to male consumers (Banks, 2001). Findings from the UK-based health helpline, *NHS Direct*, also identified the potential for helplines to normalise help-seeking for men, and found that male callers who used the helpline once anticipated future use (Goode et al, 2004). In Australia, men are reported to be using helpline services at an increasing rate (*Healthdirect*, 2018). However, despite the increase in calls from men, it is noted that such services are still primarily used by women (*Healthdirect*, 2018). Findings such as these suggest that while helplines may have potential for increasing male engagement with healthcare, there is still a significant gendered gap in service uptake.

Limitations in past investigations of men's health

A range of problems have been associated with using self-report methods in social research (Edwards & Stokoe, 2004; Ten Have, 2004; Silverman, 2001). Potter and Hepburn (2005), for instance, argued that self-report methods (which include questionnaires, focus groups, and interviews) rely on the assumption that people are able to accurately report on "events, actions, social processes and structures, and cognitions" (p. 298). They go on to argue that self-report data should be viewed as specific types of social interaction whereby talk is occasioned for a particular purpose (i.e., to specific research-related questions). However, in reality many researchers treat self-report data as the actual thoughts, beliefs, and attitudes of

participants. Limitations of such research methodology has also been highlighted within the context of men's health. Seymour-Smith (2008) argued that men's apparent preference for solution-focused communication may actually be more linked to "the presentation of a hegemonic masculine identity than to a real preference for action" (p. 795). In other words, men may state that they prefer solution-focused communication because it is aligned with hegemonic ideals, but may not actually prefer it in reality – they are 'doing being masculine'. As such, reliance on self-report data in men's health literature means there remains a gap in our knowledge about how men routinely accomplish searches for help. This gap in knowledge is problematic, and has led to the perception that men as a group are "unreliable, irresponsible, and unwilling to be helped" (Banks, 2004). It also appears to have perpetuated a largely homogenous view of men as patients, rather than acknowledging the potential for diversity in regard to the embodiment of masculinity and subsequent engagement with healthcare (Mahalik, Good, Englar-Carson, 2003). Such views are pervasive and have been shown to impact the attitudes of health professionals, with research indicating that clinicians perceive male patients who do not conform to hegemonic norms as problematic and oversensitive (Foss & Sundby, 2003).

Approaches that use naturally occurring instances of men's engagement with health services may provide new insights into their health behaviours. Such materials do not involve researcher interference and capture social interaction as it occurs organically. Recent work using naturally occurring data has challenged some aspects of men's purported preferences for help-seeking. In Feo and LeCouteur's (2013) study, men were observed to orient away from solution-focused talk in a telephone counselling setting, despite the fact that this style of communication is routinely described as what men prefer in the men's health literature (Adamsen, Rasmussen & Pederson, 2001). As such, it appears there remains much to learn about men's actual health behaviours through examination of naturalistic data.

Aims of the current study

The current study aims to qualitatively explore men's help-seeking behaviours by analysing male callers' talk on an Australian health helpline. The focus for analysis is to thematically identify the ways in which men position themselves as help-seekers, and the extent to which these themes deviate or conform to those commonly reported on in the men's health literature. Ultimately, this study will contribute to existing understandings of men's health by directly examining how men use helpline services to address their health concerns.

Method

Data collection and participants

The data for this study were 196 telephone calls collected from an Australian health helpline – *Healthdirect Australia*. In total, over 35.5 hours of audio-recorded calls were analysed. Call length varied depending on the complexity of medical complaints, with the shortest call lasting 1:48 minutes and the longest call 23:06 minutes (average duration was 9 minutes). Participants were 24 registered nurse call-takers (22 female, 2 male) and 196 unique callers. As per a previously negotiated agreement between SA Health and the Freemasons Foundation Centre for Men's Health at the University of Adelaide (which granted researchers access to the calls), all calls in the corpus were from men, with the exception of 20 calls where a woman initiated contact, but eventually passed the telephone to the male patient. Both callers and call-takers provided informed consent for use of their recorded data (which is automatically stored by the service) in a follow-up interaction that occurred post-call. This allowed for the helpline interaction to be free of researcher interference, therefore reducing the possibility that data was influenced by its use in the study (and enhancing reflexivity).

Ethics

Approval for this research was obtained from the Human Research Ethics Subcommittee of the School of Psychology at the University of Adelaide. To protect participant anonymity, all potentially identifying information (e.g., names, ages, locations) was replaced with pseudonyms during transcription.

Analytic method

All calls in the dataset were transcribed verbatim by the first author. The opening turns of calls were primarily used for analysis, as callers' routinely provided a 'reason-for-calling' (e.g., "I am calling because I am worried about my child") at this point in the call, which contained rich thematic information that identified them as help-seekers. In order to analyse the data, the current paper utilised a data-driven, inductive thematic analytic approach (see Braun & Clarke, 2006). Thematic analysis was chosen for this analysis due to the rigorous nature of Braun and Clarke's approach, and its applicability to psychological data. The first stage of analysis involved familiarisation of the data through repeated reading of verbatim transcripts. Next, the data were manually searched and broadly coded for salient characteristics, and then collated into potential themes. These themes were then reviewed to ascertain whether they were reflective of the overall dataset, and then defined and named. Finally, exemplar extracts that were considered to capture the essence of respective themes were chosen for inclusion in the final report. The first author conducted the analyses, and the remaining authors were involved in consultation and review of both the themes and the analysis to ensure trustworthiness and rigour (Tracy, 2010). Utilisation of the additional authors in this consultation process also allowed for reflexivity, which involved acknowledgement of any personal biases and beliefs may influence aspects of analysis (Houghton, Casey, Shaw & Murphy, 2013).

Results

Three broad types of male callers were identified within the *Healthdirect Australia* dataset. These included: 1) the reluctant caller, 2) the unwell patient, and 3) the concerned carer. Sub-themes were also identified within some of the broader themes (see below).

Table 2. Help-seeking themes and sub-themes identified in men's calls

Broad themes and sub-themes	Characteristics
Type 1: The reluctant caller References to third parties Feelings of doubt Men labelled as hesitant participants	• Negotiating with the masculine norm to not appear overly concerned with health, while still seeking help; • Expressions of being hesitant to seek help (either by men themselves or by others) ; • Highlighting the concerns of others, rather than presenting own concerns.
Type 2: The unwell patient Chronic medical issues Distressing medical symptoms Medically knowledgeable callers	• Descriptions of health concerns as chronic, enduring, or very distressing; • Positioning self as having 'expert' medical knowledge, and therefore as a more reliable help-seeker
Type 3: The concerned carer The worried parent The worried spouse	• Explicit reference to feeling concerned about another person's health status (usually partner or child)

Type 1: The reluctant caller

Male callers who were categorised into the reluctant caller theme appeared to be negotiating with the hegemonic masculine ideal that men should not be overly worried about their health, while also simultaneously negotiating with their need to seek help. In order to manage this, men were observed to mitigate responsibility for contacting the helpline in two ways: a) by referencing the concerns of third parties (e.g., female partners) as a reason for calling, b) by expressing feelings of doubt about their need to be seeking help, and c) by allowing others to initiate the call on their behalf and demonstrating hesitance to participate in the help-seeking. Through use of these strategies, male callers were able to overcome the dilemma of help-seeking while still maintaining their stake at hegemonic masculinity.

References to third parties

The references to third parties sub-theme involved men highlighting the concerns of others (usually female partners) as a key reason for contacting the helpline. This meant that men positioned themselves as help-seekers who, in essence, required convincing in order to contact the helpline, rather than orienting towards their own feelings of worry as a prompt for the call. This sub-theme can be observed in the following examples:

> Um my partner rang up because she was a bit worried about me and this is my third day of having gastro. (Call 8)

> I just rang up because my wife just went to work and she was worried and she said please ring that number so I thought I'd ring. (Call 112)

The presence of this sub-theme in the data suggests that referencing the concerns of others can facilitate help-seeking for male callers. It is possible that this help-seeking strategy serves to protect men from feeling as though they may be perceived as frivolous or overly worried,

as the onus for contacting the health service is placed onto someone other than themselves. This strategy also buffers men from the possibility of negative social appraisal in the event that their health concern is assessed as not warranting medical attention. In many ways, this strategy functioned to distance men from the healthcare encounter, positioning them more so as passive recipients rather than assertive help-seekers.

Feelings of doubt

The feelings of doubt sub-theme involved male callers who expressed uncertainty about their role as a help-seeker early in the helpline encounter. Specifically, men were observed to label health concerns unimportant or non-severe, and question whether help-seeking was justified. An example of this can be observed in the following extract, which involves a male caller who is experiencing light headedness symptoms following smoking cessation.

> Aw look… yeah um. Look, it's not important. But, look. I've been trying to give up the cigarettes right? I've been weening myself off of them for three weeks. What I am experiencing is very light headedness. (Call 10)

Here, we can see how the caller expresses uncertainty about his help-seeking behaviour by labelling his concerns as "not important". Similar to the previous sub-theme, this strategy appeared to protect men's stake in hegemonic masculinity by avoiding the perception of being overly concerned with health. However, instead of referencing the concerns of others, men oriented to a pre-emptive stance that their health problems were not severe. While this stance is somewhat dilemmatic in that it projects a lack of a medically legitimate or 'doctorable' problem (Heritage & Robinson, 2006), it also serves to protect men from having their medical concerns unexpectedly dismissed or rejected. This means that male callers are cognitively safeguarded in the event that their problems are not deemed worthy of medical attention, and their stake in masculinity remains intact.

Men labelled as hesitant participants

The hesitant participant sub-theme involved men who did not contact the helpline on their own accord. Instead, the call was initiated by significant others in these instances (usually female partners). In these calls, men were frequently observed to be reluctant to engage in their own help-seeking, and demonstrated a preference that their significant others manage the help-seeking on their behalf. This theme typically emerged after call-takers requested that men take the phone, rather than continuing to speak through their partners. As such, this theme was typically communicated by partners, rather than by male callers. This sub-theme can be observed in the following examples, which are spoken by female callers following the call-taker request to speak with the male patient.

> Yep sure I'll put him on now. He'll probably be able to help you with the rest of [the call] anyway he's just being stubborn (laughs). Thank you. (Call 62)

> I told him he'd have to speak with you himself. I said, 'I told you you've got to talk to them yourself'. (Call 45)

These examples illustrate the stance that female callers often projected when initiating calls on behalf of men – that they are stubborn, unwilling, or reluctant to engage. Females callers could also be observed rejecting suggestions that male callers may be too unwell to proceed with the call themselves (e.g., Call 62, above). As such, there comments were typically loaded with moral undertones which evaluate men negatively for their lack of engagement with the healthcare encounter. The existence of this sub-theme within the data suggests that women continue to play an integral role in men's access to healthcare services, including in telehealth encounters.

Type 2: The unwell patient

Male callers who were categorised into the unwell patient theme positioned themselves as sick help-seekers who required medical support. There were two ways in which callers were observed to position themselves as unwell patients: a) by highlighting their status as a long-term patient experiencing a chronic medical issue, b) by emphasising the presence of distressing medical symptoms, and c) by positioning themselves as having medical knowledge related to their condition. Similar to the previous theme, men who presented as the unwell patient type appeared invested in maintaining hegemonic masculine ideals around help-seeking, despite appearing more invested in their healthcare. While they were open about their need to seek help for their medical concerns, all men displaying this theme presented health concerns as unequivocally requiring medical attention. In other words, their health concerns were positioned as significant and obviously requiring medical attention, therefore protecting men from being considered as overly concerned or frivolous about health matters. As such, it would appear that these men were also protecting their stake at hegemonic masculinity when seeking help in this way, despite being open about their need to be help-seekers.

Chronic medical issues

The chronic medical issues sub-theme was identified in calls where men referenced their reason for contacting the helpline with an existing chronic illness. Men typically identified themselves as chronically unwell by stating the name of their medical diagnosis, or by referencing the need to undergo recurrent medical procedures due to an underlying illness. This sub-theme is illustrated in the example, below, which involves male callers who identify with special health needs.

> Ah look I've had a spinal injury, and I am what you would call an incomplete paraplegic. I um take Duplex tablets to um go to the toilet. I just feel uncomfortable and can't go at the moment. (Call 98)

> I'm a dialysis patient. I've just dialysed earlier today and I had a fistula done on Monday. Um and I just got home and I was starting to shiver so I took my temp and it was thirty seven something. (Call 80)

Both callers in the above examples can be observed identifying their chronic health needs in the early parts of the call, prior to mentioning the symptoms that have prompted their contact. They both appear to identify with their chronic health conditions, for example, often using "I am" statements when describing their respective diagnoses (e.g., "I am what you would call an incomplete paraplegic" and "I'm a dialysis patient"). While the identification of chronic medical issues early in the call is certainly helpful for call-takers' to accurately provide medical advice, its prioritization functioned to position these men as help-seekers who (by virtue of their health status) are unequivocally justified in seeking medical attention. In addition to this, adverse medical symptoms experienced by those with diagnosed illnesses are typically perceived as more serious in comparison to non-chronically ill people. Given this, the explicit identification of chronic illness also functions to position symptoms as severe. Given these considerations, this type of help-seeking also appears to align with hegemonic masculinity, and suggests that these ideals continue to impact help-seeking despite the expectation (or assumption) that chronically ill men may be more involved in healthcare.

Presence of distressing medical symptoms

Male callers were also observed to reference the presence of distressing medical symptoms as a reason for contacting the helpline. Distressing medical symptoms tended to involve those

that were painful or disturbing in nature, and which had been tolerated without remittance for a period of time. Some examples of distressing medical symptoms can be observed, below.

> I've been um bleeding from the back passage quite severely. Like not a little, but like a lot. Like literally filling the toilet bowl full of blood. (Call 4)

> I've had a sore foot for a couple of days. It started a couple days ago it started getting swollen and then the pain became unbearable. (Call 41)

> What bothers me tonight is exactly the same as last time [I called]. It's my leg. It's absolutely excruciating pain. (Call 54).

It was noted that men tended to use 'extreme case formulations' (Pomerantz, 1986) when describing their symptoms, which is an interactional practice whereby something is described using maximal properties in order to make it appear compelling or believable. Use of this strategy appeared to aid men's help-seeking, and support them in communicating that their contact to the helpline was prompted by medical symptoms that were highly distressing. As such, these extreme descriptive statements function to justify help-seeking behaviours, while simultaneously protecting men's masculine identify as someone who only seeks help when absolutely necessary.

Medically knowledgeable callers

The medically knowledgeable sub-theme involved callers who positioned themselves as being medically knowledgeable. Typically, this position was achieved through reference to prior experience with a medical condition or occupational knowledge, which therefore implied a greater level of understanding. Examples that illustrate this sub-theme are below.

> I happen to be a registered nurse myself but ah anyway I need advice. I started vomiting and diarrhoea at six or seven o'clock this evening. (Call 35)

> My temperature is thirty seven point four and I know from the past that as soon as it hits thirty seven point eight I end up getting shipped off to the hospital. (Call 80)

Similar to other sub-themes in this category, male callers who referenced their own medical knowledge were open and assertive about their need to seek help. However, by highlighting their medical knowledge and relative competence to make health-related judgements at the outset of calls, these men also appear to be attempting to avoid the possibility of being perceived as a frivolous help-seeker. As such, according to the sub-theme, male callers still appear to be prioritizing hegemonic ideals and protecting their stake in masculinity, despite appearing more oriented to help-seeking.

Type 3: The concerned carer

As has been illustrated by other themes, male callers routinely displayed trouble expressing worry or concern about their own health concerns without the use of conversational devices which served to protect their stake at masculinity (e.g., such as those described in the 'unwell patient' theme). It was interesting, then, to find that there were some conditions where male callers would openly express concerns about medical issues - when they were contacting the helpline on behalf of another person (e.g., a child or spouse). One explanation for this could be due to the men prioritising their positions as "carers" over their stake to masculinity. In this sense, the caller is able to exhibit traits and behaviours more traditionally associated with femininity because of their identify as a "carer", and the responsibilities that are congruent with this position (i.e., seeking help for your child or spouse when they are unwell). There were two sub-themes within the 'concerned carer' type: the worried parent, and the worried spouse.

The worried parent

In calls where men contacted the helpline on behalf of their children, male callers were routinely observed to openly express alarm for their children's health state, and identify this as their reason for calling. This is illustrated in the following examples, below.

> I'm quite concerned about my son he's two years old and he's gasping for air. (Call 13)

> I've got a thirteen month old little girl. She started throwing up when we got home this afternoon, probably about six thirty. Ah she's not keeping anything down and we are worried it might be gastro. (Call 7)

As can be observed through the above examples, calls that were coded to this sub-theme often featured psychological constructions, where callers attached negative psychological states to their reason-for-calling (e.g., feeling "worried"; Potter & Hepburn, 2003). These psychological constructions worked to convey a concerned stance about the health status of the children. It was noted that this concerned stance was positioned as belonging to the caller, rather than to the children's other parent or a third-party. As such, it would appear that male callers in these callers were prioritizing their position as 'carers', as opposed to prioritizing their investment in masculinity.

The worried spouse

Male help-seekers in the dataset were also could also be seen identifying themselves as carers for their partners. This sub-theme was similar to the 'worried parent', in that male callers in this category were also observed to display a concerned stance about the health state of another person – in this case, their spouses. Examples of this type of help-seeking are

illustrated in the examples, below, which involve two male callers contacting the helpline on behalf of their female partners.

> What I'm ringing for is um my wife. She's thirty-nine weeks pregnant and yesterday we went to the hospital… and the doctor wanted to try and start labour. So, we went to see another doctor and got a second opinion, and he was telling us not to because of preeclampsia… I just wanted to know for my peace of mind like how quickly can it develop? (Call 127)

> My wife's in hospital at the moment and she's being given fairly heavy doses of Endone and there have been sudden reports come out over the [television] that there is a deadly epidemic fear from the use of Oxycodone, which is Endone. Do you know anything of this? (Call 119)

Male callers who contacted the helpline on behalf of their partners were observed to seek help in a somewhat different way to the 'worried parent' – in these calls, men appeared to be acting as information-gatherers, rather than asking for direct medical advice around how to manage their unwell partner. While men still displayed a concerned stance, they appeared somewhat removed in comparison to calls about children's' health needs. This difference in help-seeking style could also be observed through the language that was used to express health concerns, which was diminished in comparison to the outward alarm that was typically expressed when calling on behalf of children. A potential reason for this could be that men felt a greater responsibility as carers for children, given their increased vulnerability to illness and limited capacity to help-seek on their own. By comparison, adult partners may be perceived as less vulnerable, despite their respective health status. In any case, men who positioned themselves as carers (in any capacity) tended to be more open to being involved in the help-seeking process and expressing concern.

Discussion

The present study qualitatively examined the ways in which male callers sought help using a health helpline. Analysis highlighted three broad types of male callers (the 'reluctant caller', the 'unwell patient', and the 'concerned carer'), as well as a number of sub-themes within these broad categories. These findings demonstrate that men sought help in a variety of different ways, rather than prescribing to a homogenous pattern of gendered help-seeking. This supports contemporary constructs of masculinity which tend to reject a global, fixed embodiment of masculinity, instead supporting the concept that masculinity can be fluid and versatile (e.g., the concept of masculine 'scripts'; see Mahalik, Good, Englar-Carson, 2003). However, perhaps unsurprisingly, it remains the case that a number of the themes identified in the current dataset align with findings from men's health and masculinity literature.

The 'reluctant caller' theme (and associated sub-themes) highlights the uncertainty that male patients can exude when seeking help. We observe how male callers negotiated with the dilemma of needing to seek help while also orienting to protecting their stake at masculinity, and how this results in referencing the worries of other people, expressing doubt about their calling, and having others (generally women) initiate contact for them. Men's general reluctance to seek help and women's role in initiating access to healthcare is well documented (Umberson, 1992), and has also been observed in similarly designed health helplines operating out of the UK (Goode et al, 2004). The existence of this theme within the current dataset suggests that a significant portion of contemporary men continue to feel uneasy about utilising health services for their own needs. However, given the current inequitable state of men's health in comparison to women, it also a somewhat positive finding in that it signifies that this group of callers are, in fact, able to access healthcare using the identified strategies to overcome their initial reluctance.

Many of the findings within the current dataset were also largely consistent with hegemonic concepts of masculinity, and the impact that this is theorised to have on help-seeking (Del Mar Garcia-Calvente, et al., 2012; Galdas, Johnson, Percey & Ratner, 2010; Smith et al., 2007). Male callers categorised into the 'reluctant caller' and 'unwell patient' themes both appeared oriented towards avoiding the perception that they were frivolous help-seekers, or unduly concerned with their health. While men in the 'reluctant caller' type attempted to avoid this perception by positioning themselves as somewhat disengaged from the encounter, men in the 'unwell patient' type did the opposite; instead positioning themselves as more knowledgeable or competent help-seekers. As such, despite looking outwardly dissimilar, men in both groups seemed to be oriented towards the same hegemonic ideal. However, it is interesting to note that men in the 'unwell patient' type remained quite engaged in the healthcare encounter and assertive in their need to access professional medical advice. This finding aligns with research that identified active self-monitoring and information-gathering practices in men prior to seeking medical attention, which therefore rejected the notion that men are disinterested in their own health (Smith, Braunack-Mayer, Wittert & Warin, 2008). While the findings in the present study still align with aspects of hegemonic masculinity (i.e., that men must be sufficiently sick in order to justify help-seeking), it is somewhat inconsistent with the bulk of the men's health literature that portrays men as a homogenous group who are unwilling to seek help.

Findings from the current analysis also highlighted additional help-seeking behaviours that were at odds with aspects of men's health literature. Our analysis found that men who identified as 'carers' tended to be more open in their help-seeking, and regularly referenced their own concerns as a reason-for-calling. This finding was dissimilar to the other caller types, who routinely 'hedged' concerns by either minimizing them, positioning them as belonging to others (i.e., the 'reluctant caller'); or by maximising them in order to be

perceived as possessing specialist medical knowledge (i.e., ‘unwell patient’). Instead, men in the ‘worried carer’ type (i.e., those calling on behalf of their children or partners) owned their concerns and expressed them readily. It is possible, then, that this finding more so supports other models of masculinity (Anderson, 2005; Bridges & Pascoe, 2014; Elliott, 2015; Miller, 2011), which acknowledge a shift in the way that contemporary men embody masculinity, and proposes that men are able to adopt characteristics that are traditionally viewed as ‘feminine’ (i.e., emotional expression, sensitivity, domestication, etc.) without rejecting masculinity altogether. Our finding of the ‘worried carer’ suggests, then, that men who take on a carer role are able to bypass hegemonic masculinity norms and instead adopt a more flexible form of masculinity or masculine ‘script’ (Mahalik, Good, Englar-Carson, 2003). Such a finding supports emerging masculinity research, where these newer constructs of masculinity have been theorised to enable men to provide primary care to children (i.e., ‘stay-at-home’ dads; Latshaw & Hale, 2015; Medved, 2016).

The insights derived from the current study have practical implications for healthcare providers and the organisations who design helpline services. Understanding the types of men who utilise health helplines is useful, as it highlights the diversity of men as healthcare consumers, and cautions against the perception of men as a standardised, reluctant group. Our findings also bring an awareness to the changing landscape of masculinity, and how this can manifest during healthcare encounters via help-seeking. Findings from the current study may assist healthcare providers to have an awareness of men’s diverse help-seeking behaviours, and to support them through this sometimes arduous process. Future research utilising naturally occurring data from other phases of the medical consultations would be useful in order to build a comprehensive picture of men’s health behaviours.

Conclusion

The present study has contributed to men's health literature by identifying the various 'types' of male callers who accessed an Australian health helpline. This investigation also provided insight into the various strategies used by men to facilitate help-seeking. Analysis was strengthened through use of naturally occurring data, which meant that men's help-seeking behaviours could be explored without researcher influence or interference.

Our findings suggest that men's health represents a landscape of both continuity and change. On one hand, there are still men who present as uncertain, disengaged, and reluctant to seek help for medical issues. There are also men who are able to assertively seek help, though, may feel the need to use strategies that serve to protect their stake at hegemonic masculinity while doing this. Yet, there are some men who are engaging more openly with healthcare, and who are taking responsibility for the healthcare needs of others. Together, these findings propose a versatile understanding of what it means to be a man seeking help in contemporary society, and a rebuke to the homogenous, stagnant, and largely negative view of male help-seekers.

Chapter 6: Discussion

The present thesis examined health communication and help-seeking patterns in calls to an Australian health helpline, *Healthdirect Australia*. Calls from men were selected for analysis due to a research interest in studying men's health behaviours, both generally and within the context of interactions with an alternative health service such as a helpline. The overarching aim of the thesis was to examine how the social action of delivering healthcare at a distance was accomplished, as well as investigating the ways in which men, specifically, engaged with the helpline for their health concerns. This focus on helpline interaction was borne from a gap in mainstream literature regarding how certain practices relevant to healthcare are adapted and accomplished in over-the-telephone environments where there is a lack of visual cues and physical proximity between clinicians and callers. In addition to this, a focus on men's health behaviour was chosen given the significant differences in health service use between men and women, as well as a narrative within mainstream men's health literature that positions men as reluctant and unwilling to engage with healthcare. The analyses in the present thesis aimed to provide insight about how healthcare can be delivered at a distance using helplines, and how men utilise such services. These separate analyses achieved the overall aims of the thesis, which included: a) identification of the structural organisation of interactions that take place on helplines in order to deliver healthcare at a distance, b) understanding how nurse call-takers overcome the omnipresent absence of visual cues through the use of specialist interactional practices, and c) identifying how men, specifically, seek help for medical concerns using the helpline.

In this chapter, I provide an overview of the thesis. I also discuss the contributions that this thesis makes to the field of telehealth service provision, men's health, and qualitative inquiry.

Finally, I outline the strengths, limitations, and recommendations for future research building from the works contained in the present thesis.

Overview of chapters

Chapter 1 outlined the relevant background literature that has informed this thesis. This involved an examination of the empirical literature on telehealth service delivery, as well as existing research related to men's health, help-seeking, and the potential usefulness of helplines for improving men's health service engagement. This chapter also included a review of the methodologies typically utilised for studying men's help-seeking behaviours, with a focus on the use of self-report data (i.e., data collected from interviews, focus groups, or questionnaires) within mainstream men's health literature. In particular, it was highlighted that there are specific limitations associated with the use of such methodologies, along with the suggestion that a reliance on self-report methods may have resulted in a possibly distorted narrative that men are homogenously reluctant or unwilling to seek help for health concerns. It was also highlighted that such concerns may be overcome through exploration of men's naturally occurring health behaviours (i.e., data that are collected without researcher interference), such as those utilised in the present thesis.

Following this, Chapter 2 provided an in-depth overview of the data source (*Healthdirect Australia*), data collection procedures, and methodological approaches utilised within the present thesis. The methodology of Conversation Analysis (CA) was described, including information about how 'institutional talk' is described within this framework, the basic tenants of CA, and the benefits of this approach (e.g., the ability to analyse how social action is negotiated and accomplished, etc.). The methodology of Thematic Analysis (TA) was also outlined, which included a clear rationale for use of this approach and a description of the

theoretical considerations applied prior to conducting analyses (i.e., the decision to complete an inductive, data-driven approach).

Summary of analytic chapters

Three analytic papers explored various aspects of the helpline dataset. The analytic papers were linked to the broad aims of the present thesis, which included identification of the structural organisation of interactions during *Healthdirect* calls (Chapter 3), exploring the specialist interactional practices used by nurse call-takers to overcome the omnipresent lack of visual cues during calls (Chapter 4), and identifying the ways in which male callers sought help for their medical concerns (Chapter 5).

The first analytic chapter, Chapter 3, used CA to explore the overall structure of calls to the helpline, as well as comparing and contrasting this structure with literature derived from face-to-face primary care visits. This analysis led to the identification that calls to *Healthdirect* are highly structured encounters that routinely involved eight distinct phases: call opening, establishment of reason-for-calling, check of caller safety, creation of a confidential patient file, medical information-gathering, health advice, caller survey questions, and call closing. This analysis also explored the interactional strategies used by nurse call-takers to weave between administrative tasks (e.g., creating a confidential patient file) and medical tasks (e.g., medical information gathering), as well as difficulties associated with this. This shift between administrative and medical activities was highlighted as a point of difference from the organisation of primary care encounters, which generally do not include administrative tasks during the medical encounter - rather, these typically occur at reception prior to the patient meeting with clinicians. Overall, the findings from this analytic chapter identified systematic differences between the structure of *Healthdirect* and face-to-face primary care consultations, and proposed some suggestions for improving communicative practices in order to facilitate

smooth progression of calls (specifically, marking the transition to administrative tasks with labels and brief explanations).

The second analytic chapter, Chapter 4, also used CA to examine how physical examination was routinely accomplished in a helpline environment. Analysis focused on the interactional practices employed by nurse call-takers to collaboratively guide callers in self-examination. It was highlighted that physical examination was facilitated by the use of gross categorisations that required reporting of large-scale symptom characteristics (e.g., whether a body part looked 'normal') and two-component speaking turns (i.e., those that included a prefacing component with instructions for self-examination, followed by an information-soliciting question). These practices facilitated callers in successfully accomplishing physical examination, despite their lack of professional medical knowledge and the absence of visual cues between nurse and patient. Overall, the paper outlined that ways in which nurses might manage an absence of visibility during telephonic encounters, and successfully complete medical tasks over-the-telephone. The findings also provided insight into the ways in which nurses can recruit patients to undertake tasks that would typically be conducted by clinicians in physically co-present consultations, which may be applicable to healthcare contexts in addition to helplines.

The third and final analytic chapter, Chapter 5, utilised TA to explore the ways in which male callers to *Healthdirect* identified themselves as help-seekers. The analysis outlined three broad themes, which were formulated as caller 'types'. These types included the 'reluctant caller', the 'unwell patient' and the 'concerned carer', as well as a number of sub-themes within these broad categories. These findings demonstrated that male callers sought help in a variety of different ways, rather than prescribing to a homogenous pattern of help-seeking. However, it was also acknowledged that some of the patterns identified within the

Healthdirect dataset aligned with mainstream narratives around men's help-seeking - namely, that men were sometimes reluctant or uncertain about engaging with the health service around their own medical needs. Overall, the paper concluded by acknowledging the versatility of help-seeking within the helpline dataset, and challenging the homogenous and largely negative narrative of male help-seekers within mainstream men's health literature.

Contributions and implications of this research

The following section will describe the implications of these analytic papers in relation to key respective findings, and will include a discussion of the following: a) contributions to communicative practices related to telehealth, and b) contributions to men's health, help-seeking behaviours and use of helplines.

Contributions to communicative practices related to health and telehealth

The present thesis offers numerous insights into the ways that communicative practices can facilitate (or hinder) telehealth encounters. The analysis in Chapter 3 highlighted a multitude of communicative practices that were distinct to delivering healthcare in a helpline environment, though in some cases resembled practices that are documented to occur in face-to-face primary care settings (Byrne & Long, 1976; Robinson, 2003). For instance, calls to *Healthdirect* routinely included medical activities that callers likely would have experienced during health visits to a GP, such as an 'opening' phase where medical concerns are discussed, a 'medical information-gathering' phase where concern-specific and general medical history is taken (including an iteration of physical examination), and a 'health advice' phase where suggested courses of actions are provided by call-takers around how to manage or treat medical concerns. However, other activities were also identified within calls to *Healthdirect* which have not been identified in primary care - namely, administrative activities (i.e., the caller safety check and the creation of the confidential file). This finding

was different to other explorations of triage-focused health helplines (Pooler, 2010), which found an overall structure that was almost identical to that of primary care consultations, largely due to the administrative portion of calls being handled by frontline staff prior to connecting callers with nurse call-takers.

Through analysis of caller responses to nurse call-takers during administrative task sequences (e.g., the caller safety check and confidential file sequence), it was determined that callers often did not expect nor understand these tasks, with this misalignment generally leading to interactional disfluency (e.g., caller resistance answering questions, hesitation, and repair sequences) which disrupted the flow of the call. It was summarised that a misalignment between caller expectations and service requirements may explain the manifestation of interactional difficulty at this point in calls, as patients generally are not familiar with divulging personal information (e.g., their home address, phone number, etc.) in the middle of medical encounters. Rather, this administrative talk tends to occur outside of the medical portion of primary care encounters altogether. In addition to identifying the source of interactional disfluency in calls, Chapter 3 also identified a potential solution. This solution involved the acknowledgement of forthcoming administrative tasks prior to the commencement of these sequences (e.g., prefacing administrative turns with, “I just need to ask some safety questions…”, etc.). When call-takers prefaced administrative turns with these acknowledgements, calls routinely progressed with little to no interactional disfluency. A potential real-world implication from this finding relates to system design of telehealth, as the finding that administrative tasks can be managed alongside medical tasks suggests that frontline handling of calls may not always be necessary. As such, these findings not only contribute to the field of health communication, but also to the field of telehealth service provision more generally.

Chapter 4 provided additional contributions to the field of health communication, particularly for the facilitation of physical examination in environments (e.g., telephonic contexts, like helplines) where there is an absence of visual cues. The finding that nurse call-takers assist callers to perform self-examination supported thematic findings by Pettinari and Jessopp (2001), who identified self-examination as a potential practice for overcoming the absence of visibility associated with health helplines. It also demonstrates one way in which activities usually bound to those that possess 'professional vision' (Goodwin, 1994) can be transformed so that it is accessible to a non-professional (i.e., callers). The finding that physical examination can be successfully facilitated over-the-telephone through use of two-component turns is significant, as difficulty around this medical task has led to reduced willingness to use telehealth in the past (Bratton, 2001; Mair et al., 2005; Pappas & Seale, 2010). The analysis also demonstrates how this process can be relatively straightforward, provided that call-takers design their turns to include an instruction and information-soliciting component, and ensure that they seek gross (rather than specific) information. Findings in Chapter 4 demonstrated that calls that did not feature this physical examination design involved greater interactional disfluency, often due to callers not understanding the task they were required to complete or the information they needed to deliver. Such findings have significant implications for call-taker training, as well as training clinicians in telehealth contexts other than helplines. Training clinicians to conduct physical examination using this turn design may enhance clinician confidence around using telehealth, improve the efficacy of physical examination, and address practitioner apprehension around using health technologies. In addition, it is possible that such turn design principles may also assist other types of telehealth or in-person medical activities in which recruitment (i.e., the social action of providing or requesting assistance; Kendrick & Drew, 2016) is required. These implications may, in turn, improve uptake of telehealth more broadly through improved practitioner competence conducting

physical examination, and positively impact patient satisfaction during such encounters. This is of particular relevance at present due to the push to move many traditionally face-to-face services online as a result of COVID-19. It is likely that such services will need to rely on telehealth in the longer term as the world reacts and recovers from this pandemic, meaning that quality call-taker training and competence is essential for the health and wellbeing of communities around the globe.

The findings in Chapters 3 and 4 also contribute to field of health communication as investigated by CA. Social interaction associated with healthcare has been of long-standing interest to the discipline of CA, with a very large body of work (Drew, Chatwin & Collins, 2001; Heritage & Maynard, 2006) dedicated to studying these so-called 'clinical encounters'. While CA was founded on the analysis of counselling-focused helpline interaction (Sacks, 1992), this field has received a lower volume of research in comparison to clinical encounters that occur in face-to-face environments. In addition to this, there is even less research dedicated to the study of helplines that provide medical triage, information and advice, as opposed to general counselling. Indeed, as described in the Introduction chapter of the present thesis, the analyses contained within this thesis represent one of the very few CA investigations into health communication on a medical helpline. Given this, the various findings detailed in Chapters 3 and 4 contribute to the discipline of CA considerably, and offer much needed insight into the social organisation and interactional practices associated with delivering healthcare via helplines. This chapter will now move on to explicate the contributions from the present thesis relevant to men's health and help-seeking behaviours, as well as providing commentary on men's use of helplines.

Contributions to men's health, help-seeking behaviours and use of helplines

The analysis in Chapter 5 is one of very few studies to explore men's help-seeking practices *in situ*, rather than basing analysis on what male participants and practitioners say men 'do' when 'doing help-seeking'. Perhaps unsurprisingly, men's help-seeking behaviours on *Healthdirect* were demonstrated to be more versatile in comparison to the often negative depiction of men's help-seeking behaviours that is commonly perpetuated by mainstream men's health literature (Banks, 2004). This finding adds to previous work that has also challenged homogeneity within mainstream healthcare and, alternatively, advocated for an intersectional approach to men's health (Griffith, 2012; Mahalik, Good, Engar-Carson, 2003; Watkins, 2019). Despite the versatility observed in the present thesis, it was identified that men's health behaviours continued to align with hegemonic masculinity (Wetherell & Edley, 1999) in many cases. The finding of a 'reluctant caller' type was perhaps the most closely aligned example of hegemonic masculinity, with this theme demonstrating the often uncertain nature in which men sought help, which included the utilisation of females around initiating this process. Men's general reluctance to seek help and women's role in initiating access to face-to-face healthcare is well documented (Norcross, Ramirez & Palinkas, 1996; Seymour-Smith, Wetherall & Phoenix, 2002; Tudiver & Talbot, 1999; White & Johnson, 2000; Umberson, 1992), and has also been observed in similarly designed health helplines operating out of the UK (Goode et al, 2004). Given the volume of literature, this finding is not totally surprising, however, it does suggest that this rather limiting aspect of masculinity continues to impact on contemporary men's engagement with health services.

The 'unwell caller' type was also identified to be largely consistent with the construct of hegemonic masculinity, despite involving more assertive help-seeking behaviours. Men who were thematically coded at this level presented as preoccupied with avoiding a perception

that they were frivolous help-seekers, and would usually bind their help-seeking to severe negative health states. Despite this, it was interesting to note that male callers in this group remained quite active and engaged in the healthcare encounter. As such, while this finding aligns with hegemonic theories of masculinity, it also appears somewhat inconsistent with much of the men's health literature that portrays men as a homogenous group that is reluctant and unwilling to seek help. These inconsistencies suggest that hegemonic masculinity may not necessarily prevent men from seeking help, as has been suggested previously (Del Mar Garcia-Calvente, et al., 2012; Galdas, Johnson, Percey & Ratner, 2010; Smith et al., 2006). Rather, it may be that hegemonic masculinity results in a different format of help-seeking behaviour and patterns. The proposal that men may engage in non-normative help-seeking behaviours has been reported by Smith et al (2008), who found that Australian men typically engage in 'detective'-like self-monitoring of their health symptoms prior to contacting health services for support. The authors highlighted the contrast between their findings and the popular narrative that men are disinterested or unwilling to engage with healthcare services, instead suggesting that men remain very much engaged with their healthcare through self-led behaviours. As such, the findings in the present thesis around the 'unwell caller' appears to support this proposal, while also recognising the likely impact of hegemonic masculinity of men's help-seeking behaviours.

Another finding from the present thesis that contributes to men's health is the identification of the 'concerned carer' type, a novel finding that appeared largely inconsistent with much of the established men's health literature. Male callers coded at this level (i.e., those that identified themselves as 'carers' of children or spouses) were observed to be more open in their help-seeking, and often referenced their own concerns as a reason for calling. This finding was dissimilar to help-seeking coded at the 'reluctant caller' and 'unwell patient' due to the 'hedging' of concerns associated with these caller types, whereby callers would

position concerns as belonging to others, or maximise them in order to appear to have inflated medical knowledge. In contrast, men in the 'concerned carer' type positioned themselves as accountable for their concerns, and expressed them without such hedging. This finding suggests that men who take on a caring role are able to bypass hegemonic masculinity norms, and access behaviours that are traditionally associated with femininity without risking their stake in masculinity. In other words, men's responsibility as a carer for spouses or children appears to override prioritisation of hegemonic masculine norms, therefore enabling men to seek help using emotional expression. As such, this finding supports literature that suggests men have access to new and flexible forms of masculinity when taking on non-traditional male roles, behaviours and identities, such as being a primary carer for children (Latshaw & Hale, 2015; Medved, 2016). However, it is important to acknowledge that hegemonic masculinity is still thought to underlie constructions of emerging masculinities, as opposed to replacing it entirely (Latshaw & Hale, 2015; Hunter, Riggs & Augoustinos, 2017). For example, it has been shown that constructions of men who take on non-traditional male roles (such as being primary caregivers to children) continue to build hegemonic masculinity ideals into these accounts. Hunter, Riggs and Augoustinos (2015) highlighted this tendency in a review of parenting books, in which primary caregiving fathers tended to be constructed as men who were taking a temporary break from being financial 'bread winners', and rejecting the notion that some fathers may choose or prefer primary responsibility of caregiving. Given this, it is important to emphasise that the finding of a more flexible masculinity in the subset of *Healthdirect* callers does not necessarily demonstrate that some men have rejected hegemonic masculinity entirely – it more so reflects the availability of a more flexible masculine identity or script when particular social roles are undertaken or prioritised.

The findings in Chapter 5, taken as a whole, demonstrate the utility of health helplines for male callers. Male callers remained engaged in the healthcare encounter across all caller

types, and appeared oriented towards having their medical concerns assessed in each instance. Although there was evidence of men feeling uncertain about their help-seeking in some cases, the fact that these men were observed to contact the health service at all is a promising finding. To put this into other words, even men who presented as reluctant to seek help were able to initiate the health encounter and articulate their concerns, rather than avoiding contact altogether. Men who contacted the helpline on behalf of others also demonstrates the utility of the service for carers, particularly fathers. A significant portion of calls in the dataset (around 30%) came from fathers, which is notable given that men are often positioned as being uninvolved or secondary to female spouses when it comes to children's healthcare needs (Backett, 1987; Graham, 1984; Umberson, 1992). This finding supports Goode et al's (2004) study of the *NHS Direct* helpline, which similarly reported a theme of fathers (particularly "new dads") accessing the helpline on behalf of children. The finding also supports other research (Greaves, Oliffe, Ponic, Kelly & Bottorff, 2010; Hosegood, Richter & Clarke, 2016; Robertson & Williamson, 2005) which has highlighted fatherhood as a critical juncture within a man's life-course where health and wellbeing (including help-seeking practices) are prioritised differently. Taken together, these findings suggest that healthcare encounters over-the-telephone provides men with greater opportunity to become embedded in healthcare – both as carers for others, as well as for themselves. Future research would do well to utilise men's real-life health interactions to better understand how behaviour shifts when acting as a carer for others.

Strengths and limitations

There were a number of strengths associated with the research contained in the present thesis that warrant mentioning. First, all data utilised for analysis were naturally occurring, and did not involve researcher influence during its collection. This meant that analysis could focus on exploring the actual health practices associated with helpline encounters, rather than relying

on retrospective accounts or other forms of self-report. This aspect of the dataset not only facilitated the study of interactional practices that were inherent to delivering healthcare at a distance, but it also enabled an unobtrusive study of men's engagement with healthcare.

Second, reflexivity was considered during all aspects of the present thesis. This involves the concept (inherent to qualitative inquiry) that the researcher is an active participant in determining what data are generated and interpreted (Finlay, 2002). While this concept is less common within certain qualitative fields due to systematic analytic methods (as is the case with conversation analysis), reflexivity was considered nonetheless at all stages of writing. While the first author conducted the majority of analyses in the present thesis, the remaining authors were heavily involved in consultation and review of the interactional patterns and themes, respectively, to ensure trustworthiness and rigour (Tracy, 2010). Utilisation of the additional authors in this consultation process also enabled reflexivity, which involved acknowledgement of any personal biases and beliefs may influence aspects of analysis (Houghton, Casey, Shaw & Murphy, 2013). During this process, it was important to acknowledge that the position of the first author changed over the course of the research project from that of a female PhD candidate to that of clinical psychologist. This evolution in training, occupation and mindset brought about a number of experiences that undoubtedly shaped some of the opinions contained in this thesis. These experiences included working and volunteering for various telehealth organisations and gaining first-hand experience of the trials and tribulations of being a call-taker. Other experiences included working in male-specific mental health positions, which provided a glimpse into the male perspective of mental illness. Overall, these life experiences led to the development of genuine interest in the field of telehealth and men's health that went beyond the initial curiosity which sparked the research project. It was also acknowledged that other authors (including those in the first author's doctoral supervisory panel) came from various disciplines, including psychology,

medicine, and men's health. Access to these different disciplines and perspectives (particularly the opportunity to work with researchers who are embedded within men's health) also enhanced reflexivity, and assisted with overcoming personal biases during the analytic process.

Finally, the analyses in the present thesis add to a relatively small body of literature that seeks to understand technology-mediated healthcare. Given the scarcity of pre-existing research in this area, the insights derived from the analytic chapters offer significant insight. It is also worthwhile noting that the body of literature pertaining to medical helplines is very small, with the majority of literature focusing on supportive (i.e., counselling) helplines as opposed to those that have an institutional aim of delivering specific medical activities. Given this, a strength of the present thesis was the ability to provide insights regarding how healthcare is delivered at a distance within the environment of a medical, triage-focused helpline. This distinction is significant due to the difference in institutional aims and associated helpline activities that are inherent to medical helpline interaction (i.e., the direct provision of medical triage, assessment and advice, versus general support).

As is the case with all research, the present thesis has some potential limitations that should be considered when taking stock of findings. Given that limitations specific to each of the analytic papers have been discussed within the respective chapters, the aim of this section is to explore and discuss broader limitations. This section will also include some recommendations for future research.

It should be stressed that the dataset available for this thesis was taken from a single health helpline. This meant that we could not compare directly against other telehealth data in order to ascertain whether findings relating to delivering healthcare at a distance were transferable or generalisable to wider telehealth settings. Similarly, the scope of the research project in

which this thesis was based did not allow for the collection of data from primary care interactions (e.g., GP consultations). Again, this limited our ability to make direct comparisons between telehealth and primary care health interaction. These additional datasets would have been particularly useful for strengthening the analyses in Chapters 3 and 4, as it was sometimes difficult to source pre-existing literature with which to compare. As such, future research exploring telehealth communication would benefit from utilising multiple sources of data.

Another limitation surrounds the collection of data from male callers, as opposed to collecting data from both men and women. While this inclusion criterion was implemented to facilitate exploration of men's health behaviours, it meant that there was, once again, no direct comparison to women's health interactions available for analysis. Such comparison would have been particularly useful for the thematic analysis of men's help-seeking within the present thesis, as this would have enabled clear distinctions to be made between men and women's help-seeking behaviour. As such, future research exploring help-seeking behaviours should consider utilising naturally occurring data from both men and women.

An additional limitation associated with the present thesis involved the inability to categorise caller responses based on demographic information, such as age. While date of birth was sometimes included in the creation of confidential patient medical files on *Healthdirect*, this practice was not always discernible in the audio recordings. Grouping responses based on age may have been useful for exploring whether different types of health behaviours were associated with younger or older callers. Future research into men's help-seeking may be enhanced by utilisation of age within analysis, as it is possible that emerging forms of masculinity (i.e., those that embody traits traditionally associated with femininity) may be more readily embraced by younger generations of men.

It is also acknowledged that the author chose not to examine the impact of call-taker responses on help-seeking in order to retain a specific focus on men's behaviour. It is possible, though, that men's help-seeking behaviours may be influenced by others and the degree to which interactants challenge or perpetuate gendered attitudes and behaviours. While this decision represents a limitation for the present thesis, it highlights an important area of consideration for future research.

A final consideration involved the decision to forgo detailed analysis of various interactional practices (e.g., advice-provision, advice-receipt, etc) contained within the helpline data. While this research decision was not necessarily a limitation of the present thesis (rather, deciding where to focus analysis is reality of all research), it is worth acknowledging that the *Healthdirect* data was rich with interactional practices that were not able to be comprehensively analysed. Given the general lack of research exploring health helpline interaction, future research should consider detailed conversation analytic analysis of these various practices, including (but not limited to) call openings, diagnosis delivery, advice-provision, advice-receipt, and call closure.

Concluding thoughts and directions for future research

The present thesis explored health communication and help-seeking in calls to an Australian health helpline, *Healthdirect Australia*. The aim was to examine how the social action of delivering healthcare at a distance was accomplished, as well as investigating the ways in which men sought help for their health concerns using a helpline.

The analysis included in the present thesis demonstrated that calls to *Healthdirect* were highly structured medical encounters that shared a similar organisational structure to face-to-face primary care consultations. However, it was highlighted that calls to the helpline routinely involved the accomplishment of administrative tasks during the medical encounter,

which was a feature that appeared largely dissimilar to primary care practices. The inclusion of these administrative tasks meant that nurse call-takers were required to skilfully weave between medical-talk and administrative-talk, though, sometimes experiencing interactional disfluency when turns were not designed to pre-empt the upcoming institutionally mandated activities. As such, this analysis found that turn design was highly facilitative for these administrative tasks, and enabled smooth call flow from beginning to end.

Analysis also demonstrated that while many familiar medical activities were accomplished during calls to the helpline (e.g., history-taking, physical examination, the provision of health advice), these activities were often modified in order to overcome the absence of visibility inherent to telephonic interaction. It was demonstrated that physical examination was highly modified in order to facilitate caller self-examination. Turns that included an information-gathering and instruction component were found to enable caller self-examination, whereas turns that involved professional jargon or ill-defined instructions generally resulted in interactional disfluency. Once again, these findings highlighted the importance of turn design for straight-forward accomplishment of over-the-phone medical activities.

Finally, the present thesis offered a thematic exploration of men's help-seeking on *Healthdirect*. This resulted in the discovery of three distinct caller 'types', all of which involved various help-seeking practices. While it was demonstrated that some of these help-seeking behaviours were congruent with mainstream accounts of men's health behaviours others were determined to be dissimilar. Analysis also provided insight into the impact that norms associated with hegemonic masculinity can have on help-seeking behaviour. While this construct appeared to hinder help-seeking in some cases, it was notable that it also manifested in somewhat assertive help-seeking behaviours. This suggests that hegemonic masculinity may not always lead to diminished engagement with health services. Analysis

also demonstrated men's tendency to bypass norms associated with hegemonic masculinity when in a carer role, suggesting that men in these roles may have access to a more flexible form of masculinity that allows for expressed emotion, rather than remaining fixed to hegemonic norms. This area warrants further research as men's role in initiating health encounters for others (particularly children) has received very little research attention and would likely contain rich information about the changing landscape of contemporary masculine identity.

The findings presented in the present thesis have important consequences for both clinical practice and future research. In terms of clinical practice, many of the findings have practical applicability to telehealth service and call-taker training. Training call-takers to be mindful of the language they use when initiating tasks that may not be intuitive to callers is important for smooth call progression, and (if done well) could mitigate the need for frontline staff to manage administrative tasks. Assisting call-takers to be more competent around collaboratively accomplishing self-examination may also lead to an increase in telehealth service use, as a lack of confidence in this area can prevent clinicians from offering telehealth services. In terms of research, the present thesis highlighted the importance of examining naturally occurring instances of health interaction, particularly for the investigation of men's help-seeking behaviours. It demonstrated that a reliance on self-report measures in research can lead to a narrow, homogenous picture of men's health due to men potentially 'doing being masculine' when engaged in such research (e.g., answering interview questions in a manner that prioritises hegemonic masculinity). The findings derived from men's actual health interactions in the present thesis suggest that there is far more versatility within men's help-seeking than mainstream literature suggests. However, these claims require future research effort in order to determine whether they operate in wider healthcare contexts. Despite this, these findings have shown that men should not be treated as a homogenous

group when interacting with health services. This is important to acknowledge, as treating men with positive regard during health consultations is needed in order to facilitate satisfaction with services and ensure that they continue to seek help in the future.

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Appendices

Appendix A: Transcription Notation

The transcription symbols listed are based on Jefferson's system of transcription routinely used in conversation analytic research (Jefferson, 2004).

(0.3)	The number in brackets indicates a silence measured to the nearest tenth of a second.
(.)	A full stop within parentheses indicates silence that is less than two-tenths of a second.
=	The equals sign indicates latching between utterances. This is used to indicate talk that is produced with no silence between the end of one speaker's talk and the beginning of the next speaker's talk.
[ ]	Square brackets indicate the onset and offset of overlapping speech.
>word<	Speech enclosed in inverted arrowheads represents speech that is noticeably faster than surrounding speech.
<word>	Speech enclosed in protruding arrowheads represent speech that is noticeably slower compared to surrounding speech,
.hh	A full stop before 'h' represents inhalation. The more hs afters the dot represents extended inhalation.
hh	A 'h' without a full stop represents exhalation. The more hs represents extended exhalation.
wor:d	A colon following a syllable or word indicates that the speaker has extended the syllable. More colons indicate longer extensions of the syllable or word.
,	A comma indicates slightly rising intonation.
.	A full stop indicates falling intonation.
?	A question mark indicates strong rising intonation.
¿	An inverted question mark indicates a rising intonation that is more strong that a comma, but less than a regular question mark.

<	A ‘less than’ symbol by itself is a left push. This indicates speech that sounds like it has been produced earlier than it is (also called a ‘jump-start’).
!	An exclamation mark indicates speech that is delivered in a lively or emphatic tone.
*word	An asterisk indicates a croaky delivery of the following speech.
°word°	Speech enclosed in degree symbols indicates that the speech is lower in volume than its surrounding speech.
word	Words or syllables that are underlined indicates emphasised speech delivery.
↑	An upwards pointing arrow indicates a rising shift in the speaker’s intonation of speech.
↓	A downwards pointing arrow indicates a falling shift in the speaker’s intonation of speech.
wor-	Words or syllables followed by a dash indicates an abrupt termination of speech.
WORD	Words in capitals mark a section of speech that is noticeably louder than its surrounding speech.
→	Arrows in the left margin of a transcript extract points to specific parts of the extract that are discussed in the analysis.
(guess)	A word enclosed in a bracket represents the researcher’s best guess of the speaker’s utterance.

Appendix B: Study Fact Sheet

The Research Project

This study aims to explore how men calling the telephone health helpline *Healthdirect Australia* present their reasons for calling, describe their problem/questions and respond to the advice they are given. Health services face the challenge of becoming more appropriate for male consumers to encourage male help-seeking and to improve outcomes for men's health. Findings from this research will be used to enhance call-taker training and service delivery by providing examples of the way men routinely formulate their healthcare concerns and respond to advice. Extending knowledge of how and why men call health helplines will also contribute to the formulation of health policy that is suitable for male consumers. The study is being conducted by researchers from the University of Adelaide along with SA Health and the Freemason's Foundation Centre for Men's Health at the University of Adelaide.

Freemasons Foundation Centre for Men's Health

The Freemasons Foundation Centre for Men's Health (FFCMH) was established as a joint venture between The University of Adelaide and the Freemasons Foundation in late 2007 with the vision to enable men to live longer, healthier, happier lives.

The Centre's mission is the pursuit of innovative research programs, the significant improvement of health services, the delivery of evidence-based training programs, and the timely dissemination of health information and education resources. The Centre is the first of its kind to take a comprehensive approach to men's health addressing both physical and psychological health problems along with a wide range of factors determining health and wellbeing across the lifespan. The Centre's purpose has been enthusiastically embraced by a

range of individuals and organisations and is led by a multidisciplinary team comprised of world-renowned experts in men's health. Further details about the Centre, including recent publications, can also be found on their website: www.adelaide.edu.au/menshealth

Appendix C: Information Sheet for Call-takers

Purpose of the study:

You are invited to participate in a study that is being conducted by researchers from the University of Adelaide along with SA Health and the Freemason's Foundation Centre for Men's Health at the University of Adelaide. The project aims to gain a better understanding of how men use the helpline, *Healthdirect Australia.* Of particular interest is how men introduce their concerns, or reason for the call, over the telephone, as well as how they respond to the types of advice they are given. Please note that the aim of the study is not to evaluate the performance of call takers and participation in the study is completely voluntary.

What the study involves:

This project involves analysing samples of telephone conversations that will be recorded by *Healthdirect Australia.* As calls to *Healthdirect Australia* are already recorded, it will not be necessary to set up any new recording equipment. If you consent to participate in this research, you will be asked to allow recordings of your calls with male callers to *Healthdirect Australia* to be used for analysis of how men introduce their concerns, or reason for the call, over the telephone, as well as how they respond to the types of advice they are given. The researchers will be transcribing the call recordings in order to observe patterns or regularities in the way male callers interact with call takers. The aim of the study is not to evaluate the performance of call takers.

Benefits of the study:

The potential benefits of this research include encouraging more men to use telephone health helplines such as *Healthdirect Australia,* providing information to governments that can be

used to develop policy on men's health and well-being, and further tailoring the services that are offered by *Healthdirect Australia* to suit the types of needs that are expressed by callers.

Ethical considerations:

If you agree to take part in this study, your identity will not be made public in any way in the research. Any information that might identify you (e.g., the use of names or places) will be changed in any written reports or presentations of the general research findings. If you agree to take part in the research, you should also be aware that you may withdraw from the study at any time, should you change your mind. If you decide not to participate in this research your non-involvement will not affect either your employment status or your working environment at *Healthdirect Australia.*

Consent:

If you would be willing to participate in this study, we please ask that you read and sign the attached consent form. Please also feel free to contact the researchers from the University of Adelaide with any questions

Appendix D: Standard Consent Form for Call-takers

1. I,……. (please print name) consent to take part in the research project entitled:
   …….
2. I acknowledge that I have read the attached Information Sheet for Call-takers
3. I have had the project, so far as it affects me, fully explained to my satisfaction by the research worker. My consent is given freely.
4. I have been given the opportunity to have a member of my family or a friend present while the project was explained to me.
5. Although I understand the purpose of the research project is to enhance health-helpline service provision to men, it has also been explained that involvement may not be of any benefit to me.
6. I have been informed that, while information gained during the study may be published, I will not be identified and my personal results will not be divulged.
7. I understand that I am free to withdraw from the project at any time.
8. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

Name:_____ Signature:_____ Date:_____

Witness:

I have described the nature of the research to _____,

(print name of participant)

and in my opinion, he/she understood the explanation.

Appendix E: Script for Call-takers to Obtain Caller Consent

Hello, this is <insert name> from *Healthdirect Australia*, may I speak to <insert name>?

Just before I go any further, could I just let you know our calls are recorded for quality purposes. Is this aright with you?

Thank you for recently using our *Healthdirect Australia* service. I am ringing to see if you would be willing to assist us. We are currently conducting research to help improve the delivery of services to men in Australia. May I just ask whether you would be willing to have the recording of your previous call included in a study that researchers at the University of Adelaide are doing into men's use of *Healthdirect*? The research is looking at details of the way men make calls to *Healthdirect*, but no individuals will be identified and all callers' details will remain strictly anonymous.

Do you consent to us providing the recording of your call for the purposes of the study?

Thank you for your time today…