

UNIVERSITY OF SOUTHAMPTON

FACULTY OF HEALTH SCIENCES

**Exploring the Views of Parents of Children Aged Two Years and Under Following
Telephone Advice from Nurses Working in a GP Out-Of-Hours Service in Ireland**

By

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ABSTRACT

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**EXPLORING THE VIEWS OF PARENTS OF CHILDREN AGED TWO YEARS AND UNDER
FOLLOWING TELEPHONE ADVICE FROM NURSES WORKING IN A GP OUT-OF-HOURS
SERVICE IN IRELAND**

By Abedallah Kasem

This thesis focuses on parents' use and experiences of general practitioner (GP) out-of-hours (OOHs) services in Ireland. The progress in the establishment of GP OOHs services is considered by the Health Service Executive (HSE) to be a highly significant quality initiative for patient care, and the health service as a whole. Outside of normal GP surgery hours, parents of children can call a dedicated telephone number, to have their urgent health concerns assessed and to be advised about the appropriate level of care. Experienced nurses, who are often based in a GP OOHs centre, assess the call over the telephone and provide advice to the callers. The spur for conducting this study arose from my personal and professional experience which, I believe, underscores the need for exploring and understanding parents' views of GP OOHs services, in order to bring about change in nurses' practice of delivering advice over the telephone. The overall aim of the study is to explore and understand the views of parents of children, aged two years and under, following telephone advice received from nurses in the context of a GP out-of-hours service.

A qualitative, exploratory, descriptive design was used to examine the views and experiences of parents of children aged two years and under, who used a GP out-of-hours service provider in Ireland. Nine parents who had received phone advice from a nurse were purposively sampled to take part in the study. Data were collected using semi-structured interviews by telephone. Data were transcribed and analysed thematically. Themes included parents' perceptions of illness in children with the need to be heard, parents' views about accessibility to GP OOHs, parents' expectations that the service would offer guidance and reassurance, parents' satisfaction with the nurse's advice, and parents' experiences of hospital emergency departments (EDs). Suggestions for improving the GP OOHs service were made across these themes. The suggestions include: higher staffing levels, wanting a quicker call back, preference for face-to-face assessment over telephone advice and a preference for a children's area in the GP OOHs. The study revealed that parents are satisfied with the GP OOHs service and the parental decision-making model has the potential to provide an opportunity to continue the progress of the establishment of GP OOHs services in Ireland.

Table of Contents

Table of Contents.....	i
List of Tables.....	vi
List of Figures.....	vii
DECLARATION OF AUTHORSHIP.....	viii
Acknowledgements.....	ix
Abbreviations	x
Chapter 1: The context of the study.....	1
1.1 Introduction	1
1.2 Background	1
1.3 Personal motivation for conducting a qualitative study	3
1.4 Nurse-led telephone advice helplines in a global context.....	5
1.5 The development of GP OOHs and telephone advice nursing practice in Ireland.....	6
1.6 Nursing and technology	7
1.7 Parents' pathway through the GP out-of-hours service.....	9
1.8 Cost of access to health care in Ireland.....	10
1.9 Aim and objectives of the study	11
1.10 Summary.....	11
1.11 Thesis structure	12
Chapter 2: Literature review of parents' experiences and use of telephone advice nursing	14
2.1 Introduction	14
2.2 Data sources and the search strategy	14
2.3 Inclusion and exclusion criteria	15
2.4 Search outcome and study selection	17
2.5 Quality appraisal	18
2.6 Data extraction and synthesis	20

2.7 Results	20
2.7.1 Characteristics of the studies included for the review	20
2.7.2 A review of the literature about parents’ help-seeking behaviours, experiences and views about the use of health services.....	21
2.8 The appropriateness of help-seeking models to health service use	22
2.8.1 Predisposing factors: Sociodemographic characteristics that influence parents’ help-seeking behaviour	23
2.8.2 Enabling Factors: parents’ source of advice and their self-strategies in response to acute illness	25
2.8.3 Need Factors: Parental perception of illness in children and how to access health services	26
2.9 Parents’ and patients’ experiences when contacting and using GP OOHS	31
2.9.1 Patients’ and parents’ expectations of, and compliance with, telephone nurse advice.....	32
2.9.2 Patients’ and parents’ satisfaction with telephone nurse advice.....	34
2.10 Patients’ and parents’ recommendations to improve the GP OOHS service	36
2.11 The impact of nurses’ use of CDSS and how this may influence decision making when using GP OOHS services	37
2.12 Summary.....	40
Chapter 3: Research design, methods and analysis.....	41
3.1 Introduction	41
3.2 An exploratory qualitative research design	41
3.3 Philosophical orientation that underpins the study	42
3.4 Setting	44
3.5 Negotiating access to the study setting	44
3.6 Sampling parents for interview and case identification.....	45
3.7 Inclusion and exclusion criteria	46
3.8 Recruitment process.....	46
3.9 Ethical considerations.....	48

3.10 Data collection and conduct of interviews	49
3.11 Data analysis	51
3.12 Study rigour and trustworthiness	54
3.13 Summary.....	56
Chapter 4: Results: Participants key characteristics, views and experiences of the use of health services	58
4.1 Introduction	58
4.2 Characteristics of the interview participants	58
4.3 Parents’ perceptions of illness in children: the parental voice and the need to be heard... 64	
4.3.1 Parental anxiety.....	64
4.3.2 Children are special: they cannot speak for themselves.....	65
4.4 Parents’ perception of what the GP OOHs service would offer.....	66
4.4.1 Guidance.....	67
4.4.2 Reassurance.....	69
4.5 Parents’ perceptions of the ED and its impact on their decision making	71
4.5.1 Experience and perceptions of the ED: understaffed and busy.....	71
4.5.2 Time and distance to travel to the ED	72
4.6 Accessibility of the GP OOHs service	73
4.6.1 Familiarity with the GP OOHs service telephone number	73
4.6.2 Geographically convenient location of the GP OOHs service	75
4.6.3 Economic factors and the use of telephone nurse advice	76
4.6.4 Leaving other family members at home	77
4.7 Parents’ satisfaction with the nurse’s advice	78
4.7.1 Nurse’s manner and trust in their clinical skills.....	78
4.7.2 Parents’ adherence to the nurse’s advice.....	79
4.8 Parents’ beliefs about how the GP OOHs service could be improved.....	81
4.8.1 Higher staffing levels	81

4.8.2 Quicker call time back time from the nurse	81
4.8.3 Preference for face-to-face assessment over telephone advice	82
4.8.4 A preference for a children’s area	83
4.9 Understanding parental decision-making model.....	83
4.10 Summary.....	85
Chapter 5: Discussion.....	87
5.1 Introduction	87
5.2 Discussion of results	87
5.3 Comparison of the parental decision-making model with existing theoretical models of help-seeking	91
5.4 The role of reflexivity and a discussion about the methodology of the study.....	93
5.5 Personal learning from this study.....	95
5.6 Limitations of this study	95
5.7 Summary	97
Chapter 6: Implications for the nursing practice, recommendations and conclusions	98
6.1 Introduction	98
6.2 Implication for nursing practice, research, policy and education	98
6.2.1 Implications for nursing practice	98
6.2.2 Implication for policy	99
6.2.3 Implication for education.....	100
6.2.4 Implications for research	101
6.3 Recommendations	101
6.4 Conclusion	103
Appendices.....	104
Appendix 2.A Summary tables of the CASP checklists and questions used to appraise identified studies.....	105

Appendix 2.B Summary table of the selected articles concerning the views of parents of children about GP OOHs and use of TAN.....	114
Appendix 3.A Letter to Stakeholders at Out-of-Hours Service	157
Appendix 3.B Letter to the Nurse Manager at Out-of-Hours Service	159
Appendix 3.C Participant’s Invitation Letter	161
Appendix 3.D Participant Information Leaflet	163
Appendix 3.E Participant’s Consent Form.....	167
Appendix 3.F Interview Topic Guide	169
Appendix 3.G A table showing reach of data saturation	171
Appendix 3.H Letter to Ethical Committee at Out-of-Hours Service.....	179
Appendix 3.I An example of data extracts of P1-P9’s transcripts, emerging codes/ ideas, and the formal codes /interpretations identified from the analysis.....	181
Appendix 3.J Table showing the codebook created to show data analysis.....	231
Appendix 3.K Table 3.3 Mapping the potential links between themes and sub-themes identified from the analysis.....	253
Appendix 3.L A thematic map showing the outcome of the refinement process that defines and names the identified themes.	256
Appendix 4.A describes brief parents’ summaries of what made them contacting the service of GP OOHs.....	257
P1’s summary	257
P2’s summary	258
P3’s summary	260
P4’s summary	261
P5’s summary	262
P6’s summary	264
P7’s summary	266
P8’s summary	267
P9’s summary	268
Glossary of terms.....	271
List of References.....	273

List of Tables

Table 1.1 Groups to which charges do not apply	10
Table 2.1 Showing the inclusion and exclusion criteria for identifying relevant articles	16
Table 2.2 Showing the classifications of studies based on the country and the methods used, and the CASP checklist used for judging and appraising the evidence	19
Table 3.1 Summary of advantages versus disadvantages of both mode of interview adapted from Oltmann (2016).....	50
Table 3.2 Steps of thematic analysis adapted from Braun and Clark (2006).....	52
Table 4.1 Characteristics of participants.....	60
Table 4.2 Summary of themes and sub-themes identified from the data analysis.....	63

List of Figures

Figure 1.1 Caller's pathway during telephone advice nursing (TAN).....	10
Figure 2.1 Summary of search outcome and study selection	18
Figure 2.2 Main themes identified in the literature concerning the views of parents of children aged two years and under about the use of health service	22
Figure 3.1 Showing the number of potential participants recruited during the two rounds of recruitment process	48
Figure 4.1 Parental decision-making and their tendency to call GP OOHs service when seeking telephone advice for a child	85

DECLARATION OF AUTHORSHIP

I, Abedallah Kasem, declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research

Exploring the Views of Parents of Children Aged Two Years and Under Following Telephone Advice from Nurses Working in a GP Out-Of-Hours Service in Ireland.

I confirm that:

This work was done wholly or mainly while in candidature for a research degree at this University;

Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

Where I have consulted the published work of others, this is always clearly attributed;

Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;

I have acknowledged all main sources of help;

Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;

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Signed:

Date:

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Abbreviations

CSO	Central Statistics Office
CDOC	Carlow Doctor on Call
DDOC	Dublin Doctor on Call
CDSS	Clinical Decision Support Software
DoHC	Department of Health and Children
ED	Emergency Department
GP	General Practitioner
HSE	Health Service Executive
ICGP	Irish College of General Practitioners
ICT	Information and Communication Technology
IT	Information Technology
KDOC	Kildare Doctor on Call
NHS	National Health Service
OOH	Out-of-Hours
RGO	Research Governance Office
SDOC	South Doctor on Call
TCT	Telephone Consultation and Triage
TALN	Telephone Advice Line Nurse
TAN	Telephone Advice Nursing
UK	United Kingdom
US	United States
USA	United States of America

Chapter 1: The context of the study

1.1 Introduction

This study focuses on the views and experiences of parents of children aged two years and under following telephone advice from nurses working in a GP out-of-hours (OOHs) service in Ireland. This chapter introduces the concept of telephone advice and discusses the practice of telephone advice nursing (TAN) in a global context, and then outlines the development of TAN practice in Ireland. I also outline how nurses use technology when giving telephone advice, before describing a parent's pathway through a GP OOHs service. The aims, objectives and research question are described and I set out the structure of the thesis.

1.2 Background

The use of the telephone for giving health advice is not new; there are reports of a case as early as 1897, when a physician used the telephone to listen to a child with breathing difficulty (Payne et al. 2001). In the late 1960s, the National Aeronautics and Space Agency (NASA) developed remote telemedicine technology to monitor the health status of NASA astronauts in flight (Sorrells et al. 2006). Telemedicine refers to the use of audio, video and other telecommunications and electronic information processing technologies for the transmission of information and data relevant to the diagnosis and treatment of medical conditions, or the provision of health services or aid to healthcare personnel at distant sites (Koch 2006; Craig & Pam 2008; Stowe & Harding 2010). By the early 1990s, telemedicine was practiced to address an ever-widening span of health care issues. It is particularly used to address potential inequalities in access to care, due to geography and population density (Harkin 2001; Miller et al. 2008). For example, it is used to facilitate remote patient care in hospital settings, in connecting hospitals and their collective expertise with remote surgeries, thereby enabling remote diagnosis (Dabrowska & Cornford 2000). Telemedicine has been signalled as an advance that provides equity of service to patients who would otherwise be disadvantaged by distance from a specialist; many aspects of medicine can now be delivered at a distance by using new technology (Swett et al. 1995). Telemedicine is being applied in many areas of health care delivery; for example: dermatology (See et al. 2005), radiology (Strehle & Shabde 2006), midwifery (Australian College of Midwives 2013), district nursing (Bangs et al. 2002), and nurse practitioners in minor injury clinics (Reed 2005).

Chapter 1

Telemedicine has been seen as one of the first technologies used to provide health care remotely, and it has been at the forefront of the development of the emerging practice of telephone advice nursing (TAN) across the world (Craig & Pam 2008; Stowe & Harding 2010). Development in information and communication technology (ICT) has come to play an integral role in the delivery of nursing services to sick children; aiming to improve the quality of care by providing patients with care and education that is easy to access, as well as overcoming barriers that may occur for patients without their own means of transport (Glasper et al. 2000). Therefore, ICT has enabled nurse-led health services to operate effectively in an environment that is supported with telecommunications devices. These services exist in many countries but are particularly notable in Sweden (Holmstrom&Hoglund2007; Ernesater et al. 2009; Kaminsky et al. 2009), the US (Bohnenkamp et al. 2004; Kempe et al. 2006; Dollinger et al. 2007), and UK (Glasper et al. 2000; Munro et al. 2000; Snelgrove 2009).

'Telephone Advice Nursing (TAN)', 'Telephone Advice Line Nurse (TALN)', and 'Telephone Consultation and Triage (TCT)' are terms that have been used interchangeably to refer to the use of ICT, especially the telephone, to deliver nursing services such as: triage, health information and advice, follow up and referral (Greenberg 2000; Hagan et al. 2000; Wahlberg 2004; Hartford 2005; Peck 2005; McGinley & Lucas 2006; Moehr et al. 2006; Sorrells et al. 2006; Yardley et al. 2009; Costera et al. 2010; Hansen & Hunskaar, 2011). In this study, the term telephone advice nursing will be used throughout this thesis to refer to the use of telecommunication technology, by nurses working in GP OOHs health services, to deliver remote health information and advice. Nurses are employed to assess the seriousness of a call, provide self-management advice where appropriate and to refer callers to the appropriate level of care. This could include receiving a GP home visit, attending the GP OOHs centre, attending a hospital's emergency department (ED) or contacting an emergency ambulance (Moscato et al. 2003; Greenberg 2009; Costera et al. 2010; Hansen & Hunskaar 2011). Nurses working in GP OOHs services typically use some form of electronic communication such as wireless headset connected to a computer and use a call management system to assess the caller's need for urgent care, as well as to log the details of that call (Beaulieu & Humphreys 2008; Wahlberg et al. 2003).

The mechanism for delivering health information and advice varies between different GP OOHs services. Some GP OOHs services use single-line phone-video systems, wireless satellite technology or dedicated high-speed lines, while others use internet networks and point-to-point connections that link major hospitals to smaller hospitals, clinics, community health centres, or

school-based clinics (Sorrells et al. 2006). The GP OOHs service aims to remove the time and distance barriers from between patients and medical help, to connect patients in their homes to health care professionals, to identify callers' health care needs, especially those suffering from chronic illness. It can prove especially useful for dealing with elderly patients or for those recently discharged from hospital care, who may need particular multi-faceted treatments (Greenberg 2009). For rural and isolated regions, the GP OOHs service has the potential to offer more accessible and timely services for patients. It can be used to support the delivery of highly specialised nursing services such as access to health information and advice, referrals, appointments, and health education (McGinley & Lucas 2006; Moehr et al. 2006; Sorrells et al. 2006; Costera et al. 2010; Hansen & Hunskaar 2011). The GP OOHs service has the potential to save time and travel costs for patients and professionals and, as its use expands, could exert a profound influence on physicians' practice, especially in remote areas (Hardin & Langford 2001, McGinley & Lucas 2006). The practice of TAN based at GP OOHs services in relation to urgent or unscheduled care is discussed in section 1.3.

1.3 Personal motivation for conducting a qualitative study

The spur for conducting this qualitative study is from my personal and professional experience which, I believe, underscores the need for exploring the views of parents of children aged two years and under, following a contact with a nurse working in a GP OOHs service. In 2000, I worked as a paediatric nurse in the ED of a large teaching hospital in Dublin. I used to work different shifts, which involved answering some telephone calls at different times of day from parents of sick children aged from 1 day to 16 years of age. The advice that I gave was based on my personal experience and knowledge. With the ED there was no set of guidelines or protocols upon which to base the practice of giving advice over the telephone. There was a lack of hospital policy, and lack of in-service training, for nurses who were required to deliver advice over the telephone. I was concerned about the ad-hoc nature of the practice of giving advice by nurses who had not received any training in telephone advice nursing and triage; nor was there any protocol to apply or adhere to. This raised issues of nurses being left professionally vulnerable and potentially lacking in the necessary skills to conduct telephone advice nursing in the ED; a situation which, in turn, led me to consider what the experiences of telephone triage were from the patients' perspective, in other healthcare settings where the practice of TAN was more established.

Mackway-Jones et al. (2007) suggested that children aged two years and under are treated differently from older children and adults because of their weight, size, body proportions and

Chapter 1

anatomical and physiological features. These factors place young children at particular risk of being sick and becoming unwell (Mackway-Jones et al. 2007). For example, young children relatively have a large head and short neck, and together with the relatively large tongue, make children's breathing more difficult when they are infected with viral illness. Moreover, lack of communication for children aged two years and under causes parental difficulty in understanding symptoms such as irritability and crying, which causes additional parental anxiety and distress (Mackway-Jones et al. 2007). Consequently, the uniqueness of telephone advice nursing not only provides parents with a single point of access to health advice and information (Turnbull et al. 2011), but it also provides a source of reassurance and may act to calm anxious parents. Moreover, I have a personal interest in this area, which was aroused with the observation of the ad-hoc practice of telephone advice provided to callers in the ED department in which I worked. Similar patient presentations over the telephone were dealt with after a brief assessment of the nature of the problem; callers were then advised to visit an emergency department or to contact their GP. This in turn, places a burden on anxious parents' time, funds and travel options, in order to seek health advice via a face-to-face consultation.

My personal motivation for doing this study is to bring about change to the practice of advice in giving advice to anxious parents over the telephone and to enable nurses to deliver safe and effective advice over the telephone, to anxious parents, at a national level. I decided to start studying for a doctorate in clinical practice in UK in 2012 for a number of personal reasons. First, I wanted to develop my work with intellectual and academic people who share a common interest in the topic area, such as my supervisors. Second, the nature of exploring parents' views of children aged two years and under has increased my interest in doing qualitative research, therefore improving my learning experience. This initiative should help me to develop my research and leadership capacity and capability, as well as advancing the quality of my professional practice. Finally, my interest has increased for doing this study after finishing my master degree in nursing in 2008, where during the stage of carrying a literature review about telephone consultation, I noticed that there is a lack of Irish research studies investigating the views of parents following telephone advice from nurses providing TAN services in Ireland. There is a need to maximise the level of understanding regarding the practice of TAN in GP out-of-hours services in Ireland. This study focuses on the views of parents of children aged two years and under, because parents of those young children often experience anxiety related to lack of appropriate knowledge to help them look after those sick children and who therefore require case management advice (Light et al. 2005; Beaulieu & Humphreys 2008).

1.4 Nurse-led telephone advice helplines in a global context

Nurse-led telephone advice lines, designed to provide information about the most appropriate course of action, have been developed in several countries. The practice of TAN is particularly widespread in countries such as Australia, Ireland, Netherlands, Sweden and the United Kingdom. The considerable demand for TAN services in these countries is because of the important challenges regarding the provision of healthcare services. One of the key drivers is the increased demand for general practitioner (GP) and hospital emergency department (ED) care (Payne et al. 2001; Turner et al. 2002; Bunn et al. 2004; Koch 2006; Kohler 2008; Pountney 2009). As a result of this increased pressure there has been a policy focus on providing access to acute care outside hospital and moving health services into the patient's own home (Bunn et al. 2004; Koch 2006; Kohler 2008; Pountney 2009). In Australia, the Department of Health in Western Australia (DoHWA) developed an initiative called Health Direct in 1999, as a response to the need to reduce escalating healthcare costs, improve consumer health knowledge and preventing unnecessary use of expensive health resources, such as emergency departments (Ledek et al. 2002; Turner et al. 2002).

In the United Kingdom (UK), a nurse-led telephone helpline system, known as NHS Direct, covering both England and Wales, was launched in 1998. More recently, this service was replaced by a newer service (NHS 111) which includes triage by non-clinical call-handlers and, where appropriate, telephone advice by nurses. Nurse-led telephone services were set up in the UK as a recommendation in the Chief Medical Officer's report, which called for health information helplines to be piloted and evaluated in order to develop emergency services in the community, and increase public access to healthcare provision (O'Cathain et al. 2004; Egbunike et al. 2008; Maguire et al. 2001). This initiative was to be done through centralised facilities, supported with modern information and communication technologies (Munro et al. 2000; Glasper et al. 2000; Snelgrove 2009).

Despite the different challenges and aims that have led to the establishment of TAN services in these countries, there are commonalities between them. Firstly, TAN services usually operate from a dedicated call centre, accessed by dialling one phone number and available nationally 24 hours a day, seven days a week (Ledek et al. 2002; Turner et al. 2002, Keatinge & Rawlings, 2005; Rolland et al. 2006; Holmstrom 2007, Holmstrom & Hoglund 2007). Secondly, nurse-led telephone advice services consist of a telephone network, telephone equipment, electronic documentation and a computerised decision-support system (Hagan et al., 2000; Holmstrom 2007, Ernesater et al. 2009; Kaminsky et al. 2009). Thirdly, the services are staffed by registered nurses who are

Chapter 1

recruited following three to six months of intensive training to giving health care advice by telephone. The skills of such trained nurses are at a level to meet standard performance criteria and the key performance indicators around providing triage and health information (Turner et al. 2002).

The practice of TAN requires the formation of new roles for nurses, because it changes the interface between the nurse and the patient, and delivers health information and advice to parents and the public remotely, in an environment where they do not meet face-to-face (Strom et al. 2009; Holmstrom 2007). TAN also requires non-traditional skills in the effective use of technology, most particularly the skills associated with accessing and disseminating health information (Snelgrove 2009). Nurses are ideally placed to deliver remote health information and advice because they are well-trained, are less costly than doctors and are highly valued for their listening and communication skills (Greenberg 2000; Black 2007). It is a matter of professional necessity for the nursing profession to take responsibility for defining the roles of nurses who provide telephone advice, establishing standards for practice and education, and regulating and monitoring the practice of telephone advice nursing to ensure the safety, effectiveness and quality of service (Bryant-Lukosius, 2004).

1.5 The development of GP OOHs and telephone advice nursing practice in Ireland

In Ireland, the practice of providing health information and advice by telephone was first established by the National Poisons Information Centre in 1966 (National Poisons Information Centre, 2008). Since then, advice delivered by telephone has become commonplace through the establishment of GP cooperatives. The Health Service Executive (HSE) has suggested that this development is a highly significant quality initiative for patient care, general practice and the health service as a whole (HSE 2010). The advent of publicly funded GP cooperatives in Ireland, established in the Carlow region known as Care Doctor on Call (CDOC) in 1999 as a pilot initiative, followed by NeDoc in the North East in 2000, provided a basis for a more formalised managed approach to the provision of out of hours' GP services (HSE 2010). According to the Oireachats Library and Research Service (OLRS) (2014), the key features of the GPs out-of-hours service in Ireland is that it is people-centred, accessible and comprehensive; and that it provides a regular entry to the health care system. However, one possible way of managing the increased demand for, and supply of, GPs' services across Ireland was the introduction of telephone advice nursing in GP OOHs. TAN would provide advice and solve issues unhindered by the geographical distribution

of GPs, thereby ensuring both access and equity for caller/patients (Smith et al. 2001; Lynch, 2004).

In addition, the National Health Strategy Quality and Fairness: 'A Health System for You' was announced by the Government of Ireland in 2001, to provide vision and strategic direction for the health and personal social services. The key objectives for the health strategy centred on four national goals: i) better health for everyone, ii) fair access, iii) responsive and appropriate care delivery and iv) high performance (HSE 2008). In Ireland, TAN practice was primarily developed in response to increased demand for out-of-hours services and emergency department care; as well as a sharp rise in health costs and expenditure (Department of Health and Children (DoHC) 2009). TAN aims to provide a high quality, easily accessible family doctor service to deal with urgent medical problems. Trained triage nurses receive calls and prioritise the patient's health problems based on their urgency (CDOC, 2006). They establish whether the caller needs to be seen by a physician or to be given self-care advice, based on a computerised protocol (CDOC, 2006). Approximately 3.63 million people (72% of the total population in Ireland), has access to call centres spread throughout the country, that provide structured 24-hour urgent general practitioner (GP) out-of-hours services (Department of Health and Children 2009). These services include the South Doctor On Call (SDOC), Dublin Doctor On Call (DDOC), Care Doctor On Call (CDOC), and Kildare Doctor On Call (KDOC) (DoHC, 2009).

In addition, significant increases in the Irish birth rate have placed increasing demand on GP OOHs services. In 2011, 74,650 babies were born compared to 53,969 babies in 1998 (Central Statistics Office, 2011). The Department of Health and Children suggest that, the increase in birth rate has led directly to an increase in the number of calls to OOHs centres in Ireland, with a corresponding increase in the number requiring paediatric emergency department care (DoHC, 2011). A recent report by the Health Service Executive (2010) shows that the GP OOHs service covering the south eastern rural area of Ireland, and providing a service to a total population of 1,413,000, managed approximately 390,000 calls in 2011 (HSE 2010). In this context, one possible way of achieving the goals of the national health strategy, and decreasing attendances at emergency departments (ED) in Ireland, is the implementation of TAN across the country.

1.6 Nursing and technology

In Ireland, the Nursing and Midwifery Board of Ireland (NMBI), formerly An BordAltranais is the independent, statutory organisation which regulates the nursing and midwifery professions in

Chapter 1

Ireland. The organisation works with nurses and midwives, the public and key stakeholders, to enhance patient safety and patient care. A key element of the nursing and midwifery profession in Ireland is the expansion of the nursing practitioner's role, to involve a broader and more holistic interpretation of nursing and midwifery practice (An BordAltranais, 2007). The term 'scope of practice' is a framework that refers to the range of roles, functions, responsibilities and activities which a registered nurse or midwife is educated, competent and has the authority to perform (Castledine 2000). The scope of nursing practice was designed by An Bord Altranais in the year 2000 to assist Irish registered nurses and midwives in a number of ways. The scope of practice concept seeks to help nurses and midwives to develop a personal understanding of their role which promotes continuous professional autonomous decision-making in the areas in which they work; as well as encouraging independent critical thinking among those medical professionals. The concept also endeavours to enhance service provision for patients and clients, to improve the educational preparation and job satisfaction of individual nurses and midwives, and to improve rates of nurse and midwife recruitment and retention for the profession as a whole (An BordAltranais 2000).

Advances in information and communication technology (ICT) present an expanding opportunity for nurses to enhance the quality of life, and the independence of patients and their family carers, through better and more immediate communication, together with greatly increased access to health advice (Chambers & Connors 2002; Bohnenkamp et al. 2004; Nazarko 2007; Pountney 2009). The benefit of integrating technology into nursing practice is that it has the potential to augment nurses' cognitive functions to improve patient safety (Newbold et al. 2004), to improve efficiency and communication (Eley et al. 2008) and to allow patients and their carers to work in partnership with nurses (Magnusson et al. 2005). Indeed, nurses have been using computers in everyday practice for years to obtain patients' records and to send patient information to other health care providers. Holmstrom (2007) stated that computers have become a third party in patient-professional nurse communications. Eley et al. (2008) found that 86% of nurses use computers at work throughout Australia. Despite of the low response rate (43.3%), the researchers found that the most frequent uses were for managing patients' records, continuing professional education, communicating with other medical contacts, accessing policies and procedures and accessing clinical results.

In Ireland, nurses working in the GPs out-of-hours services use clinical decision support software (CDSS), entitled the Nightingale Teleguides (NGs), to help assess a caller's needs. The Nightingale Teleguides are an algorithm-based clinical decision support software (CDSS) tool, made up of a set

of symptom based, age and gender specific clinical algorithms, which enable the right caller to reach the right level of care advice at the right time (Nightingale Teleguides 2009). According to the Nightingale Teleguides (2009), the algorithms are designed for GP out-of-hours services, ambulance services, urgent care facilities and minor injuries units. Computer-based guidelines aim to achieve standardised outcomes, to increase patients' satisfaction by providing credible, consistent and rapid advice, and to reduce the number of adverse events that may occur (Black 2007; Marklund et al. 2007; O'Cathain 2007). Turner et al. (2002) emphasised that the work of a telephone advice nurse is guided by a decision support system. The 10 most frequently used guidelines in the telephone advice nursing service relate to abdominal pain, headache, fever, vomiting, diarrhoea, rash, cough, head trauma, dizziness and bites (Turner et al. 2002; Belmanet al. 2005).

1.7 Parents' pathway through the GP out-of-hours service.

Understanding the parents' pathway through the GP out-of-hours service is important, in order to provide the context of how parents of children aged two years and under experience these services. The GP out-of-hours services use the 'Adastra Call Management System'. Adastra is an electronic patient record system that provides multiple users with information pertaining to patient episodes of illness in a timely manner (Advanced Health and Care, 2015). It also allows nurses and GPs to access previous encounters and any special notes, or patients care plans, that have been previously documented. Consequently, a parent's pathway through the GP out-of-hours starts by registering all relevant details with the service. When a parent contacts the service, their case is logged on to the system by a non-clinical call-taker receptionist, who logs the patient's demographic details, notes the patient's current symptoms and their contact telephone number (figure 1.1). The details that are documented by the receptionist include name, date of birth, current location, name of person making the call, relationship to the patient, caller's own GP details and the presenting symptoms. When the receptionist has logged the patient's demographic details and recorded the presenting symptoms, the case is prioritised as routine, urgent or emergency. The priority of the case is determined by the receptionist based on guidelines developed by the GP out-of-hours clinical governance team and the medical director of the service. Once the case is prioritised, a nurse then calls the caller and ends the call by either giving advice, an appointment to visit GP OOHs or a referral to the nearest ED.

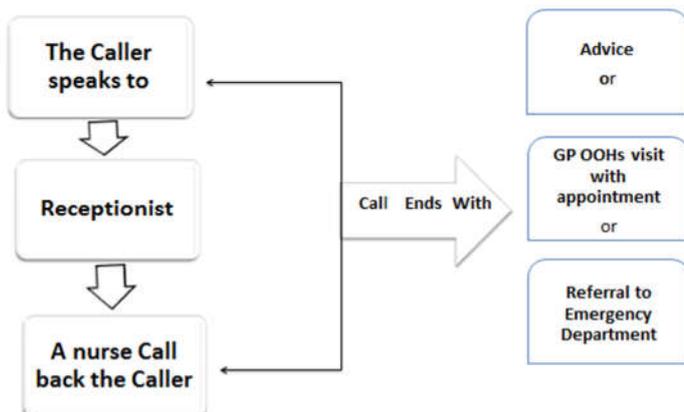


Figure 1.1 Caller’s pathway during telephone advice nursing (TAN)

1.8 Cost of access to health care in Ireland

Health care in Ireland is provided by the Health Service Executive (HSE) for everyone regardless of nationality (Citizen Information Board 2014). However, clients have to pay some hospitals, and other health care services charges, unless they have a medical card or belong to certain groups listed in table 1.1.

Table 1.1 Groups to which charges do not apply

• Medical card holders
• People receiving treatment for prescribed infectious diseases
• Children up to 6 weeks of age
• Children who have certain diseases and disabilities
• People who are entitled to hospital services because of EU regulations
• Women receiving maternity services
• People who are subject to a “long stay” charges

According to the Citizens Information Board (CIB) (2014), clients who are using ED without being referred by a GP are required to pay a fee of 100 euros. A cross-sectional survey of 384 people attending GP clinics in four different locations in Ireland has shown that 78% of the general public pay a consultation fee to their GPs, and that the cost of a GP visit varies from 35-65 euros (HSE

2010). The average cost for an appointment with a family doctor or a GP is 50 Euros. In addition, children aged 6 years and under are entitled for a free-of-charge visit to a participating GP, as are children diagnosed with asthma (HSE 2015). Despite the demand for use of GP services by public patients, the utilisation of these GPs is primarily affected by the price that the users face.

According to the HSE (2010) review of GP out-of-hours services, which examined the costs of GP/nurse telephone triage, the average cost for the service to provide the nurse telephone advice per call was €4.35. In this context, cost may be an important factor in a parent's decision making, when choosing between different health services. Unlike the UK, where services are free at the point of use, it is unclear how charges for health services affect parents' decision making and experiences in Ireland, when it comes to using those services.

1.9 Aim and objectives of the study

The aim of the thesis is to explore and understand the views of parents of children aged two years and under, following the receipt of telephone advice from nurses working in GP OOHs services in Ireland.

This study will address the following research objectives:

1. To understand how parents of children aged two years and under use the service of GP OOHs.
2. To explore the views of parents following telephone advice from nurses working in GP OOHs service.
3. To explore parents' preferences regarding ways of improving the service of GP OOHs and the practice of TAN.

1.10 Summary

This chapter has provided an overview of the research problem that addresses the need for exploring the views of parents of children following their telephone contact with Irish nurses working in GPs out-of-hours services. The evidence from the available research, conducted both nationally and internationally, regarding GP OOHs services, suggests that this service has the potential to overcome some of the challenges that face the health care system in Ireland. There is a dearth of Irish research and detailed studies concerning the practice of providing health information and advice aspects of GP OOHs services. This study was undertaken with the aim of informing a policy that can be used as a guide to improve the practice of providing remote health

Chapter 1

information and advice over the telephone in GPs out-of-hours services in Ireland. The next chapter provides a thorough review of the literature concerning parents' views and experiences of GP OOHs services and the use of telephone advice nursing.

1.11 Thesis structure

Chapter 2 provides a critical analysis of the current literature on parents' use of the GP OOHs services and the remote delivery of nursing advice for improving patients' outcomes. It also provides a critical overview of the decision-making process and help-seeking behaviour of parents of children when deciding to use this sort of health services. The knowledge synthesised through this chapter is based on an extensive review of the available studies considered to be relevant to explore parents' views and experiences of GP OOHs services. Findings from the literature to support the need for the study, to achieve its aims and objectives, and to best answer the research question were presented. In chapter 3, the study design is set out, describing the methods used to address the research objectives and the approach to qualitative analysis. The chapter also addresses ethical considerations and how rigour is achieved. Chapter 4 presents the key characteristics of the participants who participated in the study. In this chapter, the results of the analysis and the interpretation of the interviews data collected from nine parents who took part in the study were presented. The chapter continues to discuss how I have used parents' views and experiences to create a model to represent parental decision-making process in relation to using health services such as the GP OOHs service. Chapter 5 provides a discussion of the main results in the context of related literature on the topic and follows the thematic order of the parental decision-making model presented in Chapter 4. In this chapter, the parental decision-making model is compared with existing theoretical models of help-seeking. The chapter also includes a discussion of the role of reflexivity and the methodology used followed by a discussion on personal learning from the study and the limitation of the study. Chapter 6 concludes the thesis in which I present the implications and recommendations of my study for TAN related nursing practice, further research and education.

Chapter 2: Literature review of parents' experiences and use of telephone advice nursing

2.1 Introduction

This chapter examines the literature about how parents of children who are two years of age and under seek help and advice from health services. The literature reviewed draws particular attention to parents' experiences, views and use of telephone advice nursing (TAN) in GP OOHs services in order to provide a critical overview of the decision-making process and help-seeking behaviour of parents of children when deciding to use this sort of health services. Initially, the chapter describes the type of review undertaken and outlines the search strategy used (e.g. the electronic databases used, key search terms, search strategy and the inclusion and exclusion criteria): this is followed by a summarised critical appraisal of the studies identified for the review. The chapter then provides the results of the review under a number of thematic sub-headings that focus on help-seeking behaviour, what parents experience when contacting GP OOHs, parents' perceived benefits and barriers to getting help, parents' suggestions to improve GP OOHs services and finally the impact of nurses' use of CDSS and how this may influence parents' decision making when seeking help from GP OOHs services.

2.2 Data sources and the search strategy

There are broadly four types of a literature review that include a traditional or narrative literature review, systematic literature review, meta-analysis and meta-synthesis (Polit and Beck 2006; Bryman 2008; Cronin et al. 2008). I have used a structured approach to identifying literature and a narrative approach to critique, summarise and synthesise the body of the literature concerning parents' experiences of using health services when consulting on behalf of a child. Cronin et al. (2008) describe how a narrative literature review can help researchers identify gap or inconsistencies in the literature, thus refining or focusing the research question or hypothesis. Coughlan et al. (2007) suggested that a narrative literature review can help in developing conceptual or theoretical frameworks. Accordingly, I selected to do a narrative review with these aims in mind.

A structured search of the published literature was undertaken to ensure a comprehensive examination of parents' and patients' experiences of seeking help on behalf of a child, and to

understand how help-seeking behaviour influence the parental decision-making process when using such services for advice about children's illness. Search terms were identified by reviewing the key papers on this topic. These included help-seeking, health belief model, help-seeking behaviour, acute illness, childhood, parents, children, advice, telephone advice nurse, after hours, GP out of hours, general practice. Firstly, structured literature searches of electronic databases from January 1990 to February 2017 were performed. These included the Cumulative Index of Nursing and Allied Health Literature Plus (CINAHL Plus), Medical Literature On-Line (MEDLINE), ExcerptaMedica database Elsevier (EMBASE Elsevier) with full text, Science Direct Elsevier and Psychology Information (PsychINFO). These databases were chosen for their relevance to nursing, and to the area under investigation. Second, to maximise the evidence identified for this review, the search strategy included accessing the grey literature, such as conferences, presentations, abstracts and unpublished reports, using the search engine SIGLE (System for Information on Grey Literature) to cover the period from January 1990 to October 2016. I searched the internet web site Lenus (www.lenus.ie), which is a good source of Irish grey literature. Lenus captures some publications of Irish health organisations, Irish hospitals and all HSE, DOH publications. Thirdly, a manual search of internet web sites such Google Scholar, and reference lists from key published and unpublished papers relevant to parents and patients' use of GP OOHs, were used to supplement electronic searching. Searching the databases involved using truncation, and Boolean operators ('OR' and 'AND') to combine and link the search terms.

2.3 Inclusion and exclusion criteria

Literature from 1990 onwards was included to coincide with the increasing popularity of GP OOHs service models during the 1990s in the UK and elsewhere (Keating & Rawlings 2005; Bunik et al. 2007). Inclusion criteria were formulated in relation to the research question, aim and objectives of the study and are categorised in terms of the date, country, language, study design and the focus of study (table 2.1). First, studies were included if they were written in English language and were from the following countries: Australia, Canada, the United States of America, the United Kingdom, New Zealand, the Netherlands, Denmark, Norway, Ireland and Sweden. The review focuses on developed countries and in particular, those that have broadly similar GP out-of-hours models to those in Ireland. Second, if the research design included quantitative, qualitative, mixed methods studies or were systematic reviews, evaluation reports of GP OOHs services and policy documents produced by government or professional bodies. Fourth, if they were focused on the following aspects: a) parental help-seeking behaviours on behalf of their child from general

practice and GP OOHs; b) patients (of all ages) experiences or views of GP OOH; c) nurses' experiences of using CDSS.

Table 2.1 Showing the inclusion and exclusion criteria for identifying relevant articles

Criteria	Inclusion criteria	Exclusion criteria
Date	1990-2017	Prior to 1990
Country	Australia, Canada, United States of America, United Kingdom, New Zealand, Denmark, Norway, Netherlands, Ireland and Sweden.	Countries other than those listed in the inclusion criteria.
Language	English language.	Not written in English language.
Study design / type of evidence	Primary research including quantitative, qualitative or mixed methods studies. Systematic reviews, Evaluation reports of GP OOHs services and policy documents produced by government or professional bodies	Opinion pieces, editorials, letters to editors.
Focus of study	Parental help-seeking behaviour on behalf of their child from general practice and GP OOHs. Patients' (all ages) experiences or views of the use of GP OOHs including literature about parents of children over the telephone by a GP or a nurse working at a GP OOHs service. Nurses' experiences of using CDSS to provide advice over the telephone.	Help-seeking behaviours aimed at a specific adult illness (e.g. breast cancer, dementia, cardiac problems and urinary diseases) or childhood illness (e.g. mental disorders, communication and behaviour disorders). Specialists' helpline services not staffed by nurses (such as social services help lines). Telephone advice related to smoking cessation or general advice on weight control.

2.4 Search outcome and study selection

The search strategy generated 524 potentially relevant studies (a flow diagram of the search strategy and identification of relevant literature is presented in Figure 2.1). From reading the titles and abstracts of these studies, 456 were then excluded from the review because i) nine articles were duplicated and ii) the remainder did not meet the inclusion criteria. Most papers were excluded because they focused on the help-seeking behaviour of adults or children with specific conditions (Table 2.1) which were not relevant to the experiences of parents with children aged two and under. One study was not published in English, three articles were personal opinion and one was a letter to a journal. The remainder were excluded because they were not relevant to the topic area: e.g. they evaluated parents' satisfaction with a telephone service in Emergency Departments; focused on telephone consultation given by a daytime GP or paediatrician; was a telephone intervention aimed at a specific adult illness such as diabetes, HIV and mental illness; or was about telephone advice related to smoking cessation or general advice on weight control.

The remaining 68 studies (13%) focused on both parental help-seeking behaviours and on patient experiences (which included literature about patients of all ages) of GP OOHs services and of receiving advice from a nurse. The literature review also draws upon evaluation studies of the safety and effectiveness of telephone advice nursing from GP OOHs centres, and nurses' experiences of using CDSS to provide advice over the telephone. The full texts for these 68 studies were obtained and read in full, and were reviewed more fully for their relevance to the research questions and aims of my study. Of these, 3 studies were reports and one was a theoretical article. Two reports evaluated patients' referral from the GP OOHs services in Ireland and one report evaluated the GP OOHs in the UK. The remaining 64 were empirical studies which were assessed for quality using the Critical Appraisal Skills Programme (CASP) tools (see section 2.5).

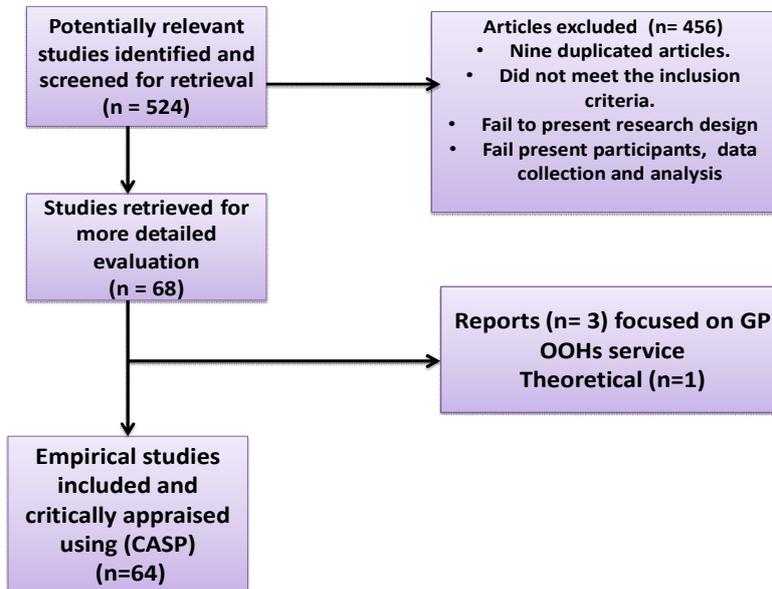


Figure 2.1 Summary of search outcome and study selection

2.5 Quality appraisal

Critical appraisal is the process of carefully and systematically examining available research to identify methodological flaws in the literature and provide researchers the opportunity to make informed decisions about the quality of research evidence, to judge its trustworthiness, and its value and relevance in a particular context (Polit and Beck 2006; Sanderson et al. 2007, Bryman 2008; Shamliyana et al. 2010). There are many critical appraisal websites available that provide tools to judge the quality of a research study, for example the Centre for Evidence Based Medicine (CEBM) in Oxford (UK), the Critical Appraisal Skills Programme (CASP) and the Joanna Briggs Critical Appraisal Tools. All of these provide access to critical appraisal tools for different types of studies including systematic reviews and RCTs. In this literature review, the Critical Appraisal Skills Programme (CASP) tools were chosen because they are accessible, high quality tools, quite detailed, and used for many years for specific research designs, and they allow researchers to make sense of the evidence when reading research. There are separate tools available to judge a variety of research designs, such as systematic reviews, randomised controlled trials, cohort studies, case control studies, economic evaluations, diagnostic studies,

qualitative studies and clinical prediction rules. Each tool contains 10 or 11 questions that can be used as a checklist to assess the quality of a research paper. Appendix 2.A provides summary tables of the CASP checklists and questions used to appraise the identified studies.

Of the 68 studies identified, 64 studies were critically appraised using the appropriate CASP checklist (based on the methodology of the study). Table 2.2 shows the research methodology of these and the country in which these studies were set. Of the 64 studies, 25 were qualitative, 2 were systematic reviews, 6 were mixed methods studies, 1 was a case control study, 2 were randomised-controlled trials, and the remainder (n=28) were cross-sectional surveys. For each of the different type of research design, the appropriate CASP tool was selected. Each study was evaluated for robustness, based on the relevant CASP questions using their three-point scale (*yes, can't tell, no*). All the papers included met at least five of the questions listed in the CASP checklists and were therefore considered to be of sufficient quality to be included in the review.

Table 2.2 Showing the classifications of studies based on the country and the methods used, and the CASP checklist used for judging and appraising the evidence

Research methodology	Number of studies	Type of CASP checklists
Qualitative	25 (3Sweden, 2Netherlands, 1Denmark, 19UK)	Qualitative CASP checklist
Systematic reviews	2(1 Netherlands, 1 UK)	CASP checklist for systematic review
Quantitative: <ul style="list-style-type: none"> • Cross-sectional surveys • Case-control study • Randomised-controlled study 	Of the 31 (3Australia, 1 Canada, 4 Netherlands, 2 USA, 1 Ireland, 1 Sweden, 16UK) 1 (UK) 2 (UK)	CASP checklists for: Cross-sectional Case-control study Randomised-controlled study
Mixed methods	6(1 Australia, 5 UK)	CASP checklist for studies that include both qualitative and quantitative methods

2.6 Data extraction and synthesis

Sixty four studies were considered sufficiently robust and met the inclusion criteria. These studies were read and reread, and then appraised and analysed sequentially. The following information about each paper was extracted: authors, year and country; study purpose and design; sample size and setting; data collection and analysis; study findings and limitations. Data extracted from these articles were presented in a tabular format to aid synthesis of the literature (Appendix 2.B). The findings from each study were examined to identify common concepts or themes across the studies.

2.7 Results

2.7.1 Characteristics of the studies included for the review

Of the studies included in the review, only one Irish study was identified (table 2.2). This was a survey of the experiences of 240 patients and their satisfaction with out-of-hours services (Smith et al. 2001). In total, 44 studies were published in the UK; of these, 19 studies were qualitative and were focused on patients' (of all ages) satisfaction with GP OOHs service, parents' help-seeking behaviours for children with minor illness, parent's perception of benefits and barriers to the use of GP OOHs and nurses' experiences of CDSS to provide advice over the telephone. Only 5 studies used mixed methods which evaluated and examined the differential use of GP out-of-hours services. One study was identified as a systematic review. The remaining 19 studies were quantitative and evaluated the appropriateness and safety of advice and measured patients' satisfaction with GP OOHs services using surveys.

Four studies were published in Sweden. Three qualitative studies focused on patients' perceptions of receiving advice from a medical helpline and nurses' use of the CDSS to give advice over the telephone. The fourth study was a survey of 203 callers to understand the function of the telephone advice nursing and callers' satisfaction (Wahlberg and Wredling 1999; Strom et al. 2009). Four studies were carried out in Australia, and of these one was a mixed methods study (Phillips et al. 2008) and three were surveys that evaluated the effectiveness of telephone advice given by nurses and the appropriateness of the advice outcome (Keatinge and Rawling 2005; Keatinge 2006; Montalto et al. 2010). One study, published in Denmark, was focused on parents' beliefs and expectations when using the GP OOHs service. One study surveyed Canadian parents when seeking treatment for their febrile children (Enarson et al. 2012). Two studies from the USA were quantitative, one focused on mothers' help-seeking of care for children (Pridham 1997), and the other surveyed rural parents' behaviour and expectations when caring for children with acute

illness (Hart et al. 2013). The last seven studies were published in the Netherlands. Of these, one is a systematic review that assessed the research evidence on the safety of telephone triage in GP OOHs services (Huibers et al. 2011) and two were a qualitative study of parents' seeking immediate primary care for their children (Hugenholtz et al 2009). The rest were quantitative surveys which compared patient contact with GP OOHs services and examined patients' satisfaction with those services (Van Uden et al. 2006; Giesen et al 2007; Smits et al. 2012; Keiser et al. 2015).

2.7.2 A review of the literature about parents' help-seeking behaviours, experiences and views about the use of health services

The findings from the 64 studies, the three reports and one theoretical article identified from searching the literature were categorised and organised into five main themes (Figure 2.2). The first theme examines the appropriateness of help-seeking models to health service use. This theme incorporates three main sub-themes (which broadly draws on Andersen's (1995) model of accessing healthcare): a) predisposing factors: the socio-demographic characteristics that influence help-seeking behaviour; b) enabling factors: parents' source of advice and their self-strategies in response to acute illness; c) need factors: parental perception of illness in children and how to access health services. The second theme specifically focuses on what parents experience when contacting GP OOHs. This theme encompasses two main sub-themes including: patients' expectations of, and compliance with, telephone nurse advice and patients' satisfaction with telephone advice. The third theme describes parents' suggestions to improve the service of GP OOHs service. The final theme is about the impact of nurses' use of CDSS and how this may influence parents' decision making when using GP OOHs services. The following section provides a detailed discussion of the literature based around these five main themes.

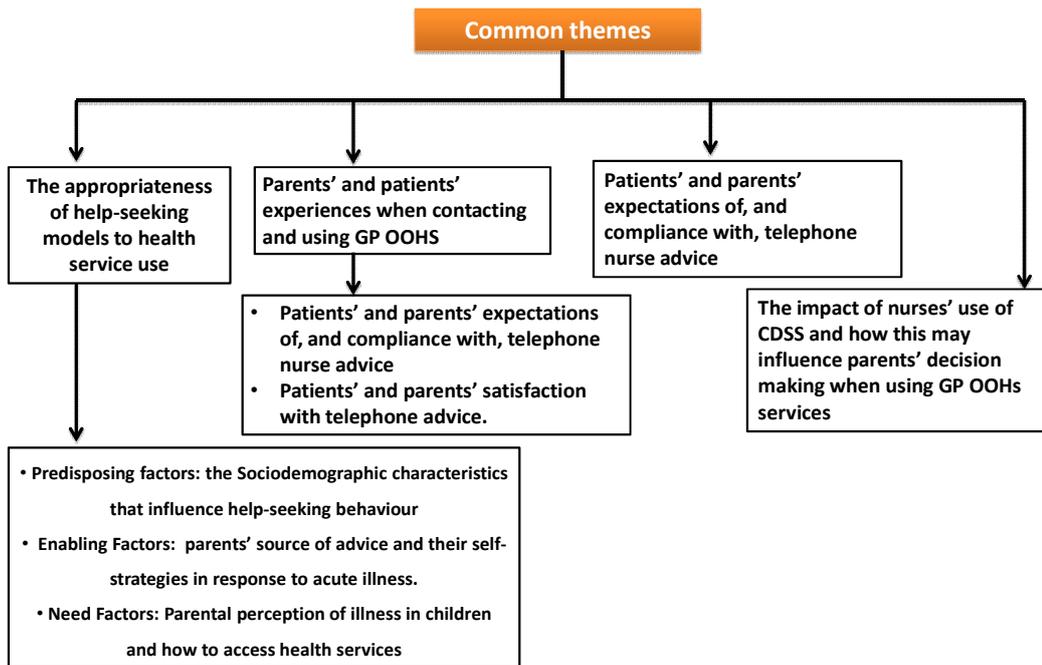


Figure 2.2 Main themes identified in the literature concerning the views of parents of children aged two years and under about the use of health service

2.8 The appropriateness of help-seeking models to health service use

In this section, I draw on models of help-seeking behaviour to elucidate the process of help seeking among parents of children (Wyke et al. 1990; Morrison et al. 1991; Andersen 1995; Edward et al. 1996; Kai 1996a; Pridham 1997; Neill et al. 2016) and apply this literature to the context of GP OOHs services. Help-seeking behaviour is conceptualised as a decision-making process that consists of three main stages including: problem recognition and definition, decision to act and selecting a source of help (Andersen 1995; Kai 1996a; Kai 1996b; Cornally and McCarthy 2011). Help-seeking behaviour for a health problem can, therefore, be defined as a problem focused, planned behaviour, involving interpersonal interaction with a selected health-care professional (Cornally and McCarthy 2011). In addition, whilst Andersen’s (1995) model is not specifically about parental help-seeking, this model of health service use is appropriate as a conceptual basis for understanding parent’s behaviour, specifically parents of children two years of age and under. Andersen (1995) proposed that health service use is affected by several factors which influence the likelihood that individuals will seek help from a health care service. He further subdivides these factors into three domains. Firstly, predisposing factors such as race, age, and health beliefs (for instance, an individual who believes health services are an effective treatment

for sickness is more likely to seek care). Secondly, enabling factors, examples of which include family support, access to health care and availability of the service. Thirdly, need factors represents both the actual need for health care services and the perception of severity of illness. This model asserts that the need for health care such as the perceived symptoms is the primary factor in determining use of health services.

Whilst help-seeking is a term that is used in many different contexts throughout the literature this literature review identified limited evidence relating to help-seeking behaviours for children two years of age and under, particularly in the context of the GP OOHs care. When parents do seek professional advice, parents are reported to seek help from GPs, with occasional reference to health visitors, practice nurses and pharmacists (Morrison et al. 1991; Houston and Pickering 2000; Neil 2000; Andersen 1995; Kai 1996a; Cornally and McCarthy 2011). In the context of the GP OOHs services, the process of patients seeking out-of-hours GP advice, or health information, starts when a patient initiates a call to the GP OOHs service (Foster et al. 2003; Monaghan et al. 200; Egbunike et al. 2008). Examining this literature revealed some key areas that are discussed below. The factors outlined by Andersen have been used as a framework to help understand the literature about parents' behaviour when seeking help for their sick children (sections 2.8.1 to 2.8.3).

2.8.1 Predisposing factors: Sociodemographic characteristics that influence parents' help-seeking behaviour

Sociodemographic characteristics such as parent's socioeconomic status and their cultural beliefs have the potential to influence parental health seeking behaviours. Wyke et al. (1990) proposed that attendance at the GP practice by parents of children with respiratory illness is dependent on their subjective interpretations of the perceived severity of their child's symptoms. Using a quantitative methodology to investigate the relationship between socioeconomic status, Wyke et al. (1990) reported symptom severity and the reactions of parents to hypothetical sets of symptoms. Parents of children from deprived families reported worse coughs than other parents and were significantly more likely to consult the GP for reasons relating to coughs. Wyke et al. (1990) concluded that children from such families suffer from worse respiratory illness than those from non-deprived families. Morrison et al. (1991) found that lone mothers were more likely to call GP OOHs service, and that reasons for doing so included the absence of another adult who could provide advice and reassurance, and the difficulty of making alternative arrangements for other children in the family.

Socioeconomic status may affect the help-seeking behaviour of parents of toddlers (Edwards and Pill 1996). Edwards and Pill (1996) found that parents from lower socio-economic groups showed less confidence in the self-management of common childhood problems such as colds, and diarrhoea but no differences in the self-management of fever (Edwards and Pill 1996). This resulted in higher GP consultations for children in deprived areas. Kai (1996b) also identified a link between parents' perception of the degree of threat to the child's health and loss of control in work that was carried out in a disadvantaged inner-city-setting. This study examined the concerns of parents about their pre-school children when they were acutely ill. Kai found that parents sought help when they perceived threat posed by an illness in those children, and felt under pressure when they lost their sense of control when faced with illness in children.

Some of this literature is now over 20 years old and may not fully reflect the experiences of today's parent users. Nonetheless, findings from earlier work can inform our understanding, particularly when considered in light of more recent studies. More recent studies have attempted to identify the common factors that impact on and influence parental decisions to seek help from GP OOHs (Neil et al. 2016). These have included parents' knowledge and experience of child illness. Neil et al. (2016) used focus groups and interviews to examine how 27 parents of children under five years, from a range of socioeconomic groups in the East Midlands of England, use information to make decisions during acute childhood illness at home. Parents reported that decision-making during acute childhood illness was influenced by personal, social and health service factors such as the nature of the child's illness; parents' experience and knowledge of childhood illness; social support; access to health services; trust in health care providers; and social expectations of parents during acute childhood illness.

Previous and current work on parental help-seeking behaviours for children two years of age and under have indicated that the parental decision to seek help for an ill child is based on the constructs of perceived severity of illness, self-efficacy in relation to home management, perceived benefits of consulting and cues to consults the GP OOHs service. The next section explores the enabling factors such as parents' sources of information and advice as well as parents' actions to manage child illness at home.

2.8.2 Enabling Factors: parents' source of advice and their self-strategies in response to acute illness

The literature indicates that parents use a range of actions and strategies in response to illness in children. Initially, many parents will 'wait and see' (Kai 1996a; Kai 1996b; Neill 2000; Allen et al. 2002). If symptoms persist, parents will then make every effort to treat the child themselves using over-the-counter remedies, call a family and friends for practical advice or the use of other sources of information such as books and leaflets, the internet, and health service web sites (such as NHS Direct) to look for information on illness management (Allen et al. 2002; Houston and Pickering 2000; Ingram et al. 2003; Kallestrup and Bro 2003; Keatinge 2006; Neil et al. 2014). The literature also shows that parents tend to employ reasonable strategies and have a strong sense of responsibility for managing their children's illness at home before seeking help from a health care provider (Kai 1996a; Kai 1996b; Hopton 1996; Neil 2000; Gischler et al. 2008; Hugenholtz et al. 2009). These strategies usually involve taking the child's temperature, checking for rash, and giving over the counter medication (Houston and Pickering 2000). However, strategies that parents establish for managing their children's illness were strengthened by their strong belief in self-management and a desire to cope and to take responsibility for caring for their sick children (Houston and Pickering 2000; Neil 2000; Hart et al. 2013).

Ingram et al. (2003) found that all parents sought information and advice about coughs from a range of sources and parents often referred to multiple sources before deciding what to do. However, when assessing the trustworthiness of information sources, parents felt that 'professional' sources were more credible than other sources of health information such as the internet (Ingram et al. 2003). Neil (2000) reported that contacting pharmacist and family or friends were the two main sources of information and support used by parents prior to seeking help from a primary health care doctor. In a study examining parents' preferences in information sources relating to their children's health, Keatinge (2006) used qualitative content analysis and descriptive statistics to analyse telephone survey data. The researcher found that parents' preferences in child health information sources varied according to the perceived severity of their child's illness. However, in a non-urgent situation when children were sick a total of 170 decisions were made by parents, with 'telephone advice line' the source most frequently selected (n= 58), followed by general practitioner (n= 27). However, in an emergency situation a total of 129 decisions were made by parents and the most frequently selected information source categories were telephone advice line (n=74); 'other' (n= 31) and GP (n= 16) (Keatinge 2006). Parents 'decisions about using some of the above information sources was influenced by the level of comfort they felt using the source, the accessibility of the knowledge, as well as the trust in the

knowledge or expertise of the source (Keatinge 2006). In their more recent study, Neil et al. (2014) conducted an exploratory qualitative study using 5 focus groups and three face-to-face interviews with parents of children under 5 years of age in UK. In this study parents' pre-consultation information seeking was dominated by the internet because of the easy internet access at home. Moreover, in a qualitative interview study of 20 parents presenting to a GP OOHs service in the Netherlands with a febrile children less than 12 years, De Bont et al. (2015) found that parents consulted other parents as well as the internet as source of information before consulting the GP OOHs.

2.8.3 Need Factors: Parental perception of illness in children and how to access health services

Parents learn about their child's behaviour over time and learn to identify what is normal for their child. Studies (which are predominantly qualitative in nature) suggest that parents of sick children make contact with health services, including GP OOHs services, when they are worried and when they discover unfamiliar and disturbing symptoms in their children (Kai 1996, Hopton 1996, Neil 2000; Kallestrup and Bro 2003; Gischler et al. 2008; Hugenholtz et al. 2009). Parents are more likely to contact health services when they perceive there is increased severity of illness in their child (Wyke et al. 1990; Hopton et al. 1996)

Pridham (1997) proposed a mother's working model to organise their help-seeking behaviour for infant care. This model includes at least four components relevant to parental help-seeking: (a) the meaning to the mother of a care giving situation; (b) the condition that will satisfy the help seeking; (c) sources of help that are available; and (d) a mother's expectations about the accessibility of help and her willingness to seek help. Pridham (1997) asserted that new mothers, especially first-time mothers, are expected to seek help from family, friends, and health professionals in order to learn about their role and capabilities as a mother. In a study that aimed to explore difficulties that parents of young children with acute illness might experience, Kai (1996) found that parents felt disempowered, were not given enough information about their children illness and were worried that they would be bothering the GP unnecessarily. Similar findings are reflected in the context of GP OOHs services. Houston and Pickering (2000) reported that parents' decisions to call the GP OOHs service are not taken lightly. Using a qualitative approach, Houston and Pickering (2000) carried out 29 in-depth interviews with parents of children from semi-rural locations in the southeast of England and found that all parents perceived dealing with a sick child as a stressful experience and feared doing the wrong thing with the child despite implementing useful strategies prior to calling the doctor. Neil (2000) asserted

that parents monitored their children's behaviour constantly for changes such as mood changes, sleeping or eating patterns, or crying for no identifiable reason. In their qualitative analysis of semi-structured interviews with 27 parents, Hugenholtz et al. (2009) found that parents perceive illness in children and recognise symptoms from the observation of a deviation in the child's normal appearance or behaviour. The researchers also identified that not taking risk with children's health, ruling out or preventing serious disease and feeling of lost control in managing the situation were all factors that motivated parents to make contact with the GP OOHs services. However, Hugenholtz et al.'s qualitative study was limited to the findings of one GP OOHs in one region of the Netherlands. Hart et al. (2013) explored rural parents' behaviours regarding acute respiratory infections in children and found that parents management of respiratory illness in children by increasing fluid intake, however, these parents sought help with from their GP when they knew that children will not get better or when child has discoloured phlegm or discharge.

Although some clinical symptoms are of particular concern, for example: coughing, high temperature, rashes, possibility of meningitis and pain have been useful for parents attempting to control the illness while feeling disempowered by the threat of the supposed seriousness of the illness (Kai, 1996; Hugenholtz et al. 2009). These symptoms that cause parents concern emerge in a number of studies in different health care settings, including the GP OOHs (e.g. Hopton 1996; Hugenholtz et al. 2009), in a telephone helpline for parents of children with congenital anomalies (Gischler et al. 2008) and health services more generally general practice (Kai 1996). In an observational study in the Netherlands, Gischler et al. (2008) found that a total of 670 calls occurred outside office hours and only 23.7% of these calls concerned crying baby with feeding problems. However, this study was specifically about children with particular underlying conditions. Feelings of helplessness or of being unable to cope with their child's illness (Kai 1996) and when parents' attempts to treat the child have failed (Hopton et al. 1996) were also factors associated with parents' tendency to call health service for advice and information.

Previous research shows that parents' monitoring for a combination of signs of children's illness such as cough, breathing difficulty and poor feeding appears to be underpinned by parents' worry, threat and lack of confidence when caring for such children at home (Houston and Pickering 2000; Ingram et al. 2003; Gischler et al. 2008; Hugenholtz et al. 2009). These children often remain dependent on medical technology in the home, which places an enormous burden and responsibility on parents to manage these symptoms at home (Ingram et al. 2003; Gischler 2008). Ingram et al. (2003) conducted seven focus group discussions and semi-structured interviews (n=30) with 60 parents of children aged between 5months and 17 years from a range

Chapter 2

of socio-economic backgrounds to explore parents' concerns and beliefs about susceptibility and severity of acute respiratory tract infections (RTI), beliefs about the triggers and barriers to consulting, and information and support seeking behaviour undertaken before consulting primary care in the UK. The researchers found that the perception of threat to a child of RTI was increased with more severe illness. However, their study was limited by the views of mothers and didn't compare father and mothers' experiences. Uncertainties regarding which children with RTIs are at risk of poor outcome and how to assess illness severity were an important driver for parents to seek help from primary health care (Kai 1996; Ingram et al. 2003).

Accessibility is used to describe geographical variation in patients' distance from services, the time during the 24-hour day of contacting the service, how the service is organised, and access to transport. The use of the telephone has the potential to reduce inequalities of access to care, can enable the integration of urgent care services (for example, call centres) and primary care and can overcome geographical barriers to access to primary care for patients living further away from such services (Turnbull et al. 2008; Turnbull et al. 2010). Andersen's (1995) behavioural model of health service use provides a conceptual basis that can be applied to understanding how parents' behaviour for seeking help for a children's illness.

There were several factors identified that could affect parents' and patients' accessibility to GP OOHs services and the use of telephone advice nursing. According to Turnbull et al. (2010) familiarity with the GP OOHs service, the availability of services, legitimacy of demand and negotiation about mode of care, may all influence the frequency and the use of GP OOHs. These factors can all lead to a variation in if, and how, patients access GP OOHs services (Giesen et al. 2007; Turnbull et al. 2010). It is important to recognise the views of those that use the GP OOHs service about accessibility to such services, in order to avoid consequences that could include a lack of adherence to advice or treatment, complaints and litigation or avoidance of future use (O'Cathain et al. 2014). Many authors have emphasised that in rural areas, where the population is dispersed, and where other primary health care services have typically been less accessible, the telephone is a useful mechanism for providing individuals with access to advice and health information (Lattimer et al. 1998; Payne et al. 2001; Richards et al. 2007; Egbunike et al. 2008; Phillips et al. 2008; Strom et al. 2009; O'Cathain et al. 2014; Keizeret al. 2015). Using an exploratory descriptive design, Keatinge (2006) surveyed 100 parents to ascertain their preference in sources of information concerning their children's health. In a non-urgent situation 34% of parents reported that they would use the GP OOHs service as their preferred source of advice regarding child health, whereas 57.4% of parents would use the GP OOHs service in an

emergency situation. Parents' choices were influenced by the availability of the service when other services are closed, easy access, reliability, knowledge or advice, reassurance, the expertise of the staff and convenience (Keatinge 2006).

There is also evidence that parental expectations about accessibility and their willingness to seek help from GP out-of-hours services may decrease with distance from the GP OOHs centres, for parents who lives in rural areas. Turnbull et al. (2010) examined if telephones can overcome geographical barriers to accessing out-of-hours primary care by parents of young children. The researchers used mixed methods that included a quantitative analysis of 5,697 calls about children aged 0–4 years, 30 hours of observation at primary care centres, eight interviews with parents and a review of 80 telephone call recordings. Turnbull et al. (2010) found that Call rates for children (0–4 years) decreased as the callers' distance from the centre increased: the 20% of people who lived furthest from GP OOHs centres made fewer calls than those living closest to the service. In a research study on mothers' help-seeking as care initiated in social context. Payne et al. (2001) conducted semi-structured telephone interviews with 47 patients of all ages and included 24 parents with children aged under 5 years. The study described the expectations of patients or third-party callers who had contacted a GP out-of-hours centre, and their satisfaction with telephone advice received. Although many patients reported anxiety about their ability to describe symptoms over the telephone, or to understand the advice received, accessibility and convenience of the telephone advice were seen as positive aspects of the service because of GP's communication skills, being empathetic and unrushed, and providing advice that allayed their concerns. However, this study was carried out in a socially deprived area of inner London and was limited by not including elderly patients and those who are unable to communicate over the telephone. Strom et al. (2009) described patients' perceptions of receiving nurse telephone advice from a medical care help line. This qualitative study of twelve participants in Sweden (which included 5 parents of children under 12 years), reported that the service was simple to use and time saving. Patients described the helpline as being easily accessible by telephone, which overcame barriers of geographical distance and lack of transport. The help line was also available when other services were not open.

Richards et al. (2007) conducted focus groups and telephone interviews with 27 users of the service of GP OOHs services, and included six parents of children aged 11 or under. The study aimed to explore their experiences. Participants identified some concerns that included delays when waiting for a call back, and they perceived the service as being under-resourced. However, the majority of users described the location of the service as an important element for accessing

Chapter 2

the service, especially for patients with chronic illness. The service was also reassuring for parents of children with breathing difficulties, such as croup cough. Poole et al. (2011) conducted a thematic analysis of free-text comments provided by 341 respondents, within a survey instrument, to explore patients' (of all ages) recent experiences of out-of-hours services and to identify suggestions for improvement of the services and the performance of the practitioners involved. Accessibility was a central theme in patients' experiences of out-of-hours care, reporting particular concerns that included delayed and long waiting times for a service response, problems receiving home visits and difficulties accessing a service or medication or getting a face-to-face consultation. O'Cathain et al. (2014) used a cross-sectional postal survey of a large sample of 4,265 users in UK to explore acceptability of the NHS 111 urgent care telephone service. The study reported that NHS 111 did not improve access to urgent care and the launch of the service has increased the use of emergency ambulance services. However, this study was limited by a low response rate of 41%. Additionally, the study was conducted in the first years of operation of NHS 111 and, as such, some of these concerns may relate to a service that was in the early stages of implementation.

Other factors associated with views about accessibility to GP OOHs services relate to the inaccessibility of a patients' own GP during daytime general practice and patients' unmet expectations of what patients need of the service. Lack of accessibility to daytime GP practices has been considered as a motivating factor for increasing the use of GP OOHs services. Keizer et al. (2015) surveyed a large sample of patients (n=2,000) with non-urgent health problems in four GP cooperatives in the Netherlands. Despite a low response rate of 32.3%, the researchers found that patients with 'unnecessary' contacts were younger and were more often frequent users of the service; factors attributed to those patients' beliefs that GP OOHs services are intended for all help requests, together with the lack of accessibility to daytime primary care. The researchers also found patient-related motives, such as worry, a perceived need to see a GP, and a need for medical information, were the most important motives for contacting a GP cooperative.

Patients' unmet expectations of what they need from the GP OOHs service were strongly associated with negative evaluations of accessibility to the GP OOHs. A cross-sectional study sent postal questionnaires to patients who had received nurse telephone consultation from one of 26 GP cooperatives in the Netherlands, Giesen et al. (2006) found that patients who expected face-to-face advice or a home visit, but only received telephone nurse advice, were more negative about accessibility to the service and telephone advice nursing. With a response rate of less than 50%, Giesen et al. (2006) reported that the higher level of negative evaluation was reported by

patients who have one or more chronic illness, whereas the lowest level of negative evaluation was made by patients living in rural areas. Horrocks and Salmon (2007) compared older people and parents of young children's needs and expectations in a semi-rural area in the UK. The researchers reported that despite differences in presenting symptoms and attitudes to service use, older people and parents with young children experienced similar practical problems in accessing care at the primary care centre. These practical problems with access include: poor verbal instructions for finding the department, scarce parking, the need to pay for a parking ticket and inadequate signage. The literature above highlights the disparities in access to GP OOHs services. It also highlights that limited access has the potential to impact parents' ability and willingness to seek help for their sick children. The next section discusses patients' expectations of, and compliance with, telephone nurse advice.

2.9 Parents' and patients' experiences when contacting and using GP OOHs

This literature includes both patients' and parents' experiences when they have sought help from a GP OOHs services including how satisfied they are with the GP OOHs services and what they expect of these services (Foster et al. 2003; Monaghan et al. 2003; Egbunike et al. 2008). In a study that included patients of all ages, Foster et al. (2003) reported that patients experience a process of negotiated consultation (between the service and the parent), working through their health issues, and reaching an agreed course of action. During such discussions, a range of options will be considered and explored with the patient, by nurses who decide what type of consultation the patient should receive: telephone advice, a treatment centre visit or a home self-advice. Where studies have particularly focused on parents of children, this literature has described who makes the call, the time and length of the call and the common reasons for the call (Wahlberg and Wredling 1999; Houston and Pickering 2000; Munro et al. 2001; Monaghan et al. 2003; Richards et al. 2007; Egbunike et al. 2008; Turnbull et al. 2010). The majority of these studies suggest that parents who made calls to GP OOHs services experience different lengths of telephone call, ranging from a few seconds to 20 minutes.

In the wider literature about patients of all ages, rather than sources just focusing on parents, Richards et al. (2007) found patients perceived waiting for a nurse to call back as difficult, reporting enduring painful or worrying symptoms and experiencing increased levels of anxiety. Richards et al. (2007) recommended that call handlers could reduce anxiety and improve the quality of service if they uniformly advised people on the likely waiting period, before being called back, as well as keeping people informed about any delays in responding. In their analysis of the

free-text comments, Poole et al (2011) reported that patients perceived the process of consultation as lacking consideration for parents and children due to poor accessibility, quality of communication and ineffective and inefficient triage over the telephone. Nevertheless, other studies that specifically focus on parents' experiences and views can be classified into two main areas of focus: patients' expectations of, and compliance with, telephone nurse advice; and patients' satisfaction with telephone advice. The next sections provide a detailed discussion on these sub-themes.

2.9.1 Patients' and parents' expectations of, and compliance with, telephone nurse advice

Understanding why parents call a GP out-of-hours service provider, and what they expect from such a service, are key component of quality of care and important aspects of patients' experiences that may influence their compliance with the advice and their future use of the service (Thompson et al. 2004; Hart et al. 2012). Thompson et al. (2004) declared that poor patient satisfaction and unmet expectations with a service may result in low compliance and waste of resources. Accordingly, when calling the GP OOHs service about their sick children, parents expect to receive reassurance to reduce their anxiety and to be treated in a friendly manner, be given advice on how to manage a child's symptoms, an explanation of what was wrong by speaking to a nurse directly, and/or to receive an appointment to see the doctor (Kallestrup and Bro 2003; Thompson et al. 2004; Egbunike et al. 2008; Strom et al. 2009; Enarson et al. 2012; De Bont et al. 2015). Where parents hold realistic expectations (i.e. those that coincide with what the service can and does offer), patients are more likely to receive the medical contact they request and consequently will be more compliant by adhering to that advice (Thompson et al. 2004). Thompson et al. (2004) surveyed a sample of 4,466 patients, with a response rate of 60.5%, who used the GP OOHs service and found that 74.3% patients had their expectations met when visiting the GP OOHs service, compared to 64.8% of patients who requested telephone advice. Thompson et al. (2004) concluded that a high satisfaction level is an important outcome measure of any out-of-hours service, as it increases patient confidence and compliance and ultimately clinical outcomes. In a survey of English patients, with a response rate of 60%, McKinley et al. (2002) studied the effect of patients' expectations of advice on satisfaction, by surveying 3,457 patients who requested advice from five out-of-hours services. The researchers found that meeting patients' expectations may reduce their dissatisfaction with the GP OOHs service and medical advice supplied via the telephone. In contrast, a qualitative study of 27 GP OOHs services users in the UK, Richards et al. (2007) identified a number of concerns and expectations that service users had about GP OOHs services. The key areas of

concern included the urgency with which the calls were handled, and delays when waiting for a call back. Similarly, Hart et al. (2012) concluded that better understanding expectations and behaviours of rural parents, nurses can develop better strategies for providing evidence-based care for parents of children who present with acute respiratory infections and other common concerns. De Bont et al. (2015) found that parents of children with fever expressed the need for reassurance from an expert, and a confirmation that they were practicing self-care appropriately. This demonstrates the potential of nurse provided reassurance as a driver that allows the parent to comply with the nurse advice and maintain self-care practices where appropriate.

Associated with parents' expectation is parents' compliance. Many authors suggest that when expectations about medical advice and treatment are met, adherence and compliance with the advice offered over the telephone regarding their children's health concerns will increase (Shipman et al. 2001; McKinley et al. 2002; Thompson et al. 2004; Richards et al. 2007; Egbunike et al. 2008; Strom et al. 2009). Compliance refers to callers 'doing the right thing' by adhering to, following and complying with the advice offered by a nurse over the telephone (Wahlberg and Wredling 1999; Shipman et al. 2001; Thompson 2004; Strom et al. 2009). Wahlberg and Wredling (1999) reported that 85% of respondents to a postal questionnaire survey stated that they had followed the advice. Strom et al. (2009) reported that callers were highly compliant with the advice provided because of their involvement in the decision-making process. Foster et al. (2003) carried out a quantitative analysis, aiming to achieve an objective assessment on callers' compliance with NHS Direct advice to attend an accident and emergency (A&E) department. The researchers found that of those following the advice to attend A&E, three quarters (75.8%: 94 of 124) did so within two hours of their contact with NHS Direct, and 90.4% within 12 hours. Time taken from call to attendance ranged from 12 minutes to 3 days. However, this study is limited by a small sample size in that there were only 2.4% of patients who were advised to attend ED which could lead to underestimating compliance level.

In a qualitative English study to explore patients' expectations and help-seeking behaviour, to understand their relationship with satisfaction and experience of out-of-hours care, Egbunike et al. (2008) reported that confidence, or a lack of it, in the ability of the health professionals was also an important aspect of a participant's evaluation of the clinician, which influenced the patient's compliance with advice given. In addition, using a postal survey which achieved a response rate of 69%, Munro et al. (2000) evaluated patients' compliance with the nurses' advice before and after the introduction of NHS Direct and found that 85% of callers say they comply with all of the advice given; a further 13% admit they comply with only some of it. Strom et al.

(2009) conducted 12 semi-structured interviews to describe patients' perceptions of receiving advice via a medical care help line. The researchers found that compliance and acceptance of advice were both enhanced when patients felt involved in the decision-making process. Munro et al. (2001), who undertook the evaluation of the U.K. nurse-led telephone helpline, have linked the data from 155 call transcripts with that from an equivalent number of postal survey questionnaires, in order to conduct a qualitative analysis of reasons for lack of compliance. The authors have described some evidence of poor communication between nurse and caller, of ambiguity in the advice given by the nurse, and of mishearing or misinterpretation of what the nurse said.

2.9.2 Patients' and parents' satisfaction with telephone nurse advice

Satisfaction with GP OOHs services refers to the fulfilment of expectations or perceived needs (Salisbury 1997; Wahlberg and Wredling 1999; Shipman et al. 2000; Payne et al. 2001; Shipman et al. 2001; Smith et al. 2001; McKinley et al. 2002; Thompson et al. 2004; Keatinge and Rawlings 2005; Egbunike et al. 2008; Enarson et al. 2012; Smits et al. 2012). McKinley et al. (2002) studied the effect of patients' expectations of care on satisfaction with the care provided by GP OOHs and concluded that meeting and failing patients' expectations is a key predictor of patients' satisfaction. However, Quantitative surveys that have evaluated parents' satisfaction with GP OOHs services and the use of telephone advice nursing, have reported high levels of satisfaction ranging from 80% to 95% (Wahlberg and Wredling 1999; Shipman et al. 2000; Payne et al. 2001; Shipman et al. 2001; Smith et al. 2001; Carr-Bainset al. 2010; Enarson et al. 2012). Smith et al. (2001) reported that 86% of their respondents were satisfied, and 9% were dissatisfied, with the GP OOHs service. Patient satisfaction was high because the service offers visits to the service centre in emergency situations, as well as telephone advice. Shipman et al. (2001) conducted in-depth semi-structured interviews with 72 patients registered with a GP out-of-hours service in UK, to understand patients' views, expectations and experiences. The researchers reported that the key benefits of the service that have increased patients' satisfaction with the health service were the speed of being seen via an appointment, and the opportunity to have a face-to-face consultation. Other perceived benefits of the use of TAN in a GP OOHs services include: for patients with chronic conditions such as heart failure, diabetes and chronic obstructive pulmonary disease, the GP OOHs service has the potential to reduce the cost of providing care, at the same time as it improves the patients' quality of life, whilst also helping to maintain their independence (Marklund et al. 2007; Munro et al. 2005). In Sweden, 95% of patients were completely satisfied with the advice and help given by nurse working in the GP OOHs service (Wahlberg and Wredling

1999). The reason suggested for this high level of satisfaction was that callers were given self-care advice which they were happy to follow. This advice, in turn, saved patients time and travel costs. Only 8 callers expressed dissatisfaction, which related to their feelings of uncertainty about the advice received.

Previous experience of using a GP OOHs service and patient satisfaction have also been identified as necessary for ongoing evaluation of quality of care provided by the GP OOHs service (Smith et al. 2001; Keatinge and Rawlings 2005; Strom et al. 2009). Parents' feelings of satisfaction were strongly related to their perceptions that nurses understood their problems and were empathetic in their responses to parents. Satisfaction was also linked to parents finding the advice sufficient to meet their needs; especially when the advice was given in a language that they found comprehensible (Strom et al. 2009). Egbunike et al. (2008) identified that factors such as timeliness, perceived quality of the service and matching user expectations were the principal factors influencing overall reported satisfaction. Keatinge and Rawlings (2005) reported that 96% of parents of children were satisfied with the GP OOHs service because of the quicker response time to the call, the way in which the advice is conveyed by the nurse and the outcome of the advice. All of the studies cited above concluded that improved understanding of the patients' perspectives, regarding the care / advice provided, lead to increased staff satisfaction and motivation.

Kai (1996) found that disparity between parents' beliefs and expectations about illness and professionals' behaviour further frustrated parents' attempts to understand illness. Parents expressed a need for a range of accessible and specific information to support them through their seeking help for children's illness. Moreover, in their final report of the impact of the introduction of NHS Direct on GP cooperative services, Munro et al. (2001) reported that not all callers were satisfied with the service. Reasons for dissatisfaction included difficulties in getting through to the service and delays in being able to speak to a nurse. In addition, some callers were unhappy about the number of questions asked; particularly the basic questions about name, address, GP and so forth, in a context where they feel that their problem is urgent. Factors such as lack of perceived social support for the caller, who could not leave the house with a sick child because another child was asleep, and lack of trust in the service provider by the caller who questioned whether the person they were speaking to was a nurse or a receptionist, were also seen as reasons that could decrease parents' satisfaction about the use of the GP OOHs service (Munro et al. 2001).

Chapter 2

While GP OOHs services facilitate cost-effective and timely access to health information and advice, those same services may also present some disadvantages. Foster et al. (2001) used a qualitative approach to explore older peoples' experiences and perceptions of different models of general practice out-of-hours services. The researchers found that the use of the telephone, and the requirement to travel to be seen, were common barriers for not using the service by this group of elderly patients. Shipman et al. (2001) reported that the main barriers identified by patients for not attending the GP OOHs service are: feeling too ill to travel, having other dependents to care for at home, and lack of transportation. Shipman et al. (2001) concluded that parents who are socially disadvantaged are more likely to use the GP OOHs services due to concerns about equity of access and transport. Poor performance and issues related to safety of triage over the telephone was perceived as a barrier to TAN's use.

Moreover, Egbunike et al. (2008) found that mothers of children aged less than 5 years, were dissatisfied with the GP OOHs service. However, the study was limited by having a low response rate of only 26%. The most common reasons for callers' dissatisfaction related to long waiting times for the nurse to call back, unmet expectations, anxiety and wanting/needing more time during the consultation process and finally that the callers were parents with no previous experience of their child's particular illness (Egbunike et al. 2008). Carr-Bainset al. (2010) distributed 425 postal questionnaires to investigate the satisfaction with, and experiences of, patients receiving an OOHs home visit from a GP. Despite of a moderate response rate of 54%, 87% of the 230 responding patients expressed their satisfaction with a home visit by a GP from the cooperative. However, 32% patients were dissatisfied with the time taken to receive the visit. The researchers also found that if the home aspect of the GP OOH service is not available, 67% patients would have phoned for an ambulance or gone directly to a hospital's ED.

2.10 Patients' and parents' recommendations to improve the GP OOHs service

Much of the literature about patients' views of GP out-of-hours services indicates that overall, parents have positive experiences of using these GP OOHs services (Egbunike et al. 2008; Strom et al. 2009). Campbell et al. (2009) asserted that delivering services with care that result in high levels of user satisfaction, needs to take account of users' expectations as well as their experience of care. Egbunike et al. (2008) conducted 30 semi-structured telephone interviews with users of a GP out-of-hours service, to explore their experiences and to establish their preferences for development of the service. Callers identified that improving continuity during the consultation

process, and continuity of onwards referral, would enhance the service. Maguire et al. (2011) explored how parents seek urgent and emergency services when their child under five years old has a feverish illness in UK. The researchers found that lack of consistency and standardisation within and between services was strongly emphasised by participants and thought to be problematic, which matches parents' desire and need for more explicit and consistent written and verbal advice and information for appropriate home management. Poole et al. (2011) reported that patients' suggestions for improving care included improvement of patients-practitioner communication, triaging patients more effectively and efficiently, as well as extending GP and pharmacy opening times and medication delivery services.

2.11 The impact of nurses' use of CDSS and how this may influence decision making when using GP OOHs services

Telephone advice nurses have adopted evidence-based clinical guidelines and protocols to ensure safe practice in the delivery of remote health information and advice to the public (Parahoo 2006; Marklund *et al.* 2007; Ernesater *et al.* 2009; Dowding *et al.* 2009). In this context, clinical practice guidelines have been defined by Parahoo (2006, p 427) as

"...systematically developed statements to assist practitioner and patient' decisions about appropriate healthcare for specific clinical circumstances".

The three key features of this definition are: these guidelines must be developed in a systematic process through research and review of the literature; their value is for both patients and the health care providers and they are implemented on a case-by-case basis to assist in the clinical decision-making process. The literature has highlighted that the core of telephone advice nurses service in different countries, including Australia and the United Kingdom, is very similar where nurses follow a computer-driven guidelines and protocols to give health information and advice about a wide range of problems. Therefore, guidelines and protocols for giving health information and advice can be either paper-based or computerised and have been called decision support systems (Dowding *et al.* 2009; Ernesater *et al.* 2009). 'Decision support systems', 'advice support system', 'decision aid soft wares' and 'telephone advisory systems' have been used interchangeably and can be defined as software programmes of patient-specific assessments and recommendation used by telephone advice nurses to aid the process of decision-making regarding health issues (Holmstrom 2007; Marklund *et al.* 2007; Dowding *et al.* 2009; Ernesater *et al.* 2009). They aim to achieve more standardised outcomes, to increase patient satisfaction by providing credible, consistent and rapid advice, and to reduce the number of adverse events that

Chapter 2

may occur. They endeavour to achieve this by providing nationwide uniform guidelines covering health information and advice for various conditions such as fever and cough among children, adults and older people (Marklund *et al.* 2007; Ernesater *et al.* 2009; Dowding *et al.* 2009). This in turn will influence how parents experience and use services such as GP OOHs.

Turner *et al.* (2002) emphasised that telephone advice nurses' work in Australia is guided by a decision support system based on clearly-stated guidelines (n= 550), which is applicable to many settings including the UK. These guidelines were designed to standardise key questions, assessment, action and home care instructions. The key questions aim to establish the callers' name and age, details regarding the onset of their problem, its intensity and frequency. Assessment contains a list of questions regarding the symptoms that should be assessed to determine urgency. The action is organised so as, where possible, to elicit 'yes' or 'no' answers to determine appropriate disposition and advice. According to Ernesater *et al.* (2009) computerised guidelines and protocols are symptom-based and correspond to the most common reasons for seeking advice. They are designed as a checklist from which key questions are recommended based on the callers' symptoms.

Several studies have highlighted how nurses become familiar with the content of the CDSS they are using (Mayo *et al.* 2002; O'Cathain *et al.* 2004; Holmstrom 2007; Ernesater *et al.* 2009). Mayo *et al.* (2002) examined telephone advice nurses' use of protocols and guidelines in different settings in California. Mayo *et al.* (2002) found that 78.8% of protocols (n=223) were available for most of the telephone nursing service. The study by Mayo *et al.* (2002) indicated that the nurses relied upon written or computerised guidelines to organise, make decisions, and expedite patients' symptoms-based assessment. Holmstrom (2007) used a qualitative, descriptive approach to examine Swedish nurses' experience of the use of decision-support software. This key component offered triage recommendations and self-care advice to the general public in Sweden. The researchers carried out in-depth interviews with registered nurses (n=12) focusing on their views concerning the decision-support software, how they used the software in practice and how it influenced their clinical decision-making. The findings of Holmstrom's study encompassed four main themes including: support for the system but not for the decision; inconsistency between the actual practice and the decision-support software; limited support for learning and information and communication challenges thrown up by the use of software. The study found that decision-support software was not fully adapted to the real-life situations that nurses faced in their daily practice. It also indicated that, while decision-support software is a helpful tool in assessing callers' needs as it focuses on acute conditions, it limits the use of nurses'

clinical decision skills that are based on knowledge and experience. Ernesater *et al.* (2009) conducted a qualitative study in Sweden to describe telephone advice nurses' experiences of working with computerised decision support systems and how such systems could influence their work. They carried out semi-structured interviews to examine the experience of nurses (n= 8) working with computerised decision support. Their findings were presented under three themes and each theme contained subcategories. According to Ernesater *et al.* (2009) nurses experienced their work with a decision support system as supporting, inhibiting and quality-improving. The supporting category consisted of four subcategories which described how the system supported telephone advice nurses in their work including: simplifying work, complementary support, professional security and enhancing nurses' credibility. The inhibiting category described how telephone advice nurses sometimes felt that computerised decision support inhibited them in their work. This impediment was further broken down into three subcategories including: incomplete software, disagreement between nurses and decision support and controlling and obstructing work. The quality-improving category described how computerised decision support improved quality in TAN at the organisational level and consisted of two subcategories including: uniform advice and increasing accessibility. Ernesater *et al.* (2009) have outlined in their study that computerised decision support cannot replace telephone advice nurses' professional knowledge and competence. Despite the success of using TAN service to save time, reduce costs and increase patients' capacity for self-care, there is a risk that decision support systems may mechanise and undermine the communication between the nurses and the callers (Ernesater *et al.*, 2009).

The majority of CDSS that formally evaluated in nursing still appear to have limited benefit in terms of improving nurses' recommendations and the parents' behaviour when seeking help (Dowding *et al.* 2009). However, this suggests that parent's behaviour is influenced by the call outcome as advised by the telephone nurse adviser. Therefore, call outcomes can be classified into three main groups of action in the context of GP OOHs services. Firstly, go to an emergency department immediately or call the ambulance; secondly, advice over the phone from a nurse or an appointment to see a doctor at the GP OOHs centre or wait for a home visit; thirdly, go to your own GP during the day (Wahlberg and Wredling 1999; Smith *et al.* 2001; Shipman *et al.* 2001; Foster *et al.* 2003; Monaghan *et al.* 2003; Richards *et al.* 2007; Egbunike *et al.* 2008). In a Swedish study that aimed to understand the process of telephone nursing, Wahlberg & Wredling (1999) distributed a postal questionnaire to 203 callers and found that the predominant outcome was self-care advice (49%). Using a qualitative in-depth interview with parents of children aged one year and under (n=70), Shipman *et al.* found that 50.0% received telephone advice and 45.3%

Chapter 2

received a home visit. Monaghan et al. (2003) noted that nurses' responses to patients' enquiries, regarding serious symptoms, at NHS Direct are based on computer-based guidelines and consist of categories such as calling an ambulance; visiting the emergency department immediately; to be seen in an emergency department within four hours; contacting their GP within 72 hours and home care instructions. Smith et al. (2001) found that call outcomes were classified as 28% of callers to the GP OOHs received home visits, and only 3% of patients received advice over the telephone.

The literature related to nurses' use of CDSS has emphasised that these software are programmes designed to carry out patient-specific assessments and recommendations, which are used by telephone advice nurses to aid the process of decision-making regarding health issues (Holmstrom 2007; Marklund et al. 2007; Dowding et al. 2009; Ernesater et al. 2009). The literature also show that nurses use CDSS in a variety of ways and are likely to prioritise their own knowledge and expertise above that provided by a CDSS. This suggests that CDSS cannot replace nurses' knowledge. However, it is essential that parents are given not only an assessment of the child's condition, but also a sense of guidance and reassurance.

2.12 Summary

There is a considerable number of studies that have investigated patient and parental seeking-help behaviour from a GP OOHs services and/or the use of telephone advice nursing (TAN). However, there are very few studies that have specifically explored parents' views and experiences of health information and advice received from the nurse over the telephone. Those that have been undertaken have been carried out in countries such as Australia, Netherlands, USA, Sweden and UK. There is a dearth of Irish studies that examined parents' views about the GP OOHs service, despite its implementation in 1999 (HSE 2010). The literature review in this chapter has identified the following gaps to suggest that further research is needed to explore telephone advice nursing in the context of GP OOHs services from an Irish perspective. First, the experiences of parents of children aged two years and under have been given little attention in terms of what parents need; particularly their experience when their children become unwell and their condition deteriorates. Second, there is a need to investigate parent's views and experiences using a qualitative approach to achieve a better understanding of how GP OOHs services can be improved; therefore, reflecting the preferences and needs of parents. The next chapter outlines the research design and methods.

Chapter 3: Research design, methods and analysis

3.1 Introduction

This chapter describes the design, methods and analysis for the study, which were adopted to achieve the aims and objectives of the study. I then outline the philosophical orientation that underpins the study. The chapter goes on to describe the study setting, followed by a discussion on negotiating access to that setting. The steps for selecting parents for interviews, together with how cases were identified, are then outlined, before discussing the recruitment process. The chapter continues by addressing the ethical considerations, data collection and conduct of the interviews. Finally, I discuss the analysis of data, and how issues relating to the rigour and trustworthiness of the study, were dealt with.

3.2 An exploratory qualitative research design

A research design is the framework or guide used for planning, implementing and analysing a research study (Gerrish and Lathlean 2014). It is the plan for answering the research question (Burns and Grove 2005). Research designs are most often grouped as either quantitative or qualitative. However, researchers can mix or use multiple designs to best answer their research questions or the proposed hypothesis. In general, quantitative research designs most often reflect a deterministic philosophy that is rooted in the post-positivist paradigm or school of thought (Polit et al. 2001; Creswell 2003; Burns and Grove 2005; Gerrish and Lathlean 2014). Post-positivists examine cause and how different causes influence outcomes. Therefore, the post-positivist paradigm assumes that reality can be discovered deductively; an approach where most ideas or concepts are reduced to variables and the relationships among them are tested. Researchers who follow this paradigm hold the belief that any knowledge that results from their work is based on careful observation and measurement and the interpretation of objective reality. In contrast, a qualitative research design is rooted in the naturalistic paradigm and begins with the assumption that reality is subjective and is inductively discovered. For such researchers, multiple realities exist, rather than just one. Researchers often use this type of design when little is known about a particular concept or experience (Polit et al. 2001; Creswell 2003; Burns and Grove 2005; Gerrish and Lathlean 2014)

Understanding how to select a research design is a crucial step in conducting meaningful research, as each design offers a unique plan or approach to best answer the research question(s) (Le-May and Holmes 2012). This study uses an exploratory qualitative design to answer the question of what are the views of parents of children aged two years and under, following telephone contact with a nurse working in GP OOHs services. The reasons for choosing this design were inspired, in part, by Strauss and Corbin's (1998) discussion on exploratory qualitative studies. The reasons for my choice are: my personal experience of giving advice over the telephone, my philosophical orientation that encourages me to use a qualitative design (see next section) and the nature of the research problem under investigation. Strauss and Corbin (1998) assert that qualitative designs are best for exploring substantive areas about which little is known and where researchers wish to gain novel understanding. Thomas (2003) asserts that using an exploratory inductive approach helps qualitative researchers to condense extensive and varied raw text data into a brief, summary format. This focus helps to establish clear links between the research objectives and the summary findings derived from the raw data, and to develop a model or theory. Moreover, the exploratory qualitative approach is inductive, rather than deductive. It begins with the assumption that reality is subjective, not objective, and that multiple realities exist, rather than there being just one reality (Creswell 2003; Burns and Grove 2005; Pope and Mays 2006). Other reasons for using such an approach with this particular research topic are firstly, the study aims to describe and explore the views of parents, whose children are two years of age and under, as little is known about these views from an Irish perspective. Therefore, an exploratory descriptive qualitative design permits the researcher to use techniques that allow the views and experiences of parents to be presented freely (Strauss and Corbin 1998). Secondly, this design allows the researcher to explore and understand the nature of parents' experiences, issues and views in more depth. Finally, qualitative designs encourage researchers to be reflexive about how to analyse other people's experiences, perceptions and views.

3.3 Philosophical orientation that underpins the study

Philosophical orientation is a term used to describe the researcher's world view of the reality under investigation. Polit and Beck (2012) suggest that a paradigm is a world view that is often described in terms of the researcher's ontological and epistemological belief of the reality under study. The concept of ontology refers to the nature of the reality, whereas the concept of epistemology refers to the philosophical theory of knowledge; in particular, what should pass as acceptable knowledge and what justifies our views in what we are doing (French 2002; Bryman 2008). The position of interpretivism in relation to ontology and epistemology is that

interpretivists believe the reality is multiple and originates from different participants' perspectives, and further, the knowledge acquired in this paradigm is socially constructed rather than objectively determined (Carson et al. 2001). Interpretivists look for meanings and motives behind participants' actions, for example in behaviour and interactions with others in the society and culture (Chowdhury 2014). Interpretivism holds that participants do not have access to the real world, suggesting that their knowledge of the perceived world (or worlds) is meaningful in its own terms and can be understood through careful use of interpretivists' procedures (Carson et al. 1998)

Because the focus of my study is understanding and interpreting of parents' views and experiences of the use of health services, the interpretivists perspective encouraged me to reflect on my personal experience and prior knowledge rather than just being detached from parents' views and experiences. In support of this, Carson et al. (2001) outlined that models that are developed based on an interpretivists approach will be affected by the researcher's interpretation of the data collected (for example, from interview transcripts) as well as the personal experience of the researcher. Qualitative research is concerned with studying the empirical world from the viewpoint of the participants under study (Krefting 1991) and so fits well with the interpretivists paradigm. Krefting (1991) also argues that participants' behaviour is influenced by their physical, sociocultural, and psychological environments; this is the basis for naturalistic inquiry. Interpretivists believe that an understanding of the world can only be achieved through knowledge as perceived by individuals. This implies that interpretivists attempt to understand and explore problems within a specific context. Qualitative approaches include data collection methods such as observation and interviews which are used to help understand social phenomena in naturalistic settings (Miles and Huberman 1994). As a result, data collection activities are typically carried out in close proximity to a local setting for a sustained period of time.

The ultimate goal of interpretivism is to understand individual experiences, with the belief that reality is subjective and constructed by the individual (Lather 2006). Taking into consideration the above discussion, the interpretivistic paradigm or lens influenced my choices about choosing an exploratory qualitative descriptive design and the use of telephone semi-structures interviews as a method of data collection. It also influenced the way I presented the data giving full descriptions of each participant's circumstances in relation to his/her use of the service under study and also illustrative quotes of themed data. The reasons for this influence are: first, I hold the assumption in this study that the views of parents form a reality that is not a fixed entity, but

Chapter 3

rather is a creation of parents' experiences of the GP out-of-hours service when seeking help for their sick children (Creswell 2003; Burns and Grove 2005). These views are multiple and subjective and mentally constructed by those parents. Second, epistemologically this study requires the researcher to be part of the inquiry process and to be reflexive and interpretive (see chapter four for discussion on the role of reflexivity). These assumptions underpinned my research strategy and the methods I have chosen as part of that strategy. Therefore, as a qualitative researcher, I intended to access the views of parents through studying the subjective meaning and perceptions that parents hold about the use of health services when seeking help for their ill children. Consequently, from an interpretive point of view, I seek to understand and interpret the meanings of parents' help-seeking behaviour, their views, and experiences about the use of GP OOHs in Ireland. It is my belief that the findings of this study are context-bound and require the researcher to engage in parents' views and experiences about health service use. As an interpretivist's researcher, an exploratory qualitative descriptive design was undertaken to achieve the aim of the study and to best answer the research question.

3.4 Setting

A large GP OOHs service in Ireland was chosen as the setting for this study. The service covers the south eastern rural area of Ireland and provides a service to a total population of 1,413,000. It managed approximately 390,000 calls in 2011 (Gantly 2012). The setting was chosen for a number of reasons. Firstly, the service operates longer hours and receives a large number of calls per year in comparisons to other GP services across the country. This call volume, in turn, should increase chances of recruiting parents with a diversity of experiences about the service of GP OOHs. Secondly, the service employs a large number of nurses who are trained to deliver advice to patients over the telephone; the quality of which has an impact on parents' use of the GP OOHs service. Thirdly, the service integrates seamlessly between the community based health care providers and the hospital multidisciplinary team. The importance of this integration is to give clear guidance for parents and patients who are calling the service of GP OOHs for advice which, in turn, impacts their expectations and satisfaction with the call's outcome.

3.5 Negotiating access to the study setting

Access to the study setting was achieved through negotiation and by making contact with the nurse manager and stakeholders, including IT managers and general practitioners working at the GP out-of-hours service. A site visit was arranged to meet service managers face-to-face, to

explain the aims, scope and importance of the study, as well as to negotiate how best to recruit participants for the study. A letter confirming the aim, objectives and benefits of conducting the study was sent to the stakeholders and nurse manager working at the GP out-of-hours service (see Appendices 3.A and 3. B).

3.6 Sampling parents for interview and case identification

Most qualitative methodologists openly recognise the lack of agreement concerning standards for sample size. For example, in his work on qualitative research methodology, Patton (2002) explains there are purposeful strategies, instead of methodological rules, in relation to qualitative sample sizes. Patton (2002) suggests that there are no rules for sample size in qualitative inquiry. Instead, sample size depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources (Patton 2002, pp.242-243).

To select a sample of the parents of children aged two years and under who used the GP OOHs service, a retrospective data analysis of anonymised calls to the GP OOHs service between January-May 2014 was provided by a manager for the GP OOHs service. These data identified the number of calls relating to children aged two years and under, as well as the reasons for calling, which provided a sampling frame for the qualitative interviews. Between January and May 2014, 194 calls were made to the GP OOHs service by parents of children aged two years and under. Of these, 123 parent-initiated calls contacted the service for coughs symptoms, 53 calls were about diarrhoea, 18 calls about a child with a fever and one parent called about abdominal pain. To secure a sample of 20 participants, I invited 123 parents of children aged two years and under and who rang the service during the months of January-May 2014 for the reason of cough to take part in the study, because they were the most frequent users of the GP OOHs service. Based on the information gained from the initial identification of the user population during January-May 2014, I adopted a purposive sampling technique to select a sample who met a set of criteria (see below). Purposive sampling was used to select potential participants on the basis of time of year, age of children and number of parents who used the service. January to May was chosen because of the high demand for advice and health information from parents of children who are vulnerable to cold-related illness.

3.7 Inclusion and exclusion criteria

To recruit participants for this study a set of inclusion and exclusion criteria was adopted. In support of this, Holloway and Wheeler (2010) suggest that sampling in a qualitative inquiry is criterion-based and guided by the opportunity of gaining access to settings and people who can provide rich information. Polit and Beck (2012) outlined that inclusion criteria define what particular participants are included in the research; while those who are excluded might be too vulnerable to be contacted or have certain characteristics that might bias or make the research problematic. Therefore, potential participants were excluded if they did not meet the following inclusion criteria:

1. Must speak and understand English language.
2. Must be a parent of a child aged two years and under and live in the geographical area covered by the call centre.
3. Must be registered with the GP OOHs service.
4. Must be available to be contacted during the period of the study.
5. Parents of children aged two years and under who contacted the GP OOHs service between the 1st January and 31st May 2014 for obtaining advice.

3.8 Recruitment process

Recruitment for this study was carried out in two periods of time based on responses from the identified potential participants. In the first round and following ethical approval from Irish College of General Practitioners (ICGP), the call centre manager identified potential participants to the inclusion criteria outlined above. The GP OOHs service mailed out an invitation pack on my behalf which included an invitation letter, information sheet about the study, consent form, interview topic guide, and a prepaid envelope addressed to me (see Appendices 3.C, 3.D, 3.E, 3.F). Once participants agreed to participate, a signed consent form was sent to the researcher's address and the volunteers were then contacted and recruited to agree a time, date and location for interview. Response to this first round of recruitment was low; two of 123 agreed to participate and these were subsequently interviewed. It is difficult to ascertain why the response rate was so low, but a total of 7 information packs were returned as did not reach participants for the reasons of change of address, two participants returned the information pack and declined to participate as they were nurses. From the remainder, no response was received.

To improve the process of recruitment, a second round of retrospective data analysis of anonymised calls to the GP OOHs service between January and May 2015 was provided by a manager for the GP OOHs service, following the second ethical approval from the ICGP. These data identified the number of calls relating to children aged two years, and under and the reasons for calling, which provided a second sampling frame. A total of 184 parents were identified and contacted by a manager working at the call centre to take part in the study (see figure 3.1). Of the 184 parents, 9 responses were received by post to the call centre and then were re-sent to my home address. Of the 9 parents, only 7 parents were interviewed by telephone at a time and a date of their preference. The remaining two were contacted several times to confirm their participation however, no responses were received. Interviews with the first two parents were undertaken in August 2014, whereas the other seven interviews took place during August and September 2015. Consequently, estimating adequate sample size in qualitative studies is directly related to the concept of saturation. The concept of data saturation, which is applicable to all qualitative research that employs interviews as the primary data source, demands bringing new participants continually into the study until the data set is comprehensive, as indicated by data replication or redundancy; in other words, no new information is gained (Miles and Huberman 1994; Morse 1995; Bowen 2008). Therefore, recruitment for my study was stopped when saturation was reached: that is, at the point when nothing new is being added. To ensure this, a table was created to show the replication of the common codes identified from the nine stories of parents, as shown in Appendix (3.G).

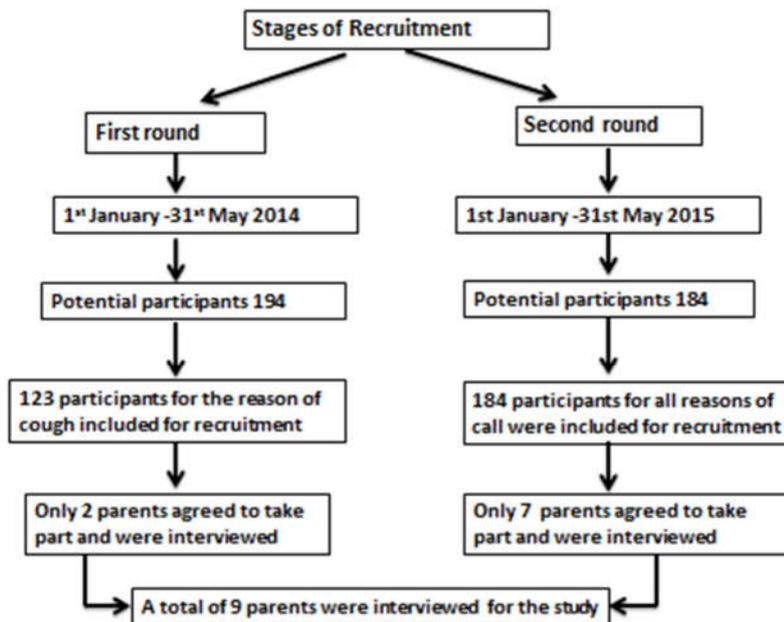


Figure 3.1 Showing the number of potential participants recruited during the two rounds of recruitment process

3.9 Ethical considerations

Ethical approval for this study was reviewed and approved by the Irish College of General Practitioners (ICGP) and the out-of-hours service Ethical Committee in Ireland (see Appendix 3.H). Embedded in this study are ethical considerations that include the appropriateness of the research design and methodology, participants' rights, and how to manage data obtained from participants. Bond (2006) and Hess (2006) outlined that conducting any research should be guided by well-established ethical principles including respect for participants, beneficence, justice, anonymity and confidentiality. The respect principle is achieved by fully informing participants about the study before they decide to take part, or to decline; that taking part is entirely voluntary and, should they decide to take part, they are free to withdraw at any time without threat or penalty. A written consent form was obtained from potential participants before the interview took place. I provided an information letter to potential participants to fully inform them about the nature of the study, what they are being asked to do, as well as outlining any benefits of the study. Participants were initially contacted by telephone once they signed the consent form and had returned it to the researcher. I then contacted the IT manager in the GP OOHs for those who agreed to take part in the study to decide on an interview date and time. At the start of the interview, participants were asked if they have any concern about the study, or their participation in the study, before taking part. The researcher informed participants of their

right to fair and equitable treatment during the period of the study. Participants were informed of their right to be anonymous and that all data obtained from them would be treated in a confidential manner. They were also ensured that their identities will not be published; data were kept in a locked file cabinet, and data stored through computers were protected by creating a password that is only accessible to the researcher.

3.10 Data collection and conduct of interviews

The purpose of the interviews was to explore parents' views about the GP OOHs service, their views about the staff, availability of the services the parents' required and the outcome of their calls. Semi-structured interviews, either by telephone or face-to-face, were used depending on each participant's preference. The first reason for adopting the semi-structured approach is that the researcher has a preconceived view of the information to be gathered and the questions to be asked. Second, a semi-structured interview format allows the researcher's role to be structured, so that it encourages the researcher to ask about certain topics; however, such a structure also allows the participants to talk freely about relevant views and experiences that the topic guide may not cover. Thirdly, semi-structured interviews are often seen as one of the best ways to tap into the participants' perspectives (Patton 2002; Oltmann 2016).

Accordingly, participants were offered a choice of face-to-face or telephone interviews with the aim of reducing the refusal rate and overcoming difficulties that can arise from conducting telephone interviews; for example, interviewing parents who may have hearing difficulties. Many authors would argue that face-to-face interviewing can accrue time and financial expenses due to the need to travel to participants (Patton 2002; Creswell 2003; Hay-Gibson 2009; Doody and Noonan 2013). Other authors suggest that telephone interviewing can reduce time and cost expenses (Carr and Worth 2001; Creswell 2003; Irvine et al. 2012). Another significant aspect of interviewing is the geographical distribution of participants. Often face-to-face interviews are restricted to a local geographical area, whereas telephone interviewing allows the researcher to overcome this restriction. Telephone interviewing as a method to data gathering can be beneficial for wide geographical access and for hard-to-reach participants (Irvine et al. 2012; Oltmann 2016). Other benefits and disadvantages are summarised in table 3.1. In this study, all participants chose to be interviewed over the telephone.

Table 3.1: Summary of advantages versus disadvantages of both mode of interview adapted from Oltmann (2016)

Components	Face-to-face interview (F2F) mode	Telephone interview mode
Time and financial costs	Usually intensive; travel may add to costs	Can be less time intensive than F2F; lower costs (no travel)
Geographical distribution	Often limited geographically to local area	National and international access possible and easier
Sensitive or controversial topics	May be difficult in F2F; potential to be embarrassing or awkward	May be less awkward than F2F
Technology problems	Less likely to have problems, except with recording device	Calls can be dropped; possible recording problems
Interviewer safety	Can be endangered depending upon location and time of meeting	Low danger; interviews can be made from office, home, or other location as appropriate
Note taking	Can be obtrusive; however, can capture non-verbal language and cues	Can be done unobtrusively; may present logistical problems juggling multiple items

Interviews were supported with a topic guide that was designed as a guide for the interview (see Appendix 3.F). The interview topic guide consisted of a series of open-ended questions with prompts to encourage parents to express their accounts, views and experiences of the GP OOHs service and use of telephone advice nursing. Questions were devised based on the research question and the literature concerning the views of parents and patients about GP OOHs services, as the goal is to tap into parents' experiences and views. This approach to information gathering was consistent with a standard qualitative approach and ensured interview questions were presented consistently to all participants (Creswell 2003; Oltmann 2016).

I conducted 9 telephone interviews with the 9 parents who agreed to take part in the study. All the interviews lasted between 30-45 minutes and were arranged at a time which suited the participants. Interviewees were given a time to feel comfortable and express any concerns they may have about the study. Interviewees were given a time to reflect on their role as a participant. All parents were reassured in terms of their right of confidentiality and anonymity. Participants were informed that interviews were recorded using an iPhone voice recorder, with participants' consent, to allow transcription and subsequent analysis. Recorded data were transcribed after each interview, and proof read by the researcher to ensure the accuracy of the transcripts. All data gathered were recorded and stored in a computer file, supported with a password only identifiable to the researcher. All recorded interviews were labelled with anonymised identification numbers, time, date and type of data collected.

3.11 Data analysis

Qualitative data analysis was undertaken to organise and elicit meaning from the interviews about parents' views about the GP OOHs service. According to Miles and Huberman (1994), the aim of qualitative analysis is to draw valid meanings from the data by practical and communicable methods, giving knowledge that others can rely on. Therefore, data collected using telephone interviews was transcribed and analysed using thematic analysis. Thematic analysis can be defined as an analytical approach to qualitative data and a method of identifying and reporting themes within that data (Vaismoradi et al. 2013; Lynass et al. 2012). This approach was adopted because a review of existing literature, relating to patients' experiences of out-of-hours care, provided clear guidelines that facilitate the coding process of the data gathered from parents of children aged two years and under. This approach was also adopted firstly, for its ability to directly represent the descriptions of participants' views or experiences; and secondly, the analysis also allows the researcher to identify themes, or common threads that occurred in more than one participants' account and those emerged from interpretation and description of the data. Moreover, analysis is not a linear process where I move from one phase to the next. Instead, it is more recursive process, where I move back and forth as needed, throughout the phases. It is also a process that develops over time (Ely et al.1997). Accordingly, I drew on Braun and Clarke's (2006) steps to qualitative data analysis as shown in Table 3.2.

Table 3.2 Steps of thematic analysis adapted from Braun and Clarke (2006)

Step	Description of the step
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set. Collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells. Generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating the analysis to the research question and literature, producing a scholarly report of the analysis.

Familiarising myself with the data was the first step to analysis. The transcribed data was read and re-read several times to ensure the accuracy of the transcription. This process, of repeated reading and re-reading the recorded data, was considered an important initial step that enabled me to search for meanings and patterns, and to be immersed in, and become familiar with, the data (Braun and Clarke 2006). During this step, initial and emergent ideas and codes were marked with different colours to facilitate the subsequent more formal coding process (see Appendix 3.1). For example, initial notes or repeated patterns across the data that related to why parents called out-of-hours services were marked in red.

Following this early reading and identifying initial, emergent ideas in the data, I then produced formal *codes* from the data (see Appendix 3.I). At this stage of the inductive analysis, open coding was performed (that is, coding anything that might be relevant from as many different perspectives as possible). Coding is a way of classifying all of the data so it can be compared systematically with other parts of the data set. Open coding was performed manually by writing notes using a Microsoft word document. The initial identified codes were given different colours so each code match up with the data extracts that demonstrate the code. In addition, a codebook using Microsoft Word was created to present a systematic coding of the transcripts (see Appendices 3.J). The purpose of this codebook is to make sense of, and facilitate deeper engagement with, the data as well as to gain clearer insights into the interview data (MacQueen et al. 2008; DeCuir-Gunby et al. 2011). The codebook was structured as suggested by MacQueen et al. (1998) and includes the following components: code name, brief definition, inclusion and exclusion criteria and an example or data extracts that demonstrate the given code from the individual transcript. Computerised qualitative analysis software has been available since the advent of the Microsoft Windows platform in the early 1990s (Jones 2007). The software aims to shorten analysis timeframes, can provide more thorough and rigorous coding and interpretation, can create and share large data sets and allows for secondary analysis of qualitative data sets (Jones 2007). However, I used Microsoft Word because it is convenient, easy to access and cost free and was an appropriate method for a smaller scale study.

The third step of *searching* for themes begins when all data have been initially coded and collated, which generated an extensive number of different codes. This step, which re-focuses the analysis at the broader level of themes, involves sorting the different codes into potential themes and collating all the relevant coded data extracts within the identified themes. I combined and refined codes that were considered similar and related to one another, to form an overarching theme. A series of thematic maps were created at this stage of the analysis to show themes and sub-themes emerging from the data and the potential links between them. This series of thematic maps were designed to help establish the relationships between codes and themes, and between different levels of themes such as the main arching theme and sub-themes within them. Therefore, during this step some initial codes constituted main themes, whereas others formed sub-themes and others were discarded. An example of the thematic map is presented in Appendix 3.K.

Reviewing the initial themes is the next step which involves the refinement of those initial themes and sub-themes. During this step, some candidate themes that might collapse into each other

were joined together, to form one theme, and themes were also reviewed and refined to ensure that enough data support them. Themes that were considered problematic or not supported with enough data were reworked to create new themes or were discarded from the analysis. The aim of this step is to ensure that the new themes that were generated and the data within each theme cohere together meaningfully and a clear distinction between each theme was made. Once I was satisfied with refined themes another thematic map was created to ensure that the new themes and sub-themes emerged capture the contours of the coded data. *Defining and naming themes* was the next step. During this step each theme was identified and assigned by a data extract that fits into the broader overall story about the data that answers the research question to insure that there is no overlap between themes. The analysis continued to involve constant reading of the interview transcription, together with the parents' summaries, to identify the precise themes. To move beyond the emic summaries and the subjective accounts I used the constant comparison technique and deviant case analysis. The constant comparative analysis method is an iterative and inductive process of reducing the data through constant recoding (Glaser and Strauss 1967). The reason for using this technique is to allow a researcher to compare a participant's data during the process of coding, to identify patterns in the data, and to help further recoding to facilitate recognition and establishment of the main themes from the data. As data collection and analysis progressed, codes were refined, added and relationships between codes were explored in order to enable themes development as well as to explain relationships between themes. Therefore, the outcome of the refinement process can be seen in the thematic map presented in (Appendix 3.L). In addition, I utilised a deviant case analysis technique to revise, broaden and confirm the patterns emerging from the data. The reason for using deviant case analysis is to reassure the trustworthiness of the story told by the participating parents, and to help in developing more inclusive theories supported with adequate evidence from the data. The final step of the analysis is the producing the report that tells the story from the data collected from parents of children as presented in the next chapter.

3.12 Study rigour and trustworthiness

Most qualitative researchers document the worth of their research by applying the standards of the trustworthiness of qualitative research that parallels the standards of reliability and validity in quantitative research (Polit and Beck 2012). Despite an on-going debate about which criteria to use to evaluate quality in qualitative research, the researcher adopted the framework or criteria suggested by Lincoln and Guba (1985) to judge the rigour and quality of this study. Lincoln and Guba (1985) proposed two sets of criteria for assessing rigour in qualitative research:

trustworthiness and authenticity. Trustworthiness refers to the degree of confidence that qualitative researchers have in their data. The concept consists of four criteria: credibility, transferability, dependability and conformability (Krefting 1991; Polit and Beck 2012).

Authenticity refers to the extent to which both the conduct and the evaluation of the research are genuine and credible, not only in terms of the parents' views or experiences, but also with respect to the wider political impact of the research (Bryman 2008).

The term credibility parallels internal validity in quantitative research. In this study, it refers to the extent to which findings of the study truly reflect parents' views about the GP OOHs service. It also refers to the level of confidence in the truth of the qualitative data provided by the participants in the study (Parahoo 2006). Achieving credibility of the findings of this study entails ensuring that the researcher will conduct the study according to the principles of good practice. This requirement was achieved by using a digital phone recorder during the interviews. Within this study I explained the benefits of recording the interview to capture what is said by both parties, to ensure identical replication.

The criterion of dependability is linked to the extent to which data or parents' views are consistent and stable over time and conditions. Dependability parallels reliability in quantitative research (Polit and Beck 2012). In a qualitative study, this criterion is difficult to achieve (Shenton 2004). However, this researcher provided a dense description about parts of the research process, such as problem formulation, selection of research participants, interview transcripts, memos and data analysis that may help future investigators to repeat the study. In addition, to enhance dependability in this study, the researcher applied a code-recode procedure during data analysis, as suggested by Krefting (1991). The procedure allows the researcher to code a segment of the data; the same data can then be recoded after certain time to compare results and ensure dependability.

Confirmability refers to objectivity and the freedom from bias (Krefting 1991; Polit and Beck 2012). This criterion is achieved by identification of the researcher's bias through the use of memos and consultation with supervisors. To achieve confirmability, the site chosen for the study was only known to me through my experience with nurses working in the GP OOHs service. The processes of data collection, data reduction, drawing of conclusions, and the emergence of themes, have been carried out systematically with each stage and were discussed with my supervisors. It is hoped that by presenting the data in a clear and explicit manner, the whole research process could be replicated by anyone who wished to do so.

Transferability refers to the extent to which findings of the study can be transferred or applied in another setting. This criterion parallels external validity in quantitative research. To achieve this criterion in this study, the researcher provided sufficient descriptive data of parents' views (see chapter 5), referred back to the interviews and the literature during data analysis, and linked the findings of the study with other published studies conducted on parents' views and experiences of GP OOHs and use of TAN, as a comprehensive process of enhancing transferability. Authenticity is achieved by helping participants to reach a better understanding about the GP OOHs service, by acting as an impetus to participants to engage in the study and to freely express their views.

3.13 Summary

This chapter presented the overall plan of how the study was conducted. The research design employed is an exploratory qualitative design, which aims to explore and understand how parents of children aged two years and under perceive the GP OOHs service and their and experiences and perceptions about their use of TAN. My assumption of the views of parents is that those views form a reality that is not a fixed entity, but rather is a construction of parents' experiences of the GP out-of-hours service. These views are multiple and subjective and mentally constructed by those parents. Therefore, I conducted nine semi-structured telephone interviews as a method of collecting data. Methodological considerations and issues with recruitment are also presented in the chapter. Strategies to ensure the trustworthiness of the study were discussed. The next chapter presents parents' accounts and stories following their contacts with nurses working in the GP OOHs service.

Chapter 4: Results: Participants key characteristics, views and experiences of the use of health services

4.1 Introduction

This chapter describes the key characteristics of the participants, before presenting views, experiences and the decision-making process of parents when seeking help from the health services. The purpose of this description is to enable readers to understand more about the context of each participant when using the GP OOHs service. In this chapter, I also present the results of the analysis and the interpretation of the interviews data collected from nine parents who took part in the study. The chapter continues to discuss the central themes identified from the data analysis. Finally, I outline how I have used parents' views and experiences to create a model to represent parental decision-making process in relation to using health services such as the GP OOHs service.

4.2 Characteristics of the interview participants

The nine parents who agreed to take part were all mothers of children aged two years and under, registered with the GP OOHs service and met the criteria identified in the purposive sampling strategy. At the start of the interview, questions about demographic characteristics were asked. These included questions about gender, employment status, and the number of children in the family, as well as asking participants to describe their geographical location (e.g. travel time by car to both the GP OOHs service and to the ED), to understand how this could affect parents' decision-making process. To help facilitate this description, I wrote a summary of the nine transcripts (P1 to P9 in Appendix 4.A). The summaries were important in ensuring deeper engagement in the data and avoid fragmenting parents' experiences. The summaries helped to ensure that no potential codes are missed, to develop novel themes from the data and to ensure that equal attention and full consideration was given to repeated patterns within the data. Five parents reported that they had two children, three parents had one child and one parent was the mother of three children. Most parents were employed; two were not employed and considered themselves as stay-at-home mothers. Participants reported that travel time to their GP OOHs service ranged from 5-30 minutes.

However, the average time to travel to their nearest emergency department was 36 minutes. A summary description of the context and a biographical description of each parent is presented in table 4.1.

Table 4.1 Characteristics of participants

Participant ID number	Gender	Working status	Number of children	Self-reported travel time to GP OOHs (in minutes) by car	Self-reported travel time to ED (in minutes) by car	Summary of the context and nature of contact with the OOHs service
P1	Female	Working	2	30	35	She describes contacting the service on previous occasions about her child's high temperature. Recently, her child woke up at 3:00 AM with a high temperature that had started during the day. She found it difficult to keep the temperature down. Initially she decided to wait at home and give Nurofen every six hours. However, she found her child was really hot, her feet were freezing cold, and her heart rate was racing. P1 was very worried; she didn't know what to do or what might be causing the symptoms. When P1 telephoned she expected to speak to a nurse but instead her call was answered immediately by a receptionist, and then waited for a nurse to ring back. She received a call back within 10-20 minutes.
P2	Female	Working	1	5	40	P2 has called the GP OOHs service a lot of times, since her child was 9 or 10 months old for reasons such as breathing difficulties, temperature, cough and ear infection. More recently, she contacted GP OOHs service when her child had vomiting after a fall on a Sunday afternoon. P2 used GP OOHs service because her GP service was closed. She wanted to speak to the nurse and ask for advice and seek reassurance.
P3	Female	Working	2	15	30	P3 has used the service once or twice for her child, to seek advice about a high temperature and rash during the night. She was concerned that Paracetamol was not bringing her child's temperature down. When she rang the GP OOHs service, she expected to speak to a nurse but instead spoke to a receptionist and subsequently received a call back from the nurse within half an hour. P3 is a doctor but she was quite worried; this anxiety was exacerbated by having to wait for the nurse to call back. Her main reason for calling was the fever, an unusual rash, and she was worried that the child had become limp and unresponsive. P3 said that

						she would ring the service when she did not know what was wrong with her child and seek professional advice and reassurance.
P4	Female	Working	1	30	40	P4 used the GP OOHs service a few times when her child started to swell, got very weak, had a high temperature and had a raised, circular rash with black and purple colour in the inside. She felt panicked and was worried was about meningitis. The mother gave medicines such as Calpol and Nurofen, looked up information on the internet did the glass test on the rash. She also rang her sister-in-law who advised to attend hospital or to ring the GP OOHs service. She rang the GP OOHs service where she spoke to a receptionist and then received a call back from the nurse quickly. The nurse asked questions and advised her to attend the nearest ED.
P5	Female	Stay-at-home	2	5	30	P5 used the service when her daughter developed an itchy rash on her head. Prior to calling she had visited her local GP twice but the rash had not improved. When the symptoms worsened during the night, she rang the GP OOHs service because she was seeking different advice from the GP. The mother spoke to a receptionist and took her details and told the mother to wait for a nurse to call her back. The nurse rang back within 20 minutes. The mother did not mind waiting for the call back as it was not an emergency. She described accessing the service as “easy”
P6	Female	working	1	15	40	Most recently, P6 rang GP OOHs service for her child’s high temperature. She was afraid of meningitis or of another serious. She had given him Calpol and Nurofen but the temperature would not come down. The child was crying and unsettled. P6 was afraid he may have a convulsion. She was alone in the house at night, and her husband was working a late shift, so she rang her mother. The baby was a new-born so she decided to ring the GP OOHs service. She spoke to a receptionist who said that the nurse will ring back. The nurse rang within 15 minutes. The nurse could hear the screaming child and advised the mother to get the child checked by the GP OOHs doctor and offered an appointment.
P7	Female	Stay-at-home	2	15	60	P7 has used the GP OOHs service many times when her children have become unwell. Recently, P7 called because a rash had covered her child’s body and some flu-like symptoms had also appeared. She was very worried and did not know what was causing the rash. The mother thought that it could be a viral infection and was concerned about meningitis. P7’s first intention would be to ring her GP or her cousin who

Chapter 4

						is a doctor; however, her child's sickness happened during the night. P7 felt that telephone access to the GP OOHs service is very good. P7 spoke to a receptionist and then the nurse rang back. Generally, P7 found the nurse very good, 'fantastic'. She reported adhering to the advice the nurse gives over the phone.
P8	Female	Working	2	7	40	P8 has used the service many times. When her youngest child was 5 months old, the child woke up with a croup cough. P8 is an asthmatic and would recognise the difference between a croup cough and an asthma cough. She rang the GP OOHs service to get an appointment to be seen by a doctor because he had a temperature, was constantly crying and had a croup cough. She had not intended to speak to the nurse. The mother stated that the nurse asked many questions such as if his breathing was ok, if he had a rash, the colour of his lips, and another 10 questions. P8 thought that the nurse had offered her own opinion when she said: <i>"I don't think he needs to see the doctor straight away"</i> . However, the mother decided to take the child to the ED.
P9	Female	Working	3	15	15	P9 used the GP OOHs service a lot because her youngest child has asthma. P9 said that she also telephones for other reasons including high temperature, breathing difficulty and when her child needed to have a nebuliser. The mother described how that sometimes the nurse ring back within half an hour and sometimes she could wait for 15 minutes or less to receive a call back. However, if the child is really sick as he is asthmatic, P9 would visit the GP OOHs service or to ring an ambulance, rather than waiting for the nurse to ring back. P9 described access to the service as really good, commenting that it was an 'expert service'.

The remainder of the chapter presents the following central themes (and sub-themes) that were identified from the data analysis. These are summarised in table 4.2. The first theme that is presented is that of parents' perceptions of illness in children: parental voice and the need to seek help (sub-themes: parental anxiety and children are special: they cannot speak for themselves. This theme is typically the starting point of a parents' decision to seek help from a GP OOHs service. The second, third and fourth themes are aspects of parent perceptions of what services can offer and how accessible they are. The second theme relates to parents' perceptions of what GP OOHs offers and incorporates two main sub-themes (guidance and reassurance). Parents' perception of the ED and its impact on their decision- making is the third theme which includes two main sub-themes including a) experiences and perceptions of the ED, b) time and distance to travel to the ED. The fourth theme is linked with parents' perception of accessibility of the GP OOHs service. This theme combines a number of sub-themes including: familiarity with the GPOOHs service telephone number, geographically convenient location of the GP OOHs service, economic factors and the use of telephone nurse advice, and leaving other family member at home. The final theme presented is what parents have experienced following a contact with the GP OOHs service and is linked with parents' satisfaction with the telephone nurse advice service (incorporating two main sub-themes: nurse's manner and trust in their clinical skills, and parents' adherence to the nurse's advice. Following the presentation of these themes parents' suggestions of how GP out-of-hours services might be improved is discussed.

Table 4.2 Summary of the themes and sub-themes identified from the data analysis

Central themes	Sub-themes
Parents' perceptions of illness in children: parental voice and the	<ul style="list-style-type: none"> • Parental anxiety • Children are special: they cannot speak for themselves
Parents' perception of what the GP OOHs service would offer	<ul style="list-style-type: none"> • Guidance • reassurance
Parents' perceptions of the ED and its impact on their decision making	<ul style="list-style-type: none"> • Experiences and perceptions of the ED • Time and distance to travel to the ED
Parents' of accessibility of the GP OOHs service	<ul style="list-style-type: none"> • Familiarity with the GP OOH service telephone number • Geographically convenient location of the GP OOHs service

	<ul style="list-style-type: none"> • Economic factors and the use of nurse telephone advice • Leaving other family members at home
Parents' satisfaction with the nurse's advice	<ul style="list-style-type: none"> • Nurse's manner and trust in their clinical skills • Parents adherence to the nurse's advice

4.3 Parents' perceptions of illness in children: the parental voice and the need to be heard

The majority of parents expect that the GP OOHs service will offer guidance and reassurance. But, taking a sick child out in the night, particularly if the child had been ill for some time, could put parents into a difficult situation, such as feeling stressed or emotionally distressed. The data revealed that all parents have their own perception of illness in children and wanted to be heard by a professional nurse who would be able to provide prompt advice and help over the telephone, before parent(s) and child had to travel to the nearest health care service. Parents' perceptions of illness in children are grouped into two main sub-themes: i) parental anxiety and ii) children are special as they cannot speak for themselves.

4.3.1 Parental anxiety

Parental anxiety was a common theme among the nine participating parents. Parents clearly revealed their wish to speak to a professional nurse to help relieve their anxieties and their feelings of anxiety when their children become ill and symptoms provoked. Of the nine parents three parents were first time mothers and described feeling that they did not have enough experience in caring for a sick child. P4 is a part-time working mother of a child of 19 months. She lives half an hour's drive from the GP OOHs service and about 40 minutes' drive from the ED. She stated that she was worried because her child developed a serious and unusual rash that she had never seen before. P4, and other mothers, developed a high level of anxiety because of the seriousness of the symptoms and the perceived threat to the child that encouraged parent to call the GP OOHs service. P4 used self-care management strategies but due to the potential seriousness of the symptoms P4 was very concerned about meningitis. She was confused about the results of the glass test when using it on

the rash. She held strong beliefs about what care is needed when a child was ill and she believed that it is necessary to have the child seen by a professional nurse, which also alleviated her anxiety.

P4: I think it was before Christmas when [the child] had a temperature, but the temperature was spiking and he was getting really hot, and then I was doing the usual what you do [...] and I was getting worried, and a rash came up on him, like circular, kind of raised circle with black and purple in the inside, I started to get worried of meningitis. So, I looked up how to test for meningitis on the internet, so I did the glass test, then I was getting all confused.

Other parents used words such as “worried”, “shocked”, and “panicked” to describe their high level of anxiety. Some of the particular concerns about seriousness of the symptoms were related to a high temperature and swelling of the child’s forehead after a fall that obliged parents to make their own decision about not taking a risk of keeping the child at home, but to take them to an ED.

P1: I was worried that her heart rate was racing and her feet freezing cold the rest was so hot, my worry was of febrile convulsion.

P2: The first time I saw her head, Oh God, it is a head injury; at the same time, I saw the fall myself. I was thinking, you know, she landed on her forehead. I did not think it was that bad, but when she was getting sick different times. I felt very worried and I would not take any chance not to see what was wrong with her.

P8: See three weeks ago my little son fell and banged his head, he had a large swollen forehead, I was shocked and as a mother I got panicky when I saw him.

4.3.2 Children are special: they cannot speak for themselves

The interview data revealed that children, particularly those under two years of age, display indirect behaviour that suggest their understanding of what they feel and reflect their need for help but they are unable to articulate what is wrong. Therefore, parents pay special attention to their child’s non-verbal methods of trying to communicate to interpret their needs or health concerns. Because children cannot speak for themselves, parents described how children are special cases when deciding whether or not to contact the service. Parents described how no cost was too high (e.g. the cost of travel, or the cost of a doctor’s appointment), the parent will do their best for the children. P1 described that she preferred to speak to the nurse directly about the symptoms of her sick child.

P1: I think for children it is over the price, you know, and I think it is hard and painful with young kids.

This, in turn, may prompt the parents to respond to their children’s needs by calling the nurse at TAN to receive support and advice to help them. When a young child becomes sick, he/she is more

likely to behave in a different way from what the parents are used to. Such behaviour could be shown in the form of crying, or of the child being unsettled, irritable and wanting to be held and cuddled. In addition, young children, especially those who are under two, refuse to be held by anyone except their mum or their main care parent. Nearly all the parents interviewed described that when their children become sick their behaviour will change as a way of communicating their need for help. This gives the notion that young children are perceived by parents as 'special' cases who need someone to interpret their behaviour and communicate on their behalf.

P8: I was worried because the child's face and behaviour were not ok [...] so I rang reception because he was constantly crying.... As mother with a child who screams for an hour like that I got sympathetic, and when I look at my child's face and behaviour I got worried.

Other behaviours, such as a distressed child or one who is unable to sleep, were considered by parents as changes in behaviour that communicate their need for help. For example, P05 used the service when her young daughter developed an itchy rash on her head. She visited both her own GP and the doctor working in the GP OOHs service and reported that she received the same advice. However, her child was still distressed until she made a third visit to her older, presumably more experienced GP, who described the medication that cured itchiness. She says:

P6: I was giving him Calpol and Nurofen and the problem wouldn't go down; and he was crying, crying not settled I was afraid he may have convulsions.

P5: I was not very happy because she was not getting any better, very distressed and was not sleeping with it. She [the child] scratched all the time her head, and then after Christmas I booked her to see my old GP and I have to book four days in advance. He [the GP] looked at the rash by microscope. I got the proper cream that killed the spots and a week later she got all better.

4.4 Parents' perception of what the GP OOHs service would offer

In the first part of the interview parents were asked to tell their accounts of what prompted their decision to call the GP OOHs service. Analysis of the data revealed that parents in this study had similar expectations about what the GP OOHs service offers. Of primary importance to parents was the role of the service in offering guidance and reassurance to parents.

4.4.1 Guidance

Guidance refers to the clear directions and strategies offered by the nurse over the telephone to support and help parents on what to do if they are worried about a child's sickness. Parents feel they have a responsibility to look after their children when they become sick. They demonstrate this by using a range of strategies to manage a child's symptoms such as high temperature themselves as the first option. However, when parents need further advice or guidance they telephone the GP OOHs service with the expectation of receiving clear guidance or directions. Parents commonly seek guidance when they are uncertain of what is causing the child's sickness and are unsure of what to do when their child became sick. P1, for example, used self-management strategies to keep the child's temperature down throughout the night. These strategies included waiting at home ('wait-and' see') to see how symptoms developed and she administered Nurofen every six hours during the night. However, she found her child was really hot, her feet were freezing cold, and her heart rate was racing. P1 felt she wanted to do the right thing to manage her child's temperature and contacted the service so that she could manage her child's illness correctly.

P1: It is good service, I used the service a few times. I always find them good. Like, you know, for parents it is great as they give guidance. Recently, I had my child who woke up at night time, three clocks in the morning, having a high temperature that started during the day. She found it difficult to keep it down... I did not know whether to cover her, I did not know what to do with the child's temperature.

Similar to P1 is the case of P2 who felt unsure why her child started to vomit after having a fall. Due to uncertainty and fear of making a wrong decision, P2 has typically used the service at night time as this was the time when her child tends to show sign of sickness. She wanted to receive advice and guidance from the nurse. In this recent episode, she thought that vomiting is not like other cases, where she usually goes to the chemist and ask for medication. In this instance, she was not sure whether her child needed to see a doctor.

P2: I contacted out-of-hours when my child had vomiting after having a fall on Sunday in the back garden during the afternoon time. I used out-of-hours on that occasion because it is an out-of-hours service, my GP service was closed, and obviously her surgery is only Monday to Friday, really, really working hours. You know our experience with children when they get sick is at night or at the weekend and wanted to speak to the nurse and ask for their advice on what to do.

More than half of parents described how they would use the internet to search reputable sites such as the NHS website, and also call relatives to seek guidance and information about the child's symptoms. However, their first choice of seeking advice and guidance varied. P2 reported that her

Chapter 4

first choice is to speak to her sister-in-law, because she is a paediatric nurse. She also would call her mother as she has her own experience. P2 believes that speaking to a nurse allows a concerned parent/mother to receive professional guidance and advice that, in this case, helped to relieve P2's worry. She wanted guidance on whether a doctor was necessary or not.

P2: My first choice, you know, I preferred to speak to the nurse, as I wanted to have a sense whether the child needs to see the doctor, to check if it is a viral infection.

In contrast to P2's view, P3's first choices are to perform self-care, ring her mother, and then look up things in the internet, prior to telephoning the nurse.

P3: As a source of information, I would look up information on the internet first. I research first for information and then if I wasn't reassured later I would ring out-of-hours. My first option is to ask my mother, look up information and then ring out-of-hours.

Parents also revealed other reasons for seeking guidance, including the type of personality of the parent and the appearance of unusual symptoms. For example, P8 described that her personality is that of a worrying mother and she would use the service to obtain reassurance.

P8: Sometimes I would use the internet and I would ring my mum as she is a mother; she always says to me go with your mother's instinct [...] With my personality type, I would always bring him to the doctor when they get sick as I get very anxious especially babies when they are very young...I normally ring out-of-hours for advice and my first choice would be out-of-hours. Normally I want that little bit of assurance from the nurse over the phone.

P3: For me the reasons like fever, unusual rash, the child's behaviour changes radically, as in getting very limp, unresponsive, for things such as nappy rash and anything beyond my knowledge I would ring, to be honest, to get professional advice.

Parents who made their efforts to use self-care when searching the internet suggested that when they did not obtain enough guidance, and were still unsure about what to do, then they would ring the GP OOHs service for additional guidance, due to the seriousness of the symptoms. One parent, who is a first-time mother, reported that despite using the internet to look up her child's symptoms, she felt that seeking guidance from a professional nurse over the telephone would solve her confusion about what to do when her child became sick.

P4: As a first child mother, I used the out-of-hours service a few times when my child started to swell, got very weak, had a high temperature and a raised, circular rash with black and purple colour in the inside [...] I looked up information using the internet about information about meningitis and I did the glass test on the child's rash. ... However, I felt confused and rang the out-of-hours for clear directions.

Other parents would seek guidance because of not knowing what to do at the start of their children's sickness.

P6: I rang the service of out-of-hours because he had a really blocked nose and found it difficult to breathe. I did not know what to do or what was wrong with him.

P7: Recently, I called the out-of-hours for the reason of a rash which covered my child's body and some sort of flu-like symptoms...I did not know what was causing the rash.

4.4.2 Reassurance

As well as seeking guidance, parents were also seeking reassurance when contacting the GP OOHs service. The majority of parents who used the GP OOHs service reported that reassurance provided by a nurse reduced their levels of anxiety. Parents suggested that there were a number of ways in which the nurse's advice offered reassurance. First, parents described that they received a clear explanation of the child's symptoms and were encouraged to calm down during their conversation with the nurse over the telephone. For example, P4 described her conversation with the nurse was short but very reassuring.

P4: The nurse asked questions about the rash and advised me to calm down and to attend the nearest ED. The nurse also made a referral call to the ED nurse to inform nurses about my child possible case of meningitis. I felt that the conversation with nurse lasted for 4-5 minutes. However, I needed that advice to be assured and to know what to do.

P5: In case with rash [the nurse] ask me to look at the rash with a glass, you know that type of things, I found this good and very reassuring.

P6: The nurse was so lovely to me, she said to me to calm down when she heard me crying and getting neurotic about my child.

In addition, providing parents with information that could explain reasons for child's behaviour, such as being irritable, is one way of providing reassurance. P01 did not know what causes a child's heart to beat very fast and for feet and hands to be cold. She rang the GP OOHs service to speak to the nurse to seek reassurance.

P1: I was not asking for a recommendation, I was asking for reassurance [about] what should I do and should I bring her to a doctor in the morning. [The nurse] advised me that cold feet are fine and heart racing because of the temperature.

Second, giving practical advice and advising a concerned parent to wait and see if the child's symptoms would improve is another aspect of feeling reassured. The data revealed that the majority of parents received practical advice that could help them to stay at home and do self-

Chapter 4

care management, rather than just make a decision to bring the child to either the GP OOHs service or the ED. P6 is a first-time mother who has a sickly baby. She used the service many times and each time the child gets sick she rings the GP OOHs service for advice. When her child was 3 months old, she rang the service of the GP OOHs service because he had a really blocked nose and was finding it difficult to breath.

P6: There was one time with my son when he was three months old and had a really, really blocked nose, and the nurse on the line assured me and told to steam him in the shower in the toilet and I never heard that before and it was great advice that. It did work and I did not bring him up to see the doctor.

P1: So, I rang out-of-hours and [the nurse] advised me to give Nurofen every six hours and reassured me that [the child] will be fine until the morning and I took her to the doctor at 09.30 in the morning.

P2: The nurse enquired if [the child] has a temperature and to keep it down. The nurse asked me to give paracetamol to keep her temperature down, which is the main thing really. And provide plenty of fluid. [...], and see how things develop during the day and for a bit of reassurance, help and to know whether to worry or not.

P9: My expectation is that that they will really assess the situation and that they may tell you to come in if they think it is serious. I ring to get my child assessed and to find out if he needs to be seen so I phone to be reassured and get some help to know what to do.

Nearly all the parents expressed that they felt very reassured when the nurse advised parents to ring back if they were still worried. The nurse can also offer parents an appointment over the telephone in case they are still unhappy with the nurse's advice. Most parents expressed that receiving an appointment to attend the GP OOHs service is beneficial as this will reassure parents by facilitating a face-to-face consultation because it provides parents with an opportunity to see the doctor and explain what had happened with the child.

P1: The nurse would offer an appointment, if not happy, to come to out-of-hours even at that time of the night.

P2: Generally, the nurses will say: "would you like us to make you an appointment?" Usually in most cases I found the nurse offered me an appointment within half an hour after call.

P7: I think out-of-hours is really working, you never see a nurse, and you speak to them over the phone and [the nurse] just offers you advice and an appointment.

P6: It was one day when my son was crying and he had a temperature and [the nurse] could hear him crying over the phone and [the nurse] told me if that is the way he is crying, to [the nurse] he does not sound well. The nurse would bring him to see the doctor and [the nurse] would make an appointment now. You know [the nurse] was very quick to assess the problem and get me the help I needed.

Conversely, not offering an appointment for parents who are very concerned about a child's health could cause serious parental anxiety, leave parents unassured and lead them to seek help elsewhere. Because of her experience with her other 9 year old child, who had croup cough before, P8 rang the GP OOHs service to get an appointment so that her 5 month old child could be seen by the doctor due to difficulty in breathing and a croup-type cough. The mother described how she was concerned that the nurse could not see the child over the telephone and because the service was particularly busy on this occasion, P8 made her own decision to visit ED. P8 did not receive reassurance in this instance and felt that waiting for three hours at home could harm the child.

P8: I rang out-of-hours because I had this experience with my child who was 5 months and he woke up with a cough. I am asthmatic myself and I knew that my other son had a croup cough before. So, because of that experience with my 9 year old son, I rang out-of-hours because I wanted the baby get seen and did not want to speak to the nurse over the phone. I wanted him to be seen. So, it did not seem to [the nurse] he needed to be seen straight away and [the nurse] offered me an appointment to attend within 3 hours because they were very busy. So, I brought him straight into the emergency department in Wexford and it took me 15 minutes to be there.

4.5 Parents' perceptions of the ED and its impact on their decision making

This theme is associated with parents' experiences and perceptions of their visits to the ED. Data analysis shows that parents who were referred to visit the ED were more likely to attend than those who were not referred. The following sub-themes emerged from the data which relate to parents' beliefs about visiting the ED. This particularly focused on the length of waiting time and perceptions that the ED is understaffed and is very busy.

4.5.1 Experience and perceptions of the ED: understaffed and busy

Five parents who were referred to visit the ED after calling the nurse reported a poor experience and low satisfaction because of a waiting a long time to see a doctor and the ED department being very busy. P05 described how she was given a letter and referred to the ED by a nurse working in the GP OOHs service around 7.00 or 8.00 pm. She felt that her visit to the ED caused her family distress because of the understaffed and busy department. This suggests that she was reluctant to use the ED, and was therefore more likely to use the GP OOHs service in future. She described:

P5: When I went to out-of-hours, the doctor gave me a letter to go casualty. I went to the emergency department nearest to me that was the time when my daughter has a rash and she

Chapter 4

was extremely upset. And I was referred around 7 or 8 pm. When we got there, there were no people around and we did not see many staff, they were very busy, eventually my husband found somebody and they told him to get registered with receptionist and we had to wait for long time: about 4-5 hours. I do not want to go again, it is a very long waiting time, there is nobody really down there, it was hard to find anyone, it is a long wait, once we got seen, and we got the same advice as said by GP and the out-of-hours.

The perception of the ED as being understaffed is also considered as a source of dissatisfaction to P4:

P4: In the country, most hospitals' EDs are understaffed. I would always ring out-of-hours with a hope that a doctor can sort me out, I do not want to go to hospital because hospitals are so understaffed in my opinion.

In comparison to her prior experience with the GP OOHs service, P6 believes that the GP OOHs service is of better quality than the ED because the nurse over the telephone listens to what is being said by the parent, gives time to express feeling and reassures her. P6 feels more reluctant to use the ED because of being 'unheard': that is 'not listened to'. She commented:

P6: And with Casualty it's different and I feel they do not listen to you and would not have a great faith compared to out-of-hours. Out-of-hours is valuable service.

P9: Generally, it is low experience; very long waiting, my son and husband were referred to go at 11.00 pm. He was triaged straight away and it took him up to 5 o'clock in the morning to be admitted. Generally speaking, nurses in ED are very life. It seems to be that they are very slow and they must be very busy.

4.5.2 Time and distance to travel to the ED

Time and distance to travel is perceived by parents as another factor that could prevent parents from visiting the ED. However, due to the potential seriousness of the child's symptoms, parents are sometimes forced to travel and see a doctor in the ED. Nearly seven parents reported that it takes 30-40 minutes to drive to their nearest ED. This suggests that these parents are living in rural areas and are isolated from immediate face-to-face consultation in emergency situations. When their children get sick, parents ring the nurse in the GP OOHs service but, due to the potential seriousness of the symptoms, the nurse advised them to make their way to the ED. Despite living approximately 7 miles away from the GP OOHs service, P7 reported that she was reluctant and forced to travel 50 minutes to the nearest ED, due to the seriousness of the symptoms and the worry of meningitis.

P7: One time [the nurse] referred me to the emergency department in the nearest hospital; it took me about 50 minutes to get there. I found them very busy.

In her view, P6 perceived the ED as manic because of her previous experience when she visited the ED with her screaming baby. However, she reported that despite living in a rural area which could take 40 minutes' drive, she was still forced to travel to the ED, as advised by the nurse, because of the potential seriousness of the child's symptoms.

P6: It was one day when my son was crying and he had a temperature and [the nurse] could hear him crying over the phone and she told me if that way he is crying, to me he does not sound well. I would have to go straight to ED in [the name] of the hospital and that is manic because so many people, especially at the weekend there will be drunks, you know people in accidents and I would be down there with a screaming baby.

4.6 Accessibility of the GP OOHs service

Accessibility refers to the continuing and organized supply of care that is geographically, financially and functionally within easy reach (Payne et al. 2001; Giesen et al. 2007; Turnbull et al. 2010). Geographical accessibility means that the location or the place of the service is within easy reach. Functional accessibility relates to the opening hours and that the service is open and available for use (Payne et al. 2001; Turnbull et al. 2010). There was a widespread perception among parents that accessibility to the GP OOHs service is easy and simple. Nevertheless, parents identified several other factors that could facilitate the ease of parents' access to the service. These factors are discussed in the following sections and include familiarity with the GP OOHs service telephone number, geographically convenient location of the GP OOHs service, and economic factors and the use of nurse advice, and leaving other family members at home.

4.6.1 Familiarity with the GP OOHs service telephone number

All parents had used the GP OOHs service many times on different occasions. This experience meant that parents knew what to expect when they contacted the GP OOHs service. They reported that on each occasion they ring a telephone number that is known to them to access the service and they knew a receptionist would answer their call straight away. P01 described how telephone access to the service had made it easy for her to get through to the service and gain advice over the telephone. This was seen as a more convenient option than seeing the GP, which would have required time, travel and an appointment:

Chapter 4

P9: As a source of information, I would ring my GP first, but in the out-of-hours I would ring the [the service] because my GP is closed.

P1: I contacted the [the service] numerous times about my two year old child's health concerns, such as high temperature. I would ring out-of-hours to ask them about medication.

P2: Yeah, I think it is really easy to access, the number is there, I called them a lot of times, really since [child name] was the age of 9 or 10 months old, probably I called them 5 or 6 times in that period. Actually, it seems very good. Because when I called, mm, you know, I called for reasons such as breathing difficulty, temperature, cough and ear infection and on some occasions, I was calling because, obviously, it is out-of-hours service.

P3: I think it is an easy and adequate service, I think it is prompt, professional, I think it is well serviced.

P7: ... their access is very good [...] when you ring them you ring the centre and they ask you what is wrong with the child, and they ring back.

P8 is a mother of two children who are 9 months and 9 years of age. The mother used the service of GP OOHs many times. She described how she has the GP OOHs service telephone number stored on her telephone, suggesting that P8 is not just familiar with the service but is also a regular user.

P8: Their number is easy to access and I have it on my phone.

Familiarity with the service telephone number is also linked with parents' expectations when they ring the GP OOHs service. Nearly all parents were able to describe the call handling process suggesting that they are all familiar with how the service operates. They reported that they expected that a call taker or a receptionist will answer their call and will check and registers the details of the parent and child's name, address, date of birth, contact details, and the reason for calling. Parents also expect that the receptionist will prioritise the call based on the child's symptoms and then inform the parents that a nurse will call back, before ending the call. Parents were also familiar with waiting time for a nurse to call them back. P5 described how she does not expect to encounter a problem with accessing the service; she described familiarity with the nurse call back process in situations that the parents see as an 'emergency' as well as on non-urgent occasions.

P2: Usually, when I ring I speak to a receptionist, yeah, and then she says: I'll get a nurse to phone you back.

P3: When I rang out-of-hours, I expected to speak to a nurse, however, I spoke to a receptionist and then I received a follow up call from the nurse within half an hour.

P4: I spoke to a receptionist who asked for my details and told that a nurse will ring me back.

P5: They ring back in around 20 minutes. No, I don't mind waiting for the call back [...] in an emergency I would expect them to ring me back. The access is easy and I never have a problem.

P6: When I ring I speak to receptionist and who asks questions; she takes my details and the child's details and then she says: a nurse will ring you back.

4.6.2 Geographically convenient location of the GP OOHs service

Parents discussed the convenience of the service in terms of distance, travel time, and means of transportation and the extent to which they found the service acceptable. The majority of parents (n=7) consider the location of the GP OOHs service is convenient. It takes those parents 5-15 minutes to drive from where they live to attend the GP OOHs service. The other two parents lived in a rural area and it takes those parents approximately 30 minutes' drive to see a doctor in the GP OOHs service. However, during the winter time it could take longer than 30 minutes because of bad roads and cold weather. Parents also reported that their decision to use the out-of-hours service, as an alternative to routine GP practice, is affected by the location of the GP OOHs service which is within easy reach. P01 is a mother of two children and she lives in a rural location with bad roads. It takes P01 approximately 30 minutes to travel to see a doctor in the GP OOHs service. P01 described that the location of the service is very important. When telephoning about her child's temperature she felt that this would save her time and cost of travel.

P1: I think it is a great service, a 24 hours service for children that you can pick your phone and ring and ask questions or information about something, rather than you have to go and see a doctor, it would save seeing the GP is well.

P2 reported that the location is also important in a case where a parent rings the GP OOHs service for a consultation and was advised to visit for a face-to-face consultation. In her opinion, parents who live far from the GP OOHs service are faced with difficulty, especially if they do not drive.

P2: It is in town and it takes 5 minutes to drive. I could ring them and I could walk. For people who live far, they have to drive; it would be difficult especially if they don't have a car.

P3 lives in an area of 15 minutes' drive. She comments:

P3: The location is convenient, so in an urgent situation the closer the better [...] I am fortunate that I did not have an emergency.

P1: You know, during the winter time it would take longer, we are living in the countryside with bad roads and if it is icy you will be looking at a longer time.

This qualitative study identified that the use of telephone advice from a nurse at the GP OOHs service alleviates the inconvenience of needing to drive from a rural area. Where a face-to-face appointment is necessary, most parents felt that the service was reasonably geographically convenient, although one parent had a different view. P04 is a mother of a child who is 19 months old and works part time. It takes P04 half an hour to drive to the GP OOHs service and about 40 minutes to drive to the ED. P04 lives in the countryside and feels that she is isolated from health services; therefore, she would prefer to access the GP OOHs service by telephone rather than going to hospital, to save her time.

P4: I would prefer to use out-of-hours rather than going to hospital, to save my time. We are very isolated in the country side and out-of-hours is half an hour away from where I live.

4.6.3 Economic factors and the use of telephone nurse advice

In situations that parents perceive as urgent, all parents would use the telephone to ring the GP OOHs service as a first choice of obtaining advice and health information, compared to looking up things in the internet and ringing a mother or a friend, because the GP OOHs service is accessible by telephone and could save parents cost and time to travel. Most parents believed that the cost of a visit to the GP OOHs service is affordable and slightly less than the cost of a visit made to GP during the daytime or an ED service, as well as being convenient. Parents also described how using the telephone during the out-of-hours avoids parents incurring such charges. Parents appeared to use nurse telephone advice as a way of accessing free advice. Going to the GP for the same advice would incur a charge. This is particularly important with children, where parents frequently are required to manage episodes of ill health or symptoms that are concerning.

P1: You know, you can't pick up your phone and ring your GP. You have to come in [for a face-to-face appointment]. It is very expensive, I think that is why, you know, at least with out-of-hours, you can ring [nurses] and ask them questions.

P2: The out-of-hours is slightly more expensive than GP, I pay the out-of-hours 60 euros a visit and my GP is 55 euros, both actually are very expensive. It is really helpful, to call the out-of-hours for free.

When comparing the choice between her GP and the GP OOHs service, P5 stated that if she had to ring her GP she would speak to a receptionist who would offer an appointment to attend the

surgery. In this instance, she would be charged 50 euro per visit and her GP does not provide advice over the telephone. However, she reported additional benefits of telephoning the GP OOHs service because the nurse offers more information, gives more time to speak, explains things more, and offers advice. She found the GP OOHs service good and equivalent to her GP and in terms of charges, the GP OOHs service is a very similar cost to the GPGP. The mother believes that using the telephone would save her money.

P5: I found out-of-hours very good. It is a good service and equivalent to my GP. I am so close it. It is so handy. In terms of expenses, I found it expensive to pay 50 euro each time, it is the same price as the GP. I think the phone can save money.

This study identified that only one parent who rang the service of GP OOHs for the reason of a six weeks check-up for her baby was not satisfied with paying 60 euros as she believes that this check-up should be a free of charge.

P9: ... Another incident was when I visited the service within the six-week check-up for my baby and ended up with paying 60 euro and it should be free. Otherwise I am satisfied with the service.

4.6.4 Leaving other family members at home

Leaving other family members at home is another factor that influences parents' decision-making in using the GP OOHs service. P1 reported that despite being worried about febrile convulsion, she was also worried about leaving other family members at home. P1 has two young children and a husband. Travelling to the GP OOHs service would require her to travel in the car on her own, with her sick child seated in the back of the car, and this would make her more nervous. She also said that she would have to get someone else out of their bed, such as grandparents to come and look after the other children as she felt that both parents would need to go with the sick child.

P1: I have two young kids and a husband. If I have to leave and travel in the car on my own with the child and she was sick in the back of the car and not beside me, I would have been nervous. I would have to get someone else out of their bed, grandparents to come up ... I had a worry that the whole of us would be going in.

P9 is a mother of three young children and she works. Her young child has asthma and he needed to be nebulised every time he developed the symptoms of asthma. P9 reported that one night her child developed difficulty in breathing and high temperature. She rang the GP OOHs service and was advised to attend. She said that her husband brought the child and had to stay for hours.

This suggests that family circumstances (minding other family members at home) were hindering P9 from accompanying the sick child to the GP OOHs service.

P9: I have three small children, I have used the service a lot of time for my youngest child, I will be worried about small things such as persistent temperature, my son has asthma symptoms and he needed nebulisers. I had to stay with the other children. My son and husband were advised to attend at 11 pm and he was triaged straight away.

4.7 Parents' satisfaction with the nurse's advice

During the course of the interview, all parents were asked to report their satisfaction with the nurse's advice. On a scale out of 10, parents ranged their satisfaction between 7 and 10. Parents described two main aspects of satisfaction with the nurse's advice which were the attitude and manner of the nurse and the extent to which parents felt that they trusted the expertise of the nurse.

4.7.1 Nurse's manner and trust in their clinical skills

Nearly all parents' spoke about the nurse's attitude and manner over the telephone and described them positively. Parents described a range of attributes such as "reassuring", "caring" and "[acting] on the side of caution". When her child developed a high temperature, P1 reported being reassured from speaking to a nurse who she felt very caring and sympathetic.

P1: I mean for fairness she was lovely, she reassured me and advised me to leave her cover off and not to worry about the cold feet.

P7: When my child was sick I got very worried, it was during the night and I rang the out-of-hours. A nurse rang me back and she was very nice, she introduced herself, the advice lasted for three minutes. [The nurse] ask me question based on the symptoms.

Parents suggested that they trusted nurses because of their clinical skills and expertise. They reported how the nurse "understood the problem" and was "very clear in giving instructions", as well as being "very patient" and "sympathetic". P3 for example felt that the nurse was knowledgeable on how to manage the child's fever and the unusual rash. On another occasion, when P3 used the service of GP OOHs for information about breast feeding issues, she described the nurse manner as "supportive".

P3: Oh! Yeah, am, I am very satisfied; I would give [nurses] 8 of 10, as a service over the phone I would give 7 out of ten, based on my experience. I found [nurses] very patient, very understanding,

very clear in their instruction, very sympathetic. [...] when I rang about breast feeding issues I found the nurse very supportive.

P6 is a mother of a 15 months old son and described her first child who is a sickly baby. She described the nurse's manner as being "good" and "helpful". P6's general satisfaction with the service is that she would rate it as 8 on a scale out of 10.

P6: I found the nurses on the phone were really, really helpful. It was my first time as a mother and I did not know what to do or expect what is wrong. There was one or two times when I rang the out-of-hours [...] I got good advice from the nurse.

Attributes such as "have listening ears", "offer practical advice", "very informed", and "very practical" were also described by different parents and were associated with their high levels of satisfaction.

P2: Yeah, I did, I found nurses very good, yeah, yeah, I don't have any complaints, and they are really helpful. They definitely listen to me and they ask many questions to make sure they understand the problem.

P3: The nurses give very practical advice that a parent can take for help, I want reassurance, and certainly I want to get a sense of hope from someone.

Another parent who commented on the nurse's attitude and manner over the phone, and who felt that the nurse used some sort of guidelines to assess the child's health issues:

P9: I found them very practical and very informed, they ask a series of questions, like a sort of criteria and guidelines that they follow.

4.7.2 Parents' adherence to the nurse's advice

Adherence refers to parents' acceptance of the advice delivered over the telephone and their intention to follow it. Parents commonly adhered to the advice of the nurse because they perceived the nurse as a trusted source of expertise, who always offers practical advice that enables parents to care for their children at home. Parents trust the advice they are given, as they believe it was based on the expertise and the knowledge of the nurse, based on guidelines, and the nurse offers them timely and sound advice.

P1: I would say they give advice based on both guidelines and experience.

Chapter 4

P2: If you understand what I mean, if I was right, [nurses] understood the issue, and I understood the problem. I don't know, they probably do have guidelines, but I did not feel wrong or correct questions, it was kind of conversational talk.

P6: The nurse on the phone told to run shower in the bathroom holding the baby to steam him and advised to do that every three hours, and I think that did work really well. In the morning, he was cleared up. It did seem to me to be sound advice.

P3 comments that her conversation with the nurse was pretty quick. However, in her view the service expertise is trusted and she would adhere to what the nurse advised over the telephone. She felt she was given good, prompt and professional advice because the child's temperature came down quickly. As a new mother, she thought that the nurse certainly knew how to advise and has good experience. P3 trusted and adhered to the advice offered by the nurse because nurses, especially those who are female and have children, were being able to convey their expertise and knowledge in the context of short conversation over the telephone.

P3: The advice I was given, I trusted their expertise. They were good and it was a good advice [...] I would trust their advice and adhere to what they say. The nurse gives very practical advice that you can take to help, you want reassurance, and certainly you want to get a sense of hope from someone.

P5: I am very happy to get advice and take the advice as offered by the nurse. I followed their advice and adhered to what they say; sometimes when I become panicked [the nurse] makes it easier.

P7 is a mother of two children who are 23 months and 4 years old. The mother has used the service many times when her children become unwell. The most recent child's sickness happened during the night. In her opinion, the service of GP OOHs is very good, as she used the telephone to ring them. Her satisfaction is that she would rate the service on a scale out of 10 as 9. This suggests that parents believed that the GP OOHs is a high-quality service.

P7: I used the service many times. The service is very good, reliable and trustworthy. I would use their service again, my satisfaction with the service; I would give 9 out of 10. Every time I ring them especially in the middle of the night, they give advice; sometimes they refer me to the hospital. I generally adhere to the advice they give over the phone.

P9 trusted the nurse advice because she valued her advice and "little tips" regarding the symptoms of the child and her previous experience with the nurse's advice was positive

P9: I would generally listen to the advice and to what the nurse says. [...] I always find it good to deal with the nurse.

4.8 Parents' beliefs about how the GP OOHs service could be improved

All parents described the GP OOHs service as a good service and nearly all parents' rated satisfaction as 8 on a scale out of 10. However, in the last part of the interview parents were asked if they had any suggestions that could help to improve the GP OOHs service. The main suggestions were higher staffing levels (5.6.1), quicker call back times (5.6.2), more face-to-face assessment (5.6.3) and a children's area at the GP OOHs service (5.6.4).

4.8.1 Higher staffing levels

Three parents suggested that the GP OOHs service could be improved by increasing the number of staff, such as having more doctors, so that patients would be seen quicker when they attend a face-to-face appointment, and for a nurse to assess their children before seeing the doctor. They believe that this will help to decrease their waiting time when attending the service. This in turn, increases the risk of poorer patient care over the telephone and a decrease in the quality of service during the face-to-face consultation.

P2: To improve the service, mm, I suppose sometimes maybe if they have more doctors, because I have been there one time waiting with my child after getting an appointment for one and a half hours.

P5: Sometimes I think there is no doctor on duty, see, they tell you to come in and sometimes it takes long, so getting more doctors may improve the service.

P7: I think the out-of-hours service is really working, maybe if they have two doctors, you never see a nurse, you speak to them over the phone, if they can put you to speak to the doctor, they just offer you advice and an appointment.

4.8.2 Quicker call time back time from the nurse

Parents reported that the waiting time for a nurse to call back is between 10-30 minutes. When parents perceived they needed urgent advice, due to the seriousness of the child's symptoms, parents viewed the call back time as a long wait. This may then influence the parents to make their own decision to visit the ED. However, depending on the urgency of advice, parents believe that if the nurse calls back quickly this would improve the GP OOHs service.

P3: If they ring back quicker rather than waiting as there are many conditions that can escalate, such as in a case of meningitis, time is crucial, and I think if I am anxious I would go to somewhere or ED to be reassured.

P4: To improve the service I would suggest they could ring quicker, especially in emergency situations, to ensure that they call back as quickly they can.

4.8.3 Preference for face-to-face assessment over telephone advice

A few parents stated that being offered a face-to-face assessment more often would improve the service. They believe that because the nurse can't see the patient in their telephone assessment, children sometimes require a face-to-face assessment. Despite being a busy service, one of the parents described that seeing the nurse for the purpose of face-to-face assessment could alleviate her anxiety and may increase the chance of examining the child quickly by the doctor.

P4: I prefer to use the service to get my child seen quickly, save my time. Sometimes it could be crazy busy.

Another parent described her preference:

P8: The nurse rang me and she went through some questions, but the nurse did not know my experience as a mother with my child. The nurse and doctors are fantastic, but she did not feel that my child is urgent enough to be seen. The nurse said, like, he sounds to be ok, but I decided myself that my child, in this particular instance, needs to be seen because he is so young and I do not want him to wait for hours.

Being seen offered the opportunity of greater reassurance (when compared to telephone advice).

P9: I ring to get my child assessed and he needs to be seen so I phoned to be reassured and I want to get some help to know what to do.

Another parent recommended the need for a triage nurse before seeing the doctor in the GP OOHs service. She also suggests the need for enhancing the communication process between the nurse who offers an appointment over the phone, and the professional team in the GP OOHs service, as this may reduce the time of waiting to see the doctor and in some way improving the service:

P5: Maybe there has to be a communication between the nurse who gives the appointment and the receptionist who we see when we go in, as she tells me to take a seat. There is no nurse to triage before you see the doctor.

4.8.4 A preference for a children's area

One parents described her preference for establishing a children's area as one possible way of improving the GP OOHs service. Her belief is that this will avoid children from getting mixed up with other sick patients and may decrease their chances of infection. A parent describes that the service is in need of an area where children can be kept apart from adult patients:

P6: Maybe they need an area for children and an area for adults. Because, one time when I brought my kid to out-of-hours, an adult man kept vomiting. I was watching that and my little girl was watching too.

4.9 Understanding parental decision-making model

Several emerging themes and sub-themes were identified from the analysis of the nine interviews. These themes and sub-themes are brought together here in a model, as illustrated in figure 4.1. This model shows the common interlinking factors that affect parents' decisions when seeking help for their sick children with the GP OOHs service. The model explains that parents of children aged two years and under first have a *tendency to call the GP OOHs service* whenever a child's health causes concern out of GP hours. This decision is based on a set of factors that are linked together, as indicated in the model by arrows and connectors to inform a semi-linear process of help-seeking behaviour that necessitates parents to establish a call to the GP OOHs service. These factors comprise the main themes of the analysis.

Available models identified from the literature which relate to parents' decision-making when using the service of the GP OOHs service, have focused on factors affecting parents' access to the service and factors affecting the outcome of the telephone consultation (Lattimer et al. 1998; Foster et al. 2001; Turnbull et al. 2010). Previous research that has examined the nature and the extent of help-seeking behaviour among parents of children show that these models tend to focus on the parents' major role in monitoring their child's development of sickness and how they may seek help or advice from a variety of sources including friends, mothers, professional nurse, GPs and the internet (Andersen 1995; Pridham 1997). Anderson's (1995) Behavioral Model of Health Service Use, developed to identify determinants of acute care use suggests that health service use is determined by a combination of individual factors, social factors, and health service factors, but may oversimplify or not entirely capture the decision-making process on behalf of children (further discussed in section 5.3). My model elucidates factors related to parental help-seeking

Chapter 4

behaviour for sick children specifically and proposes that parental help-seeking behaviour is a function of five interrelated constructs or themes that characterise parents' use of GP OOHs services. This model developed here seeks to show what it is about a child that influences the tendency to call GP OOHs services. These key factors are presented in a semi-linear process of seeking help from the GP OOHs, where one stage is an outcome of the preceding one. These are presented and numbered in the order of 1, 2 and 3 (see Figure 4.1). The proposed model also describes parents' intention or potential to re-use the service in the future as indicated with the dotted arrows.

The first stage in parents' tendency to call the GP OOHs is the parent's perceptions of illness in their child (and included parental anxiety, and children are special cases and cannot speak for themselves) that led parents using the GP OOHs service. Parents presented children as 'special cases' and what was particularly important here was that very young children were unable to articulate their symptoms. This led to parents wanting to voice their concerns on behalf of the child and wanting to be heard by a health professional and receive advice, guidance, and reassurance. Typically, once a parent has perceived a need to be heard, the parent is faced with some choices and decisions to make about the availability and accessibility of health services (particularly the choice between the GP OOHs service and the ED). These decisions are influenced by what parents know and may have previously experienced (for example if the parent is a first-time user or a previous user of the service). Parents make complex decisions and the perceptions of what different services offer – and how accessible they are – are likely to be considered together in the decision-making process of parents and are numbered as 2 (in Figure 4.1). Previous use of services is likely to mediate this process and parents may make a decision on what they experienced previously (rather than directly as a result of their perception of the child's symptoms). The three interconnected factors which constitute the 'second stage' of parental decision-making process were all considered as factors that increased parents' tendency to use the GP OOHs service. The final theme, parents' satisfaction with the telephone nurse advice – is the result of parents experiencing the service - which in turn, may influence parent's tendency to call GP OOHs services on future occasions. Within this theme, parents particularly valued the manner of the nurse and trusted in their clinical skills which encouraged parents to adhere to the nurse advice.

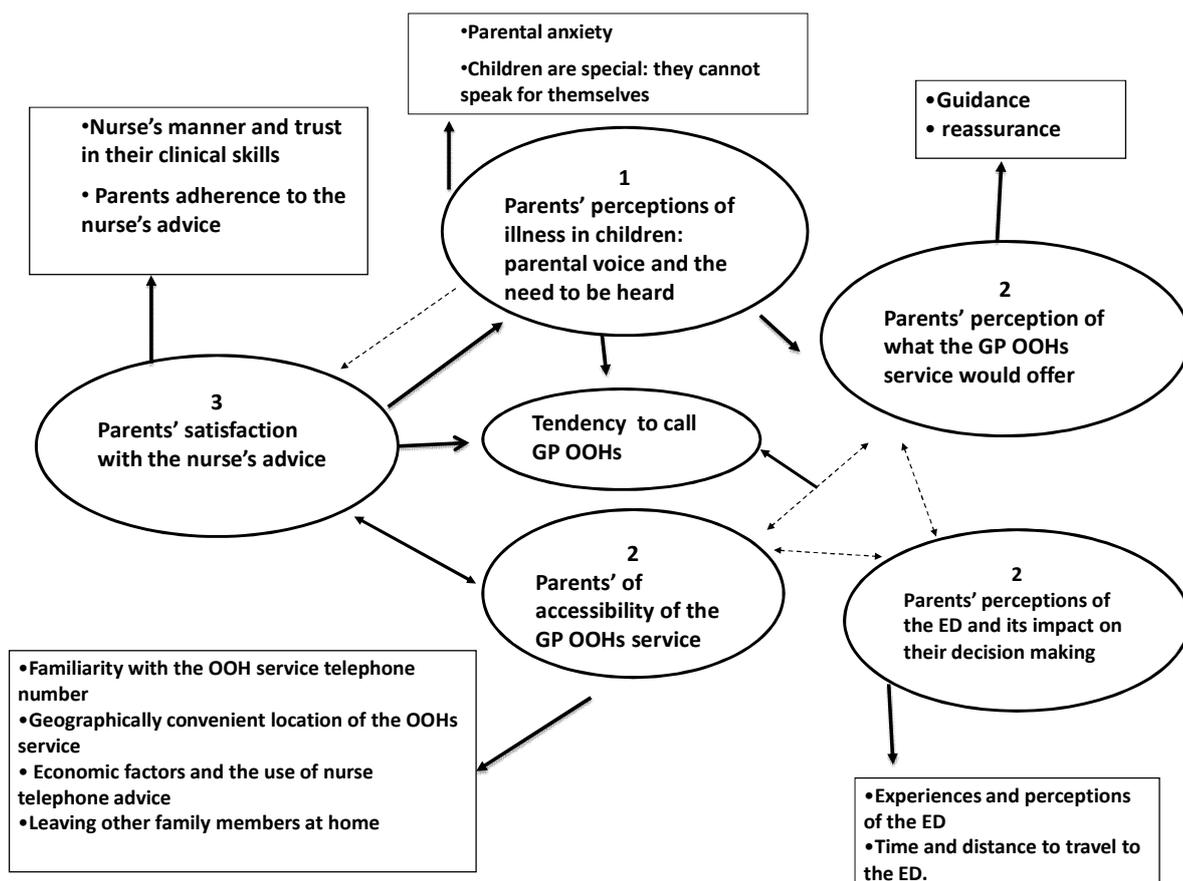


Figure 4.1 Parental decision-making and their tendency to call GP OOHs services when seeking telephone advice for a child

4.10 Summary

Chapter four has outlined the findings of the analysis of the data from the nine semi-structured interviews carried out with mothers whose children were aged two years and under. The findings of this qualitative study addressed the views, beliefs and perceptions of those parents regarding the GP OOHs service and the nurse's advice as delivered over the telephone. The findings of the analysis were presented in themes and sub-themes and were grouped together to create the parental decision-making model when using the service of GP OOHs which in turn answers the research question proposed for this study. Within this model I explained why parents considered that children aged two years and under are special and cannot speak for themselves. Parents deliberately used the GP OOHs service because of their familiarity with accessing the service and their positive previous experiences. However, factors such as long waiting time for the nurse to call back, making appointments and long waiting times, time and distance to travel, and leaving other family members at home, could all cause parental anxiety; potentially forcing parents to use in alternative healthcare resource, such as the ED. Parents' perceptions of visiting an ED were also

Chapter 4

discussed in this chapter. The next chapter provides a thorough discussion on the findings of this qualitative study compared to the previous studies focused on GP out-of-hours service.

Chapter 5: Discussion

5.1 Introduction

This study was initiated with the overall aim of exploring and understanding the views of parents of children aged two years and under, following telephone advice from nurses working at a GP OOHs service in Ireland. The pursuit of this aim has led to the collection of detailed accounts of nine parents who participated in the study and the subsequent analysis of their stories. This chapter starts with a discussion of the main results in the context of related literature on the topic and follows the thematic order of the parental decision-making model presented in Chapter 4. The parental decision-making model presented in Chapter 4 is then compared with existing theoretical models of help-seeking. The chapter also includes a discussion of the role of reflexivity and the methodology used followed by a discussion on personal learning from the study. Finally, the chapter ends with a discussion on the limitations of the study and a summary.

5.2 Discussion of results

Despite the widespread use of call centres for the provision of after-hours advice for sick children, relatively little is known about the perceptions of parents regarding this type of service, or of the views about the advice made by nurses at such call centres. This study provides new insight into the views and perceptions of parents of children two years of age and under when using the GP OOHs service in Ireland. The key findings in this study are that parents are often familiar with GP OOHs services, and in some cases, have used it repeatedly. Parents seek help for their child when they are anxious about symptoms. Contacting the service represents a 'need to be heard' by parents, because illness in children causes particular anxiety (this was linked to notions of 'children as special cases', in part because they are unable to speak for themselves).

Parental anxiety emerged as an important determinant in parents' decision-making about when to seek help and when to contact the GP OOHs service. These findings somewhat contradict Kai's (1996) study, who reported that parents felt disempowered when dealing with sick child because of difficulties in making sense of the illness so that parents were left uncertain or uninformed following advice from health care professionals at GP services. When parents are required to attend an OOHs centre, leaving other family members at home, and travelling with a sick child,

Chapter 5

was found, in my study, to be a source of parental anxiety, which in turn legitimised their reasons for calling the GP OOHs service for help and support. Parents who are on their own at home with more than one child found it difficult to visit the GP OOHs as it often necessitated taking all other children with them, therefore, increasing their tendency to call the service and wait for advice from the nurse to manage child's illness. Houston and Pickering (2000) highlighted that the decision to call the GP OOHs service was not taken lightly and was triggered by the emotional response of parents as well as their loss of confidence in the self-management strategies they used to manage the child's illness. Egbunike et al. (2008) found that mother of young children under 5 years of age were more worried and anxious about child's symptoms and wanted to be given more time to ask more questions during the time of consultation with the nurse. In my study, I found that first-time parents who are unfamiliar with child's illness were more likely to call the service of GP OOHs because of their concern to do the right thing for their child as well as their little experience against which to judge illness, consequently reporting high level of uncertainty and anxiety about managing childhood illness. This reflects similar findings in other studies, such as Wyke et al. (1990), Kai (1996) and Neil et al. (2016), although these studies were based in general practice rather than in GP OOHs care. Whilst a number of studies have highlighted the role of anxiety in parents' help-seeking behaviour much of this literature is based on attendance in the general practice setting and have included children that are a range of different ages. One of the key contributions of this study is its focus on anxiety of parents with very young children in GP OOHs settings. The study has found similarities in the role that anxiety plays, but perhaps suggests that anxiety is a particularly strong psychological factor that influences parents' decision-making when seeking help for a very young child.

Seeking reassurance or guidance from the GP OOHs was a strong motivating factor for parents to seek help. In contrast to my finding, Kai's (1996) study of parents seeking help for primary care problems in the context of general practice, reported parents felt confused when the doctor told that their child had 'a virus' or 'a bug', in turn provoking anxiety rather than reassurance. Additionally, parents felt excluded from the professional's assessment because of the perceived threat of the illness. Pridham (1997) asserts that through help seeking, a mother shares problem solving with a more knowledgeable or skilled person, therefore, making herself informed and ready to receive guidance. Strom et al. (2008) described how parents reported that the knowledge received from nurses over the telephone provides them with a sense of security and generates reassurance during the telephone conversation. Consequently, my study confirms that seeking reassurance or guidance is interlinked with parental fears and anxiety about children's

illness and motivates parents to consult a nurse working at a GP OOHs service. This suggests that the contribution of providing effective reassurance and guidance has the potential to reduce parents' emotional distress and is likely to reduce parents' use of other health service such as ED. In support of this, Traeger et al. (2015) asserted that reassurance is a core aspect of GP medical practices that can be achieved through patients' education.

Parents reported that accessibility to the GP OOHs service was enhanced due to their familiarity with the telephone number of the service, living nearby or having only a short distance to travel to the service centre, and the service being a cost-effective means of accessing care. These points reflect other studies such as Shipman et al. (1997) and Lattimer et al. (1998). Shipman et al. (1997) found that parents' decisions to use and access the GP out-of-hours service was based on perceptions of lack of service availability together with other factors such as parent's previous experiences which may shape their choice and decision to consult the GP OOHs service (Shipman et al. 1997). In addition, my finding about accessibility contradicts that of O'Cathain et al. (2014) who asserted that the use of NHS 111 did not improve access to urgent care and, in fact, had increased the use of ambulance services. However, much of the NHS 111 assessment is done by a non-clinical call handler which may be viewed differently to services that are nurse-led. These studies were based in England where access to primary and out-of-hours care is free at the point of use. The contribution of my study to what is already known about accessibility, is that the cost of accessing services influences the decision parents make. My study found that parents made choices between paying for a GP visit or appointment or receiving a free of charge call from a nurse working at a GP OOHs. Access to free healthcare could influence how satisfied that the parents felt with the OOHs nurse advice.

In my study, most parents reported to be highly satisfied with the GP OOHs service and the advice offered by the nurses. High levels of satisfaction reflected their positive experiences of the service and of easy access to it via the telephone. In addition, nurses' attitude or telephone manner was particularly important reflecting similar findings in other studies such as Salisbury (1997), Shipman et al. (2000), Foster et al. (2001), McKinley and Roberts (2001) and Egbunike et al. (2008). Salisbury (1997) identified five reasons for patients' satisfaction; among them being the medical professionals' manner and the explanation and advice received. Attributes such as "caring" and "supportive" were also reported in Egbunike et al. (2008). McKinley and Roberts (2001) reported that 81.7% of patients who received the care they hoped for, were more satisfied than those who did not. However, in my study, there was one parent who expressed her dissatisfaction with the nurse's advice, because the mother was offered an appointment for which she would have to wait

for three hours, when she made contact about her child sickness. The mother wanted her child to be seen face-to-face immediately because of her previous experience with her other child. This situation in turn motivated the mother to visit an alternative health care resource (i.e. the ED), stating that the nurse could not see the child over the telephone. Similar dissatisfaction was reflected in the findings of Munro et al. (2001), who found that parents' non-adherence with the nurse's advice offered over the telephone was because their expectations went beyond what the service could offer.

Interview participants made suggestions to improve the GP OOHs service, such as the need for higher staffing levels, quicker call back, need for a children's area in the GP OOHs service and a preference for face-to-face assessment. In relation to call back time, all parents reported that their OOHs call was initially answered by a receptionist and then wait for the nurse to ring back. This process has been reported elsewhere. An English study reported a maximum waiting time of approximately 20 minutes for the nurse to call back (Egbunike et al. 2008). According to Egbunike et al. (2008) long waiting times were associated with parents' dissatisfaction. For some parents who needed urgent advice due to the seriousness of the symptoms, waiting time for the nurse to call back is likely to influence parents' decision to use other services, rather than the GP OOHs service. In addition, unmet expectations about appointments, with long waiting times, were also considered to be an issue for one of the parents; therefore, there was a demand for higher staffing levels to meet the callers' needs and expectations about the GP OOHs service. Richards et al. (2007) reported that long waiting times were a reason for parents' high levels of anxiety; as such times were nearly always spent enduring their child's painful or worrying symptoms.

In relation to wanting a face-to-face consultation due to the perceived seriousness of the symptoms, and because of concerns that the nurse could not see the child over the telephone. My study identified that parents were aware that going directly to the GP OOHs service, without making an appointment by telephone, was not acceptable and they were expected to ring in advance to get an appointment for a face-to-face consultation. Agreeing with Turnbull et al. (2010), parents suggested that assessment over the telephone would not be adequate; for example, where a physical examination might be required, such as for a rash or breathing difficulty. However, based on the evidence from this and many other studies, it is reasonable to conclude that the practice of nurse-based telephone advice has been identified as a popular route for accessing health information and advice; a practice that now exists in many countries, but which is particularly notable in Sweden (Holmstrom & Hoglund 2007; Ernesater et al. 2009;

Kaminsky et al. 2009) and the UK (Glasper et al. 2000; Munro et al. 2000; Snelgrove 2009). The evidence of the usefulness of the GP OOHs service is well documented in the literature. Consequently, this study suggests a model of parental decision-making, regarding their use and perception of the GP OOHs services that may assist parents and health care professionals in appropriate use of medical services, such as ED and GPs. It also suggests that nursing advice received over the telephone is an integral part of the range of consultation options offered by the GP OOHs service.

5.3 Comparison of the parental decision-making model with existing theoretical models of help-seeking

The parental decision-making model (presented in chapter 4) originated from the analysis of data from parents of children two years of age and under and illustrated a range of factors that influence parents to seek help from the GP OOHs service in Ireland (see section 5.2). Models of help-seeking and service use, which have been posited across health (Andersen, 1995) and more specifically about parental help-seeking (Pridham 1997; Shipman et al. 2001), suggest that an individual must first recognize that a behavior or condition is problematic, then decide to seek help, identify an action plan (e.g., determine who to seek help from), and take action (e.g., use a service). In general, these models identified a wide range of factors that directly or indirectly influence the decisions that people make when seeking help for a health problem. Factors are often grouped into categories such as 'difficulties experienced by parents' because of need to arranging transport, caring for other children at home, managing several children on the journey and travelling with ill children (Shipman et al. 2001). According to Pridham (1997) provider or system attributes that may impact help-seeking behaviour include the accessibility, affordability and availability of health service, and parents' (dis)trust of providers are all reported in the literature as factors which influence parents' tendency to use the health.

In comparing the results of my study with the literature on models of help-seeking behaviour, I found that some of the determinants for Irish parents to contact the GP OOHs service reflect some of those illustrated in the model of Andersen (1995). Andersen (1995) developed a general model - The Behavioral Model of Health Services Use - which focussed on access to care. This model suggests that health service use is affected by both individual and contextual factors and further subdivides these factors into three domains: predisposing factors, which influence the likelihood that an individual will seek health care services; enabling factors, which affect the

Chapter 5

individual's ability to obtain health care services; and need factors, which determine the individual's level of need for health care services. When comparing the parental decision-making model originating from my analysis with Andersen's model (1995) of health care use, I found that there were three main similarities: first, the predisposing factor which increased parents' tendency to call the GP OOHs service is linked with parents' perception of child's illness; parents understand that their children cannot speak for themselves and what was particularly important here was that very young children were unable to articulate their symptoms. This led to increases in parents' levels of anxiety and worry, and a wish to voice their concerns on behalf of the child so they were heard by a health professional and could receive advice and guidance.

Second, what constitutes the enabling factors in Andersen's model (namely factors which affect the individual's ability to obtain health care services), is reflected in two components of my model: parents' perception what the OOHs service would offer and their experiences and perceptions of the use of ED. Third, Andersen's 'need factor' broadly relates to my model in what parents perceive about accessibility of the service of GP OOHs and factors such as familiarity with the GP OOH service telephone number, geographically convenient location of the OOHs service, economic factors and the use of nurse telephone advice and leaving other family members at home are considered the need factors that influence parents to seek help on behalf of their children.

The differences between the Andersen's (1995) model and my parental decision-making model is that my model highlights the important role of users' experience; decision making was mediated by whether the parent was a first-time user and by parents' previous experiences with the available health service. This study shows that Irish parents' decision to consult the GP OOHs service is based on several factors as discussed previously. What my study adds and contributes to the existing body of knowledge is that, this is the first qualitative study to explore parents' views and experiences about the use of health service when seeking help for a specific age group in an Irish setting. In addition, the findings of my study were articulated and framed to create the parental decision-making model which can provide an explanation and prediction of help-seeking behaviours among parents of children two years of age and under in the context of GP OOHs services use.

5.4 The role of reflexivity and a discussion about the methodology of the study

Reflexivity is a continuous process of reflection, during which researchers critically consider their own biases, preferences, and preconceptions and monitor their relationships with the study's participants, as well as their own reactions to participants' accounts and actions (Parahoo 2006; Polit & Beck 2010; Holloway & Wheeler, 2010). It is widely accepted as a methodological consideration among researchers undertaking a qualitative enquiry, as reflection provides a useful tool for ensuring the trustworthiness of the findings of a study (Kingdom 2005; Parahoo 2006). However, for the majority of qualitative researchers, data collection involves engaging with participants' language, their stories and the experiences they have. Therefore, as a principal researcher, I was the data collection instrument. My role is to make sense of the summaries and experiences of parents about their use of the GP OOHs service in a meaningful way, with a view to learning more about parents' experiences of telephone advice nursing, to bring about change in nurses practice, to influence policy and practice and/or to enhance understanding at a personal or organisational level. With these notions in mind comes my responsibility to be reflexive. Consequently, the concept of self as a research instrument reflects the likelihood that my subjectivity will impact my study and subsequent reporting of the findings.

In reflection in and on my study, the research question is "what are the views of parents of children aged two years and under, following their telephone advice from a nurse working in a GP OOHs service in Ireland?" This question was framed after a good deal of deliberation, critical reading and critical thinking, investigation and discussion with my supervisors and others during the workshops in the early stage of my doctoral study. One thing that I should immediately state is that I had an aspiration to explore the views of parents of children aged two years and under because of personal experience of being a parent of young children, as well as my work experience with children aged 1 day to 16 years as a nurse. I had a preference for a qualitative design, rather than quantitative research. Reflexivity also means examining the ontological and epistemological assumptions that necessitate the methodology I have chosen. To conduct this study, I employed an exploratory qualitative approach which is inductive, rather than deductive. The inductive model, in this case, begins with the assumption that the views and perceptions of people are subjective, not objective, and these views are multiple, rather than just singular. I used semi-structured interviews as a method for collecting data, supported with the help of a topic guide. I intended to carry out 20 interviews to gain a clear insight into how parents perceived the GP OOH service. However, recruitment of parents was one of the main challenges that I faced

Chapter 5

during the research process. Despite having received support from the GP OOHs service, in which the study took place, I found it difficult to recruit parents. However, to enhance the process of recruitment, I followed the recommendation from Lindenberg et al. (2001), of developing strong partnerships with GP OOH centre's management team based on mutual benefit, mutual respect, and mutual trust. This mutual trust led to the recruitment of 7 more parents. They were interviewed during the period of June to September 2015. Between June 2014 and June 2015, 307 parents were contacted to participate in my study. However, a total of only 9 parents agreed to be interviewed.

My use of reflexivity is also influenced by the work of Robson (2002), who presented ways which researchers can identify their own biases. According to Robson (2002), establishing rapport is a key success for qualitative interviewing techniques. Throughout the research process I kept in mind that being a male nurse and interviewing female parents could influence parents' selection for telephone or face-to-face interviews, which in turn could impact the amount and nature of data to be collected. As a researcher, I stayed objective by not influencing parents' choice of interview method and I listened carefully to what they said during the interviews, in order to achieve rapport. The primary objective for data collection was to represent the subjective viewpoints of these parents. In addition, I wanted their voices to reach the management and the staff of the service that parents use as a means of gaining advice and health information; namely the GP OOHs service

Reflexivity, therefore, is a dynamic element of each stage of the research journey. In addition, like other researchers coming to qualitative research for the first time, I was overwhelmed by the amounts of data I generated. Initially, I was struggling with the challenge of how to analyse this data. The available research method textbooks described what seemed to be abstract, and a technical procedure that I found difficult to apply to my research. However, a thematic approach to data analysis seemed to me difficult to use without the guidance of my experienced supervisors. During data analysis, reflexivity helped me to navigate my way through each participant's account and my responses to it. This often involved revisiting the data, and my reflective codebook, at several points during the process of analysis. I was also seeking the perspective of my supervisors, following discussion meetings which were part of my reflexive work that helped guide my analysis. My analysis was a step-by-step procedure and an iterative and reflexive process. As a researcher doing research with parents of children aged two years and under, my objectives were twofold: to proactively manage myself in my interactions with the

participants and to actively explore how parents' views impacted my pre-existing beliefs and knowledge about the GP OOHs service.

5.5 Personal learning from this study

I have learnt, from conducting this qualitative research, many lessons which relate to both my personal development as a researcher and my development as a nurse. I have not only enhanced my knowledge, skills and attitudes by undertaking this doctoral programme but also through conducting this study. Doing these has increased my personal appreciation, understanding and insights into my strengths and areas for future development. Originally, I wanted to learn more about qualitative research since my background was in quantitative work and I believe that I have now started this process. There is still much for me to learn in post-doctoral studies about other paradigms and methods of qualitative work but I feel that I now have a solid place from which to start. When I review my study I recognise several limitations (see below) and I believe that knowing these, and how to reflect on research, will help me to design better studies in the future. When I consider nursing I have learnt more about help-seeking theory and parental decision-making. This will help me in my role as a clinical educator by allowing me to design better strategies relating to the practice of telephone advice nursing and health information giving.

5.6 Limitations of this study

This study focused on the views of parents of children under two years of age, following their contact with nurses working with the GP OOHs services. However, some limitations were identified with respect to the study. One of the limitations of my study is that it relies on the honest and faithful descriptions provided by only nine parents. Therefore, the sample is small and a larger number of parents involved may improve the trustworthiness of a future study. Consequently, to enhance the process of recruiting more participants, I used a different way of communication with the stakeholders of the GP OOHs service including letter, telephone, e-mail or face-to-face contact. Using a different method of communication on subsequent attempts has been recommended by many authors to achieve an enhanced success and thus increase the chances for recruiting more parents (Lindenberg et al. 2001; Patel 2003). All documents already sent to the first sample of parents were reviewed and revised to ensure consistency and accuracy of the content, and especially the researcher's contact details. An agreement between myself and the management team was reached to facilitate identifying a new sample of parents who used the GP OOHs service between the period of January 2015 and June 2015 by the management

Chapter 5

team. All relevant documents such as the invitation letter, topic guide, information letter, consent form and a letter from the GP OOHs centre were to be sent by post by the management team to all potential participants. An agreement was also made for the management team of the GP OOHs service to receive all responses, which were then to be sent to the researcher's address.

The second limitation is that the study was carried out with only one GP OOHs service; involving other GP OOHs services would increase the involvement of more parents and thus hopefully help to deal with the issue of recruitment. A third limitation is that I included parents' views without observing what occurred; however, the research could have, and perhaps should have, included the views of nurses who delivered advice over the telephone. Such data would greatly help to strengthen the evaluation of the usefulness of the GP OOHs medical advice service. The fourth limitation is the gap between the time parents made the call to the GP OOHs service and the time for interviews which may impact parents recalling exactly what had happened during the consultation process. Other limitations are linked with methodological issues such as the use of telephone interviews, lack of member checking technique and issues with generalisability. I used telephone semi-structured interviews; therefore, telephone interviews limit seeing parents and limit the use of non-verbal cues, such as the facial expressions which are important in interpreting the reactions of the interviewees. Member checking is a useful technique to ensure trustworthiness of the study and gives researchers the ability to correct errors and challenge what are perceived as wrong interpretations. Due to the time constraint to complete the study I did not cross check my analysis with a second coder; however, data were reviewed with my supervisors. Finally, while the aim of the study is not to produce a generalisable description, the model created from the findings might be transferable to other GP OOHs services. I believe that the above limitations did not affect the significance of the parent-based findings of the study. In fact, this study provides interesting findings that could improve the performance of the GP OOHs services in Ireland.

There are significant implications for nurses working in child health service such as the GP OOHs service. For example, nurses could be encouraged to take every opportunity to educate parents about signs of serious childhood illness during their conversation over the telephone with parents especially those who are first time users of the service. GP OOHs services could potentially manage the demand of parents' use of the service by providing easier access to parents' information and GP appointments. This in turn has the potential to bridge the gap between what parents want and what professional nurses and doctors provide. These implications are discussed in further detail in Chapter 6.

5.7 Summary

This chapter has provided a discussion on the results identified from the nine accounts of parents of children aged two years and under, following their telephone contact with nurses working in the GP OOHs service. It also compares the parental decision-making model generated from the findings of my study with the existing body of literature focused on help seeking models. The key similarities and differences between my study findings and the wider literature are presented. This study has identified a range of factors that shaped parents' views about their use of the GP OOHs service. Many of those factors were considered as leading reasons for parents' overall satisfaction. What this study adds to the existing body of literature is that, to my knowledge, it is the first qualitative study to explore the views of parents of children aged two years and under from an Irish perspective. This study demonstrates, in accordance with previous research, that Irish parents value the availability of the GP OOHs services as a first-option helpline service for gaining advice and health information. It also adds, that parents have a voice and wanted to be heard when their children become sick and developed serious symptoms. What I found in this study is that the parents' decision to call the GP OOHs service is not taken lightly. Parents do their best to self-manage children's sickness, based on the experience and knowledge they already have. However, due to the perception of the seriousness of the symptoms and the risk of harming a child who cannot speak for himself, they always seek advice and consultation from the professional nurses working in the GP OOHs centre. In addition, this study demonstrated that there is a strong relationship between what parents expect from their GP OOHs service and their level of satisfaction. However, this finding strongly suggests the need for future research to evaluate the GP OOHs service concept and to examine parents' involvement in improving the quality of the services offered. The limitations of the study were also discussed; together with how I used reflexivity to understand the limitations and decisions I made. The next chapter examines the implications for nursing practice, of the new parental decision-making model identified from this study, as well as presenting recommendations and conclusions.

Chapter 6: Implications for the nursing practice, recommendations and conclusions

6.1 Introduction

Chapter six aims to present the main implications of this study for nursing practice, research, policy and education. This is followed by summarising the key recommendations. The chapter ends with conclusion.

6.2 Implication for nursing practice, research, policy and education

In principle, the GP OOHs model was set up to offer a range of services to groups including health service users such as parents of children aged two years and under; the services being supported by nurses and managers. Consequently, the following implications are discussed in regard to the areas of: nursing practice, research, policy and education.

6.2.1 Implications for nursing practice

1. *The findings of this research may contribute to the development of TAN competencies focusing on very young children and their parents that could become standards for TAN practice.*

The parental decision-making model identified from this study could be used by managers to develop core competencies related to the practice of TAN at GP OOHs services including: the provision of parent-centred care, working in interdisciplinary teams and utilisation of informatics. Having a set of standards would assist nurses to practise their role in a manner that is consistent across services and fits within with their scope of practice; thereby achieving the ultimate goal which is improving patient outcomes in a timely and professional way. Practice could also be assessed against these standards to provide nurses with information about their performance and development needs.

2. *Nurses working in GP OOHs services need to develop and maintain skills that cut across specialist boundaries to effectively deal with the range of calls that might occur.*

The range of concerns that nurses have to deal with in GP OOHs services presents a challenge requiring extensive clinical knowledge *and* skills in reflecting and active listening to ensure the quality and the safety of advice delivered over the telephone (Purc-Stephenson and Thrasher 2010). The nurses in the present study were perceived as being able to do this for a specific group of service users. The findings from this study may be presented in TAN courses to increase nurses' understanding of help-seeking behaviours, needs, and experiences of parents of children two years of age and under when using the GP OOHs service. Doing this might help nurses work more effectively with clinical decision support software (CDSS), across the age-range, and continue to deliver safe and prompt advice over the telephone.

3. *Successful management of young children's illnesses and parental fears through skilled telephone advice nursing may reduce ED attendance.*

The present study suggests that nurses can successfully play a key role in giving telephone advice, and allaying fears and anxieties of a specific group of service users. Achieving this means that parents are enabled to engage in self-management strategies which manages both parental needs and the child's condition and also may reduce the demand on visiting an ED.

4. *The findings from this study suggest that some parents prefer to use a nurse advice service and avoid paying for expensive GP advice.*

If this is found to be the case through further research attention would need to be given to the workforce demands that such a change in services would require. This has implications for further development for nurse-led services across Ireland, and perhaps in other countries which have yet to embark on developing TAN.

As virtual consultations increase in popularity more nurses will need to be taught this type of interaction through courses that enable them to become familiar with relevant CDSS and develop the necessary skills of reflective, empathic and active listening that will give service-users confidence in the advice given.

6.2.2 Implication for policy

The findings of this study confirm for managers and policy makers that there is a demand for GP OOHs services in Ireland for children of two and under. In terms of service changes, the findings of my study show growing evidence of parents' perceptions that there is a need to improve the

level of the GP OOHs service. There remains a need for an Irish national policy, within a context of efficiency savings that sustains and improves GP OOHs services and delivers maximum operational efficiency. This study provides an opportunity for policy makers to consider the suggested parental decision-making model to develop national GP cooperatives in Ireland.

Accordingly, implementing a GP OOHs service has the potential to create operational and policy dilemmas, including the need to balance national and local influences on the service, as well as to balance costs and safety. However, the findings of this study suggest a number of implications for policymakers relating to the GP OOHs service. First, the relevance of satisfaction with health services is important for policy making at the organisational level. In other words, parents' satisfaction is the result of organisational behaviours. Therefore, policies should be written taking into consideration the involvement of parents' views and experiences about the use of the GP OOHs service model. Second, policymakers must pay attention to patients' suggestions about how to improve the service so that systems can be developed that reduce the likelihood of patient harm. Introducing standards for staff to follow, in order to ensure that high quality advice and care are provided, is also important in helping staff to understand the service they are to deliver.

The parental decision-making model could be used by the Irish policy makers to develop a future expansion of the GP OOHs service system, with different roles and integration with different services. Service providers could be encouraged to progress, rather than simply maintain their current service offerings. This study suggests the need to establish higher staffing levels, to improve the quality of advice delivered over the telephone. It is anticipated that higher staffing levels will lead to a better quality of service, particularly when accessing the GP OOHs services is considered. Finally, the findings of my study also highlight the need for a clinical audit of staff performance, in order to ensure quality assurance across the GP out-of-hours service and therefore, that a consistent approach to patient care is provided.

6.2.3 Implication for education

In accordance with recommendations from the GP National Review Reports (2010) in Ireland, education is an essential element for bridging, practice, policy and research; therefore, the findings of my study have an implication for education. There is a need for nurses working in GP OOHs centres to engage in in-service training regarding the use of CDSS to deliver safe advice

over the telephone. This has an implication for nurses to expand their nursing knowledge and provide innovative patient-centred models of working and changes to nursing practice. In addition, understanding what parents' views are about the use of GP OOHs services provides opportunities for nurses to engage in higher education to gain necessary skills that qualify them to undertake research; as a result, those nurses could explore new ways of developing their practice of giving advice remotely.

6.2.4 Implications for research

Research is important to the nursing profession as it provides new knowledge, improves health care, and challenges current nursing practice with new ideas; making that practice truly evidence-based. Although this study was carried out in one setting and with a small sample, it showed that it is feasible to research the views of parents of children aged two years and under, who are using a GP OOHs service. This, in turn, opens many opportunities for researchers to study GP OOHs services from different aspects; including comparing nurses' views and parents' views of the use of the GP OOHs service for the delivery of advice and health information. This area of researching, in turn, will help to add to the existing body of knowledge concerning GP OOHs services, their use and value, for the delivery of remote advice and health information. In addition to this, a future study could include studying different settings; comparing rural and urban parents' views about their experiences and perceptions of the GP OOHs service.

The findings of this study bring to the fore some issues around organisational delivery that could be the subject for future research. For instance, it would be useful to investigate other elements of healthcare governance, such as the role of top management, the quality of management, and clinical leaders in the GP OOHs system. In addition, a future study into the mode of appointment setting, and the measurement of waiting time, would be appropriate. Finally, a study into how a GP OOHs centre's service performance differs from the performance of GPs and EDs, would also be an interesting area for research.

6.3 Recommendations

The findings of my study suggest that the following key recommendations could be made, to improve the service for parents of children two years and under and their children:

Chapter 6

- Develop a face-to-face assessment unit run by nurses within the GP OOHs service. The reason for this is that it will give nurses who are working over the telephone, an extra option or an outcome to be offered to those parents who are extremely worried and not satisfied with the remote advice. This may help worried and anxious parents to feel reassured by the advice given and be more compliant with care options.
- Develop a children's dedicated space in the GP OOHs centre, as this will decrease the chance of mixing with sick adult patients who attend the centre for a face-to-face consultation.
- Increase the number of nurses working over the telephone, thereby ensuring the delivery of an accessible, effective and efficient service, which adds to the construction of 'a health system for everyone'. This increase of the number of nurses will also help the centre nurses to respond more quickly to parents' calls. Additionally, this may create new nursing jobs and opportunities for the development of education and training in telephone advice nursing.

6.4 Conclusion

In conclusion, this study suggests that parents of children two years and under are generally aware of the existence and availability of the GP OOHs service, and that this service is being actively promoted to these groups of users in accordance with GP OOHs services' national health policy in Ireland. The research has identified several ways in which the service could be improved, so parents could access an enhanced quality of care over the telephone. The findings of this study have revealed that the performance of the GP OOHs service is influenced by certain factors, such as parents' satisfaction with the advice received from the nurses, the nurses' attitudes and telephone manners and accessibility to the GP OOHs service. The study has also shown that parents of children aged two years and under, in both urban and rural areas, are aware of and familiar with the GP OOHs service. The results of this study were brought together to develop the useful parental decision-making model that indicates understandings of involving parents' voices to improve the quality of nursing advice, and the performance of the GP OOHs service model in Ireland. The recommendations of this study are challenging and will require a significant level of commitment to implement.

Appendices

Appendix 2.A Summary tables of the CASP checklists and questions used to appraise identified studies

Table 1 Showing the checklists questions for a qualitative research	
<p>1. Was there a clear statement of the aims of the research?</p> <ul style="list-style-type: none"> • What was the goal of the research? • Why it was thought important? • Its relevance? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>2. Is a qualitative methodology appropriate?</p> <ul style="list-style-type: none"> • If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants • Is qualitative research the right methodology for addressing the research goal? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>3. Was the research design appropriate to address the aims of the research?</p> <ul style="list-style-type: none"> • If the researcher has justified the research design (e.g. have they discussed how they decided which method to use)? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>4. Was the recruitment strategy appropriate to the aims of the research?</p> <ul style="list-style-type: none"> • If the researcher has explained how the participants were selected • If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study • If there are any discussions around recruitment (e.g. why some people chose not to take part) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<p>5. Was the data collected in a way that addressed the research issue?</p> <ul style="list-style-type: none"> • If the setting for data collection was justified • If it is clear how data were collected (e.g. focus group, semi-structured interview etc.) • If the researcher has justified the methods chosen • If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)? • If methods were modified during the study. If so, has the researcher explained how and why? • If the form of data is clear (e.g. tape recordings, video material, notes etc) • If the researcher has discussed saturation of data 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>6. Has the relationship between researcher and participants been adequately considered?</p> <ul style="list-style-type: none"> • If the researcher critically examined their own role, potential bias during data collection, including sample recruitment and choice of location • How the researcher responded to events during the study and whether they considered the implications of any changes in the research design 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>7. Have ethical issues been taken into consideration?</p> <ul style="list-style-type: none"> • If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standard were maintained • If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study) • If approval has been sought from the ethics committee 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>8. Was the data analysis sufficiently rigorous?</p> <ul style="list-style-type: none"> • If there is an in-depth description of the analysis process • If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data? Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process • If sufficient data are presented to support the findings • To what extent contradictory data are taken into account 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<ul style="list-style-type: none"> Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation 	
<p>9. Is there a clear statement of findings?</p> <ul style="list-style-type: none"> If the findings are explicit If there is adequate discussion of the evidence both for and against the researchers arguments If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst) If the findings are discussed in relation to the original research question 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>10. How valuable is the research?</p> <ul style="list-style-type: none"> If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature? If they identify new areas where research is necessary If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be us. 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
Table 2 showing the checklists questions for making sense of systematic review	
<p>1. Did the review address a clearly focused question?</p> <ul style="list-style-type: none"> An issue can be „focused“ in terms of the population studied, the intervention given, the outcome considered 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>2. Did the authors look for the appropriate sort of papers?</p> <ul style="list-style-type: none"> The best sort of studies would address the review's question, have an appropriate study design (usually RCTs for papers evaluating interventions) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>3. Do you think the important, relevant studies were included?</p> <ul style="list-style-type: none"> Look for which bibliographic databases were used, follow up from reference lists, personal contact with experts, search for unpublished as well as published studies, search for non-English language studies 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>4. Did the review's authors do enough to assess the quality of the included studies?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<ul style="list-style-type: none"> The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glitters is not gold" Merchant of Venice – Act II Scene?) 	
<p>5. If the results of the review have been combined, was it reasonable to do so?</p> <ul style="list-style-type: none"> Consider whether the results were similar from study to study, the results of all the included studies are clearly displayed, the results of the different studies are similar, the reasons for any variations in results are discussed 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>6. What are the overall results of the reviews?</p> <ul style="list-style-type: none"> Consider if you are clear about the review's 'bottom line' results: what these are (numerically if appropriate), how were the results expressed (NNT, odds ratio etc.) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>7. How precise are the results?</p> <ul style="list-style-type: none"> Look at the confidence intervals, if given 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>8. Can the results be applied to the local population?</p> <ul style="list-style-type: none"> Consider whether the patients covered by the review could be sufficiently different to your population to cause concern, your local setting is likely to differ much from that of the review 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>9. Were all important outcomes considered?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>10. Are the benefits worth the harms and costs?</p> <ul style="list-style-type: none"> Even if this is not addressed by the review, what do you think? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

Table 3 showing the checklists questions for making sense of case control study	
<p>1 Did the study address a clearly focused issue?</p> <ul style="list-style-type: none"> A question can be focused in terms of the population studied, the risk factors studied, whether the study tried to detect a beneficial or harmful effect? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>2 Did the authors use an appropriate method to answer their question?</p> <ul style="list-style-type: none"> Consider is a case control study an appropriate way of answering the question under the circumstances? Is the outcome rare or harmful? Did it address the study question? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>3 Were the cases recruited in an acceptable way?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<ul style="list-style-type: none"> Are the cases defined precisely? Were the cases representatives of a defined population (geographically and/or temporally)? Was there an established reliable system for selecting all the cases? Are they incident or prevalent? Is there something special about the cases? Is the time frame of the study relevant to disease/exposure? Was there a sufficient number of cases selected? Was there a power calculation? 	
<p>4 Were the controls selected in an acceptable way?</p> <ul style="list-style-type: none"> We are looking for selection bias which might compromise the generalisability of the findings: Were the controls representative of a defined population (geographically and/or temporally)? Was there something special about the controls? Was the non-response high? Could non-respondents be different in any way? Are they matched, population based or randomly selected? Was there a sufficient number of controls selected? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>5. Was the exposure accurately measured to minimise bias?</p> <ul style="list-style-type: none"> We are looking for measurement, recall or classification bias: Was the exposure clearly defined and accurately measured? Did the authors use subjective or objective measurements? Do the measures truly reflect what they are supposed to measure? (have they been validated?) Were the measurement methods similar in the cases and controls? Did the study incorporate blinding where feasible? Is the temporal relation correct? (does the exposure of interest precede the outcome?) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>6 A. What confounding factors have the authors accounted for?</p> <ul style="list-style-type: none"> List the ones you think might be important, that the author missed (genetic, environmental and socio-economic) B. Have the authors taken account of the potential confounding factors in the design and/or in their analysis? Look for restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>7. What are the results of this study?</p> <ul style="list-style-type: none"> CONSIDER: What are the bottom line results? Is the analysis appropriate to the design? How strong is the association between exposure and outcome (look at the odds ratio)? Are the results adjusted for confounding and might confounding still explain the association? Has adjustment made a big difference to the OR? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>8 How precise are the results? How precise is the estimate of risk?</p> <ul style="list-style-type: none"> Consider: Size of the P-value, Size of the confidence intervals, Have the authors considered all the important variables? How was the effect of subjects refusing to participate evaluated? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<p>9. Do you believe the results?</p> <ul style="list-style-type: none"> CONSIDER: Big effect is hard to ignore! Can it be due to chance, bias or confounding? Are the design and methods of this study sufficiently flawed to make the results unreliable? Consider Bradford Hills criteria (e.g. time sequence, dose-response gradient, strength, biological plausibility) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>10. Can the results be applied to the local population?</p> <ul style="list-style-type: none"> Consider whether the subjects covered in the study could be sufficiently different from your population to cause concern, the local setting is likely to differ much from that of the study, can you quantify the local benefits and harms? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>11. Do the results of this study fit with other available evidence?</p> <ul style="list-style-type: none"> Consider all the available evidence from RCTs, systematic reviews, cohort studies and case-control studies as well for consistency. 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

Table 4 showing the checklists questions for making sense of a trial(RCT)	
<p>1. Did the trial address a clearly focused issue?</p> <ul style="list-style-type: none"> An issue can be 'focused' in terms of - the population studied - the intervention given - the comparator given - the outcomes considered 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>2. Was the assignment of patients to treatments randomized?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>3. Were all of the patients who entered the trial properly accounted for at its conclusion</p> <ul style="list-style-type: none"> Was follow up complete? - were patients analysed in the groups to which they were randomised? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>4 Were patients, health workers and study personnel 'blind' to treatment?</p> <ul style="list-style-type: none"> were the patients, were the health workers, were the study personnel 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>5 Were the groups similar at the start of the trial?</p> <ul style="list-style-type: none"> In terms of other factors that might affect the outcome such as age, sex, social class 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>6 Aside from the experimental intervention, were the groups treated equally?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>7 How large was the treatment effect?</p> <ul style="list-style-type: none"> What outcomes are measured? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>8 How precise was the estimate of the treatment effect?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<ul style="list-style-type: none"> • What are its confidence limits? 	
9 Can the results be applied to the local population? <ul style="list-style-type: none"> • Do you think that the patients covered by the trial are similar enough to your population? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
10 Were all clinically important outcomes considered? <ul style="list-style-type: none"> • If not, does this affect the decision? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
11 Are the benefits worth the harms and costs? <ul style="list-style-type: none"> • This is unlikely to be addressed by the trial. But what do you think? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

Table 5 showing checklists questions for making sense of cross sectional surveys	
1. Did the study address a clearly focused issue? <ul style="list-style-type: none"> • A question can be focused in terms of: the population(s) studied, the health measure(s) studied (e.g., risk factor, preventive behavior, outcome) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
2. Did the authors use an appropriate method to answer their question? <ul style="list-style-type: none"> • Consider: Is a descriptive/cross-sectional study an appropriate way of answering the question? Did it address the study question? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
3. Were the subjects recruited in an acceptable way? <ul style="list-style-type: none"> • We are looking for selection bias which might compromise the generalizability of the findings: Was the sample representative of a defined population? Was everybody included who should have been included? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
4. Were the measures accurately measured to reduce bias? <ul style="list-style-type: none"> • We are looking for measurement or classification bias: Did they use subjective or objective measurements? Do the measures truly reflect what you want them to (have they been validated)? 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
5. Were the data collected in a way that addressed the research issue? <ul style="list-style-type: none"> • Consider: if the setting for data collection was justified, if it is clear how data were collected (e.g., interview, questionnaire, chart review), if the researcher has justified the methods chosen if the researcher has made the methods explicit(e.g. for interview method, is there an indication of how interviews were conducted?) 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
6. Did the study have enough participants to minimize the play of chance?	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No

<ul style="list-style-type: none"> Consider: if the result is precise enough to make a decision, if there is a power calculation. This will estimate how many subjects are needed to produce a reliable estimate of the measure(s) of interest. 	
<p>7. How are the results presented and what is the main result?</p> <ul style="list-style-type: none"> Consider: if, for example, the results are presented as a proportion of people experiencing an outcome, such as risks, or as a measurement, such as mean or median differences, or as survival curves and hazard show large this size of result is and how meaningful it is how you would sum up the bottom-line result of the trial in one sentence 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>8. Was the data analysis sufficiently rigorous?</p> <ul style="list-style-type: none"> Consider: if there is an in-depth description of the analysis process, if sufficient data are presented to support the findings 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>9. Is there a clear statement of findings?</p> <ul style="list-style-type: none"> Consider: if the findings are explicit, if there is adequate discussion of the evidence both for and against the researchers' arguments, if the researcher have discussed the credibility of their findings, if the findings are discussed in relation to the original research questions 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>10. Can the results be applied to the local population?</p> <ul style="list-style-type: none"> Consider whether the subjects covered in the study could be sufficiently different from your population to cause concern. Your local setting is likely to differ much from that of the study 	<input type="checkbox"/> Yes <input type="checkbox"/> Can't tell <input type="checkbox"/> No
<p>11. How valuable is the research?</p> <ul style="list-style-type: none"> Consider: if the researcher discusses the contribution the study makes to existing knowledge (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature?), if the researchers have discussed whether or how the findings can be transferred to other populations 	write comments here

Appendix 2.B Summary table of the selected articles concerning the views of parents of children about GP OOHs and use of TAN

Table 2.2 Summary table of the selected articles concerning the views of parents of children about GP OOHs and use of TAN					
Author(s)/ Year of publication/ Country	Aim of the study	Research Design	Participants	Interventions	outcomes
Allen J, Dyas J, Jones M, Allen J, Dyas J, Jones M (2002) UK	To explore how parents and carers of young children feel their child displays common symptoms, what information they need to assist them in appropriate management and to determine if they would value an educational intervention on the common symptoms management.	Qualitative Focus group	29 parents took part in four focus group	Thematic analysis using the software package Nud*ist version 4 Common themes: how parents feel when their child is ill, what parents do, accessing advice from health care, barriers to accessing health care, what would help parent to manage common symptoms.	Many parents sought help from families and friends following negative experiences of seeking advice from health professionals and many were wary of the information presented in health information leaflets produced by pharmaceutical companies. Parents and carers would value an educational programme that would help them to manage common symptoms. They wanted to receive information through interactive group sessions, led by health visitors, and take home materials. Limitations: poor responses from parents with deprived areas, absence of male parents,
Andersen RM (1995) USA	to review the development of a model of health services' use	Theoretical		The Andersen model proposes that health service use is affected by both individual and	Enabling factors, which affect the individual's ability to obtain health care services; and need factors, which determine the individual's

				contextual factors and further subdivides these factors into three domains: predisposing factors, which influence the likelihood that an individual will seek health care services; need for health care services	level of. Predisposing factors such as caregiver demographic characteristics and enabling factors such as employment and availability of health insurance have been highlighted as particularly important in care giving literature, while need factors such as caregiver health have been identified as particularly important in the general literature on health care utilization
Bunn F, Byrne G, Kendall S (2009) Telephone consultation and triage: effects on health care use and patient satisfaction. <i>The Cochrane Library</i> (1), 1-36.	To assess the effects of telephone consultation on safety, service usage and patient satisfaction and to compare telephone consultation by different health care professionals.	Systematic review	Selection criteria Randomised controlled trials (RCTs), controlled studies, controlled before/after studies (CBAs) and interrupted time series (ITSs) of telephone consultation or triage in a general health care setting. Disease specific phone lines were excluded.	Two review authors independently screened studies for inclusion in the review, extracted data and assessed study quality. Data were collected on adverse events, service usage, cost and patient satisfaction. Due to heterogeneity we did not pool studies in a meta-analysis and instead present a narrative summary of the findings.	Nine studies met our inclusion criteria, five RCTs, one CCT and three ITSs. Six studies compared telephone consultation versus normal care; four by a doctor, one by a nurse and one by a clinic clerk. Three studies compared telephone consultation by different types of health care workers; two compared nurses with doctors and one compared health assistants with doctors or nurses. Three of five studies found a decrease in visits to GP's but two found a significant increase in return consultations. In general at least 50% of calls were handled by telephone advice alone. Seven studies looked at accident and emergency department visits, six showed no difference between the groups and one, of nurse

Appendix 2.B

					telephone consultation, found an increase in visits. Two studies reported deaths and found no difference between nurse telephone triage and normal care
Campbell J, Roland M, Richards S, Dickens A, Greco M Bower P (2009) UK	To investigate NHS service users' reports and evaluations of out-of-hours care in the light of UK national service quality requirements.	Quantitative: cross sectional survey	Recent users (1249) from three areas (Devon, Cornwall, Sheffield) of England, UK.	Postal questionnaire Five hundred and sixty-four (45.2%) patients were treated at a treatment centre, 441 (35.3%) received telephone advice from a health professional, 206 (16.5%) had home visits, and 38 patients (3.0%) had their problem dealt with by the call operator. Following one reminder to non-responders, 627/1249 individuals returned questionnaires (50.2% response rate), of whom 570 (45.6%) provided useable data.	UK national quality requirements were reported as being met by two-thirds of responders. Even when responders reported that they had received the most rapid response option for home visiting (waiting time of 'up to an hour'), only one-third of users reported this as 'excellent'. Adverse evaluations of care were consistently related to delays encountered in receiving care and (for two out of four measures) sex of patient. For 50% of users to evaluate their care as 'excellent', this would require calls to be answered within 30 seconds, call-back within 20 minutes, time spent waiting for home visits of significantly less than 1 hour, and treatment centre waiting times of less than 20 minutes. Delivering services that result in high levels of user satisfaction with care needs to take account of users' expectations as well as their experience of care.
Carr-Bains S, Nightingale AL and	To investigate the satisfaction with, and	Quantitative: Survey	A total of 425 and a total of 229 (54%)	Postal questionnaire Response rate 54%	The OOH home visiting services largely provide care for an older

Ballard KD (2010) UK	experiences of, patients receiving a GP out-of- hours (OOH) home visit from a GP cooperative.		were returned completed.	The data were entered into SPSS for Windows (version 16.0) for analysis limitation: is the relatively poor response rate that was achieved	population, most of whom consider that they are either too ill to travel or have limited mobility. The majority (43%) of home visits are made during the daytime at weekends, with just 25% of visits made during the night-time. If the home visit was not available, 67% of patients stated that they would have phoned for an ambulance or gone directly to hospital. The majority of patients (87%) were satisfied with the overall home visiting service that they received; however, 32% of patients were dissatisfied with the time it took for them to see a doctor or a nurse.
De Bont EG, Loonen N, Hendrix DA, Lepot JM, Dinant GJ, Cals JW. BMC FamPract (2015) (Netherlands)	to provide an in-depth overview of these factors, by exploring parental motivations, expectations and experiences with GP outof-hours consultations for childhood fever	Qualitative	A qualitative study using 20 semi-structured interviews among parents from different backgrounds presenting to GP out-of-hours care with a febrile child <12 years.	Data was analysed using constant comparison technique, coding and analysing took place simultaneously. Inductive analysis was used, by using open and finally axial coding schemes using NVivo software version9.0	four main categories emerging from the data; (1) cautiously seeking care, (2) discrepancy between rationality and emotion, (3) expecting reassurance from a professional and (4) a need for consistent, reliable information. Limitation: As only parents who visited the out-of-hours service were included, we are missing data from parents who stayed at home with their febrile child.
Dowding D, Mitchell N, Randell R, Foster	To explore how nurses use computerised clinical	qualitative A multiple case site study.	sample of nurse/patient	non-participant observation of	Computerised decision support systems were used in a variety of ways by nurses, including recording

Appendix 2.B

<p>R, Lattimer V and Thompson C (2009) UK</p>	<p>decision support systems in clinical practice and the factors that influence use.</p>	<p>Four case sites were purposively selected to provide variation in staff experience</p>	<p>consultations in each case site area was observed,</p>	<p>nurse/patient consultations (n = 115) and in-depth semi-structured interviews with nurses (n = 55) *Data were analysed using thematic content analysis.</p>	<p>information, monitoring patients' progress and confirming decisions that had already been made. Nurses' experience with the decision and the technology affected how they used a decision support system and whether or not they over-rode recommendations made by the system. The ability of nurses to adapt the technology also affected its use.</p> <p>Limitation inability to collect routine data, to be able to assess the potential impact of CDSS use on service delivery and patient care. In addition none of the cases sites had carried out a formal evaluation of the implementation of the CDSS at the time of our study, hence analysis of the impact of the CDSS on the service was not possible.</p>
<p>Edwards A and Pill R (1996) UK</p>	<p>This descriptive study aimed to assess patterns in help-seeking behaviour for common childhood symptoms.</p>	<p>Quantitative : Two groups of child development clinic attenders were studied by means of a questionnaire given to mothers for completion</p>	<p>Thirty-four mothers in the poorer Group 1 completed the questionnaire; these results were compared with those of 33 mothers from the more affluent Group 2</p>	<p>Variations in help-seeking behaviour between two economically contrasting groups were identified; this has implications for clinical understanding and service provision in primary care</p>	<p>Children in the affluent area had had fewer general practitioner consultations (mean 7.3) than those in the poorer area (mean 15.1; 95% CI for difference 4.3-11.4). They were less likely to present with an episode of diarrhoea or cold but were as likely as the poorer group to present with fever. Behaviour problems were reported less frequently (23% versus</p>

					47%), but if present, this was far more likely to result in help seeking than in the poorer group (86% versus 33%; $P < 0.05$).
Egbunike, Shaw, Bale, Elwyn, Edwards (2008) UK	to explore patient expectations and help-seeking behaviour, in order to understand their relationship with satisfaction and experience of out-of-hours care.	Qualitative study,	Purposive sample. Inclusion criteria for sampling; 221 invited, 30 participated.	30 semi-structured telephone interviews	Most (n = 25, 83%) respondents reported satisfaction with the overall service received but a few (n = 5, 17%) were dissatisfied. Patients generally had specific expectations of their consultation and there was a mismatch between patients' expectations of the service and what the service actually provides in some specific user groups. Unmet expectations resulted in subsequent, and in some cases, multiple consultations.
Enarson MC, Ali S, Vandermeer B, Wright RB, Klassen TP, Spiers JA (2012) Canada	to study the beliefs, expectations, and satisfaction of Canadian parents regarding fever and the treatment of their febrile children	Quantitative using a survey	Caregivers with febrile children were recruited from 2005 to 2007 at 3 urgent care centers and emergency departments in Edmonton, Canada: a paediatric emergency department (n = 376), an urban urgent care centre (n = 227), and a suburban urgent care clinic (n = 173)	Quantitative data were analysed by using SPSS software (version 15.0, 2006, SPSS Inc, Chicago, IL). Thematic coding was performed for all open-ended responses by 2 of the authors (M.C.E., S.A.) and consensus was obtained on all coding before analysis. The response rate was 376 (72.3%) of	High and rapidly rising temperature, as well as physical symptoms associated with fever, caused concern in most parents surveyed. Identifying the cause (80.6%) and seriousness (87.4%) of fever were the most common stressors identified. Caregivers expected to receive information about the child's illness and appropriate treatment. The parents most often wanted information about febrile seizures and the potential dangers of febrile illness. Only 16.7% of caregivers expected antibiotics. Nearly 92% of subjects were usually satisfied with medical care

Appendix 2.B

				<p>520 at the paediatric ED; 227 (63%) of 360 at the urban, lower socioeconomic, urgent care facility; and 173 (46.6%) of 388 at the suburban urgent care clinic.</p> <p>This resulted in an overall response rate of 61.0%</p>	
<p>Ernesater A, Holmstrom I, Engstrom M (2009) Sweden</p>	<p>To describe Telenurses' experiences of working with computerized decision support systems and how such systems could influence their work.</p>	<p>Qualitative</p>	<p>Eight Registered Nurses Five nurses working at the Primary Health Care Telephone Advisory Service</p>	<p>Semi-structured interviews in 2006. The data were analysed using qualitative content analysis.</p> <p>Limitation; on a small sample of telenurses.</p>	<p>Telenurses experienced their work with a decision support system as supporting, inhibiting and quality improving. Based on two of the categories – 'supporting' and 'inhibiting' – a theme was revealed: being strengthened, but simultaneously controlled and inhibited. This theme represents the individual level. The telenurses found that the decision support system simplified their work, complemented their knowledge, gave them security and enhanced their credibility. They also described experiencing the system as incomplete, sometimes in conflict with their own opinions and controlling.</p> <p>The third category referred to the organizational level: the decision support system ensured the quality of telenursing.</p>

Foster J, Jessopp L, Chakraborti S (2003) UK	To provide an objective assessment on callers' compliance with NHS Direct advice to attend an accident and emergency (A&E) department	Quantitative analysis	A representative three week period in May 2000 (6 to 26 May) was investigated. During this period there were 4493 calls to NHS Direct, of which, 8% (n=358) were recorded as being advised to attend A&E. This time period was chosen to provide a sample of 193 callers.	Data from the four A&E departments for the same three week period and two additional days were searched and matched to NHS Direct data by surname, date of birth, and post code. This process created three groups: (1) callers triaged to A&E who attended, (2) callers triaged to A&E who did not attend, (3) callers with different triage outcome who attended A&E.	The researchers found that just under two thirds of callers (64.2%:124 of 193) followed the advice given by NHS Direct and went to an A&E department with the same presenting complaint Assessing levels of compliance is difficult. These findings suggest that NHS Direct may have comparatively high levels of compliance compared with other similar services.
Foster J, Dale J and Jessopp L (2001) UK	To explore older people's experiences and perceptions of different models of general practice out-of-hours services.	Qualitative	Thirty people aged between 65 and 81 years old from community groups based in south east London.	Four focus groups were held, each with between five and 12 participants. Each focus group session lasted 90 minutes Data analysis undertaken using a grounded theory (Framework) approach.	Two related themes were identified. First, attitudes to health and healthcare professionals with reference to the use of health services prior to the establishment of the NHS, a stoical attitude towards health, and not wanting to make excessive demands on health services. Second, the experience of out-of-hours care and the perceived barriers to its use, including the use of the telephone and travelling at night. Participants preferred contact

Appendix 2.B

					with a familiar doctor and were distrustful of telephone advice, particularly from nurses.
Giesen P, Charante EM, Mokkink H, Bindels P, Bosch W, Grol R (2007) Netherlands	To explore the association between negative patient evaluation of nurse telephone consultations and characteristics of patients and GP cooperatives.	Quantitative: cross-sectional	Altogether, 5239 questionnaires were posted to patients who had received a telephone consultation, and 2583 patients responded (49.3%)	postal patient questionnaires sent to patients receiving a nurse telephone consultation from one of 26 GP cooperatives in the Netherlands. The total response was 49.3% (2583/5239).	Negative evaluations were most frequently encountered for the general information received on the GP cooperative (35%). When patients expected a centre consultation or home visit, but only received a nurse telephone consultation, they were more negative about the accessibility (OR 1.7, CI 1.4–2.1) and nurse telephone consultation (OR 4.2, CI 3.2–5.6). In the presence of a special supervising telephone doctor at the cooperative’s call centre, nurse telephone consultation was evaluated significantly less negative (OR 0.4, CI 0.2–0.8). Conclusion: Expectation of care mode was most strongly associated with a negative evaluation of nurse telephone consultation
Hart AM, Morgan KM, Casper GA (2013) USA	To explore rural parents’ behaviors and expectations regarding acute respiratory infections (ARIs) in children	Quantitative / Survey	A random digit dial telephone survey administered to 655 rural adults; 176 (76%) answered questions regarding care of their children	Increasing fluid intake was the action most parents reported “always” taking when caring for a child with an ARI. Parents take their child to see a provider when they “just know” their child will not get better or	Most reported reasons for not taking child to a provider were because the child got better on their own and they knew how to treat their child on their own. When seeing a provider for an ARI, parents considered it very important that the provider listen to the child’s symptoms, examine their child for the cause of their symptoms, and

				when the child has discolored phlegm or discharge.	provide symptom management advice. Parents expect providers to treat the ARI in one visit and allow for follow-up by phone or e-mail. Limitations: First, this survey was conducted during the summer, when individuals are least likely to experience ARIs. Second, respondents may have answered survey items in a manner they perceived as socially desirable or politically correct
Holmstrom I (2007) Sweden	to explore the use of decision aid Software programs for telenursing, from the perspective of the users.	Qualitative descriptive design	Twelve telenurses in Sweden were interviewed twice	In-depth interviews lasted 45–90 mins. *Thematic analysis *Limitation: The sample of telenurses was small.	Four themes were found: support for assessment but not for the decision; inconsistency between actual practice and the decision aid software; limited support for learning and information; and communication challenges and software programs. The software programs were a support for assessment, rather than decision-making, assuring the nurses that the relevant questions were asked. They were not fully adapted to current clinical practice, focusing mainly on acute conditions. Nurses worked to a large extent with self-care advice, often over-riding the recommendations made.
Hopton J, Hogg R and McKee I (1996) UK qualitative	To investigate patients' accounts of calling the doctor out of hours.	Qualitative analysis of semi-structured interviews with	23 people who had called the doctor	The transcripts were analysed inductively to generate the main themes.	Respondents described symptoms as the main reason for the call, they also described a range of other factors that led to the call, including

Appendix 2.B

		two groups of patients who called their doctors out of hours from one general practice	on their behalf or on behalf of another adult and 23 people who had called on behalf of a child between 6 pm and 8 am on a week day (omitting the weekend from 6 pm on Friday to 8 am on Monday).		their feelings, concerns about specific illnesses, their responsibility for others, and their previous attempts to manage the problem themselves. They also described past experiences with health services that were important in explaining the current out of hours call or explaining their general approach to using services.
Horrocks S and Salmon D (2005) UK	to explore and compare the experiences and views of these two groups following the transfer of responsibility for out of hours services from General Practitioners (GPs) to a Primary Care Trust (PCT)	Qualitative	Participants were purposively selected, being either a parent of a child or an adult of 60 years or over. Ten older people and nine parents of young children were interviewed (Table 1), of these five were by telephone;	semi-structured interviews with 19 informants living in a geographically large, semirural PCT area in England served by 15 GP practices.	Older people presented with more complex health problems than young children, and expressed more reluctance at calling the service. Both groups experienced similar access problems for using the primary care centre (PCC). Older people reported fewer difficulties obtaining a home visit, though experienced continuity problems when illness episodes lasted longer than one shift. Both groups questioned the ability of a doctor to diagnose accurately using only telephone assessment.
Houston and Pickering (2000) UK	To investigate how parents use the GP out-of-hours service	Qualitative study	A purposeful sample of 30 families was recruited. 29 parents from semi-rural location in the south –east of England	In-depth interview (n=29)	All parents said they found dealing with a sick child out-of-hours stressful and were concerned to make the right decision for their child. Furthermore, parents usually employed a reasonable strategy in attempting to manage the child's

					<p>illness. This study demonstrated that the decision to call the doctor was not taken lightly. Many parents had implemented useful strategies prior to calling the doctor. However, most parents were also aware of their limitations and feared doing the wrong thing. It would seem that on occasion this fear combined with factors such as a lack of social support and loss of parental confidence resulted in calling the doctor out of hours to seek 'peace of mind'. A rethink is needed among health professionals about the 'problem' of out-of-hour's calls.</p>
<p>Huibers L, Smits M, Renaud V, Giesen P, Wensing M (2011) Netherland</p>	<p>to assess the research evidence on safety of telephone triage in out-of-hours primary care</p>	<p>A systematic review . A systematic searches in PubMed and EMBASE databases up to March 2010</p>	<p>The year of publication varied from 1989 to 2009. Most of the studies were performed in the United States (n = 12) or the United Kingdom (n =8).</p>	<p>34 studies were included on the safety of telephone triage. Of these, 23 reported on safe triage, 11 on adverse events, and two on both.</p>	<p>Thirteen observational studies showed that on average triage was safe in 97% of all patients contacting out-of-hours care and in 89% of patients with high urgency. Ten studies that used high-risk simulated patients showed that on average 46% were safe. Adverse events described in the studies included mortality (n= 6 studies), hospitalisations (n= 5), attendance at emergency department (n= 1), and medical errors (n = 6). Research in real patients presenting at out-of-hours care showed that on average about 10% of the telephone triage contacts were unsafe. Studies</p>

Appendix 2.B

					that used simulated high-risk patients showed that on average about 50% were unsafe. The types of adverse events reported included mortality, unplanned hospitalisations, unplanned ED attendance, and medical errors. The researcher conclude that there is room for improvement of patient safety in telephone triage in out-of-hours care.
Hugenholtz M, Broer C and Daalen RV (2009) Netherlands	To gain insight into the health-seeking behaviour of parents who ask for immediate medical attention for their children.	Qualitative	A semi-structured interview was conducted with 27 parents who had consulted their own GP or an out-of-hours facility for primary care because they wanted urgent medical attention for their child who was sick. Forty-four telephone calls from parents seeking medical care for a child were analysed.	Qualitative analysis: the findings are limited to one region of the Netherlands and one out-of-hours cooperative.	Recognising symptoms in a child started with the observation of a deviation from the child's normal appearance or behaviour. Parents decided to contact medical services when they felt they lost control of the situation. Most parents consulted because they wanted to rule out or prevent serious disease, not because of the condition itself; not wanting to take a risk with their child was an important motivation. In an attempt to rule out serious disease at home, parents also attempted diagnostic procedures they had copied from professionals
Ingram j, Cabral C, Hay AD, Lucas PJ, Horwood J (2013) UK qualitative	to explore parents' views on support and information needs prior to	Qualitative	7 focus groups and 30 semi-structured interviews were held with 60 parents	Thematic analysis, using the constant comparison technique. Parents'	Parents from all socio-economic backgrounds sought information from a wide range of sources about RTIs

	consulting when children have RTIs with cough, and identify the triggers and barriers to consulting primary care		(with children aged 5 months - 17 years) from a range of socio-economic backgrounds.	experience, confidence and efficacy influence the likelihood of consulting primary care for their child's RTI. Parents would value consistent advice from a trusted source that addresses common concerns and supports home care and decision making about help seeking	in children in order to identify which of their child's symptoms should be of concern and trigger a visit to the doctor. The perception of threat to a child of RTI (with cough) was increased with more severe illness and by perceived susceptibility to illness of a particular child; whilst experience with other children increased parental efficacy to cope with childhood cough at home. Psychological models of health behaviour informed the understanding of cultural beliefs and attitudes that underpin health related behaviours.
Kai J (1996a) UK	To identify and explore parents' concerns when young children become acutely ill.	Qualitative semi-structured one to one and group interviews with parents of preschool children. Setting- Disadvantaged inner city community.	Subjects-95 parents of preschool children.	Data collection and analysis were guided by grounded theory methodology. Data gathered concerning information needs were analysed using manifest content analysis.	Fever, cough, and the possibility of meningitis were parents' primary concerns when their children became acutely ill. Parents' concerns reflected lay beliefs, their interpretation of medical knowledge, and their fears that their child might die or be permanently harmed. Parents worried about failing to recognise a serious problem. Concerns were expressed within the context of keenly felt pressure, emphasising parents' responsibility to protect their child from harm. They were grounded in two linked factors: parents' sense of personal control when faced with illness in

Appendix 2.B

					their child and the perceived threat posed by an illness.
Kai J (1996b) UK Qualitative	To identify and explore difficulties parents experience with acute illness in young children and the information they seek to help them.	Qualitative Semi-structured one to one and group interviews with parents of preschool children.	Disadvantaged inner city community. Subjects-95 parents of preschool children.	Data collection and analysis used grounded theory methodology. Data gathered concerning information needs were analysed using manifest content analysis.	Parents felt disempowered when dealing with acute illness in their children because of difficulties making sense of the illness. Central to parents' difficulties were their experiences of inadequate information sharing by their general practitioners and variations in their doctors' decisions and behaviour. Disparity between parents' beliefs and expectations about illness and treatment and professionals' behaviour further frustrated parents' attempts to understand illness. Parents expressed a need for a range of accessible and specific information to support them through their negotiation of children's illness.
Kallestrup P and Bro F (2003) (Denmark)	To describes why and when parents of acutely ill children seek the out-of-hours service, what actions they might have taken beforehand, and their expectations as to the outcome of the consultation	Qualitative: open ended questions	structured interviews with 146 parents,	A total of 46% of the parents did not consider their child's condition to be serious, but 12% thought that their child was very ill. Parents sought medical advice because of what they perceived to be a lack of control of the condition (49%), fear	Literature shows that parents consult a GP on the same day when they are worried and when they discover new, unknown, or disturbing symptoms in their children.3-5 Parents worry when they think that symptoms are threatening to their children, and especially when they feel they have lost control of the situation.

				<p>of a serious disease (17%), and for symptom relief (34%). All except three parents expected there to be an examination of their child, and 79% expected an explanation or a diagnosis. Only 13% spontaneously mentioned that they expected a prescription. It is clinical and communicative skills that prevail in promoting successful consultations in this setting</p>	
<p>Keatinge D (2006) Australia</p>	<p>To ascertain parents' preferences in sources of health information concerning their children's general health care needs, and caring for their children when they are sick.</p>	<p>Quantitative: Survey</p> <p>Part 2 of a larger study in which Part 1 evaluated parents' satisfaction with a paediatric telephone triage service. One hundred of the</p>	<p>350, 112 (32%) parents consented to participate in the study. Ultimately, 101 of these parents responded to Part 1 of the study and 100 to Part 2,</p>	<p>Data analysis for Part 2 of the study comprised categorical analysis for the identification of frequencies, as well as qualitative content analysis to structure data from the survey's open ended questions</p>	<p>Parents frequently selected more than one item on a list of health information sources provided. In a nonurgent situation when children were sick a total of 170 selections were made by parents, with 'telephone advice line' the source most frequently selected (58, 34%), followed by general practitioner (27, 15.8%). In an emergency situation the most frequently selected information source was</p>

Appendix 2.B

		tOI parents who were recruited for Part 1 of the study participated in Part 2			again 'telephone advice line' (74, n=129, 57.4%), followed by 'other' (31, n=129, 24.3%) often identified as relating to dialing '000' (Australia's emergency services number). Finally, when parents required information about the general health care needs of their child, 'other' (most frequently identified as books) was selected on 40 (n=185, 21.6%) occasions, followed by child health clinic (35, n= 185,18.9%).
Keatinge D and Rawlings K (2005) Australia	To evaluate the service's efficiency and effectiveness (Kids Kare Line telephone triage service in which experienced registered nurses respond to parents' requests for health-care advice for their child) .	Quantitative	One hundred and one parents * evaluation lasted for 12- week period	telephone-administered survey. Data analysis comprised categorical analysis for the identification of frequencies, as well as qualitative and Quantitative content analysis used to structure data emerging from the survey's open-ended questions.	Responses demonstrated that parents sought advice about a range of issues, of which the management of fever was the most frequent. All but five parents considered their call to have been answered promptly, all parents understood the advice provided to them and 96% of parents were satisfied with this advice. Fifty parents identified that they had not used another service or health practitioner for the same issue subsequent to their Kids Kare Line telephone call. Thirty-five (35.35%) parents were either advised to take their child to see a GP and did so, almost all parents said that they would worry or panic and then seek health care for their child. Of those parents

					who stated that they would telephone (20% of the total 53.68%) or take their child to the emergency department,
Keizer E, Smits M, Peters Y, Huibers L, Giesen P and Wensing M (2015) Netherlands	to determine whether contacts with out-of-hours primary care made by patients with nonurgent problems are the result of patients' beliefs or of deficiencies in the healthcaresystem.	Quantitative: Survey	A stratified sample of 2000 patients with non-urgent health problems in four GP cooperatives in the Netherlands.	Postal questionnaire The response rate was 32.3 % (N = 646). limitation of the study is the relatively low response rate.	Of the nonurgent contacts 30.4 % were judged as medically necessary (95%). Compared to patients with nonurgent but medically necessary contacts, patients with medically unnecessary contacts were younger and were more often frequent attenders. They had longer-existing problems, lower self-assessed urgency, and more often believed GP cooperatives are intended for all help requests. Worry was the most frequently mentioned motive for contacting a GP cooperative for patients with a medically unnecessary contact (45.3 %) and a perceived need to see a GP for patients with a medically necessary contact (44.2 %). Perceived availability (5.8 %) and accessibility (8.3 %) of a patient's own GP played a role for some patients Conclusion: Motives for contacting a GP cooperative are mostly patient-related, but also deficiencies in access to general practice may partly explain medically unnecessary use. Improvement of access to daytime primary care may

Appendix 2.B

					also decrease use of the GP cooperative.
Lattimer V, George S, Thompson F, Thomas E, Mullee M, Turnbull J, Smith H, Moore M, Bond H and Glasper A (1998) UK	To determine the safety and effectiveness of nurse telephone consultation in out of hours primary care by investigating adverse events and the management of calls.	Quantitative: Block randomised controlled trial over a year of 156 matched pairs of days and weekends in 26 blocks. One of each matched pair was randomised to receive the intervention.	One 55 member general practice cooperative (n=19) serving 97 000 registered patients in Wiltshire.	Data on workload were downloaded from the database of calls held by the cooperative and transferred into the statistical package for the social sciences (spss) for analysis.	14 492 calls were received during the specified times in the trial year (7308 in the control arm and 7184 in the intervention arm) concerning 10 134 patients (10.4% of the registered population). There were no substantial differences in the age and sex of patients in the intervention and control groups, though male patients were underrepresented overall. Reasons for calling the service were consistent with previous studies. Nurses managed 49.8% of calls during intervention periods without referral to a general practitioner. A 69% reduction in telephone advice from a general practitioner, together with a 38% reduction in patient attendance at primary care centres and a 23% reduction in home visits was observed during intervention periods. Nurse telephone consultation produced substantial changes in call management, reducing overall workload of general practitioners by 50% while allowing callers faster access to health information and advice. It was not associated with a increase in the number of adverse

					events. This model of out of hours primary care is safe and effective.
Lattimer V, Sassi F, George S, Moore M, Turnbull J, Mullee M, Smith H (2000) UK	To undertake an economic evaluation of nurse telephone consultation using decision support software in comparison with usual general practice care provided by a general practice cooperative.	Quantitative * General practice cooperative with 55 general practitioners serving 97 000 registered patients in Wiltshire, England.	All patients contacting the service, or about whom the service was contacted during the trial year (January 1997 to January 1998)	Nurse telephone consultation in out of hours primary care may reduce NHS costs in the long term by reducing demand for emergency admission to hospital. General practitioners currently bear most of the cost of nurse telephone consultation and benefit least from the savings associated with it.	The cost of providing nurse telephone consultation was £81 237 per annum. This, however, determined a £94 422 reduction of other costs for the NHS arising from reduced emergency admissions to hospital. Using point estimates for savings, the cost analysis, combined with the analysis of outcomes, showed a dominance situation for the intervention over general practice cooperative care alone. If a larger improvement in outcomes is assumed (upper 95% confidence limit) NHS savings increase to £123 824 per annum. Savings of only £3728 would, however, arise in a scenario where lower 95% confidence limits for outcome differences were observed. To break even, the intervention would have needed to save 138 emergency hospital admissions per year, around 90% of the effect achieved in the trial. Additional savings of £16 928 for general practice arose from reduced travel to visit patients at home and fewer surgery appointments within three days of a call.

Appendix 2.B

<p>Maguire S, Ranmal R, Komulainen S, Pearse S, Maconochie I, Lakhanpaul M, Davies F, Kai J, Stephenson T (2011) UK</p>	<p>To explore how parents navigate urgent and emergency care (U&EC) services when their child <5 years old has a feverish illness, their views of that experience and whether services are meeting their needs and triaging in line with national guidance.</p>	<p>Mixed methods</p>	<p>Overall, the 220 parents made a total of 570 contacts (median 3, range 1–13) across primary and secondary care services throughout the child’s illness which lasted an average (median) of 3 days (range 10 min to 2 weeks).</p>	<p>telephone questionnaire and . A subset participated in an in-depth interview (n=29) * Data were analysed using the Statistical Package for Social Sciences (SPSS version 17). * Content analysis and QSR NVivo software were used to analyse the transcriptions to identify any patterns and themes. 22</p>	<p>220 enrolled, making 570 contacts (median 3, range 1–13) with services during the child’s illness which lasted 3 days on average. Parents’ first preference for advice in hours was to see a general practitioner (GP) (67%; 93/138) and when unavailable, National Health Service Direct (46%; 38/82). 155 made more than one contact and 63% of the repeat contacts were initiated by a service provider. A range of factors influenced parents’ use of services. Parents who reported receiving ‘safety netting’ advice (81%) were less likely to re-present to U&EC services than those who did not recall receiving such advice (35% vs 52%, p=0.01). Parents identified a need for accurate, consistent, written advice regarding fever and antipyretics.</p>
<p>McKinley and Roberts (2001) UK</p>	<p>To describe the relationship between patient satisfaction with out of hours care provided by deputising and practice doctors in four urban areas in England and characteristics of the</p>	<p>Quantitative</p>	<p>People who requested out of hours care. (n= 1466)</p>	<p>were approached in their own homes and asked to complete the satisfaction questionnaire *response rate varied based on the area of use variable (67% and 53%)</p>	<p>Satisfaction data were available on 1402 patients. “Overall satisfaction” 95% was associated with age, doctor type, lack of access to a car at the time of the request, and health outcome. The relationships between satisfaction subscales and patient characteristics (age, sex, ethnicity, and access to a car at the time of the request), service characteristics</p>

	service provided and patients, the care given, and health outcomes.				(doctor type and delay between the request and visit), whether a prescription was given, and health outcome were variable. If an expected home visit was not received, “overall satisfaction” and satisfaction with “communication and management”, “doctor’s attitude”, and “initial contact person” were reduced. Mismatch between patient expectation and the service received is related to decreased satisfaction.
McKinley , Stevenson, Adams, and Manku-Scott (2002) UK	To determine the effect of patients’ expectation of care on satisfaction with care provided by out-of-hours services	Quantitative : survey	3457 patients from 5 practices, 2 GP OOHs and deputizing services in an England health authority during late 1997.	Questionnaire (returned 2263) Response rate 65.5%	81.7% Patients who received the care they hoped were more satisfied than those who did not, 62% received telephone advice Conclusion: meeting or failing patients’ expectation is a predictor for patients’ satisfaction.
Monaghan R, Clifford C and McDonald (2003) UK	to determine if the call length and outcomes of Registered Sick Children’s Nurses and Registered Nurses were different when triaging children who presented with ‘rash’	Quantitative analysis using Statistics Package for Social Sciences version 10	This study was carried out at NHS Direct, West Midlands, and involved analysis of 1281 calls taken by 22 nurses.	Information about the calls was extracted from routinely collected data generated by the computerized clinical decision support software. The data were used for secondary analysis	The mean call length of the Registered Sick Children’s Nurses was statistically significantly shorter than that of the Registered Nurses ($P < 0.001$). With the exception of referral for a routine appointment with a general medical practitioner, both Registered Sick Children’s Nurses and Registered Nurses

Appendix 2.B

	or 'fever' by telephone.				<p>referred to other triage outcomes groups with equal frequency</p> <p>999: the nurse contacted the emergency ambulance service and had an ambulance dispatched to the caller straight away.</p> <ul style="list-style-type: none"> • A & E: the caller was advised to take the child to an Accident and Emergency Department. • GP now: the nurse advised the caller to contact the GP services immediately for medical assessment. GP routine: the nurse advised the caller to make a non-urgent, but first available, appointment to see their GP. • Nurse advice: nurse gave the caller advice on how to look after the child at home.
Montalto M, Dunt DR, Day SE, Kelaher MA (2010) Australia	to estimate the appropriateness of recommended dispositions made in response to calls to after-hours services offering telephone triage, usually involving nurses.	Quantitative: prospective service audit.	Simulated patient calls (n=60) were monitored by a member of the research team to assess whether provider responses were in conformity with recommended dispositions.	The performance of an individual service was measured against the validated care scenarios. Since only cases with a clear consensus in triage outcome were selected	Services fell well short of a 100% appropriate response rate across all five trials. Services generally performed poorly for cases with high clinical implications such as presumed meningococcal meningitis and gastroenteritis with dehydration in a child. In general, problems of under triage were more common than over triage.

Morrison, Gilmour and Sullivan (1991) UK	To identify reasons why some children receive more out of hours visits than most.	A one year prospective study to identify the study group. This was followed by a case-control study involving a record search and personal interviews	40 children included	Structure home interview with 40 mothers.	Children seen more frequently than expected out of hours came from more socially disadvantaged families and their mothers were more likely to seek medical advice about minor childhood illness. Maternal education, to promote confidence in managing minor illness, may reduce their use of the out of hours service.
Munro J, Sampson F and Nicholl J (2005) UK	to assess the impact of NHS Direct on out-ofhours primary and emergency care, we sought data on service demand from all GP cooperatives, ambulance services and emergency departments in England, Wales and Scotland.introduction of NHS Direct.	Quantitative: Survey	data have been extracted from the three different software systems in use for the analysis	Postal questionnaire; survey response rates were 63% (188/297) for cooperatives, 100% (35/35) for ambulance services and 84% (200/239) for emergency departments	The introduction of NHS Direct was associated with an immediate 3% fall in demand coupled with a reversal of the trend so that demand began to fall by almost 8% per year. The impact of NHS Direct on cooperatives, which was achieved through the handling of approximately 5.1 million calls over the period studied, was the net result of its impact on two patient flows.
Neill S.J. (2000) UK		Qualitative / UK			

Appendix 2.B

<p>Neill SJ, Cowley S, Williams C (2013)UK Qualitative</p>	<p>Objectives: This paper presents findings from a British grounded theory study on family management of acute childhood illness at home, which provide an explanation for parent’s helping seeking behaviours.</p>	<p>Glaserian grounded theory methodology was used for the study.</p>	<p>The sampling sites for the study were in two towns in the East Midlands with population profiles close to the national average for the UK. Participants: Initial purposeful and later theoretical sampling resulted in a sample of fifteen families with children aged between 1 month and 8 years of age.</p>	<p>Four sets of data collection took place between 2001 and 2007. Unstructured family interviews were conducted with adult family members and a draw, write or tell technique was used to interview any children over 4 years of age. Theoretical sensitivity and constant comparative analysis were employed to achieve theoretical saturation around a core category.</p>	<p>Felt or enacted criticism teaches parents informal social rules which direct how they are expected to behave. Their desire to avoid such criticism of their moral status as ‘good’ parents creates significant hidden anxiety about when to seek medical help. This anxiety sometimes leads to late consultation with potentially serious consequences for their child’s health.</p>
<p>Neill SJ, Jones CHD, Lakhanpaul M, Roland DT and Thompson MJ(2014)UK qualitative</p>	<p>This study aimed to explore parents’ use of information resources during decision making in acute childhood illness at home.</p>	<p>This exploratory qualitative study used focus groups and interviews to collect data from parents of children under 5 years of age.</p>	<p>Twenty-seven parents were recruited in the East Midlands, UK, in South Asian and Gypsy/Travelling communities, a Children’s Centre and a private sector day nursery.</p>	<p>They used the principles of grounded theory as a systematic framework for data collection and thematic analysis rather than to develop a core category.</p>	<p>Parents’ pre-consultation information seeking was dominated by the internet, albeit with limited success. Parents liked easy to access, professionally validated and simple messages with access to more detailed information. Some parents always sought information through personal contact, whilst others did so when independent information seeking failed. When consulting a healthcare professional, parents liked to be given information to refer to later, although the information received varied. Importantly, neither hard copy nor</p>

					the internet was accessible for parents with low levels of literacy.
Neill SJ, Jones CHD, Lakhanpaul M, Roland DT and Thompson MJ(2016)UK qualitative	to examine how 27 parents of children under five years, use information to make decisions during acute childhood illness at home.	Qualitative: Data were collected in a Sure Start Children's Centre in an urban area of high deprivation, a centre serving the local Travelling Family community, a South Asian community centre and a private day nursery analysis,	We used focus groups and interviews to examine how 27 parents of children under five years, from a range of socioeconomic groups in the East Midlands of England, use information to make decisions during acute childhood illness at home.	Data were analysed using constant comparative. As data collection and analysis progressed, codes were refined, added and relationships between codes were explored, enabling theoretical code development, explaining relationships between themes.	This article report's findings elucidating factors that influence help-seeking behaviours. Parents reported that decision-making during acute childhood illness was influenced by a range of personal, social and health service factors. Principal among these was parents' concern to do the right thing for their child. Their ability to assess the severity of the illness was influenced by knowledge and experience of childhood illness. When parents were unable to access their general practitioner (GP), feared criticism from or had lost trust in their GP, some parents reported using services elsewhere such as Accident and
O'Cathain A, Knowles E, Turner J and Nicholl J (2014) UK	To explore users' acceptability of NHS 111.	Quantitative: Cross-sectional postal survey.	Four pilot sites in England.	Postal questionnaire *Response rate 41%	The response rate was 41% (1769/4265), with 49% offering written comments (872/1769). Sixty-five percent indicated the advice given had been very helpful and 28% quite helpful. The majority of respondents (86%) indicated that they fully complied with advice. Seventy-three percent was very satisfied and 19% quite satisfied with the service overall. Users were less satisfied with the relevance of questions asked, and the accuracy and appropriateness of advice

Appendix 2.B

					<p>given, than with other aspects of the service. Users who were auto routed to NHS 111 from services such as GP out-of-hours services were less satisfied than direct callers.</p> <p>User acceptability should be viewed in the context of findings from the wider evaluation, which identified that the NHS 111 pilot services did not improve access to urgent care and indeed increased the use of emergency ambulance services.</p>
<p>O'Cathain A, Munro J, Armstrong I, O'Donnell C and Heaney D (2007) UK</p>	<p>to explore the effect of nurses' attitudes to risk on the decisions they make when using CDSS.</p>	<p>Quantitative</p>	<p>All NHS 24 nurses were asked to complete a questionnaire about their background and attitudes to risk. the 542 nurse advisors employed in the service and sent a two sided questionnaire to each nurse using the internal postal system</p>	<p>Post questionnaire * After removing absent nurses, the response rate was 57% (265/464) overall</p>	<p>16% of calls were sent to self-care, varying three fold between the top and bottom deciles of nurses. Fifteen risk attitude variables were tested, including items on attitudes to risk in clinical decision-making. Attitudes to risk varied greatly between nurses, for example 27% (71/262) of nurses strongly agreed that an NHS 24 nurse "must not take any risks with physical illness" while 17% (45/262) disagreed. After case-mix adjustment, there was some evidence that nurses' attitudes to risk affected decisions but this was inconsistent and unconvincing.</p>
<p>O'Cathain A, Sampson FC, Munro JF, Thomas</p>	<p>To explore nurses' views of their roles and the</p>	<p>Qualitative</p>	<p>Forty-eight nurses were approached, 43 agreed to participate</p>	<p>semi-structured interviews *framework analysis</p>	<p>Nurses described both the software and themselves as essential to the clinical decision-making process. The software acted as safety net,</p>

<p>KJ and Nicholl JP (2004) UK</p>	<p>computerized decision support software in NHS Direct</p>		<p>and 24 nurses were interviewed as planned</p>	<p>using Winmax software</p> <p>*Limitation: the sample included typical NHS Direct nurses but may have been biased towards those considered by their managers to be 'good nurses, These findings may not be transferable to services where nurses have face-to-face contact with patients, such as those in walk-in centres or accident and emergency departments.</p>	<p>provider of consistency, and provider of script, and was relied upon more when nurses did not have clinical knowledge relevant to the call. The nurse handled problems not covered by the software, probed patients for the appropriate information to enter into the software, and interpreted software recommendations in the light of contextual information which the software was unable to use. Nurses described a dual process of decision-making, with the nurse as active decision maker looking for consensus with the software recommendation and ready to override recommendations made by the software if necessary. However, nurses' accounts of the software as a guide, prompt or support did not fully acknowledge the power of the software, which they are required to use, and the recommendation of which they are required to follow under some management policies. Over time, the influence of nurse and software merges as nurses internalize the software script as their own knowledge, and navigate the software to produce recommendations that they feel are most appropriate.</p>
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Appendix 2.B

<p>Payne, Shipman, and Dale (2001) UK</p>	<p>To describe the expectations of patients or third party callers who had contacted a GP out-of-hours co-operative and their satisfaction with telephone advice received.</p>	<p>Qualitative</p>	<p>97 callers identified 47 callers received telephone interviews.</p>	<p>Semi-structured interviews by telephone 7-10 days after contact.</p>	<p>23 callers (48.9%) had expected to be offered a home visit due to the nature of the condition, its perceived severity, problem in being able to attend the OOHs, risk of travel, or problems with communicating over the telephone. Satisfaction centred mostly on the doctor being able to provide reassurance and give adequate time to allay concerns. Dissatisfaction due to incorrect diagnosis without having been the patient, callers feeling of wasting doctor' time, being anxious about describing the symptoms over the telephone or understand and follow the advice received.</p>
<p>Phillips JL, Davidson PM, Newton PJ and DiGiacomo M (2008) Australia</p>	<p>To evaluate a local after-hours telephone support service in regional Australia.</p>	<p>Mixed methods : with data being captured from (1) key informant consultation of administrator and policy makers; (2) a review of case notes; (3) interviews of specialist palliative care providers, general</p>	<p>357 patients were Registered as part of the Mid North Coast Rural Palliative Care Program. Ten percent of patients or their caregivers accessed the After-Hours Telephone Support Service, representing 55 occasions of service.</p>	<p>Interviews were undertaken with all caregivers (n = 8) who could still be contacted at their last known address * thematic content analysis Limitations: First, the small sample size precludes drawing definite conclusions about the effectiveness of this intervention for larger</p>	<p>The most common reason for contacting the service was for reassurance surrounding medication usage, symptom management, and anxiety. This experience demonstrates proof of concept that acceptable palliative care advice can be provided by generalist nurses in a cost-efficient manner. The majority of calls (78%) occurred in the evening between 6 pm and midnight. Based on the number of calls and nursing and administrative costs, this afterhours telephone</p>

		practitioners, family members, and generalist nurses involved in service provision and access; (4) minutes and documentation of the rural palliative care project meetings; (5) review of quality assurance activities; and (6) audit of the call sheets.		populations. Second, the exploration of the perceptions of carers who had not used the service may have yielded some important and useful insights into the low call rates.	support service cost less than \$3,000 per year to operate within an existing service model. An audit of the call sheets revealed a high level of adherence with the call protocol sheets (98%).
Poole, Gamper, Porter, Egbunike, and Edward (2011) UK	to explore service users' recent experiences of out-of-hours services and to identify suggestions for improvement for services and practitioners involved.	Qualitative followed a secondary analysis of the a cross sectional survey data,	Three hundred and forty-one respondents provided free-text Comments. Service users were recruited from 13 sites. These comprised 9 of the 13 GP out-of-hours service providers in Wales (the remaining 4 declining to participate), NHS Direct and three A and E centres	analysis of the free-text comments *secondary analysis of the survey's qualitative data, following the principal quantitative analysis from the OPQ *thematic analysis	Central themes emerged from users' perspectives of the structure of out-of-hours services, process of care and outcomes for users. Themes included long waiting times, perceived quality of service user-practitioner communication, consideration for parents and children and accessibility of the service and medication. Suggestions for improving care were made across these themes, including triaging patients more effectively and efficiently, addressing specific aspects of practitioners' communication with patients,

Appendix 2.B

					<p>reconsidering the size of areas covered by services and number of professionals required for the population covered, extending GP and pharmacy opening times and medication delivery services.</p> <p>Limitation of the analysis of free-text comments in this context as it does not allow the opportunity to probe respondents for further detail.</p>
Pridham KF (1997) USA	To develop from the literature a rationale for a theoretical model of help seeking by mothers of young infants and to explore this model for two mothers.	Quantitative	Forty-six mothers of healthy, full-term infants completed a self-report form 3 months after the infant's birth. Responses of two mothers are used to illustrate the model	Working model includes: (a) the meaning to the mother of a care giving situation; (b) her goals in seeking help; (c) formal and informal sources of help; and (d) a mother's expectations about accessibility of help and her willingness to seek help	The two mothers expected help sources to be accessible and were willing to seek help for care giving from all types of help sources. Although both viewed themselves as having little need of help, both reported they would seek help for all the hypothetical problems. However, the women differed in what they wanted from help and from whom they would seek it and in variability in several working model components across care giving situations
Richards, Pound, Dickens, Greco, Campbell (2007) UK	To explore users' experiences of out-of-hours primary medical care.	A qualitative study employing 6 focus groups and telephone interviews. Setting: Three out-of-hours	27 users participated 5 of them by telephone interview,	Six focus groups and 5 telephone interviews. They lasted 50–80 min	Key areas of concern included the urgency with which cases are handled, and delays when waiting for a call back or home visit. Users felt that providers were reluctant to do home visits.

		primary medical care service providers in England. Thematic analysis used			The service was regarded as under-resourced and frequently misused. Many expressed anxiety about calling, feeling unsure about how appropriate their call was and many were uncertain about how the service operated. Themes from the focus group: deciding to call the service; getting through to the service; prioritising calls; waiting; location of consultation; quality of clinical care; access to medical history; collecting medicines.
Salisbury C (1997) UK	To assess patients' satisfaction with out of hours care by a general practice cooperative compared with that by a deputising service.	Quantitative	samples of (1555/2312) patients receiving telephone advice, a home visit, or attending a primary care centre after contacting either service in an eight week period. The sample size was adequate to detect a difference in satisfaction score of a quarter of a standard deviation between groups each containing at	Postal questionnaire *response rate 67%	Satisfaction with telephone advice or attendance at centre compared with home visit. Relation between satisfaction and patient's age, sex, ethnic group, car ownership, preference for consulting own doctor, and expectation of a visit. Five aspects or "scales" of satisfaction, which were labelled "explanation and advice," "doctor's manner," "contacting the service," "receptionist," and "overall satisfaction."

Appendix 2.B

			least 250 patients at a significance level of 0.05 and 80% power.		
Salisbury C, Trivella M, Bruster S (2000) UK	To determine the level of demand and supply of out of hours care from a nationally representative sample of general practice cooperatives.	Mixed methods Observational study based on routinely collected data on telephone calls, patient population data from general practices, and information about cooperatives from interviews with managers.	Eight cooperatives using Adastra software recorded the postcodes of callers. A further 12 cooperatives were randomly selected after stratification by region (southern England, the Midlands, northern England, and Scotland) and by size (more or fewer than 100 members).	program was written to extract anonymised details of calls received from 1 September 1997 to 31 August 1998, including the patient's age, sex, postcode, date and time of call, site and timing of consultation, and details of hospital admissions. Data were analysed in SPSS for Windows. A semistructured interview was conducted with the manager at each cooperative.	Almost half (408 407; 45.4%) of the out of hours calls to all cooperatives (outside bank holidays) were handled by telephone advice from a doctor or nurse; a quarter (212 550; 23.6%) by home visits; and 29.8% (267 663) by the patient attending a primary care centre. For 11 033 (1.2%) calls there were other outcomes, and data were missing for four calls. Patients living in deprived areas made 70% more calls than those in no deprived areas, but this had little effect on the overall variation in demand. 45.4% (408 407) of calls were handled by telephone advice, 23.6% (212 550) by a home visit, and 29.8% (267 663) at a centre. Cooperatives responded to 60% of calls within 30 minutes and to 83% within one hour. Hospital admission followed 5.5% (30 743/554 179) of out of hours calls (8 admissions per 1000 patients/year).
Shipman C, Longhurst S, Hollenbach F, and Dale J (1997) UK	To examine the differential use of GP out-of-hours and A&E	Mixed methods Quantitative analysis of audit	Audit includes 21 practice services and retrospective data from two A&E.	Retrospective analysis of 2564 contacts: Semi-structured telephone interviews	61.3 % (n=1855) contacted GP out-of-hours over a period of 3 weeks 38.7% (n=1171) contacts at A&E

	The focus is aspects of demand such as time of contact, age-related usage and the nature of presenting complaints	and qualitative interviews	82 telephone interviews with patients	Analysis by using SPSS and thematic analysis	33.6% of attendances were made between 7pm-10pm to the out-of-hours. Presenting complaint were Musculoskeletal problem Reasons for contact a GP out-of-hours : help and wanting advice on the seriousness of the problem 57% of patients attended the A&E by themselves , 35% spoken to their GP
Shipman C, Payne F, Hooper R, Dale J (2000) UK	To compare patients' satisfaction with GP co-operative, Gp practice-based arrangements	Quantitative study: survey.	In all, 1288 patients responded (54.4 % from GP co-operative), 302 (47.8%) from GP practice-based arrangements.	Postal questionnaire *Response rate 53.2%	Patients (n=1823), no significance differences in satisfaction, patients using GP practice based were more satisfied because of waiting time for telephone advice and waiting time for home visit, Satisfaction with GP co-operative due to doctors' manner, the process of making contact, explanation of advice received, those received advice reported increased information needs and help.
Shipman C, Payne F, Dale J, and Jessopp L (2001) UK	To understand patients views, expectations, and experiences of attending an out-of-hours primary care centre which was part of inner London GP co-operative	Qualitative study post survey satisfaction study	72 sampled patients who were OOHs attender, 47 sampled patients who were received telephone advice and 53 sampled patients who	In-depth semi-structured telephone interview 7-10 days after contacting the OOHs	Most attenders were satisfied with the service (90.0%) satisfaction rate, 83% of patients were able to get the help they needed, Key benefits: the speed of being seen and the opportunity to have face-to-face consultation. Difficulties in attending the OOHs: arranging transport, caring for other

Appendix 2.B

			received a home visit.		children, managing several children on the journey and traveling while ill. Barriers to attend OOHs: feeling too ill to travel, lack of transportation and caring of independent.
Smith, Lynch, O'Doherty and Bury (2001) Ireland	To record patients' experiences of out-of-hours care on a specific occasion and elicit their satisfaction with OOHs in general	Quantitative	Patients (n=240)	Postal questionnaire *Response rate 58%	The approximate call rate was 195 per 1,000 patients per year, 61% used the service of OOHs 28% received a home visit by GP, 3% received telephone advice. Rate of satisfaction 86% Telephone consultations are significantly low than other countries. The majority of patients waited two to four hours for a house call versus 75 minutes in the UK. Patients' previous experience of emergency care is the major determinant of current use
Smits M, Huibers L, Bos AO, and Giesen P (2012) Netherlands	to examine changes in patient satisfaction with GP cooperatives over time	Quantitative: Longitudinal observational study.	Eight GP cooperatives in the Netherlands. Stratified sample of 9600 patients	validated patient satisfaction questionnaire was distributed in 2003 – 2004 (T1) and 2007 – 2008 (T2). Response was 55% at T1 (n 2634) and 51% at T2 (n 2462).	Expectations met; satisfaction with triage nurses, GPs, and organization. Results. For most patients the care received at the GP cooperative met their expectations (T1: 86.1% and T2: 88.4%). Patients were satisfied with the triage nurses (overall grade T1: 7.73 and T2: 7.99), GPs (T1: 8.04 and T2: 8.25), and organization (overall grade T1: 7.60 and T2: 7.78). Satisfaction with triage nurses showed the largest increase over time. The quality and effectiveness of advice or treatment were given

					relatively low grades. Of all organizational aspects, the lowest grades were given for waiting times and information about the cooperative.
Snooks H, Peconi J, Munro J, Wai-Yee Cheung WY, Rance J and Williams A (2009) UK	To describe the actions of callers and assess the appropriateness of advice and healthcare contacts made following calls..	Quantitative	<p>1033/1897 (54.5%) callers returned their questionnaires at the first survey, with 957 sufficiently completed to be usable (Figure 1). The response rate at the second survey was slightly lower, at 50.3% (606/1204), with 569 usable</p> <p>774 patients from survey 1 and 457 patients from survey 2 who indicated that they called NHSDW in the previous eight weeks</p>	<p>2 Postal questionnaires were sent to consecutive callers to NHSDW in May 2002 and February 2004</p> <p>Questionnaire response rates in this study were 54.5% (survey 1) and 50.3% (survey 2).</p>	<p>Over 90% of respondents at each survey reported that the advice given about care and when to seek further help was quite or very appropriate, helpful and easy to follow.</p> <p>At each survey, just over half of all respondents reported going on to contact a further service, with a few making more than one subsequent contact. In both surveys, the services contacted most frequently following the call to NHSDW were GPs/Emergency doctors, dentists and A&E Departments.</p> <p>For those callers who were assessed as having taken unnecessary actions following their call, the majority of unnecessary actions concerned contacting a GP (survey 1: 71%, n = 94; survey 2: 68%, n = 32) or visiting the A&E Department (survey 1: 22%, n = 29; survey 2: 21%, n = 10). A few other callers went on to the dentist (survey 1: 5%, n = 6; survey 2: 9%, n = 4), or</p>

Appendix 2.B

<p>Strom, Marklund, Hildingh (2009) Sweden</p>	<p>To describe patients' perceptions of receiving advice via a medical care help line.</p>	<p>Qualitative, phenomenological approach</p>	<p>Purposive sample of 12 callers participated. Interviews were in callers home.</p>	<p>semi-structured interviews</p>	<p>The patients perceived the help line as a professional, reliable and easily accessible asset in everyday life, that self-care is promoted through personal advice and that the help line is a partner with whom one can discuss reflections and feelings. Compliance and acceptance are enhanced when patients feel involved in the decision-making process. The fact that the service is easily accessible is perceived as simple and time saving.</p>
<p>Thompson K, Parahoo K and Farrell B (2004) UK</p>	<p>To assess patient satisfaction at two out-of-hours cooperatives in Northern Ireland.</p>	<p>A quantitative</p>	<p>A sample size for the study was 4466. A total of 2707 questionnaires were returned, Thirty-eight questionnaires were unusable and thus results from 2669 questionnaires were analysed.</p>	<p>postal questionnaires *response rate 60.5%</p>	<p>Patients who initially requested to be seen at the out-of-hours centre were more likely to receive the contact they requested than those who requested telephone advice or a home visit. Only 41.8% of patients requesting a home visit actually received one. Patients were generally satisfied with the service provided and most satisfied with the 'doctor's manner' and the 'explanation and advice' received. Patients who received the contact they initially requested were more satisfied with all aspects of the service than other patients. The type of contact actually received had little effect on the satisfaction levels reported by patients who received the contact they initially requested.</p>

					With realistic expectations, patients are more likely to receive the medical contact they request and consequently will be more satisfied with the service provided. High satisfaction level is an important outcome measure of any out-of-hours service as it increases patient confidence and compliance and ultimately clinical outcome.
Turnbull J, Martin D, Lattimer V, Pope C and Culliford D (2008) UK	To examine the effects of distance and rurality on rates of out-of-hours service use.	Quantitative: Geographical analysis based on 34 229 patient calls. *Out-of-hours provider in Devon, England serving nearly 1 million patients *	routinely collected data on telephone calls in June (n = 14 482) and December (n = 19 747). * Data were analysed using SPSS (version 14) and Microsoft Office Excel® 2003. The Kruskal–Wallis method was used to examine differences between groups.	Straight-line distance measured patients' proximity to the primary care centre. At area level, rurality was measured by Office for National Statistics Rural and Urban Classification (2004) for output areas, and deprivation by The Index of Multiple Deprivation (2004).	Call rates decreased with increasing distance: 172 (95% confidence interval [CI] = 170 to 175) for the first (nearest) distance quintile, 162 (95% CI = 159 to 165) for the second and 159 (95% CI = 156 to 162) per thousand patients/year for the third quintile. Distance and deprivation predicted call rate. Rates were highest for urban areas and lowest for sparse villages and hamlets. The greatest urban/rural variation was in patients aged 0–4 years. Rates were higher in deprived areas, but the effect of deprivation The present study suggested that rurality may present particular difficulties or disincentives for certain population groups (for example, parents with children aged 0–4 years),

Appendix 2.B

<p>Turnbull J, Pope C, Martin D, Lattimer V (2010) UK</p>	<p>To examine if telephones overcome geographical barriers to accessing primary care out-of-hours by parents of young children.</p>	<p>Mixed methods : Quantitative and a qualitative study to build up a picture of patients' out-of-hours service experiences and decision-making.</p>	<p>quantitative analysis of 5697 calls about children aged 0–4 years; 30 hours of observation at primary care centres, eight interviews with parents and a review of 80 telephone call recordings.</p> <p>Purposive sample.</p>	<p>non-participant observation at the centres, semi-structured interviews with parents of children who had used the service and a retrospective review of a sample of out-of-hours telephone call recordings about children 0–4 years.</p>	<p>Call rates for children (0–4 years) decreased with increasing distance: the 20% of people who lived furthest from a primary care centre made fewer calls, 570 per 1000 patients/year (95% CI 558 to 582) than the 20% living closest, 652 (95% CI 644 to 661). Overall, call rates decreased with increasing rurality.</p> <p>Qualitative analysis suggested that this geographical variation was linked to familiarity with the system (notably previous contact with health services) and the availability of services, legitimacy of demand (particularly for children) and negotiation about mode of care.</p> <p>The overall call rate for children was 673 (95%) per 1000 patients/year.</p>
<p>Turnbull J, Pope C, Martin D and Lattimer V (2011) UK</p>	<p>To examine the effect of distance and rurality on the doctor's decision to manage the call by telephone or face-to-face.</p>	<p>Quantitative: Geographical analysis of routine data on calls to an out-of-hours cooperative</p>	<p>routinely logged calls to the cooperative in June and December 2003 (n = 34 229 calls)</p>	<p>Data were analysed using SPSS v14.</p> <p>The study focuses on geographical and service use data. We were not able to examine objective or subjective perceptions of the severity of the</p>	<p>For distances >6 km, the likelihood of receiving telephone advice only increased progressively with increasing distance from the PCC (Model 1). However, for those patients seen face-to-face, overall, there was increased likelihood of receiving a home visit (compared with PCC attendance) with increasing distance (Model 2).</p>

				presenting medical problem.	Patients experience differences in how their call to out-of-hours services is managed depending on where they live. Telephone access and consultation can be used to overcome geographical barriers but do not necessarily make access geographically equitable
Van Uden CJT, Ament JHAA, Voss GBWE, Wesseling G, Winkens RAG, Schayck OCPV and Crebolder HFJM (2006) Netherlands	To provide insight in costs of these two different models of out-of-hours care.	Quantitative Annual reports of two GP cooperatives in 2003 were analysed on costs and use of out-of-hours care. Costing is conducted from the perspective of the health services and costs to patients are not included.	Information on costs was gathered from the annual accounts of the year 2003 of the two GP cooperatives involved in this study.	Statistical analysis Costing is conducted from the perspective of the health services and costs to patients are not included.	Costs per capita of the GP cooperative in the integrated model were slightly higher than in the separate model (€ 11.47 and € 10.54 respectively). Differences were mainly caused by personnel and other costs, including transportation, interest, cleaning, computers and overhead. Despite a significant reduction in patients utilising ED care as a result of the introduction of the GP cooperative integrated within the ED, the costs of the ED remained the same. The study results show that the costs of primary care appear to be more dependent on the size of the population the cooperative covers than on the way the GP cooperative is organised
Wahlberg and Wredling (1999) Sweden	To understand the function of telephone nursing	Quantitative	Callers (n=203)	a mailed questionnaire about consultation and Satisfaction. * The response rate (71%)	The most common reason for calling was symptoms of infection. The predominant outcome was self-care advice (49%). In the mailed questionnaire 85% of respondents stated that they had followed the

Appendix 2.B

					advice and 95% were satisfied with their consultation.
Warren FC, Abel G, Lyratzopoulos G, Elliott MN, Richards S, Barry HE, Roland M, Campbell JL (2015) UK	To investigate the experience of users of out of hours General Practitioner services in England, UK.	Quantitative: Population based cross sectional postal questionnaire Survey.	86 providers with confirmed organisational type, 44 were not for profit organisations, with 21 providers in each of the NHS and commercial sectors. There	The questionnaire included four evaluative questions on out of hours provision. We analysed data collected by the English GPPS (from July to September 2012 and January to March 2013), which achieved an overall response rate of 35% (971 232 patients returned a questionnaire out of 2 750 000 patients invited to complete it)	Data from 902 170 individual service users were mapped through their registered practice to one of 86 providers of out of hours GP care with known organisation type. Commercial providers of out of hours GP care were associated with poorer reports of overall experience of care, with a mean difference of -3.13 (95% confidence interval -4.96 to -1.30) compared with not for profit providers. Asian service users reported lower scores for all three experience outcomes than white service users (mean difference for overall experience of care -3.62, -4.36 to -2.89), as did service users who were unable to take time away from work compared with service users who did not work (mean difference for overall experience of care -4.73, -5.29 to -4.17).
Wyke S, Hewison J and Russell IT (1990) UK	To investigate factors that influenced the decision to consult a doctor for a single episode of a single symptomatic condition	Quantitative : postal questionnaire. All these children had been reported in a postal questionnaire as	Parents of a stratified random sample of 234 (94%) children from 21 training practices in north east England were interviewed at home. Interviews covered	SPPS analysis : This study suggests that most parents take considerable care in deciding whether to consult a general practitioner for their child's respiratory illness.	The model showed that a doctor was likely to be consulted if the child had severe symptoms, or if the cough affected the child's behaviour. This suggests that most parents deciding whether to consult the doctor make careful decisions based on what they see as objective criteria. No social characteristic had

		<p>having had a cough between six and 10 weeks before the interview. cough and the child's previous respiratory history.</p>	<p>social characteristics of the family, the severity of the child's</p>	<p>They base these decisions on what they see as objective criteria, such as the presence of symptoms that they perceive as severe, and the effects of the cough upon the child.</p>	<p>a significant influence on the decision to consult the doctor over and above the influence of the characteristics and effect of the cough itself.</p>
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Appendix 3.A Letter to Stakeholders at Out-of-Hours Service



Letter to Stakeholders at Out-of-Hours Service

Abedallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Dear manager:

I am a doctoral student and I am currently undertaken a full time Doctorate in Clinical Practice at the University of Southampton in England. I am writing to seek a permission to conduct a research study over twelve month's period in your setting.

The title of the proposed study is: Exploring the views of parents of children less than two years of age following telephone advice from nurses working in call centres in Ireland. The overall aim of the study is to explore and understand the views of parents of children less than two years of age concerning the service of Telephone Advice Nursing (TAN) in Ireland. It is anticipated that parents of children less than two years of age and who avail the service of TAN and registered to your service will be participating in this study. An informed consent form will be obtained prior to the commencement of the study.

The researcher is hoping that the findings of this study will contribute to future decisions regarding modification or changes required in service of TAN and may inform a competency-based education program for nurses involved in telephone triage and consultation. It is also hoped that this study may contribute to future research for achieving the goals of the health strategy and improving patients' care. Please find an enclosed copy of the research proposal outlining the need for this study to be undertaken and describing how I will be conducting the study. I have also enclosed a letter of proof of enrolment with University of Southampton. If you require any further information please do not hesitate to contact me at the above address.

I trust this in care and look forward hearing from you

Yours sincerely

Abedallahousef

Appendix 3.B Letter to the Nurse Manager at Out-of-Hours Service

Letter to the Nurse Manager at Out-of-Hours Service



Abedallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Dear nurse manager:

I am a doctoral student and I am currently undertaken a full time Doctorate in Clinical Practice at the University of Southampton in England. I am writing to seek a permission to conduct a research study over twelve month's period in your setting.

The title of the proposed study is: Exploring the views of parents of children less than two years of age following telephone advice from nurses working in call centres in Ireland. The overall aim of the study is to explore and understand the views of parents of children less than two years of age concerning the service of Telephone Advice Nursing (TAN) in Ireland. It is anticipated that parents of children less than two years of age and who avail the service of TAN and registered to your service will be participating in this study. An informed consent form will be obtained prior to the commencement of the study.

The researcher is hoping that the findings of this study will contribute to future decisions regarding modification or changes required in service of TAN and may inform a competency-based education program for nurses involved in telephone triage and consultation. It is also hoped that this study may contribute to future research for achieving the goals of the health strategy and improving patients' care. Please find an enclosed copy of the research proposal outlining the need for this study to be undertaken and describing how I will be conducting the study. I have also enclosed a letter of proof of enrolment with University of Southampton. If you require any further information please do not hesitate to contact me at the above address.

I trust this in care and look forward hearing from you

Yours sincerely

Appendix 3.B

Abedallah yousef

Appendix 3.C Participant's Invitation Letter



Participant's Invitation Letter

Abedallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Dear participants,

I am a doctoral student and I am currently undertaken a full time Doctorate in Clinical Practice at the University of Southampton in England. I am writing to invite you to participate in my research study.

The title of the proposed study is: Exploring the views of parents of children less than two years of age following telephone advice from nurses working in call centres in Ireland. The overall aim of the study is to explore and understand the views of parents of children less than two years of age concerning the service of Telephone Advice Nursing (TAN) in Ireland. It is anticipated that parents of children less than two years of age and who avail the service of TAN and registered to your service will be participating in this study. An informed consent form will be obtained prior to the commencement of the study.

The researcher is hoping that the findings of this study will contribute to future decisions regarding modification or changes required in service of TAN and may inform a competency-based education program for nurses involved in telephone triage and consultation. It is also hoped that this study may contribute to future research for achieving the goals of the health strategy and improving patients' care. The study procedures involve no foreseeable risks of harm to you. The study includes: firstly, an interview either by telephone or face-to face interview that may last up to 45 minutes and will be audio-taped; secondly, a hand written note will be taken. You are free to ask any questions about the study or being a subject selected for the study. You are free to call me at any time for further information needed. My contact telephone number is 00353879390552.

I appreciate your participation in this study. Your participation is voluntary, and you are under no obligation to participate. You have the right to withdraw at any time. All information provided by confidentially maintained and stored by myself in a secure place and will not be shared with any other persons without your permission. Your identity will not be revealed while the study is being conducted or published

Yours sincerely

Abedallah Kasem

Appendix 3.D Participant Information Leaflet



Participant's Information Sheet

Abedallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ

E-mail: ayk1e12@soton.ac.uk

Study title: Exploring the views of parents less than two years of age following telephone advice from nurses working in a call centre in Ireland.

Principal investigator's name: Abedallah Kasem

Principal investigator's title: Doctoral student

Telephone number of principal investigator: 00353879390552

You are being invited to take part in a research study carried out at your CareDoc call centre service. Before you decide whether or not you wish to take part, you should read the information provided below carefully and, if you wish, discuss it with your family, friends or GP (doctor). Take time to ask questions – do not feel rushed or under pressure to make a quick decision.

You should clearly understand the risks and benefits of taking part in this study so that you can make a decision that is right for you. This process is known as 'Informed Consent'. You do not have to take part in this study. A decision not to take part will not affect the care you and your child receives.

If you decided not to take part you are still free to opt out at any time. You do not have to give us any reason. If you do opt out at any time again, this will not affect the care you and your child receives.

Why is this study being done?

This study will explore the views of parents of young children following telephone advice from nurses working in a call centre in Ireland. The overall aim of the study is to explore and understand the views of parents about their use of Telephone Advice Nursing (TAN). The findings of this study will contribute to future decisions regarding modification or

changes required to improve TAN and may inform an educational programme for nurses involved in telephone triage and consultation.

Who is organising and funding this study?

The study is being self-funded and is being carried out to fulfil the requirement of achieving a Doctorate in Clinical Practice from University of Southampton in England.

Why am I being asked to take part?

You have been asked to take part in this study because you are a parent of a young child and registered with CareDoc Call Centre service.

How will the study be carried out?

The study is taking place from 1st of June 2014 at the CareDoc Call Centre. A maximum number of 20 parents will be participating to attend face-to-face interviews or telephone interviews.

What will happen to me if I agree to take part?

If you decide to take part the researcher will contact you to arrange a convenient time to visit you in your home or speak to you on the telephone if you would prefer. The name of the researcher that will visit you is Abedallah Kasem. If you wish to have a family member or friend present in your home at the time of the interview or present at the interview, you are welcome to do so. The interview will take no more than one hour. At the interview, the researcher will ask you about your experience of contacting the CareDoc service. The interview will be very informal, like a conversation. You can ask questions during the interview and the researcher will be happy to tell you more about the study.

At the beginning of the interview, the researcher will ask for your written consent. You will be asked if you are willing for our discussion to be tape-recorded; this helps the researcher remember the conversation better. After the interview has finished, your participation in this study will have finished. No personal details, such as your name, address or any other details that would identify you will be written down. If you would like to receive a summary of our research findings at the end of the study, the researcher will ask CareDoc to send this to you.

What are the benefits?

The information you provide will contribute to future decisions regarding modification or changes required to improve TAN and may inform an educational programme for nurses involved in telephone triage and consultation.



What are the risks?

It is anticipated that no risk will result.

Is the study confidential?

All information which is collected about you during the course of the research will be kept strictly confidential. The researcher will not know any of your personal details unless you decide to take part in the study. If you decide to take part in the study, it is up to you how much you tell us about your experience. The researcher will not be asking to see medical records. Nurses and other health professionals who cared for you at Caredoc will not be informed about what you say as part of the research. No individual will be identified in any of the reports that are produced about the project. Feedback comments will be generalised for example 'Parent 1 commented that...'

Who can I contact if I have a concern or complaint about this study?

You can contact the doctoral supervisor for the project, Dr Joanne Turnbull (+44 2380 597940; jct@soton.ac.uk) if you have any concerns about this study or a complaint. If you would prefer to contact someone independent from the research study you can contact: Research Governance Office, Corporate Services, Building 37, Level 4, Room 4079, University of Southampton, Highfield, Southampton, SO17 1BJ. Tel: +44 23 8059 5058; email rgoinfo@soton.ac.uk

Where can I get further information?

I would appreciate your participation in this study. If you have any further questions about the study or if you want to opt out of the study, you can rest assured it won't affect the quality of treatment you get in the future. If you need any further information now or at any time in the future, please contact:

Name: Abedallah kasem
Address: Faculty of Health sciences,
 University of Southampton,
 University Road,
 Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk
Phone No: 00353879390552

Appendix 3.E Participant's Consent Form



Consent Form

Abedallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Title of study: Exploring the views of parents of children less than two years of age following telephone advice from nurses working in call centres in Ireland.

Researcher: Abedallah Kasem (e-mail: ayk1e12@soton.ac.uk)

Please initial the boxes

I confirm to that I have read and understand the patient information leaflet dated 1st June 2014. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily.	<input type="checkbox"/>
I understand that my participation in this study is entirely voluntary and that I may withdraw at any time, without giving reason, and without this decision affecting my future treatment or medical care.	<input type="checkbox"/>
I agree that the interview will be tape-recorded.	<input type="checkbox"/>
I understand that anonymous quotations from this interview may be used in reports, papers and presentations arising from this study.	<input type="checkbox"/>
I agree to take part in the above study.	<input type="checkbox"/>

Name of Patient

Date

Signature

Name of Person
taking consent

Date

Signature

Appendix 3.E

We will send you a photocopy of this form to keep. 1 copy for participant, 1 for researcher

Consent Form for Participant_ P1_01062014. Faculty of Health Sciences, University of Southampton, Highfield Campus, Southampton SO17 1BJ United Kingdom.

Appendix 3.F Interview Topic Guide



Interview Topic Guide

Abedallah Kasem,

Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Title of the study: exploring the views of parents less than two years of age following telephone advice from nurses working in a call centre in Ireland.

Questions

Participants will be then asked to answer freely the following questions that are thought will cover the research idea about TAN service:

1. Tell me what it's like to obtain an advice from a nurse working at a call centre regarding your sick child?
2. Describe the reasons that made you contacting the service of TAN?
3. Describe your satisfaction and compliance with the advice been given?
4. Describe your intention of obtaining if the service does not exist?

Each participant will be ensured that their confidentiality and anonymity will be upheld and whatever they say will not be used against them. The researcher will use neutral probes and prompts and encourage nods and expressions during the interview. For example, "can you tell more about that", "Oh", "Really". The researcher will remain neutral and will refrain from agreeing or disagreeing with what participants say. A checklist will be used during the interview to ensure that information is not forgotten.

Appendix 3.G A table showing reach of data saturation

This table shows the repetition of the different codes identified and marked with the symbol (*) among the 9 Semi-structured interviews. It also shows that there are no more new codes identified from the last few interviews which may indicate the point of reaching data saturation									
Codes	Interviews								
	P1	P2	P3	P4	P5	P6	P7	P8	P9
<p><i>Code 1: Accessibility</i></p> <p>Sub-codes</p> <ul style="list-style-type: none"> • Geographical accessibility • Functional accessibility • Financial accessibility • Telephone accessibility 	*	*	*	*	*	*	*	*	*
<p><i>Code 2: Familiarity with the service and being a previous users</i></p>	*	*	*	*	*	*	*	*	*
<p><i>Code 3: unknowing: Uncertainty about treating child's symptoms</i></p>	*	*		*	*	*	*	*	
<p><i>Code 4: self-acting</i></p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Self-administering of medication • Self-monitoring 	*	*	*	*	*	*	*	*	*
<p><i>Code 5: Emotionally disturbed</i></p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Anxious • Worried • Frightened • Panicked • Shocked 	*	*	*	*	*	*	*	*	*

<p><i>Code 6: Parents' perception of reasons for call.</i></p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Reassurance. • Guidance. • Advice. • Seeking a second opinion for reassurance. 	*	*	*	*	*	*	*	*	*
<p><i>Code 7: Description of the process of TAN service.</i></p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Call taker role/ Initial details recorded by receptionist. • Nurse call back. 	*	*	*	*	*	*	*	*	*
<p><i>Code 8: Parents' preference of Source of advice.</i></p> <p>Sub-code:</p> <ul style="list-style-type: none"> • <i>Speaking to a nurse in TAN.</i> • <i>Speaking to a friend.</i> • <i>Speaking to mother.</i> • <i>Searching the internet.</i> • <i>Speaking a nurse in</i> 	*	*	*	*	*	*	*	*	*

<p><i>Emergency Department.</i></p> <ul style="list-style-type: none"> • <i>Making their own decision.</i> 	*	*	*		*			*	
<p><i>Code 9: Nurse attitude</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> • <i>Reassuring</i> • <i>Caring and being on the side of caution</i> • <i>Being good</i> • <i>Helpful</i> • <i>Understanding the problem</i> • <i>Very clear in giving instruction</i> • <i>Very patient</i> • <i>Sympathetic</i> • <i>Supportive</i> • <i>Have listening ears.</i> • <i>Offer a practical advice</i> • <i>Trusted expertise</i> • <i>Very informed</i> • <i>Very practical</i> 	*	*	*		*		*	*	*
<p><i>Code 10: Parental choice for advice if TAN service doesn't exist.</i></p> <p><i>Sub-codes:</i></p>	*	*	*	*	*	*	*	*	*

Appendix 3.G

<i>ED visit</i> <i>GP visit</i>	*	*	*	*	*	*	*	*	*
<i>Code 11:</i> <i>practical constraints</i> <i>of face-to-face</i> <i>consultation</i> <i>Sub-codes:</i> <ul style="list-style-type: none"> • <i>Leaving other family member at home alone.</i> • <i>Time to travel</i> • <i>Perception of receptionist as a gatekeeper</i> 	*	*	*	*	*	*	*	*	*
<i>Code 12: Young Children cannot speak for themselves.</i>	*	*	*	*	*	*	*	*	*
<i>Code 13:</i> <i>parent's expected outcome of the call</i> <i>Sub-codes:</i> <ul style="list-style-type: none"> • <i>Home-care advice/ Guidance</i> • <i>OOHs Visit by an appointment</i> • <i>General Practitioner (GP) visit</i> • <i>Emergency Department visit</i> 	*	*	*	*	*	*	*	*	*
<i>Code 14:</i> <i>parents' experiences about nurse advice</i> <i>Sub-codes:</i> <ul style="list-style-type: none"> • <i>Practical advice for self-care</i> • <i>Trusting the advice</i> • <i>Timely advice</i> 	*	*	*	*	*	*	*	*	*

<ul style="list-style-type: none"> • <i>Advice based on guidelines</i> • <i>Sound advice</i> 	*	*	*	*		*			*
<p><i>Code 15:</i></p> <p><i>Parent's decision making rather than TAN advice</i></p> <p><i>Sub-codes</i></p> <ul style="list-style-type: none"> • <i>Parents preference to be seen</i> • <i>Perception of urgency</i> 	*	*			*			*	*
<p><i>Code 16:</i></p> <p><i>Parents beliefs about Emergency Departments as an alternative</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> • <i>Perception of long waiting time</i> • <i>perception of very busy</i> • <i>perception of understaffed</i> • <i>perception of availability of staff</i> 	*	*	*	*	*	*		*	*
<p><i>Code 17: Adherence to Nurse advice</i></p>	*	*	*	*	*		*		*
<p><i>Code 18:</i></p> <p><i>parents preference/wants</i></p> <p><i>Sub-codes:</i></p>		*			*	*	*		*

Appendix 3.H Letter to Ethical Committee at Out-of-Hours Service



Letter to Ethical Committee at Out-of-Hours Service

Abdallah Kasem,
Faculty of Health Sciences,
University of Southampton,
University Road,
Southampton SO17 1BJ.

E-mail: ayk1e12@soton.ac.uk

Dear Sir/Madam:

I am a doctoral student and I am currently undertaken a full time Doctorate in Clinical Practice at the University of Southampton in England. I am writing to seek a permission to conduct a research study over twelve month's period in your setting.

The title of the proposed study is: Exploring the views of parents of children less than two years of age following telephone advice from nurses working in call centres in Ireland. The overall aim of the study is to explore and understand the views of parents of children less than two years of age concerning the service of Telephone Advice Nursing (TAN) in Ireland. It is anticipated that parents of children less than two years of age and who avail the service of TAN and registered to your service will be participating in this study. An informed consent form will be obtained prior to the commencement of the study.

The researcher is hoping that the findings of this study will contribute to future decisions regarding modification or changes required in service of TAN and may inform a competency-based education program for nurses involved in telephone triage and consultation. It is also hoped that this study may contribute to future research for achieving the goals of the health strategy and improving patients' care. Please find an enclosed copy of the research proposal outlining the need for this study to be undertaken and describing how I will be conducting the study. I have also enclosed a letter of proof of enrolment with University of Southampton. If you require any further information please do not hesitate to contact me at the above address.

I trust this in care and look forward hearing from you

Yours sincerely

Abdallah yousef

Appendix 3.I An example of data extracts of P1-P9’s transcripts, emerging codes/ ideas, and the formal codes /interpretations identified from the analysis

Interview	Data extracts	Emerging codes/ ideas	Formal codes /interpretations
P1 AM	<p>R0: the first thing to ask, have you a child who is under two? P1 AM: <u>she is two next March</u> R0: very good. P1 AM I have three and two year old. R0: do you work your self P1 AM: <u>I do work in administration in the HSE</u> R0: is it far away to travel from OOHs service do you think? P1 AM: <u>from my house to OOHs</u> R0: yes P1 AM: <u>to travel from house to OOHs is about twenty to half an hour drive</u> R0: it’s a little bit far away from OOHs, isn’t it? P1 AM: it is, yeah. R0: can you tell me your story or your account of what made you to call or contact OOHs about your child? P1 AM: <u>I contacted OOHs numerous times about my child, I viewed it as a great service, I used it as to speak to a nurse and I have not got necessary to go a doctor department, and it did work very well for me.</u> R0: what made you to say it did work well?</p>	<p><u>Age</u></p> <p><u>Working status</u></p> <p><u>Location</u></p> <p><u>Travel time</u></p> <p><u>View / Use of the service</u></p> <p><u>Valuing the service</u> <u>Great service</u> <u>Speaking to aNurse</u></p>	<p><u>Accessibility</u></p> <ul style="list-style-type: none"> <u>Geographical accessibility</u> <u>Telephone accessibility</u> <p><u>Familiarity with the service and being a previous users</u></p> <p><u>Parents’ perception of child’s illness /unknowing/</u></p>

<p>P1 AM: I had E (child) woke up at night with a high temperature during the day. I could not or I find it difficult to keep it down. I would wait here and give nurofen every six hours. So I gave nurofen whatever during the night, found her really hot, her feet were freezing cold and heart rate is racing so I got a fright. So I rang OOHs and reassured me to say that she will be fine until the morning and I took her to the doctor at 0930 in the morning. Was not very sad it was three clocks in the morning.</p> <p>R0: three clock in the morning?</p> <p>P1 AM: Yeah three clock when I rang roughly</p> <p>R0: Was it easy to you to get access to the service do you think?</p> <p>P1 AM yeah, I rang and I spoke to a secretary, I was still through to someone and she got a nurse to ring me back within few minutes. She reassured me that E was fine once her temperature did not go any higher, all I was worried that her heart rate was racing and her feet freezing cold the rest was so hot.</p> <p>R0: how long would you say it take to ring you back?</p> <p>P1AM: she rang me backward in 10 minutes</p> <p>R0: Would you think 10 minutes is long?</p> <p>P1 AM: o, like, yeah, I would think sometimes it is long, my worry of febrile convulsion; we did not know by the time to get the message from OOHs what to look on. Sometimes it takes long and I wait for half an hour for a phone call.</p> <p>R0: was your child coughing is well</p> <p>P1 AM: coughing, I can't remember was she coughing at the time!</p> <p>R0: As an initial response when you saw your child has a temperature, what did you think the problem is?</p> <p>P1 AM: I was too worried when I give nurofen, I thought it is a viral infection, she didn't, she wasn't, and it was started late in the evening, and I just gave nurofen and calpol. I cannot remember speak to somebody and said keep given nurofen every six hours and Calpol every 4 hours during the night, it was that her hands and feet are cold and heart rate was racing. Once I kept the temp 39 degree centigrade.</p> <p>R0: that is still very high isn't it?</p>	<p>Doctor</p> <p>Very well</p> <p>Temperature</p> <p>Medication</p> <p>Signs/symptoms</p> <p>Reassurance</p> <p>Doctor visit</p> <p>Access to the service</p> <p>Secretary or receptionist</p> <p>Reassurance</p> <p>Signs/symptoms</p> <p>Time for call back</p> <p>Parent's Worry</p> <p>Reason for call</p> <p>Viral infection</p>	<p><i>Uncertainty about treating child's symptom</i></p> <p><i>self-acting</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> • <i>Self-administering of medication</i> • <i>Self-monitoring</i> <p><i>Parents' perception of child's illness / Emotionally disturbed</i></p> <p><i>Frightened</i></p> <p><i>Parents' perception of child's illness /parents' perception of reasons for call</i></p> <ul style="list-style-type: none"> • <i>Reassurance</i> • <i>Guidance</i> • <i>Advice</i> <p><i>Description of the process of help-seeking from GP OOHs service</i></p> <p><i>Sub-codes:</i></p> <p><i>Length of call back</i></p> <p><i>Parents' perception of child's illness /unknowing/ Emotionally disturbed</i></p>
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Appendix 3.I

<p>P1 AM: yeah, it is very high. R0: did you think that you to talk someone else before speaking to OOHs? Like your friend, your mum? P1 AM: yeah, I could, yeah I could rang a friend, no I would ring OOHs quicker! After 6 clock, I would ring OOHs quicker. Just even afraid, I would ring OOHs as I would ask them about medication. I rang them one time about giving my child antihistamine. I ask them can I give calpol and antihistamine.</p> <p>R0: symptoms wise, did they last for long after getting advice from them? P1 AM: I took E to my doctor the next day, the first thing to my own GP. R0: did they advise to do that or you just went yourself? P1 AM: No, she advised me that cold feet are fine and heart racing because of the temperature. And she said to me give nurofen and if it does not go down and still worried about her there is no problem to bring her in to the OOHs.</p> <p>R0: right, it was three clock in the morning and what time did you visit the OOHs? P1 AM: I rang them at 0900am and they took me more less, I would say 0930 am R0: that is six hours after three clocks, did you sleep? P1 AM: no, I slept with her, no I did not. I stayed with her, no I did not at all. R0: What was your initial response when somebody answers your call? You were saying it was a receptionist would you accept a receptionist to speak to you straight away?</p> <p>P1 AM: No! Really I would, yeah, like! No I would expect they have medical nurse, oh!, no really would I expect a nurse to answer the phone is this what you are saying? R0: yes, would you prefer a nurse to speak to you? P1 AM: oh! Yes, absolutely because I kept waiting and waiting, even you know. Say I don't know how long it could be 10 or 20 minutes, but it was 20 minutes at three in the morning?</p>	<p>Medication Source of information Access to service Friend Medication GP Nurse advice Reason for call Advice Appointment Doctor visit Lack of sleep Expectation/nurse to call back Call description Happy Waiting time for call back</p>	<p>Source of help-seeking Parents' preference of Source of advice. Sub-code: <ul style="list-style-type: none"> Speaking to a nurse in TAN Speaking to a friend Telephone accessibility Parents' Source of help parent's expected outcome of the call Sub-codes: <ul style="list-style-type: none"> Home-care advice/ Guidance OOHs Visit by an appointment Parent's expectation/ speaking to a nurse Description of the process of help-seeking from GP OOHs service Sub-codes: Length of call back</p>
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<p>R0: yes, yes, obviously you rang them at three clocks in the morning, it took you 10 mints to wait P1 AM: yeah I get through receptionist straight away and then I was waiting and it took 10 minuets for a nurse to ring me back. R0: Can you remember who called you back; was it a nurse or a doctor? P1 AM: yeah, it was a nurse who called back, definitely, R0: How long the advice go for do you think? P1 AM: it was a number of minuets, like! It was not. I mean for fairness she was lovely, she reassured me that once E concern is the cold feet and hand, you I just gave her nurofen, I was so worried that her heart racing and the cold feet. The rest of her body was hot, I did not know wither should I cover her, I didn't know what to do with her. She advised me to leave her off cover and not to worry about the cold feet.</p> <p>R0: how long do you think that call last for? P1 AM: I would say the call last for about 4-5 minutes. R0: do you think that 5 minutes is enough to be reassured? P1 AM: well, it did, she 'am' she reassured me that I could ring her straight back if I want to. R0: were you happy with advice? P1 AM: yes, I was happy with the advice. R0: if you think that there was no OOHs service in your area and you did not know the phone number of the OOHs, what would you have done? P1 AM: right, if there was no OOHs service, could put her in the car and went to casualty. R0: how far is casualty from you? P1 AM: in Kilkenny, you will be looking at 30-35 minutes. R0: this can be serous! Isn't it? P1 AM: it is sad, that is in fact we have no frost and no bad road, you know, during the winter time it would take longer, we are live in the country side with</p>	<p>access</p> <p>Valuing the nurse</p> <p>Lack of information/ nurse advice /call outcome</p> <p>Length of call</p> <p>Happy with service</p> <p>Options /No service Casualty</p> <p>Travel time Location of ED</p> <p>Worry Signs/ symptoms</p>	<p><i>Telephone accessibility</i></p> <p><i>Nurse attitude</i></p> <ul style="list-style-type: none"> lovely reassuring. Offer a practical advice <p><i>Description of the process of help-seeking from GP OOHs service</i></p> <p><i>Sub-codes:</i></p> <p><i>Length of call back</i></p> <p><i>Nurse attitude</i></p> <p><i>Reassuring.</i></p> <p><i>Reasons for satisfaction</i></p> <p><i>parental choice for advice if TAN service doesn't exist.</i></p> <p><i>ED visit</i></p> <p><i>GP visit</i></p> <p><i>practical constraints of face-to-face consultation</i></p> <p><i>Time to travel</i></p>
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Appendix 3.I

<p>bad roads and if it is icy you will be looking at longer time. And I had worry about febrile convulsion, and we have to call for an ambulance in that way.</p> <p>R0: has your child has a febrile convulsion before?</p> <p>P1 AM: No, it was my first, I did not know anything about febrile convulsion. If I did not ring OOHs I would bring my child straight in to casualty.</p> <p>R0: would you phone casualty rather than to bring your child in?</p> <p>P1 AM: No, why would I phone casualty while the nurse and OOHs are there. And I would find that nurses any time that I phone OOHs they are on the side of caution make you go in to casualty if they thought there is any reason.</p> <p>R0: when the nurse call you back, can you remember what she say to you at the start of the call?</p> <p>P1 AM: she asked my details, and child's details about the child, is the child on any medication. She did ask me, she did ask me if the child has cough, breathing problems if I remember from birthdate, and she did ask me about cough and breathing problem.</p> <p>R0: Did she offer you any recommendation do you think?</p> <p>P1 AM: I was not asking for recommendation and I was asking for guidance and reassurance what should I do and should I bring her to a doctor in the morning, I have two young kids and a husband. If I have leave and travelling in the car with my own with her. It isn't. It isn't, That she was sick in the car seat in the back of the car and not beside me, I would have be nervous, I would have to get someone else out of their bed, grandparents to come up, I had to say my worry, I had a worry that the whole of us would be going in.</p> <p>R0: did she offer you a GP or a doctor to come to your house?</p> <p>P1 AM: No, that was never an option for a doctor to come to my house; I never had that as an option. She offered me that if I was not happy with what she told</p>	<p>Ambulance</p> <p>Lack of information</p> <p>Alternatives</p> <p>Caution</p> <p>Visit to casualty</p> <p>Valuing the nurse</p> <p>Child details</p> <p>Caller details</p> <p>Reason for call</p> <p>Medication</p> <p>Guidance</p> <p>Reassurance</p> <p>Other Family member</p> <p>Travel by car</p> <p>Feeling nervous</p> <p>Call for a friend</p> <p>Worry</p> <p>Doctor visit</p> <p>Options /no advice</p> <p>Call</p> <p>outcomes/Doctor visit</p>	<p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit</p> <p>GP visit</p> <p>Nurse attitude</p> <ul style="list-style-type: none"> Caring and being on the side of caution <p>Description of the process of help-seeking from GP OOHs service</p> <p>parents' perception of reasons for call</p> <p>practical constraints of face-to-face consultation</p> <ul style="list-style-type: none"> Leaving other family member at home alone. <p>Parent's decision making rather than TAN advice</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p>
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<p>me and if not still happy with the conversation she has no problem to bring the child to a doctor in the OOHs.</p> <p>R0: is there any specific recommendation given about your child's problem at that time?</p> <p>P1 AM: No. she was saying to give it a while, and if the temperature has not come down to ring her back. It did come down. But it is just her feet... sorry can you hold for a second....</p> <p>R0: if you made a decision to attend a casualty or an OOHs service which one is closer to you?</p> <p>P1 AM: there is an OOHs in Cashel that is near to us than casualty.</p> <p>R0: how long will it take to be there?</p> <p>P1 AM: OOHs in Cashel will take 25-35 minutes I would say.</p> <p>R0: are they open 24hours a day?</p> <p>P1 AM: in OOHs in Cashel, I have to ring the nurse, and then she has to go through her doctor to see was she there or out on a call? There is only one doctor and you have to ring otherwise I have to go to casualty.</p> <p>R0: Do you think that the service should be improved so you can have easy access?</p> <p>P1 AM: I think, I think if I could speak directly to a nurse without having to ring the secretary and wait for the call to come back. That would be very beneficial. I think the nurse is great. It is great to have the service for reassurance, to guide parents. You know a two year old cannot tell parents what wrong with them.</p> <p>R0: do you think nurses give their advice based on guidelines or just experience, what would say about this?</p> <p>P1 AM: I would say they give advice based on both guidelines and experience, if you are a mother and you are a nurse regardless you have experience of both, you want to give both. They will always offer you to see a doctor.</p> <p>R0: what would expect to happen when you telephoned the service at the start?</p> <p>P1 AM: I did not, I didn't know, didn't know the temperature cause of heart racing. That was frightening me. I didn't know that was from the high temperature, I didn't wither there is something wrong, I would of gone to OOHs</p>	<p>Nurse recommendation</p> <p>Options Decision Casualty</p> <p>Improvement of service</p> <p>Valuing the nurse Valuing the service Experience with sick children</p> <p>Valuing the nurse/Advice /use of Guidelines Lack of information Frightening Being worried</p>	<ul style="list-style-type: none"> Home-care advice/ Guidance OOHs Visit by an appointment <p>parental choice for advice if TAN service doesn't exist. ED visit GP visit</p> <p>Accessibility to A&E</p> <ul style="list-style-type: none"> Geographical accessibility Functional accessibility <p>Nurse attitude Sub-codes:</p> <ul style="list-style-type: none"> Reassuring Source of guidance Experienced nurses <p>Young Children cannot speak for themselves</p> <p>Parents' perception of child's illness</p>
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Appendix 3.1

<p>or to casualty. Because I was so worried. I did not know that heart racing goes with a temperature, and cold feet goes with a temperature.</p> <p>R0: is there anything that has surprise about the service and the advice been given to you by the nurse?</p> <p>P1 AM: No, because I went to the GP the next day and they did not tell me anything different and still say to give the child calpol and nurofen.</p> <p>R0: apart from giving advice over the phone about your child's temperature, what did you want from the nurse and the service of giving consultation?</p> <p>P1 AM: all what I want to tell me what to do and she did, she told me what to do, if she told me to see the doctor I would have gone out of the door.</p> <p>R0: how would You describe your overall experience about your child having a temperature and calling the OOHs service?</p> <p>P1 AM: like I couldn't first, like I have set with her in the house at three clock in the morning and that is a deal for any, you know, I would wait until the morning, I didn't sleep , I stayed with her, no I didn't, I knew she is alright, I knew the cold feet is nothing to worry about, I knew, I spoken to the nurse to keep her temperature down as much as I could, and if I let it came higher or down to ring her back, and I know she would have sent me straight to the doctor then. She didn't, nurofen brought her temperature down a bit, her heart still kind of racing and her feet are cold, but you know, I went to the GP the in the morning.</p> <p>R0: When you went to the GP in the morning, did you wait long to see them?</p> <p>P1 AM: No, I was the first thing in the morning, I was in at half nine,</p> <p>R0: did the GP know in advance that you rang OOHs and did she expect you to come in the morning?</p> <p>P1 AM: I know they (OOHs) didn't informed, and didn't phoned , but I can't tell exactly that she (GP) was aware, I don't know.</p> <p>R0: what would say about your visit to the GP? Do you have to register and wait to be called?</p> <p>P1 AM:it is by an appointment only, I have to ring at 9 am and she took by half nine in the morning. No information about my child was given in advance to GP.</p>	<p>Call outcome/GP visit</p> <p>Parents' experience/expectations/ Nurse advice</p> <p>Parents experience with sick child/ Staying with child Lack of sleep Nurse advice</p> <p>An appointment/Gp visit</p> <p>GP waiting time Not sure Appointment only</p> <p>GP advice</p>	<ul style="list-style-type: none"> Emotionally disturbed Uncertainty about treating child's symptoms <p>parent's expected outcome of the call</p> <ul style="list-style-type: none"> Home-care advice/ Guidance GP visit <p>Parent's decision making rather than TAN advice</p> <p>Sub-codes</p> <ul style="list-style-type: none"> Wait and see Parents preference to be seen Perception of urgency <p>Parents' perception of child's illness</p> <p>parent's expected outcome of the call</p> <ul style="list-style-type: none"> Home-care advice/ Guidance OOHs Visit by an appointment
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<p>R0: were given any different course of action a part from that given by the nurse at the OOHs?</p> <p>P1 AM: No, she came a round by that time, she was improved a bit, no certainly, the GP didn't give me any antibiotics, and would not give anything for her. She couldn't, she checked her ear nose and throat, no infection anywhere, couldn't have anything wrong with the child, she say it's a viral, I stayed for about 15minutes.</p> <p>R0: you rang OOHs at three clock in the morning and took you fifteen minutes to travel GP for 15 minutes, what would you say about this?</p> <p>P1 AM: yeah, I needed, yeah, that advice I got through in the morning kept from GP till nine clock in the morning. I wouldn't be happy without getting the child been seen. Like if that her feet cold and high temperature during the day, I would have her in the car and gone to the doctor.</p> <p>R0: what would say about GP service as they are served by a doctor and not by a nurse?</p> <p>P1 AM: I think for children it is over the price, and I think it is hard and pain with young kids, you know, even if you bring them to talk to a nurse in there. I think they should be another service in there where you do not have to go to the doctor and pay 50 Euro, because with children so many things would pop up. It is very expensive, I think that is why, you know, at least OOHs, and I rang them before about little thing, at least you can ring them and ask them questions. You know, you can't pick up your phone and ring your GP. You have to come in,</p> <p>P1 AM: what would you say about your experience of having the phone to make easy access to advice about your child's health?</p> <p>P1 AM: I think it is a great service, a 24 hours service for children that you can pick your phone and ring and ask questions or information about something rather than you have to go , would save seeing the GP is well.</p> <p>R0: what would you say about your experience with other parents who live in the area?</p> <p>P1 AM: for parents who live in the same area would go to GP with smallest thing if they have something wrong with their children. And even if they pick up the</p>	<p>experience /Sick children</p> <p>GP Advice Mother concer</p> <p>Valuing OOHs service</p> <p>Experience / sick children Suggestion/improving the service Dissatisfaction/GP visit cost Access to GP OOHs</p> <p>Parents experience/decision in the future</p> <p>Satisfaction/ Good Access</p>	<p><i>Parent' preference / wants</i></p> <ul style="list-style-type: none"> <i>Preference for face-to-face assessment.</i> <i>Preference for a Professional staff</i> <p><i>Reasons for satisfaction</i></p> <ul style="list-style-type: none"> <i>Availability of service after out-o- hours</i> <i>Telephone accessibility</i>
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Appendix 3.1

	<p>phone half of them would go their GP and pay whatever they have to pay. But you can ring OOHs at 6pm and they tell you if you want to see a doctor.</p> <p>R0: if this experience has to happen again, what decisions will you make and take in the future?</p> <p>P1 AM: I still ring OOHs and wait for my call back, no matter how long will that be, it would be my first choice. It is my only choice, there no other options, as such I would go to casualty. And if go to casualty I will be charged and wait for hours. The phone made a good access and open. Parents wanted reassurance, a little bit of guidance, the nurse offered if I want to see a doctor no problem, but she said I did not need it, and she said no problem if ringing her back in 5 minutes if I still want to come back in.</p> <p>R0: in case where you don't have a car and your child is sick, what would you do?</p> <p>P1 AM: oh' God, I would ring an ambulance. Yeah, I would ring their number 999.</p> <p>When you worried about febrile convulsion I would ring them straight away, when my child had febrile convulsion, we rang OOHs, we were on receptionist, and we could not wait, because he started to get sick and we know there is something wrong, I said to my husband to leave the phone we will go casualty, we got them in the care seat and travelled to casualty and his eyes started to roll in his head, and went out and my husband could not driving people off the road, I rang ambulance to meet us in the road.</p> <p>R0: what would you say about the location of the service?</p> <p>P1 AM: Definitely, the location of the service is very important and if we have to speak to nurse that day rather than secretary or a receptionist taking details, you know, if a nurse got on the phone that day to guided us rather than to travel, we could wait for him, but we weren't offer that option.</p> <p>R0: what would say in general as a mother of child under two about the Telephone advice service?</p> <p>P1 AM: it is good, I used few times, I always find them good. Like, you know, for parents it is great as they want to have guidance.</p> <p>R0: if your ring a casualty and a nurse a said to you I am not in a position to give advice, what would you say?</p>	<p>What Parents want Reassurance</p> <p>Decisions in the future</p> <p>Use of the service</p> <p>Casualty visit</p> <p>Parents experience /casualty visit</p> <p>Accessibility</p> <p>Valuing the service/ Reassurance Guidance</p> <p>Accessibility/location</p> <p>Travel time</p>	<p>Parent's decision making rather than TAN advice</p> <p>Geographical accessibility</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Availability • Offer guidance <p>Geographical accessibility</p> <p>Functional accessibility</p>
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<p>P1 AM: I think that is just good if you live close so you can walk your child in. but it is not, it is not, like as I said I have my child in bed, I can't just get out and walk over with two kids. It is not. I appreciate they say they need to see them. As a mother, a mother can explain the situation, but if she is still not happy, look you can say you have to come in and you can sort out how to come in. but think of simple things, there is no need for people to be. E my child that night , her heart racing and cold feet that was so worried out, I knew the nurofen is going to bring her temperature down again, and it worked, but it was coming back up again, it was when her heart racing and cold feet and I did not anything about that. Then I see people are googling everything now and they are losing their life altogether.</p> <p>R0: you mean looking at the internet. Would you that yourself?</p> <p>P1 AM: yes, I would have done it and I would not do it again. Because end up the worst case scenario. No I wouldn't do it. I would prefer to speak to some, nurse would always offer you to come in.</p> <p>R0: From your experience with advice giving from the nurse, have come cross with different advices?</p> <p>P1 AM: it is hard question, because every situation when you ring it is different! I would ring and follow the advice given, she was quiet happy for me to come in, I followed her advice, and she gave her name and ring me straight back.</p> <p>R0: what would you say about your general satisfaction with the service?</p> <p>P1 AM: well, like if you just can ring straight to the nurse, and not wait, I mean if you are getting up at three clocks in the morning. And like, child is still in bed, it just you couldn't wait twenty minutes for a nurse to call you back. Because other times I have to wait for 20 minutes.</p> <p>R0: In order to improve the service, what advice would like to give?</p> <p>P1 AM: it seems to be a great service, I have to say, any time I speak to one of the nurses, they are all very nice, they never show a time to get you off the phone for fairness, they give much time as much as you want, and they don't hang up the call until you are happy. They would offer an appointment, if not happy, to come to OOHs even at that time of the night.</p>	<p>Parent's experience /Sick child/ source of information</p> <p>Signs / symptoms Being anxious</p> <p>Advice by phone Use of the service Valuing the service / satisfaction</p> <p>Improving the service</p> <p>Speaking to the nurse Valuing the service Valuing the nurse OOHs visit/offer Appointment</p>	<p><i>Adherence</i></p> <p><i>parents preference/wants</i></p> <ul style="list-style-type: none"> • <i>Speaking to nurse</i>
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Appendix 3.1

	<p>R0: Right, Mrs AM you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me? P1 AM: No, I said as much as I can. R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you. You can contact me at any time.</p>		
<p>P2 AC</p>	<p>R0: You are a mother of a child, isn't it? What age is the child? How many kids do you have? P2 AC: we have just one, and she is two and three months, R0: Can you recall your account and experience of what made you to contact OOHs? P2 AC: for more recent time? R0: Yes, or any time when your child has a cough? P2 AC: the last time I contacted them when she was vomiting and it was after she had a fall in the back garden in the afternoon, in that evening she woked fight during that night vomiting and I phoned OOHs for advice and asked them what to do on that occasion. R0: did you call them many times or is it just that time? P2 AC: Yeah, I called them a lot of times, really since A was the age of 9 or 10 months old, probably we called them 5 or 6 times in that period. R0: how would you describe your experience about calling the service? P2 AC: Actually, it seems very good. Am, because when we called, am, you know, in some occasions we were calling because obviously it is out-of-hours service, and like regular GP is not around, like we not sure it is something that., you know, we need to go to the doctor about . You know or just something, may be just go to the chemist and get her medication. So, some time we used we asked to speak to the nurse on those occasions and ask for their advice and that is quiet useful. R0: do you have a GP around where you live yourself?</p>	<p>Age Experience of health service Vomiting fall advice use of the service experience very good out-of-hours /availability source of advice Speak to a nurse Advice Useful service</p>	<p>Parents' perception of child's illness /unknowing/ Uncertainty about treating child's symptom Accessibility <ul style="list-style-type: none"> functional accessibility availability Telephone accessibility Familiarity with the service and being a previous users</p>

<p>P2AC: yeah, we have a GP, actually she is not back out where we use to live, because she someone where I use to see where I live elsewhere. We continue to go to her; obviously her surgery is only Monday to Friday, really, really working hours. You know we found our experience for children for some reasons when they get sick at night or at the weekend we definitely need to phone OOHs.</p> <p>R0: how far is your home from OOHs and Your home from GP?</p> <p>P2 AC: from home to OOHs is about 5 minutes to drive, and from my home to my regular GP ,like could be a round 20 -25 minutes.</p> <p>R0: I think you live nearby isn't it?</p> <p>P2 AC: yea, yeah. Very nearby.</p> <p>R0: what would you say when somebody answer your call, what happen?</p> <p>P2 AC: usually they answer the call very quickly, you don't get wait too long. Am, then just when I call the phone ring obviously they asking about who I am calling about. When I give the name generally Usually on my phone number they say it is A (Child name) and they say the age of the child and then usually ask any problem. And then, you know, generally they say would like us to make you an appointment. Am or I ask if could speak to a nurse instead or first of all, am and the nurse will ring me back. Or otherwise if want to go straight to the doctor, they try to give me an appointment very much straight away. You know they may say how are you going to get there, and usually in most cases I found they send us an appointment within half an hour after call.</p> <p>R0; how do they send you an appointment?</p> <p>P2 AC: they just tell me on the phone. If I ask can I see OOHs? Usually they say how far away and I say about Five minutes. They say ok, I can give one whatever time.</p> <p>R0: Have ever called the service when your child has difficulty in breathing or coughing?</p> <p>P2 AC: No, No, Not with difficulty in breathing, she might had a little bit of cough or ear infection as the main purpose for the call.</p> <p>R0: were speaking to a nurse straight away or what happen exactly?</p>	<p>Working hours Sick children Experience Weekend Use of the service</p> <p>Accessibility/ Location Travel time</p> <p>Call description/ Call answer / Very quickly/ Caller details</p> <p>Reason for call</p> <p>Call outcome An appointment</p> <p>Nurse advice Doctor visit</p> <p>Reason for call</p>	<p><i>Reasons for satisfaction</i></p> <p><i>Familiarity with the service and being a previous users</i></p> <p><i>Accessibility</i></p> <ul style="list-style-type: none"> <i>Geographical accessibility availability</i> <p><i>Description of the process of seeking help from GP OOHs service</i> <i>Sub-codes:</i> <i>Length of call back</i></p> <p><i>parent's expected outcome of the call</i> <i>Sub-codes:</i></p> <ul style="list-style-type: none"> <i>Home-care advice/ Guidance</i> <i>OOHs Visit by an appointment</i>
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Appendix 3.1

	<p>P2 AC: usually, a receptionist, yeah, and then they well say I will get a nurse if I ask to speak to a nurse. Usually they say I get a nurse to phone you back. And so, then a nurse call me within 10 minutes.</p> <p>R0: how would you describe 10 minutes, did you find it very long?</p> <p>P2 AC; am, it depends, like sometimes you might wish if I particularly worried with a little bit sooner, am or may be, you know, may be, it is not even 10 minutes. May be it felt like 10 minutes because you are waiting. I think there was an occasion and definitely it was 10 minutes if not long. Like , you know if you worried it feel long.</p> <p>R0: Have you ever come cross with more than 10 minutes?</p> <p>P2AC: No, No.</p> <p>R0: How would you describe the nurse speaking to you about your child and what exactly you need from the service?</p> <p>P2 AC: I felt they usually very good, they tend to be pretty understanding every situation, you know that you have small child, what is wrong, what to do? Am they tend to be very good, you know, they are very cautious, yeah, yeah, understandably they cannot diagnose the child over the phone, if there they think there is any kind of, you know for example, A (child) pumped her head, if there is any chance of head injury, they get very cautious and tell you to go straight to hospital.</p> <p>R0: did you explain what happen to A (child) at that time? How did find them?</p> <p>P2 AC: Yeah, I did, I found them very good, yeah, yeah, I don't have any complaint, and they are really helpful. They definitely listening to us and they ask many questions to make sure they understand the problem.</p> <p>R0: can you tell what questions did they may ask you?</p> <p>P2 AC: at the time she fell, they asked me the exact time she fell, the exact time she vomited, where and what part of her head she pumped.</p> <p>R0: would you say they ask you the questions based on something such as guidelines or protocols?</p> <p>P2 AC: oh, am, it did not, but may be they do, but it did not come across like a script, if you understand what I mean, if I was right, they understood the issue,</p>	<p>Speaking to Receptionist</p> <p>Time to call back Nurse advice</p> <p>Valuing the nurse Very good, Understanding every situation Very cautious Can't diagnose Signs /symptoms Reason for call</p> <p>Valuing the nurse No complaint Very good Really helpful Call description/Ask questions Signs / symptoms</p> <p>Call description/ nurse's use of Guidelines</p>	<p><i>parents' perception of reasons for call</i></p> <p><i>Description of the process of seeking help from GP OOHs service</i> <i>Sub-codes:</i> <i>Length of call back</i></p> <p><i>Nurse attitude:</i> <i>Sub-code</i> Valuing the nurse Very good, Understanding every situation Very cautious Can't diagnose <i>parents' perception of reasons for call</i></p> <p><i>perception nurse attitude</i></p> <p><i>Description of the process of seeking help from GP OOHs service</i> <i>Sub-codes:</i> <i>Length of call back</i></p>
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<p>and I understood the problem, I don't know, they probably do have guidelines, but I did not feel no wrong or correct questions, it was kind of conversational talk.</p> <p>R0: did they give any advice at that time?</p> <p>P2 AC: yeah, in that particular occasion they advised me after A(child) vomited twice aftershe pumped her head that we should go immediately to Accident and Emergency (A&E) department in the hospital, and then they give me advice of what to do if something happen on the way to A& E, if she start to vomiting and if she start to have a fit or anything like that. And they give me advice if something happens to call them immediately and they may ring an ambulance to meet us in their way to A&E. Initially they offered us to call an ambulance to bring us to A&E, and on that particular night we were happy to drive and need for ambulance, then they said ok, and if something happen they still arrange for an ambulance for us.</p> <p>R0: did they offer you to give medication?</p> <p>P2 AC: No, they did not offer any medication, No,</p> <p>R0: how far A&E from your home?</p> <p>P2 AC: we went to Tallaght, it is not very close, it is a bout forty minutes' drive as it is the nearest to us.</p> <p>R0: what would you say or how do you describe your experience of arriving to A&E?</p> <p>P2AC: Am, we did not have a great experience to be honest, when we arrived at that stage; it was 5 clocks in the morning. There was no body at the reception, there is assign says to go to nurse station, so went in to the nurse station, and nobody acknowledged us for good 5 minutes or even more, there were people there and then a nurse came and said how may I help you? I said: yeah, we have a child her who pumped her head and she is been vomiting. The nurse said come over here, and in the middle of the corridor she took her Blood pressure, but for the whole time she did not ask child name or anything like that and she placed us in a cubicle and a doctor will come and see you. Then we waited for the doctor and then the doctor came and had a look at her, and that was fine. Then we have to go back out to reception when the reception is open and registered the child.</p>	<p>/ Conversation</p> <p>Signs/symptoms</p> <p>Call</p> <p>outcome/advice</p> <p>Ambulance / refer to A&E</p> <p>A&E Service location</p> <p>Travel time and distance</p> <p>Experience of Accident and Emergency / Not great experience</p> <p>Time of arrival</p> <p>Lack of acknowledgment</p> <p>Speaking to A&E nurse</p> <p>Assessment</p> <p>Waiting for a doctor</p>	<p>Parent's perception of the use of Guidelines</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance Ambulance/referral to A&E <p>Parents beliefs about Emergency Departments as an alternative</p> <ul style="list-style-type: none"> Perception of long waiting time perception of very busy perception of understaffed perception of availability of staff Perception of not being heard miss diagnosed/given wrong information
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Appendix 3.1

<p>We did, we got a wrist band, her name at. The nurse took that away and they never put back that on. And a result of that until different occasion our child was mixed up with another child, when the doctor comes around, it was not a great experience.</p> <p>R0: what do you mean she was mixed with another child?</p> <p>P2 AC: Am, at one stage when the doctor came around, she the doctor was having the whole conversation with that fact the child has fluid on her lung and she didn't have that and she was checked and it was clear and I was saying I don't know what she was talking about, she pumped her head. Similarly, the same doctor looking a sample for her urine saying that she has a kidney infection.</p> <p>R0: Did all these things happen at that night?</p> <p>P2 AC: yeah, yeah, and they send us home with saying that my child has ear infection, her head was fine, and she didn't have ear infection, and they send us home with a prescription with antibiotic and I discovered that they are giving us a prescription for a 10 years old. You know, it was really very bad experience. I mean, I know they are under a lot of pressure.</p> <p>R0: did it take you long to see a receptionist in A&E?</p> <p>P2 AC: Am, I would say it was about 30-40 minutes. I think they opened at six clocks or something. We saw the nurse straight away before the receptionist on arrival.</p> <p>R0: you were advised by OOHs to go to A&E, in case you did not know the OOHs what would do?</p> <p>P2 AC: if I did not know OOHs, I guess, I would have gone to straight to A&E and would have get her checked, because my good instinct to that it was just to go to them, it was coincident because she pumped her head, it was bad fall but wasn't really bad fall. But, just I because we phoned OOHs and two incidents of vomiting we should get her checked. But I think if I hadn't called them I bring her to A&E. any way.</p> <p>R0: what did you think the problem was when your child has a fall and she started to vomit?</p> <p>P2 AC: the first time I saw her, O, God, having not a good sign, after having a fall, it is a head injury, at the same time I saw the fall myself. I was thinking, you</p>	<p>Receptionist in A&E</p> <p>Wrong information</p> <p>Doctor' Misdiagnosis/ Wrong Prescription/ /Home advice Wrong advice Very bad experience</p> <p>Registration Waiting time in A&E Seeing the nurse in A&E</p> <p>Caller's option A&E visit Signs /symptoms</p> <p>Reason for call/ Feeling anxious</p>	<p>parental choice for advice if TAN service doesn't exist. ED visit</p> <p>Parents' perception of child's illness /unknowing/ Emotionally disturbed</p>
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<p>know, she landed on her forehead; I did not think it was that bad, but when she was getting sick different times. I would not take any chance not to see what was wrong with her. She fell about 6 clocks in the evening, you know.</p> <p>R0: if you were to make a decision as an alternative to A&E what would be your choice of action?</p> <p>P2 AC: yeah, yeah, suppose, I have GP. But if they were open at that time I would probably contacted them. Like, my GP doesn't open at all during the weekend, actually the incidence happened at Sunday, and they wouldn't be available.</p> <p>R0: would you know in advance what would expect from OOHs?</p> <p>P2 AC: I did, because I contacted them few times during the last year and an half, generally they give a good advice. And more often we had a very good experience. And many of the times we have to go to them. Over the last year and an half I would say Our expectation that they would give a good advice.</p> <p>R0: what would you say about the advice itself and what kind of advice you may get in general from the nurse?</p> <p>P2AC: well! Obviously in her case we were advised to go to hospital and that advice is a reassurance that I needed at the time and then, because when we got the hospital the doctor said we did the right thing to come in. so I suppose reassurance really, overtime we saw them had been when my child had ear infection at the first and twice when she had them we didn't really know why she is upset and in really bad form and I remember I had one conversation with the nurse on the line, you know, for quiet few minutes and she was asking me so many question, she said, you know she could tell you over the phone if there is any infection you should go straight down to see the OOHs and she give an appointment, she may also advice if she has a temperature and to keep it down. And to give Paracetamol to keep her temperature down, that is the main thing really. And a plenty of fluid.</p> <p>R0: could you remember how they finish the call?</p> <p>P2 AC: Am, I think they would finish it, along the line you know, they may say is that everything, is there anything else that you need to ask. Anything like that.</p> <p>R0: how would you describe that experience?</p>	<p>Use of the service/ availability/ other services are closed</p> <p>Caller's expectations Good advice Good experience Nurse advice Hospital visit Reassurance</p> <p>Previous experience with OOHs / visit by appointment</p> <p>Home advice Medication</p> <p>Valuing the nurse</p> <p>Expectations</p>	<p>Accessibility</p> <ul style="list-style-type: none"> functional accessibility availability <p>parents' experiences about nurse advice</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance Visit by appointment <p>Nurse attitude</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Supportive
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Appendix 3.1

<p>P2 AC: yeah, good again, yeah, know, good they although accommodate you, you know you feel you ask many question and offered you to listen, and answer your questions.</p> <p>R0: what would you say about your expectations about the advice and would you follow what they say?</p> <p>P2 AC: O, yeah, definitely, I would definitely follow it, suppose because of the experience I had with them. It has been so good. They haven't kind of send us on the wrong track, even myself I had an appendicitis last year, and ended up in OOHs, when it was on one of the weekend, they spot it very well, so I didn't speak to the nurse and I knew I needed to go myself.</p> <p>R0: when you telephone OOHs, what exactly do you think you want from the service? Your purpose of the call?</p> <p>P2 AC: well, if I asked to speak to the nurse, it is usually in my experience, it is usually because to be little in the sense whether the child needs to see the doctor, you know, is it something that, you know, it could be just a viral, you know, to give Paracetamol for day, and see how things will go or see, you know, yeah, you should definitely, the one thing at new care we found it a bit of reassurance, is it serious and what let cause it. For me is just kind of helping me to knowing it and whether to worry about it or not.</p> <p>R0: from your experience with OOHs, who would you prefer to speak to when you ring?</p> <p>P2 AC: I think that, actually, the system is working quiet well as it is. Because every time that I call do not want to speak to the nurse, and am, all the time speaking to nurse the time is less than half of the time, the other time I just want to get an appointment straight away, am for that it works, it really suits me to speak to receptionist first, it is not that deal that I have to wait for few minutes to be called back from a nurse.</p> <p>R0: is that because your intention you want to visit them?</p> <p>P2 AC: No, not in every case, like, more often, my intention is not to visit, so in those cases, it is fine just to speak to reception and make an appointment without speaking to the nurse.</p> <p>R0: what would you say about the time spent over the phone with nurse?</p>	<p>Follow advice Good experience</p> <p>Use of the service/ purpose</p> <p>Speak to the nurse To see Doctor Reason for call/ Reassurance Information</p> <p>Valuing the service Appointment Speak to receptionist</p> <p>Call description/ Length of call</p>	<ul style="list-style-type: none"> • Have listening ears. • Offer a practical advice <p>parents' experiences about nurse advice</p> <p>Adherence</p> <p>parents preference/wants</p> <p>parents' perception of reasons for call</p> <p>parents preference/wants</p> <p>Description of the process of help-seeking from GP OOHs service</p>
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<p>P2 AC: am, I think it is very short really, am, I can't think of any particular occasion that is long conversation probably 5 minutes or less. Wither just taking the main details and then advise me what to do.</p> <p>R0: what would you say generally about the OOHs service in your area, is there any other services like OOHs service?</p> <p>P2AC: No, No, OOHs is the only out-of-hours service in my area that I am aware of, and I suppose, I found it a really, really good service because it covers those times when, you know, you may really need a doctor, obviously if GPs are working visit hours, you know, and specially for us is well, because my self and husband are working and we send our daughter to crèche and sometimes you pick her up in the evening and she may has a temperature and she may cannot be that well that day, You might need to bring her to the doctor you can go that evening if you need to rather than wait to the next day and I we have to work and get a time of work, you know, from that point of view, at sometimes we really need it at the evening based on the outcome from the crèche she is been not great.</p> <p>R0: in what aspects were you pleased about the service or what made you to be pleased about it?</p> <p>P2 AC: am, I suppose, because every time we have gone to the OOHs, and I think, yeah, although in one occasion. The doctors are really, really, care and obviously it is not always the same doctor, just knowing from the last two occasions we actually went down one when the child has ear infection and the second one when she has chicken pox and the doctor was really care and really good with her and the at the time when I had appendicitis and the doctor spot it straight away.</p> <p>R0: based on this experience, what decisions might you take in the future in case where your child gets sick?</p> <p>P2 AC: if my child is sick during the out-of-hours, I would definitely use OOHs, if I was reassured that she needed to see a doctor, I couldn't wait till the morning and I can't see any reasons why wouldn't use OOHs, because as I said, our experience has been good, if we had gone and felt they, you know, have misdiagnose something, then I would not go back to them, but that has never happen you know.</p>	<p>Valuing the service Out-of-hours service</p> <p>Experience of other family at home</p> <p>Valuing the doctor/ Caring</p> <p>Previous experience /sick child</p> <p>Caller's Future decision</p> <p>Accessibility/</p>	<p>Accessibility: Functional accessibility</p> <p>practical constraints of face-to-face consultation Sub-codes:</p> <ul style="list-style-type: none"> Leaving other family member at home alone. Time to travel <p>Parent's decision making rather than TAN advice Sub-codes</p> <ul style="list-style-type: none"> Parents preference to be seen Perception of urgency
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Appendix 3.1

<p>R0: what would you say about accessing the service? P2 AC: I think it is really easy to access, the number is there, you ring up, the service is in locality for us, so it is really easy to access, I could be there in 5 minutes . R0: what would you say about other people who live in your area? P2 AC: who live far away, I don't know anyone who have used it in that locality to be honest. I don't know. R0: would you call a friend or someone if you need advice and who you might call? P2 AC: I call my sister in law because she is a paediatric nurse, I call my mother as she has kids and she has experience, I would probably look up a lot at the internet. And I found it extremely good but we have to be careful, most of the time I would use the NHS web site as a source of information because it is reputable site. They have a lot of information for everything. R0: speaking about your family circumstances, can you tell me about it? P2 AC: we have one child, and we both working? R0: what would you say about the location of OOHs in your area? P2 AC: it is in Town and could ring them and I could walk. For people who live far it would be difficult if they don't have car otherwise they have to drive. R0: what would you suggest to improve the OOHs service? P2 AC: I would think it is not necessary need for home visit, more often or not, most of the reasons for callers are pretty straight forward ear infection, chicken pox, fever, cough or whatever so. No it wouldn't necessary require a home a visit or someone to come to the house. They can improve the service, am, I suppose sometimes may be if they have more doctors, because I have been their one time the waiting with my child after getting an appointment for one hour an half. It was Sunday evening and even when we had an appointment, the service is there all the time. Ro: from your experience with OOHs, how would you summarise this experience? P2 AC: yeah, it just really been good, and it would not be my first choice, it would be my GP and I have to go and see her, OOHs is slightly more expensive than GP,</p>	<p>Easy Access</p> <p>Source of information</p> <p>Friend Family member Internet</p> <p>Accessibility/ Location of the service</p> <p>Improving the service Reason for call</p> <p>Waiting time Increase staff</p> <p>Cost expenses Good experience GP visit OOHs visit Financial accessibility</p>	<p>Accessibility</p> <p>Sub-codes</p> <ul style="list-style-type: none"> • Geographical accessibility • Functional accessibility • Telephone accessibility <p>Source of help-seeking Parents preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> • Speaking to a nurse in TAN • Speaking to a friend/family member • Use of internet <p>Parent' preference / wants</p> <ul style="list-style-type: none"> • Preference for face-to-face assessment. • Preference for a Professional staff <p>parental choice for advice if TAN service doesn't exist</p> <p>Reasons for satisfaction</p>
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	<p>I pay OOHs 60euros and my GP is 55 Euros, the both actually are very expensive. It is really helpful, to call OOHs for free.</p>		<ul style="list-style-type: none"> • Availability • Financial accessibility
<p>P3 TC</p>	<p>R0 AK: hello; good morning / evening R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you R0: great, Mrs, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start R0: the first thing to ask, have you a child who is under two? P3TC: yes R0: do you work your self P3TC: yes, I am a doctor and work as an education officer in MCCA R0: how far are do you live from OOHs service? P3TC: our closest OOHs would be around 15 minutes' drive. That is the centre that we would go to, R0: can you tell me your story or your account of what made you to call or contact OOHs about your child. P3TC: am, so I had. With regards to my child, I have used once or twice. I have not used much excessively; I think it would have been for high temperature and rash I think.</p>	<p>Child's Age Work status, Travel time Location Story/account Use of the service</p>	<p>Accessibility</p> <ul style="list-style-type: none"> • Geographical accessibility • Telephone accessibility <p>Familiarity with the service and being a previous users</p> <p>Parents' perception of child's illness /unknowing/ Uncertainty about treating child's symptom</p>

Appendix 3.1

<p>R0: were you worried? P3TC: yes, I want to confirm that. I think, I was concerned that Paracetamol was not bringing his temperature down. R0: so were you looking for advice? P3TC: Yes exactly, R0: when you rang the service, what did you expect to happen? P3TC: I expected to speak to a nurse and that if the nurse can confirm the referral I made to the doctor. R0: Did you speak to a nurse first or receptionist? P3TC: AM, probably receptionist actually, R0: and then what happen? P3TC: I got a follow up call from the nurse R0: how long did it take you to get a call back from the nurse? P3TC: A! Within half an hour. R0: did you find it very long? P3TC: Am am, No I don't think, there was another call that I made by for my own care, I think in that case it was not wasn't as urgent. R0: in case where a mother who is not a doctor, how would describe this half an hour? P3TC: Aam, probably I will be quiet anxious and worried. To be fair this is the longest I ever had wait for each time. R0: when your child had a temperature what was your initial response and what did you think the problem is? P3TC: am I thought it was possibly an infection, am or some sort of allergy. Orreaction to herb or a new food. R0; Did they give advice? P3TC: yeah, they did, they did, well I suppose, Am, I think the last time I called was regarding a temperature of, I think it was 38.5 degree and because that, meant to be over the excessive. The treatment I was giving my child giving Paracetamol, to monitor and remove the clothes from the baby.</p>	<p>Reason for call/ Symptoms: rash, temperatur,e Medication: Paracetamol, advice, description of call/ Speak to receptionist Follow up care Time to call back Previous experience Feeling anxious and worried Long waiting time Reason for call/ Infection reaction Symptoms: rash, allergy Previous experience/ Treatment Medication</p>	<p>Description of the process of help-seeking from GP OOHs service Sub-codes: Length of call back Parents' perception of child's illness / Emotionally disturbed Frightened Parents' perception of child's illness /unknowing/ Parents' perception of child's illness self-acting Sub-codes: <ul style="list-style-type: none"> • Self-administering of medication • Self-monitoring </p>
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<p>What other advice I was given? To ensure the baby is getting a plenty of fluid. And actually the temperature did reduce. I also advised to check nappies about reaction to nappy rash, due to hot weather and heating.</p> <p>R0: did that advice take a long time?</p> <p>P3TC: Am that was the advice I was given, I trusted their expertise. They were good and it was a good advice. The time is pretty quick amount of time, good, I was constant if i</p> <p>R0: how did you find access to the service in your opinion? What is your view about access?</p> <p>P3TC: I think it is adequate service, I think it is prompt, professional, I think it is well serviced, particularly as a new mother I think that the people who I speak to certainly knew what they talking about. Which it helped that I spoke to female nurse who has better experience in that particular area</p> <p>R0: how far is casualty from you?</p> <p>P3TC: casualty is about thirty minutes' drive from me, care doc is closer</p> <p>R0: where is that causality? I</p> <p>P3TC: it would be Kilkenny.</p> <p>R0: where you ever referred to causality?</p> <p>P3TC: no, no never in the last time with my daughter</p> <p>R0: Did they offer you any other recommendation?</p> <p>P3TC: Am, they did offer me access to the service to get the child checked over because it was the middle of the night. I don't know if OOHs come to someone's house.</p> <p>R0: can you tell me about the manner of nurses over the telephone?</p> <p>P3TC: oh! Yeah, am I found them very patient, very understanding, very clear in their instruction, very sympathetic particularly when I rang about breast feeding issues and supportive,</p> <p>R0; what made you to say this?</p> <p>P3TC: they ask question, very confidential checklist of question about my child, which the can based their advice on, particular when child has a temperature, child's colouring,</p> <p>R0: how do they end the call?</p>	<p>Nurse advice</p> <p>Valuing the nurse/ Trusted expertise</p> <p>Very good</p> <p>Offer Good advice</p> <p>Access</p> <p>Prompt and adequate service</p> <p>Well serviced nurse experience</p> <p>casualty location/ travel time</p> <p>Call outcomes/ Casualty referral Recommendation Access</p> <p>Nurses' manner/ valuing the nurse</p> <p>Very patient, very understanding.</p> <p>Clear in their instruction, very sympathetic, supportive</p>	<p>Nurse attitude</p> <ul style="list-style-type: none"> Trusted expertise Very good Offer Good advice Prompt and adequate service Well serviced Experienced nurses <p>Accessibility</p> <ul style="list-style-type: none"> Geographical accessibility Telephone accessibility <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance OOHs Visit by an appointment <p>Nurse attitude :</p> <ul style="list-style-type: none"> very patient, very understanding. Clear in their instruction, very sympathetic, supportive <p>parents' experiences about nurse advice</p>
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Appendix 3.1

<p>P3TC: I found very guarding, and they say call us back if there is any and follow up, I think I was given a direct number that I could call. Am, so I could access the service without going to switchboard. Which I found very, very helpful, and when you anxious like that.</p> <p>R0: as a mother of a child, what other reasons you may ring the service?</p> <p>P3TC: am, for me the reasons like fever, unusual rash, child's change radically as in getting very limp. Unresponsive, for things such as nappy rash and anything beyond my knowledge I would ring to be honest is to get professional advice, for me I would look up information in the internet. And research first for information and then if I wasn't reassured I would ring OOHs. So my first option I would ask my mother and look up information and then ring OOHs.</p> <p>R0: in case where you ring casualty and a nurse answer your call and said I am not in a position to offer you advice, what is your view about this?</p> <p>P3TC: Oh, I would really be annoyed about that, because I think that they could be a steps that they could take to reassure you on your way to casualty, with OOHs I found this very good as they reassure you.</p> <p>R0: how satisfied are with the service of OOHs.</p> <p>P3TC: I am very satisfied; I would give them 8 of 10, as a service over the phone I would give 7 out of ten, based on my experience and I have no emergency where I could test them. I would be satisfied with nurse advice, depending on what, depending on ..., I mean in most case they give you the option to see the doctor if you want, in my experience I did not need that, they provide you with options, I found the service is going good.</p> <p>R0: Do you think that the service should be improved so you can have easy access? What improvement do you think the service needs?</p>	<p>Guidelines, checklists of questions</p> <p>Valuing the nurse: very guarding, Courteous end of call, very helpful.</p> <p>Reasons for call</p> <p>Symptoms</p> <p>Professional advice</p> <p>Source of information/ Internet information</p> <p>Mother advice</p> <p>Experience with A&E/ Feeling Annoyed</p> <p>Reassurance</p> <p>Satisfaction</p> <p>Good experience with OOHs</p> <p>Casualty visit</p> <p>Doctor visit</p>	<p>Nurse attitude :</p> <ul style="list-style-type: none"> • very guarding, • Courteous end of call, • very helpful. <p>parents' perception of reasons for call</p> <p>Source of seeking help/ Parents' preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> • Speaking to a nurse in TAN • Speaking to a friend <p>Parents beliefs about Emergency Departments as an alternative</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • previous experience <p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit</p> <p>GP visit</p> <p>Parent' preference / wants</p> <ul style="list-style-type: none"> • Nurse helpline/speaking directly to nurse
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	<p>P3TC: I think if OOHs have an separate advice line or a nurse helpline, just to ring the nurse for advice and not necessary to make an appointment, especially during the weekend and specially with a child who is new-born, I don't have very easy access and access for advice over the telephone is a huge help.</p> <p>R0: is there anything that has surprise about the service and the advice been given to you by the nurse?</p> <p>P3TC: very practical advice that you can take to help , you want reassurance, certainly you want to get a sense of hope from someone. I think you still have to make the journey to doctor or casualty,</p> <p>In terms of travel and time, if the child is very sick I need to go very quickly, and if they said to go casualty I have to go.</p> <p>R0: in terms of adherence to the advice:</p> <p>P3TC: I would trust their advice and adhere to what they say.</p> <p>Ro: what would you say about the location of the service?</p> <p>P3TC: it is convenient, so in an urgent situation the closest the better, I mean if it could be more localise it would be better. I am fortunate that I did not have emergency.</p> <p>R0 In order to improve the service, what advice would like to give?</p> <p>P3TC: if they ring back quicker rather than waiting as there are many conditions that can escalate such in case of meningitis time is crucial, and I think if I am anxious I would go to see someone to be reassured.</p> <p>R0: Right, Mrs AM you have given me a lot of information. Our interview has lasted for 30 minutes. Is there any question that you would like to ask me?</p> <p>P3TC: I hope that these information would help</p> <p>R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p> <p>P3TC:yes, thank you</p>	<p>Nurse helpline/speaking directly to nurse/</p> <p>No Appointment</p> <p>Practical advice</p> <p>Reason for call/</p> <p>Sense of hope</p> <p>Reassurance</p> <p>Doctor visit</p> <p>Casualty visit</p> <p>Reasons for satisfaction/</p> <p>Travel saving</p> <p>Time saving</p> <p>Adherence</p> <p>Improving the service</p> <p>Parent's want/</p> <p>Quick response</p> <p>Urgent cases</p> <p>Reassurance</p>	<ul style="list-style-type: none"> • Preference for a Professional staff <p>parents' experiences about nurse advice</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Practical advice for self-care <p>parents' perception of reasons for call</p> <p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit</p> <p>GP visit</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Travel saving • Time saving a • adherence <p>Parent' preference / wants</p> <ul style="list-style-type: none"> • Quick response • Urgent cases • Reassurance

Appendix 3.1

<p>P4 WC</p>	<p>R0 AK: hello; good morning / evening R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you R0: great, Mrs CW, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start R0: the first thing to ask, have you a child who is under two? P4 CW: Yes he is two by the end of November R0: do you work your self P4 CW: yes, I do work part time in mental health. R0: can you tell me your story or your account of what made you to call or contact OOHs about your child. P4 CW: am, I think it was before Christmas, I can't remember, it sometime before Christmas where he has a temperature, but the temperature was spiking and he was getting really hot, and then I was doing the usual what you do, I was giving what calpol and nurofen, keeping an eye on him, and then he started to swell, and I was getting worried, and a rash came up on him, like circular, kind of raised circle with black and purple in the inside, I started to get worried of meningitis. So I looked up how to test for meningitis on the internet, so I did the glass test, then I was getting all confused and I rang OOHs, they were very helpful, in that anything raised, or look black or purple I should go to doctor, they rang me back it could've been 45 minutes later. Am, no, no they rang me back very quick by a nurse who is on duty, and she talk me through, as I was a little panicking they were very helpful, to get my son to hospital, they had rang a head the hospital to</p>	<p>Child's age Work status Account/ story/use of the service Reasons for call Symptoms Medication Feeling worried Feeling confused Source of information/inter- -nt Nurse advice Call description Call back</p>	<p>Accessibility <ul style="list-style-type: none"> Geographical accessibility Telephone accessibility Familiarity with the service and being a previous users Parents' perception of child's illness /unknowing/ Uncertainty about treating child's symptom self-acting Sub-codes: <ul style="list-style-type: none"> Self-administering of medication Self-monitoring Parents' perception of child's illness / Emotionally disturbed Frightened/ feeling panic Source of help-seeking Parents' preference of Source of advice. Description of the process of help-seeking from GP OOHs service</p>
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<p>say that we were coming because we were afraid of meningitis, and they were helpful, we got to the hospital and they expected me, and they have seen us quicker they could, OOHs were very helpful in their part. You know what I mean. And they were very helpful at keeping me calm. Because it was my first time to know more about children, as I was a bit panicky as any other mother anywhere.</p> <p>R0: what made you to say that they were helpful?</p> <p>P4 CW: pardon, oh am in that, they ask about symptoms, they ask direct question on where is the rash, describe the rash, what his temperature, they tried to find out as much information as possible because they could not see him. And in that like, talking to me, and keeping me calm, do you know that kind of way, rather letting me going manic and crazy.</p> <p>R0: how did you find access to the service in your opinion?</p> <p>P4 CW: am, yeah, at that time, there was another time when I rang the service about my father in law I was waiting for a while and can be long, I will be worried in emergency situations, with my son they were super quick because he is a child and we were fearful, and but one other time I have to ring I was kind of waiting for awhile, and you know the way they have to ring you and then they ringing you back.</p> <p>R0: when you ring the service who do you speak to? How long would you say it take to ring you back?</p> <p>P4 CW: you kind speak to a doctor receptionist first and she put through a nurse, they usually rang me back, it depends on how busy they are, how quick they ring back, that night I it would be 20minutes to ring back and I was rushing to get my son to get him to hospital.</p> <p>R0: As an initial response when you saw your child has a temperature, what did you think the problem is?</p>	<p>Waiting time for call back</p> <p>Feeling panic</p> <p>Valuing the nurse</p> <p>Call outcome/hospital visit</p> <p>Experience /sick child</p> <p>Valuing the nurse /Advice /</p> <p>Feeling calm,</p> <p>Previous experience /waiting long</p> <p>Accessibility</p> <p>Speaking to receptionist</p>	<p><i>Sub-codes:</i></p> <p><i>Length of call back</i></p> <p><i>Nurse attitude</i></p> <ul style="list-style-type: none"> <i>Very helpful</i> <p><i>parent's expected outcome of the call</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> <i>Home-care advice/ Guidance</i> <i>OOHs Visit by an appointment</i> <p><i>Nurse attitude</i></p> <ul style="list-style-type: none"> <i>Keeping parent calm</i> <p><i>Parent's perceptions of child's illness and previous experience</i></p> <ul style="list-style-type: none"> <i>Wait and see</i> <p><i>Geographical accessibility</i></p> <p><i>Description of the process of help-seeking from GP OOHs service</i></p> <p><i>Sub-codes:</i></p> <p><i>Length of call back</i></p>
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Appendix 3.1

<p>P4 CW: I rang my sister in law, she said go go, I kind knew in that case that there is something really wrong when he and he starts toswell, he was weak and had a temperature, I just rang OOHs they said to me to see a doctor or to get him to a doctor.</p> <p>R0: can you speak a little bit about the advice? How did you find that advice?</p> <p>P4 CW: the advice in that evening because of the rash, she said to me if the rash look like black or purple just bring him straight to the hospital, and she said if he was my son I would have gone to hospital right now. That advice I needed to know what to do, at that time I have no one to get advice from, I found it, yeah, I now need to bring to hospital. I went to Wexford general hospital</p> <p>R0: how far are you from the OOHs?</p> <p>P4 CW: it is about half an hour, I never had to going to OOHs at all.</p> <p>R0: How long the advice went for?</p> <p>P4 CW: The advice was very little, it was to get my son to the hospital, so the time spent with the nurse may be like about 5 -10 minutes because she treated me as emergency and she said she will ring the hospital to inform them we are coming. It took me under an hour to get to emergencydepartment. There is no way to get ambulance.</p> <p>R0: do you think that OOHs service save you time and travel?</p> <p>P4 CW: yeah, suppose if you go to OOHs, and to be honest with you I find the hospital so bad in the country. I would do anything to avoid me going to the hospital. I would always ring OOHs with a hope that a doctor can sort me out, I do want to go to hospitalbecause hospital are so understaffed in my opinion and long time waiting. At that night they ruled out meningitis straight away, but we stayed for hours after because there was no Peadiatricion. I would prefer to use OOHs than going to hospital, to save my time, we are very isolated in the country side and OOHs is halfan hour far where I live.</p> <p>R0: how would you describe nurses' manner?</p> <p>P4 CW: they very nice very helpful, they say OOHs, nurse Margaret ringing you back.</p>	<p>Waiting time for call back</p> <p>Source of information / Sisters advice</p> <p>Call outcome/ Nurse Advice Hospital visit</p> <p>Short time for advice</p> <p>Travel time casualty</p> <p>Bad experience with hospital visit Reasons for bad experience</p> <p>Nurses' manner</p>	<p>Source of help-seeking Parents preference of Source of advice.</p> <ul style="list-style-type: none"> Sisters advice <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance OOHs Visit by an appointment <p>parents' experiences about nurse advice</p> <p>Parents beliefs about Emergency Departments as an alternative</p> <p>Nurse attitude</p> <ul style="list-style-type: none"> very nice very helpful
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<p>R0: do you think nurses give their advice based on guidelines or just experience, what would say about this?</p> <p>P4 CW: they give information based on the information I gave them.</p> <p>R0: what would expect to happen when you telephoned the service at the start?</p> <p>P4 CW: I wanted to call some as soon as possible. I want to get advice either from a nurse or a doctor, nurse have a lot more experience. I do accept advice from the nurse. Suppose when I ring OOHs it is really an emergency.</p> <p>R0: is there anything that has surprise about the service and the advice been given to you by the nurse?</p> <p>P4 CW: am basically, I am happy with the advice they gave. They were very helpful as they sent to the hospital and saved my time</p> <p>R0: what would say about your visit to the GP? Do you have to register and wait to be called?</p> <p>It is one occasion where I called OOHs, yes I am registered with a gp ,non ever referred by OOHs to visit GP.</p> <p>R0: you rang OOHs at three clock in the morning and took you fifteen minutes to travel GP for 15 minutes , what would you say about this?</p> <p>Ro: what would you say about the location of the service?</p> <p>The location is very near as we live in rural area of the country, I prefer use the service to get seen quickly, save my time. Sometimes it could be crazy busy.</p> <p>R0: what would say in general as a mother of child under two about the Telephone advice service?</p> <p>P4 CW: they are very good, the nurses are very nice, on a scale of10 I would give them 10 out of 10 because I did not know what to do. To improve the service if they could ring quicker especialy in emergency, to ensure that they call back as quick they can.</p> <p>R0: if your ring a casualty and a nurse a said to you I am not in a position to give advice, what would you say?</p>	<p>Information</p> <p>Reason for call</p> <p>Speak to a nurse or doctor,</p> <p>Advice</p> <p>Satisfaction</p> <p>Valuing the nurse</p> <p>Gp travel time</p> <p>Service location</p> <p>Casualty location</p> <p>Satisfaction/</p> <p>Valuing the nurse</p> <p>Improving the service /ring quicker</p>	<p>Parents' perception of the use of Guidelines</p> <p>Parents' perception of child's illness /parents' perception of reasons for call</p> <ul style="list-style-type: none"> • Advice <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Availability • Nurses manner • Time saving to travel • Geographical accessibility • Functional accessibility <p>parents preference/wants</p> <ul style="list-style-type: none"> • Speaking to nurse • Nurse to ring back quicker
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Appendix 3.1

	<p>P4 CW: o my God, suppose they may cover themselves, they cannot see them, that means I have to bring the child in. I understand how careful about giving the advice.</p> <p>R0: what would you say about your general satisfaction with the service? It is a great service to have in the area, I think they are well staffed. In the country most hospitals are understaffed</p> <p>R0: Right, Mrs CW you have given me a lot of information. Our interview has lasted for 26 minutes. Is there any question that you would like to ask me?</p> <p>R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>	<p>Satisfaction / Valuing the service</p>	<p>Reasons for satisfaction</p> <ul style="list-style-type: none"> Well staffed
<p>P5 EMcE</p>	<p>R0 AK: hello; good morning</p> <p>P5 EMCE: good morning how are you.</p> <p>R0: Mrs EMcE thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you</p> <p>R0: great, Mrs, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start</p> <p>R0: <u>the first thing to ask, have you a child who is under two?</u></p> <p><u>P5 EMCE: Yes, she is under two and she is two by the 22nd of August.</u></p> <p><u>R0: do you work your self?</u></p> <p><u>P5 EMCE: no, unemployed.</u></p> <p>R0: how far are do you live from OOHs service?</p>	<p><u>Child's age</u></p> <p><u>Work status</u></p>	<p><u>Accessibility</u></p>

<p>P5 EMCE: I live around 7 kilometres away from OOHs, it is very handy.</p> <p>R0: can you tell me your story or your account of what made you to call or contact OOHs about your child.</p> <p>P5 EMCE: in a lot of time my children got sick for few days, I did not ring my doctor because I was thinking they will get better. And the symptoms start to getworse again. In that case I have to go to OOHs because my own doctor is closed; I don't want to go to my doctor all the time, when the symptoms get worse during the night. Such as rash for my daughter, the other child has been vomiting justsymptoms like that, I have been to my gp twice and the symptoms did not improve. She did not improve for a month, I called OOHs, and sent me to st Luke and then my original doctor eventually knew what is wrong with her and it was a scabies rash.</p> <p>R0: when you called the OOHs for any reasons like these, who do you expect to receive your call?</p> <p>P5 EMCE: I think I spoke to a lady at the receptions, and she get the nurse to call me back, I found them very helpful, sometimes when she had high fever, they told me what to do, then she got a lot better, I found them very good, they give me a good advice.</p> <p>R0: how did you find access to the service in your opinion?</p> <p>P5 EMCE: If found them very accommodating. I find the call ok, they give you an appointment and sometimes I have to wait for few hours</p> <p>R0: how long would you say it take to ring you back?</p> <p>P5 EMCE: they ring back around 20 minutes. No I don't mind waiting for the call back, it is not too long, in emergency I would expect them to ring me back.theaccess is easy I never have a problem</p> <p>R0: How would describe the nurses manner?</p>	<p>Accessibility/ Service location</p> <p>Story/ account/ use of the service</p> <p>Other services closed</p> <p>Reasons for call /Symptoms worsening</p> <p>Previous call outcome/ Gp visit followed by service visit</p> <p>Speaking to receptionist</p> <p>Valuing the nurse Good advice</p> <p>Call outcome/ Appointment</p> <p>Long waiting time for call back</p> <p>Access to service</p> <p>Nurses' manner Valuing the nurse</p>	<ul style="list-style-type: none"> Geographical accessibility <p>Familiarity with the service and being a previous users</p> <p>Parents' perception of child's illness /unknowing/ Uncertainty about treating child's symptom</p> <p>parent's expected outcome of the call Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance A&E Visit referral <p>Description of the process of help-seeking from GP OOHs service Sub-codes:</p> <ul style="list-style-type: none"> Length of call back Speaking to receptionist <p>Nurse attitude</p> <ul style="list-style-type: none"> Very good Offer good advice very reassuring
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Appendix 3.1

	<p>P5 EMCE: they were very nice, they were very good to me. They just said I get someone to call back, and they did, which is very important, and they give an appointment to come in and that is perfect. They give good advice they, I found them very great because when I ring my own doctor you can't actually get advice as such, it is nice that they ring you back and be able to give a good advice to what to do or what to look out for. In case with rash they ask to look at the rash with a glass, you know that type of things, I found good and very reassuring</p> <p>R0: in relation to the information that they give over the phone, do they hang up straight away or just give advice based on something? I found them very good, they talk to you about things, like one day I rang about when my child swallowed a hairconditioner, they give me a number to ring to see if it is poison or not, they are so helpful.</p> <p>R0: how long did the advice last for?</p> <p>P5 EMCE: sometimes it could be less than five minutes. They don't stay long on the phone, I don't feel they want to get off the phone or to get rid of me. They end the call by saying if you need us ring back, you know keep an eye on him, they give an appointment,</p> <p>R0: if they refer you to a casualty which one do you go?</p> <p>P5 EMCE: I go to Kilkenny, that is the time when my daughter she has rash, she was extremely upset. and I was referred around 7 or 8 pm, when we got their they were no people around and we did not see many staff they were very busy, eventually my husband found somebody and they told him get registered with receptionist and we did wait for long time about 4-5hours, when I went to OOHs they give me a letter to go casualty.</p> <p>R0: how would you describe your experience with Casualty?</p> <p>P5 EMCE: I do not want to go again enough, it is a very long wait, there is nobody really down there, it was hard to find anyone , then very long wait are very busy, it is a long wait, once we got seen , we got the same advice as said by gp and OOHs, as it was a viral infection, I got medicine to stop the itching such as antihistamine and I was not very happy because she was not getting any better, very distressed and was not sleeping with it. She scratch all the time her head,</p>	<p>Parent's experience/sick child</p> <p>Call descriptions/ Length of advice time</p> <p>Call outcome/ Advice /referral A&E</p> <p>Bad experience with casualty visit</p> <p>Experience with casualty visit</p> <p>Distressed child/itchy rash</p>	<p><i>parent's expected outcome of the call</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> <i>Home-care advice/ Guidance A&E Visit referral</i> <p><i>Parents beliefs about Emergency Departments as an alternative</i></p> <p><i>Parents' perception of child's illness /unknowing/ Uncertainty about treating child's symptom</i></p> <p><i>Parents' perception of child's illness /unknowing/ Emotionally disturbe</i></p>
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<p>and then after Christmas I booked her to see my Gp and I have to book four days in advance, so nobody looked at the rash by microscope. And got improved few days later as I got the proper cream that killed the spots and a week later she got all better.</p> <p>R0: on a scale out of 10 what would you say about and you want to look for advice?</p> <p>P5 EMCE: I like to ring OOHs because they tell more. If I had to speak to my doctor I speak to receptionist who advises me to come and see the doctor and doctor won't give you advice. And they give more time to speak, OOHs explain something more to you and they give you more advice, and I like that. And they get a nurse to ring back and some time it could be nothing and want just advice, I don't need to go in. sometimes you just get worried, but I know more self if I think my child is limp or high temperature and he is really sick I will be gone out of the door to casualty. I do not ring my mother or friend, if I was not sure about something I would ring and look for reassurance</p> <p>R0: what would expect to happen when you telephoned the service at the start?</p> <p>P5 EMCE: I expect that if I can't get to speak to my own GP. I found OOHs very good. It is a good equivalent, I am so close it is so handy, in terms of expenses I found it expensive to pay 50 euro each time, it is the same price as gp, I think the phone can save money,</p> <p>R0: what would say in general as a mother of child under two about the Telephone advice service?</p> <p>P5 EMCE: I found them very good experience; sometimes you have to wait for a bit of time, I understand that waiting can be annoying, out of 10 I would give the service 7 or 8 out of 10 because, they ring you back, it is not too far from me, I got seen quick, the location is convenient, the lady over the phone quite friendly and nice</p> <p>R0: if you ring a casualty and a nurse said to you I am not in a position to give advice, what would you say?</p> <p>P5 EMCE: alright, I would not be happy, I like to speak to someone that happens with the doctor when he tells to come in and I have to come in and I feel disappointed, I like when they tell you to come in or not to come in, because I</p>	<p>Valuing the nurse Speaking to a nurse</p> <p>Reason for call reassurance/ worried/high temperature</p> <p>Options if no advice/ Casualty visit</p> <p>Valuing TAN: expectation financial accessibility /saving money</p> <p>reasons for satisfaction/ Good experience with OOHs</p> <p>follow advice</p> <p>Reasons for call:</p>	<p>nurse attitude</p> <ul style="list-style-type: none"> Nurses tell more versus doctor advice <p>parents' perception of reasons for call</p> <p>parental choice for advice if TAN service doesn't exist. ED visit GP visit</p> <p>Accessibility</p> <ul style="list-style-type: none"> Functional accessibility Financial accessibility <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> Availability Offer guidance Geographical accessibility Functional accessibility Good experience
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Appendix 3.1

	<p>wanted them to tell me what is wrong. As apparent you could panick and wanted tell you what to do.</p> <p>R0, what would you say if you want summarise the reasons for ringing OOHs?</p> <p>P5 EMCE: well, rash, sometimes cough if doesn't get better, temperature at night and just to get heard, reassurance, I do sometimes look up things from time totime about rash, sometimes it can be helpful, then my gp or OOHs depending on the times, my GP do not offer advice over the phone, so I prefer OOHs as they get a nurse to ring me back.</p> <p>R0: what would you say about your general satisfaction with the service?</p> <p>P5 EMCE: I am very happy to get advice and take the advice as offered by the nurse, I followed their advice and follow what they say, sometimes when you panicky, they make easier. I am very satisfied and very happy to be very close to the service</p> <p>R0: In order to improve the service, what advice would like to give?</p> <p>P5 EMCE: trying to think, sometime the waiting time, the last time I was waiting for two hours , sometimes I think no doctor on duty, see they tell you to come in and sometimes take long, I do not time waiting, so getting more doctor. May be they have to be a communication between the nurse who give the appointment and the receptionist who we see when we go in as she tells me to take a seat, there is no nurse to triage before you see the doctor.</p> <p>R0: Right, Mrs AM you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me?</p> <p>R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>	<p>Reasons for satisfaction/ Adherence to the a nurse advice</p> <p>Improving the service</p> <p>Waiting times Issues</p>	<p><i>parents' perception of reasons for call</i></p> <ul style="list-style-type: none"> • <i>reassurance</i> <p><i>Reasons for satisfaction</i></p> <ul style="list-style-type: none"> • <i>Adherence</i> • <i>Good advice</i> <p><i>parents preference/wants</i></p> <ul style="list-style-type: none"> • <i>Speaking to nurse</i> • <i>more professional staff</i> • <i>nurse triage for face-to-face consultation</i>
P6 EOL	<p>R0 AK: hello; good morning / evening</p> <p>R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you</p> <p>R0: great, Mrs EOL, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate.</p>		

<p>Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start</p> <p>R0: the first thing to ask, have you a child who is under two?</p> <p>P6 EOL: I do , I have a 15months old son</p> <p>R0: do you work your self</p> <p>P6 EOL: yes, I work and my husband works as well.</p> <p>R0: how far are do you live from OOHs service?</p> <p>P6 EOL: we have moved recently, before I was half an hour away and before Christmas we moved and now is about 15minutes away.</p> <p>R0: can you tell me your story or your account of what made you to call or contactOOHs about your child.</p> <p>P6 EOL: my son was a sickly baby, he was quiet sick a lot until he was one, I was at home in my own he is my first baby, there was four or five occasion when I knew he was very sick so I rang OOHs basically for advice.</p> <p>R0: how did you find access to the service in your opinion?</p> <p>P6 EOL: I found the nurse on the phone were really helpful, it was my first time mother and I did not know what to do or expect what is wrong, there was one or two times when I rang them I did not take them any further I got advice from them. There was one time with my son when he was three months old and had really really blocked nose, and the nurse on the line told me to steam him in the shower in the toilet and I never heard that before and it was a great advice that it did work and I did not bring him up to see the doctor. But On another occasion I ended up with him to the hospital I phoned OOHs</p>	<p><u>Child's age</u></p> <p><u>Work status</u></p> <p><u>Location of service</u></p> <p><u>Travel time</u></p> <p><u>Story /account</u></p> <p><u>Sickly baby/ Use of the service</u></p> <p><u>Access</u></p> <p><u>Valuing the nurse</u></p> <p><u>Symptoms/ blocked nose</u></p>	<p><u>Accessibility</u></p> <ul style="list-style-type: none"> <u>Geographical accessibility</u> <p><u>Familiarity with the service and being a previous users</u></p> <p><u>Nurse attitude</u></p> <ul style="list-style-type: none"> <u>Very helpful</u> <p><u>Parents' perception of child's illness /unknowing/</u></p> <p><u>Uncertainty about treating child's symptom</u></p> <p><u>parent's expected outcome of the call</u></p> <p><u>Sub-codes:</u></p> <ul style="list-style-type: none"> <u>Home-care advice/ Guidance</u>
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	<p>and it was worthy to see their doctor two or three times and send me to hospital, I found them very good and I found the doctors in the OOHs really really care up. The only thing I would complain about is you know when you wait to ring you back for advice to tell you see the doctor and I amat home with a baby sometimes it takes 15 minutes and it is along time</p> <p>R0: how long would you say it take to ring you back?</p> <p>P6 EOL: sometimes it could be 5 minutes and one time it took half an hour and thought they forget about me, and I needed them at that time when my child had a temperature.</p> <p>R0: As an initial response when you saw your child has a temperature, what did you think the problem is?</p> <p>P6 EOL: am , when he was young, at that time I was afraid of meningitis a or disease I don't know, other times it was when he has temperature and I was giving him calpol and nurofen and wouldn't get down, as crying crying not settled I was afraid he may have convulsion, I was in my alone away from OOHs, and my husband used to work shifts. I was talking to my mother and then I was thinking to ring the OOHs, with new-borns baby I think it is the night time when they get sick,</p> <p>R0: Can you remember who you call and who called you back; was it a nurse or a doctor?</p> <p>P6 EOL: when you ring you speak to receptionist and they ask you question and they say I will ring you back, so they take your details.</p> <p>R0: How long the advice go for do you think?</p> <p>P6 EOL: the advice they talk to you about. They would stay on the phone till they feel I am happy, then they ask is there anything else that we could help, I find them very good. it was one day when my son was crying and he had a temperature and she could hear him crying over the phone and she told me if that way he is crying, to me he does not sound well, I would bring him to see the doctor and I would make him an appointment now. you know they were very quick to assess the problem and get me the help I needed.</p>	<p>Call outcome/ Advice / Hospital visit</p> <p>Valuing doctors / service</p> <p>Complaint / Waiting long for a call back</p> <p>Reasons for call/ Feeling afraid Self administering Unsettled baby Medication Symptoms</p> <p>Source of information/ Speaking to mother Speaking to receptionist Questions</p> <p>Advice Valuing the nurse Experience with sick child Doctor visit by appointment</p>	<ul style="list-style-type: none"> • OOHs Visit by an appointment • Referral to A&E <p>Nurse attitude</p> <ul style="list-style-type: none"> • Very helpful • Caring up <p>Description of the process of help-seeking from GP OOHs service</p> <p>Sub-codes:</p> <p>Length of call back</p> <p>parents' perception of reasons for call</p> <p>self-acting</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Self-administering of medication • Self-monitoring <p>Source of help-seeking Parents' preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> • Speaking to a nurse in TAN • Speaking to a mother <p>practical constraints of face-to-face consultation</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Perception of receptionist as a gatekeeper <p>parents' perception of reasons for call</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p>
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<p>R0: do you think nurses give their advice based on guidelines or just experience, what would say about this?</p> <p>P6 EOL: they would ask you few questions, a lot of the time some of the questions would be relevant. But obviously they have to ask , they have to ask as medical question, they ask if he has a rash, if he is vomiting, has he temperature, has he any marks, or lump. A lot of the answers would be no but you know they have to rule everything, I have to say they very care up</p> <p>R0: as a mother of child who is sick and if there is no OOHs in your area what will you do?</p> <p>P6 EOL: I would have to go straight to a& e in wexford hospital and that is manic because so many people, especially at the weekend they will be drunk, you know people in accidents and I would be down there with a screaming baby. Once or twice I rang the OOHs and sent me to the service and they dealt with me and sent me home, once or twice I went to OOHs and sent me to casualty with a letter, once I got there to casualty I was seen straight away before everybody because he was a new born baby. I would go to OOHs first, if I did not have then I have to go Casualty, there is no number to ring in casualty and I have to bring him in, it took me Fourty mints from old house and with the new house is half an hour.</p> <p>R0: when the nurse calls you back what they say to you?</p> <p>P6 EOL: they ring back they say hi, I am ...the nurse from OOHs ringing in regards to the symptoms of son. In one or two occasions they go through some questions and they offer advice I want you to try this and see if this can help. Sometime they say I don't want to take chances with the baby I want to give you an appointment to bring in and see the doctor.</p> <p>R0: Can you remember any specific recommendation or what type of advice they may give you?</p> <p>P6 EOL: one time my son was blocked up and could not breathe and I did know that he has asthmatic attack because I am asthmatic, and the nurse on the phone told to run shower in the bath room holding the baby to steam him and advised to do that every three hours, and I think that did work really well in the morning he was cleared him up it seems to me a sound advice .And I did not need to bring</p>	<p>Guidelines</p> <p>Relevant questions</p> <p>Symptoms</p> <p>Valuing the service/ Care up</p> <p>Options if no advice/ A & E visit</p> <p>Experience with A&E</p> <p>Travel time to A & E</p> <p>Call description Advice/ doctor visit</p> <p>Parent's Experience/sick baby</p>	<ul style="list-style-type: none"> • Home-care advice/ Guidance • OOHs Visit by an appointment <p>Description of the process of help-seeking from GP OOHs service</p> <p>Sub-codes:</p> <p>Length of call back</p> <p>Nurse attitude</p> <ul style="list-style-type: none"> • Very helpful • Caring up <p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit</p> <p>GP visit</p> <p>Parents beliefs about Emergency Departments as an alternative</p> <ul style="list-style-type: none"> • Very busy • Long time to travel • Lack of telephone accessibility <p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit</p> <p>GP visit</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p>
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Appendix 3.1

	<p>him. Most of the time they send us to see the doctor. That is an issue for me when they tell you to bring him at 11 pm and wait for some hours. I understand there are other patients but when you have a baby waiting is a problem.</p> <p>R0: what would expect to happen when you ring the service about your sick child ?</p> <p>P6 EOL: I would like to ring to speak to the nurse first because it could be something that need simple advice and if their advice does not work I would look for a doctor advice, nurse are dealing more patient most of the time. I think nurse know a lot because they deal with the public a lot, so I ring the nurse straight away.</p> <p>R0: apart from giving advice over the phone about your child's temperature, what did you want from the nurse and the service of giving consultation?</p> <p>P6 EOL: over the phone need them to get back to you quicker and I prefer to speak to the nurse straight away, one time it took me half an hour to receive a call back and I would have gone to casualty. You know half an hour is a long time when your child is sick and I should be on the road. I think more prompt and quicker response time.</p> <p>R0: do you have a gp. When you went to the GP in the morning, did you wait long to see them?</p> <p>P6 EOL: yes, they open 9 to six pm, the GP more easy as they know you a lot, and when you bring to OOHs they turn up. My first choice is my gp because he knows my son, and if they close I would go to OOHs. The nurse may say if he is no better you need to go GP.</p> <p>Ro: what would you say about the location of the service?</p> <p>P6 EOL: the OOHs is convenient, am I suppose location is easier for someone who is close,</p> <p>R0: if your ring a casualty and a nurse a said to you I am not in a position to give advice, what would you say?</p> <p>P6 EOL: I say thanks very much, I would hope she could, I would go down to see the doctor, one time my son was sick and OOHs sent us to casualty, and he had a problem with testicles, he was young baby, we stayed for three hours and were sent home after that and the second day I found some blood in his nappy and I</p>	<p>Call outcome/ sound advice/ doctor visit</p> <p>Parent's expectation/ speaking to the nurse</p> <p>Valuing the nurse</p> <p>What parents want/suggestion</p> <p>Options if no service/ GP visit</p> <p>Choice of advice</p>	<ul style="list-style-type: none"> • Home-care advice/ Guidance • OOHs Visit by an appointment • Speaking to the nurse <p>Parent' preference / wants</p> <ul style="list-style-type: none"> • Prompt and quicker call back <p>parental choice for advice if TAN service doesn't exist. ED visit GP visit</p>
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	<p>rang the casualty on Sunday because I was afraid of kidney infection. I was really angry with the receptionist and we spent half a day with your doctor to say he was fine and OOHs sent to you because of an issue with his kidney, and we ended up with admission and treated for kidney infection and I had a big issue and really angry. I sent a complaint about causality and I had negative experience. I was angry with the receptionist because we were up and down to casualty. So when OOHs give you a letter they help you a lot. And get you quicker to get seen.</p> <p>R0: what would you say about your general satisfaction with the service? P6 EOL: I would say 8 out of 10. When I ring first I speak to them straight away 99% they give me advice, the only issue or complaint as a worried mother is when they ring back as it takes sometimes long time, and when I go to see them is the waiting time to see the doctor.</p> <p>R0: In order to improve the service, what advice would like to give? P6 EOL: I did not know if it is more staff they need over the phone. And me be they need two doctors, may be they need an area to children and an area for adults. Because it was a time when I was with my kid and an adult man who was vomiting and watching that a little girl is watching.</p> <p>In the future, I would ring OOHs, I would feel so lovely to have that, and the nurse are also so lovely to me, they say to me to calm down when they heard me crying and getting neurotic about my child, my experience I would use them again and with casualty is different and I feel they do not listen to you and would not have a great faith compared to OOHs. OOHs is valuable service,</p> <p>R0: Right, Mrs EOL ...you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me? R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>	<p>Parent's experience/ Bad experience with casualty</p> <p>Satisfaction</p> <p>Complaint / issues/length of call</p> <p>Improving the service</p> <p>Valuing the nurse /Valuing the service</p>	<p>Parents beliefs about Emergency Departments as an alternative</p> <ul style="list-style-type: none"> • Long waiting time • Bad experience <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Availability of service after out-o- hours • Telephone accessibility <p>Reasons for dissatisfaction;</p> <ul style="list-style-type: none"> • Long time to response back call <p>parents preference / wants</p> <ul style="list-style-type: none"> • More Professional staff • Need for children area <p>Nurse attitude</p> <ul style="list-style-type: none"> • Lovely nurses • Caring up • Listening ears
<p>P7 MOC</p>	<p>R0 AK: hello; good evening R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you</p>		

Appendix 3.1

<p>R0: great, Mrs MOC , I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start</p> <p>R0: the first thing to ask, have you a child who is under two?</p> <p>P7 MOC: yes, he would be 2 on the 16 of September, I have two</p> <p>R0: do you work your self</p> <p>P7 MOC: a house hold</p> <p>R0: how far are do you live from OOHs service?</p> <p>P7 MOC: about 7 miles about 10 or 15 minutes' drive.</p> <p>R0: can you tell me your story or your account of what made you to call or contact OOHs about your child.</p> <p>P7 MOC: I rang them few times, he has a rash covering all his body, he had a flew like symptoms. I think it was a viral rash that he has, I had him with OOHs twice and with the hospital twice. They sent me to paediatric consultant in cork, I did not what was the rash I was thinking of meningitis. I found them very good, they are fantastic.</p> <p>R0: how did you find access to the service in your opinion?</p> <p>P7 MOC: their access is very good, I ring them and it takes me two hours to see them, when you ring them you ring the centre and they ask you what is wrong with the child, and they ring back, you speak to somebody first, we live one hour away from the hospital, we never had a child that is very sick, and we need to bring to hospital, my cousin had a child who had meningitis last week and he went to OOHs and he was lucky and sent to hospital.</p> <p>R0: how long would you say it take to ring you back?</p>	<p>Child' age</p> <p>Unemployed parent</p> <p>Travel time to the service</p> <p>Story/ account</p> <p>Symptoms</p> <p>Reason for call</p> <p>Valuing the nurse</p> <p>Access to the service /easy access</p> <p>Call description/ Waiting time for ring back</p> <p>Previous experience</p>	<p>Accessibility</p> <ul style="list-style-type: none"> Geographical accessibility Telephone accessibility <p>Familiarity with the service and being a previous users</p> <p>parents' perception of reasons for call</p> <p>Nurse attitude</p> <ul style="list-style-type: none"> Very good <p>Accessibility</p> <ul style="list-style-type: none"> Easy access Telephone accessibility <p>Description of the process of help-seeking from GP OOHs service</p> <p>Sub-codes:</p> <p>Length of call back</p>
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<p>P7 MOC: I used the service about 10 times. Sometimes they ring back in few minutes sometimes they take long.</p> <p>R0: As an initial response when you saw your child has a temperature, what did you think the problem is?</p> <p>P7 MOC: when my child is sick I get very worried, if it is during the week I ring my gp and I have a cousin who is a doctor, and if it is during the night I ring OOHs.</p> <p>R0: can you describe the nurse manners over the phone?</p> <p>P7 MOC: they are very nice, they introduce them self,</p> <p>R0: How long the advice go for do you think?</p> <p>The advice goes for three minutes, they ask you question based on the symptoms, if they think you did not need to come they say give some Calpol or Nurofen, and if worried to ring back as one way of assurance. It was the nurse who rang me</p> <p>R0: Did she offer you any recommendation do you think?</p> <p>P7 MOC: I never had a child who is very sick.</p> <p>R0: if you made a decision to attend a casualty or a OOHs service which one is closer to you?</p> <p>P7 MOC: OOHs is closer, if I ring casualty they would not give advice, so I ring OOHs first.</p> <p>R0: When you went to the GP in the morning, did you wait long to see them?</p> <p>P7 MOC: I have a GP and he is about 7 miles away from me same as the OOHs.</p> <p>R0: what would say in general as a mother of child under two about the Telephone advice service?</p> <p>P7 MOC: OOHs is an evening service and if there is no one who open at night. I would use their service again, my satisfaction with the service I would give 9 out of 10.</p> <p>R0: what would you say about your general satisfaction with the service?</p> <p>P7 MOC: you have used the service many times, the service is very good, reliable, trustworthy, every time I ring them especially in the middle of the night, they give me tablets and I get from the pharmacy, sometimes they refer me to the hospital. One time they rang up Cork A&E as it is the nearest hospital, it takes me about 50minutes. I found them very busy</p>	<p>Feeling worried Reason for call</p> <p>Source of information</p> <p>Valuing the nurse/ Nurses manner</p> <p>Advice/ Choice of advice/Call outcome</p> <p>Options for advice</p> <p>GP travel time</p> <p>Use of the service</p> <p>Satisfaction</p> <p>Reason s for satisfaction reliable, trustworthy</p>	<p>Parents' perception of child's illness / Emotionally disturbed Frightened</p> <p>Source of help-seeking Parents preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> Speaking to a nurse in TAN Speaking to a friend <p>Nurse attitude</p> <ul style="list-style-type: none"> Very nice <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Home-care advice/ Guidance <p>parental choice for advice if TAN service doesn't exist.</p> <p>ED visit GP visit</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> Availability Offer guidance Geographical accessibility Functional accessibility Trustworthy Adherence to nurse advice
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Appendix 3.1

	<p>R0: In order to improve the service, what advice would like to give? P7 MOC:I think OOHs is really working, may be if they have two doctors, you never see a nurse , you speak to them over the phone, if they can put top speak you to the doctor, they just offer you advice and an appointment. I generally adhere to the advice they give over the phone. R0: Right, Mrs AM you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me? R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>	<p>experience with A&E</p> <p>Valuing the service/ Adherence</p>	<p>parents preference/wants</p> <ul style="list-style-type: none"> Speaking to nurse
<p>P8 MOK</p>	<p>R0 AK: hello; good morning / evening R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you R0: great, Mrs MOK, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start R0: the first thing to ask, have you a child who is under two? P8 MOK: Yes, I do, he is 9 months. I have another child who is 9 years. There is a good gap because I had two miscarriages. R0: do you work your self</p>	<p>Child's age Work status/ employed</p>	<p>Accessibility</p> <ul style="list-style-type: none"> Geographical accessibility Telephone accessibility

<p>P8 MOK: no I work at home, full time mum</p> <p>R0: how far are do you live from OOHs service?</p> <p>P8 MOK: roughly about 7 minuets drive from OOHs.</p> <p>R0: can you tell me your story or your account of what made you to call or contact OOHs about your child.</p> <p>P8 MOK: I rang OOHs so because I had this experience with my about my child who was 5 months and he woke up with cough. I am asthmatic myself. And I knew that my other son had a croup cough before. so because of that experience with my 9year son, I rang OOHs because I want him get seen and did not want to speak to the nurse over the phone. I want him to get seen. So OOHs did not seem to me he needs to be seen straight away and they offer me an appointment to attend within 3hoursbecause they were very busy. So I brought him straight in to Emergency department in wexford and I took me 15 minutes to be there, so I rang reception because he was constant crying and the nurse rang me and she went through question, but the nurse did not know my experience as a mother with my child, like you, the nurse and doctors are fantastic, but she did not feel that my child is an urgent enough to be seen. The nurse said like he sound to be ok, but I decided myself that my child in this particular incident needs to be seen because he is so young and I do not want him wait for hours, as mother with a child who screams for an hour like that I got sympathetic, and when you look at your child's face and behaviour you get worried. so I decided to take him to hospital and the nurse in A&E she got him and see him straight away and she gave a nebuliser and kept him over the night.</p> <p>R0: how long would you say it take to ring you back?</p> <p>P8 MOK: they rang me straight away, generally speaking about OOHs, I will be happy with OOHs service, but they could be one incident when they did not get right.</p> <p>R0: As an initial response when you saw your child has a temperature, what did you think the problem is?</p> <p>P8 MOK: when I rang them because I want to get an appointment and see the doctor, but she could not because she has to ask me few questions and she</p>	<p>Accessibility/ Travel time to service /Location</p> <p>Use of the service</p> <p>Reason for call/cough</p> <p>Previous experience/sick child</p> <p>Call outcome/appoint ment/ long waiting time</p> <p>Parents option/choice of advice</p> <p>Reason for call/crying</p> <p>Valuing the nurse</p> <p>Feeling sympathetic / Feeling worried</p> <p>Call description/rang back straight away</p>	<p><i>Familiarity with the service and being a previous users</i></p> <p><i>Parents' perception of child's illness /unknowing/</i></p> <p><i>Uncertainty about treating child's symptom</i></p> <p><i>parent's expected outcome of the call</i></p> <p><i>Sub-codes:</i></p> <ul style="list-style-type: none"> <i>Home-care advice/ Guidance</i> <i>OOHs Visit by an appointment</i> <p><i>Parent's decision making rather than TAN advice</i></p> <p><i>Sub-codes</i></p> <ul style="list-style-type: none"> <i>Parents preference to be seen</i> <i>Perception of urgency</i> <p><i>parents' perception of reasons for call</i></p> <ul style="list-style-type: none"> <i>constant crying</i> <p><i>Nurse attitude</i></p> <ul style="list-style-type: none"> <i>fantastic doctor/nurse</i> <p><i>Description of the process of help- seeking from GP OOHs service</i></p> <p><i>Sub-codes:</i></p> <p><i>Length of call back</i></p>
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Appendix 3.1

<p>offered her opinion, I did not want to speak to the nurse , because he sounds to me different symptoms.</p> <p>R0: what did the nurse offer advice offer you advice over the phone?</p> <p>P8 MOK: I think she if his breathing is ok, if he has a rash, what colour of his lip and about 10question and most of the question were no, she probably decided well, I don't think he needs to see the doctor straight away, I did say thank I am going to take him to emergency department. The nurse did not offer me to go to casualty, I said to her I cannot wait that long, and she said ok then good by, so they did not call me after to follow up and see how he was and how I get on.</p> <p>R0: in your opinion how would describe nurse manner over the phone?</p> <p>P8 MOK: see I think she just probably gone through the motion, I still find them understanding, compassionate, but in this particular time she was going by a book. She said we get him seen with few hours, I said no that is not quick enough, the advice went for about3-4 minutes. With his other brother he is asthmatic it was one time when had very bad and we got him to OOHs and give him nebuliser and inhaler then he was fine since. He is very well now and I brought him to OOHs many times. But when had the new baby, new cough, from my experience I knew there is something wrong.</p> <p>R0: would you ring someone who know or use internet to get advice?</p> <p>P8 MOK: sometimes I would use internet and I would ring my mum as she as a mother she always say to me go with your mothersinstinct and go with what you feel. As type of personality type I would always bring him to the doctor when they get sick as I get very anxious especially baby when they are very young. Suppose it is different personality, my sister she would wait for few days to bring her child to see the doctor, but for me it would take me a day if my children get sick.</p> <p>I normally ring OOHs for advice and my first choice would be OOHs. Normally I want that little bit of assurance from the nurse over the phone, I am satisfied and very happy with service.</p> <p>R0: if you made a decision to attend a casualty or a OOHs service which one is closer to you?</p>	<p>Call description/</p> <p>Parents' option/choice for advice</p> <p>Nurse manner understanding, compassionate about</p> <p>Previous experience with sick child</p> <p>Source of information</p> <p>Anxious mother Personality type</p> <p>Satisfaction/parent's want Advice Assurance</p>	<p>Parent's decision making rather than TAN advice</p> <p>Nurse attitude</p> <ul style="list-style-type: none"> • understanding, • compassionate <p>Parents' perception of child's illness</p> <p>Source of help-seeking Parents' preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> • Speaking to a nurse in TAN • Speaking to a mother • Use of internet <p>Parents' perception of child's illness /unknowing/ Emotionally disturbed</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Want reassurance • Offer advice/guidance • Functional accessibility
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<p>P8 MOK: I have a good experience with casualty but it is a country hospital, and when you tell him I have a sick child they see him but you have to wait to see the doctor. See three weeks ago my little son fell and banged his head, had large swollen forehead, shocked, as a mother I got panic when I see him, he did not get sick or pass out, he did not get confused, dizzy, and my husband said he is fine and he did not need to go to hospital, I rang casualty and she said to bring him in, and I did they kept him for one night, so the nurse said to me bring him and I went with the nurse thought over the phone and I have a good adherence, and I always listen to what they say.</p> <p>R0: Do you think that the service should be improved so you can have easy access?</p> <p>P8 MOK: so far I am happy with both casualty and OOHs, sometime when the nurse do not see the child, maybe is that the nurse could say to a mother who is worried we lovely can see him but you could bring him to the hospital, in that particular incident I was disappointed, as I said It is one off you, I thought that she would say to me bring him and we will see him. You know as a mother in a lot of the time when I ring they would say do not worry and bring him in and we could get him sorted out, but in that particular incident she did not and I was answering all the question with no, but as mother when I saw my child woke up with parking cough and crying I was worried and it decided to bring him to emergency room.</p> <p>To improve the service, that there was one doctor who was there, even if the child is not that sick they always bring him in, bring him, but in that incident she would say I don't have an early appointment and she would have say I advised to bring the child to hospital, she did not see him, he is 5 months old, she didnot think that the child is very sick, may she didnot want to panic me. I a lot of the time they would say to bring the child in.</p> <p>Ro: what would you say about the location of the service?</p> <p>P8 MOK: there number is easy to access and I have on my phone, the location is not too far away and accessible.</p> <p>R0: if your ring a casualty and a nurse a said to you I am not in a position to give advice, what would you say?</p>	<p>Positive experience with casualty</p> <p>Satisfaction versus Dissatisfaction</p> <p>Reason for call</p> <p>Parent's want</p> <p>Accessibility/Easy access</p>	<p>Parents beliefs about Emergency Departments as an alternative</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Perception of good experience <p>Reasons for dissatisfaction Lack of face-face consultation</p> <p>parents' perception of reasons for call</p> <p>parents preference/wants</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • preference for more staff • want quicker call back • preference for shorter waiting to see the doctor • Preference for face-to-face assessment. <p>Accessibility</p> <p>Sub-codes</p> <ul style="list-style-type: none"> • Geographical accessibility • Functional accessibility
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Appendix 3.I

	<p>P8 MOK: see that never happened with me, oh you never get that, never say that to me, oh yeah they would say to me that he needs to be seen or you can go to your gp or bring to OOHs in the second morning.</p> <p>R0: Right, Mrs MOK you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me?</p> <p>R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>		<ul style="list-style-type: none"> • Telephone accessibility
<p>P9 CC</p>	<p>R0 AK: hello; good morning / evening</p> <p>R0: thank you very much for giving the time to speak to you at this time of the day/evening, and I hope everything is good for you</p>		

<p>R0: great, Mrs, I would like to confirm few things with you; this is just an interview for a study for the purpose of gaining a higher education certificate. Whatever information you give is very confidential. Your name is not going to be use at any stage, every information that you give will be coded with a code number so your name will not be identified by anybody even my supervisors, the data or information that you give will be absolutely used for the purpose of the study and I will make some recommendation to OOHs service so they can improve the service for better things and staff nurses may make use of it just to improve their practice and to gain more experience about parents of children under two. So it is a great chance and I would like to thank you for this chance so shall we start</p> <p>R0: the first thing to ask, have you a child who is under two?</p> <p>P9 CC: yes, he is 19 months.</p> <p>R0: do you work yourself?</p> <p>P9 CC: yes, I do.</p> <p>R0: how far are do you live from OOHs service?</p> <p>P9 CC: about 10 kilometres, about 10 -15 minutes</p> <p>R0: can you tell me your story or your account of what made you to call or contact OOHs about your child.</p> <p>P9 CC: I have three small children, I have used the service a lot for my youngest child, if your first child you will be worried about small things such as persistent temperature, my son has asthma symptoms and he needed nebulisers.</p> <p>R0: how did you find access to the service in your opinion?</p> <p>P9 CC: I have to say their service is expert, the nurse call back, in a lot of time they call me back. And the answer call back service is really good, you speak to a nurse and they give you the option to speak to a nurse or to get an appointment</p>	<p><u>Child's age</u></p> <p><u>Work status</u></p> <p>Accessibility/ Location of the service/Time to travel</p> <p>Account, story , views /use of the service</p> <p>Reasons for call Worried/Symptoms: temperature, asthma symptoms.</p> <p>Valuing the service/Expert service</p> <p>Time to ring back</p>	<p><u>Accessibility</u></p> <p><u>Sub-codes</u></p> <ul style="list-style-type: none"> • <u>Geographical accessibility</u> <p><u>Familiarity with the service and being a previous users</u></p> <p><u>Parents' perception of child's illness /unknowing/</u></p> <p><u>Uncertainty about treating child's symptom</u></p> <p><u>Nurse attitude</u></p> <ul style="list-style-type: none"> • <u>Expertise</u> • <u>Call back quicker</u> • <u>Really good</u> <p><u>Description of the process of help-seeking from GP OOHs service</u></p>
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<p>to see the doctor, some time it takes an hour to ring back or three quarters an hour and certainly they are improving now, in case you have an emergency they ring you quicker. So in general they are much quicker and now it may take 15 minutes. So if your child is really sick and you do not want to wait to the nurse to call you back you may go and see them or ring an ambulance, but you know I never tried to ring an ambulance, I prefer to wait for the nurse to call back</p> <p>R0: Can you remember who called you back; was it a nurse or a doctor? Can you describe the nurse manner over the phone?</p> <p>P9 CC: nurses manners are very good, very calm, very practical, quiet thorough and they go into a lot of detail. Say they give advice but if, they generally give good advice and to be on the safe side they recommend to come in and if they give advice whatever is they also to say if not happy to come in. so I found them very practical and very informed, they going through a series of questions, like a sort of criteria and guidelines that they follow. actually one time I had rang the service about my child I was not sure what to do as she swallowed a fire lighter, so she said to me I have to come back to you I think they follow a certain criteria and they are on the side of caution when they give you advice how to deal with symptom's so they give good practical suggestion,</p> <p>R0: how far is casualty from you? Can you tell me your experience with Casualty?</p> <p>P9 CC: generally it is low experience, very long waiting, my son and husband were referred to go at 11 pm and was triaged straight away and it took him up to 5 clock in the morning to get admitted, generally speaking the nurse in A&E are very life. It seems to be that they are very slow and they must be very busy, so my experience is in the middle of a scale of 10.</p>	<p>Speaking to a nurse</p> <p>Doctor visit and an appointment</p> <p>Options if no advice /Call ambulance</p> <p>Nurses manner: very good, very calm, thorough up, give good advice</p> <p>Recommendation to come in Use of guidelines, use of criteria, Good practical suggestion,</p> <p>Previous experience</p> <p>Casualty experience: low experience, between good and bad.</p> <p>Reasons for bad experience: long time waiting, very busy, very slow.</p>	<p>Sub-codes: Length of call back</p> <p>parent's expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Speak to the nurse • OOHs Visit by an appointment <p>Parent's decision making rather than TAN advice</p> <p>Sub-codes</p> <ul style="list-style-type: none"> • Parents preference to be seen • Perception of urgency <p>Nurse attitude</p> <ul style="list-style-type: none"> • very good, • very calm, thorough up, • give good advice • recommendation to come in Use of guidelines, use of criteria, • Good practical suggestion, <p>Parents beliefs about Emergency Departments as an alternative</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Perception of long waiting time • perception of very busy • perception of understaffed • perception of availability of staff • very slow
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	<p>R0: what would expect to happen when you telephoned the service at the start? P9 CC: my expectation is that that the really assess the situation and that they may tell you to come in if they think it is serious, I ring to get my child assessed and he needs to be seen so I phone to be reassured and get some help to what to do.</p> <p>R0: if your ring a casualty and a nurse a said to you I am not in a position to give advice, what would you say? P9 CC: am, suppose I don't know really, she may tell you to go OOHs service, or to bring to Casualty, I hope she give some recommendation and you have to do what she says.</p> <p>R0: what would you say about your general satisfaction with the service? P9 CC: quiet satisfied I am not always satisfied, but generally speaking most of the doctor you meet are thorough up and go into a lot of details. But for not always satisfied is that when I had a problem from breast feeding of my child and I had mastitis, I rang the OOHs and went and see the doctor and she offered me an antibiotic and I want her to describe me another antibiotic and she refused and I had what she give me and I ended up in few days later with bad infection and got admitted, another incidence where I visited the service within the six week check-up for my baby and ended up with paying 60 euro and it should be free. Otherwise I am satisfied with the service. I do really appreciate the nurse service over the phone.</p> <p>R0: can you describe your adherence to the advice that the nurse give you over the phone?</p>	<p>Expectation about TAN : assessment, advice, reassurance, to get some help</p> <p>Options if no advice</p> <p>Satisfaction versus dissatisfaction Reasons for satisfaction doctors are thorough up, nurses give practical advice. Reasons for not satisfaction: charged for free service, refusal of giving medication she want. Valuing the GP service source of trust</p>	<p>parents' perception of reasons for call</p> <ul style="list-style-type: none"> • Reassurance • Guidance • Advice <p>parental choice for advice if TAN service doesn't exist. ED visit</p> <p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Availability • Offer guidance • doctors are thorough up, • nurses give practical advice <p>Reasons for dissatisfaction Lack of face-face consultation</p> <ul style="list-style-type: none"> • financial accessibility • unmet expectation <p>Nurse attitude</p> <ul style="list-style-type: none"> • Trusted expertise
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Appendix 3.1

<p>P9 CC: I would generally adhere to the advice and to what they you say, they sometimes tell you little tips regarding the symptoms of the child, and advice, sometimes they tell you to come in, I trust them and I always find it good to deal with the nurse. In the future I would my put the GP first during the day hours and then ask for advice from OOHs during the out of hours.</p> <p>In terms of my time and travel it is very acceptable and easy to pick up the phone and ring them especially in the evening it is invaluable. The location of the service fine, and casualty is the same about 10-15 minutes' drive.</p> <p>R0: In order to improve the service, what advice would like to give?</p> <p>P9 CC: don't think they normally follow up who they ring, I think it was one time that the nurse phone me back , I cannot remember what was the case but she did phone to say how did I get on, but she was the same nurse who I spoken to. I also would say that may be a couple of nurse may improve the service especially when you exposed to emergency service,</p> <p>R0: What would you say about GPs and you general experience about OOHs services?</p> <p>P9 CC: I really like my GP, I found them very good, probably the nurse in OOHs service as most of them are mothers and I feel that they offer a practical advice. That is the difference I could say, It is a great service that we have OOHs and I cannot imagine what A&E is going to be like if OOHs in that their. It is a fantastic service, my experience is very positive, it I during the night when most of baby get sick I would imagine they give a fantastic service.</p> <p>R0: Right, Mrs AM you have given me a lot of information. Our interview has lasted for 40 minutes. Is there any question that you would like to ask me?</p> <p>R0: I would like to thank you again for giving us the time to speak to you; you have my contact phone and e-mail address written on the information sheet that I already sent to you.</p>	<p>Valuing the OOHs service:</p> <p>Accessibility/ Acceptable, easy, save time and travel, near location.</p> <p>Improving the OOHs: need for nurse follow up, more nurses</p> <p>Valuing the nurse: give practical advice, mothers of children themselves.</p>	<p>Reasons for satisfaction</p> <ul style="list-style-type: none"> • Geographical accessibility • Functional accessibility • Financial accessibility • Telephone accessibility <p>Parent' preference / wants</p> <ul style="list-style-type: none"> • Preference for follow-up assessment. • Preference for a Professional staff <p>Nurse attitude</p> <ul style="list-style-type: none"> • Trusted expertise • give practical advice, mothers of children themselves.
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Appendix 3.J Table showing the codebook created to show data analysis

This codebook is developed and depicted based on the work of Fonteyn et al. (2008) who created their codebook with definitions, inclusions and exclusion criteria, and exemplar text from the transcript.				
Codes and sub-codes	Definitions	Inclusion and exclusion criteria	Description of the code	Exemplar from the transcript text.
<p>Code 1 Accessibility</p> <p>Sub-codes</p> <ul style="list-style-type: none"> Geographical accessibility Functional accessibility 	<p>This code refers to the continuing and organized supply of care that is geographically, financially and functionally within easy reach. It also relates to opening hours and that the service is open for use being easy and simple to access.</p> <p>This sub-code means that the distance, travel time, and means of transportation are acceptable</p> <p>This sub-code refers to having the right kind of care available on a continuing basis to those in need when they need it</p> <p>This sub-code means Whatever the method of payment, services are affordable.</p>	<p>Inclusion criteria:</p> <ul style="list-style-type: none"> Any statements describing the service and having a positive or negative view about TAN accessibility. Any statements referring to the service location or geographical distance, time to travel or cost to travel. Any statements describing service hours Any statements describing the use of the telephone to ring the service Any statements referring to making decisions about costs of different types of care 	<p>A participants described her view about OOHs in that, the use of the telephone to ring OOHs had made it easy for her to get advice over the telephone which in turns had saved her time and travel to see the GP.</p> <p>Another participants who described that the OOHs is accessible because of the availability of the telephone number that she can ring any time and also because of being living close to the service.</p> <p>A third participant who comments saying that getting advice over the phone is a huge help especially when she needed advice for her new-born baby. Otherwise she has to drive for 15 minutes to get her child seen in the nearest OOHs</p> <p>Another participant who preferred to use OOHs because</p>	<p>P1 AM: " I think it is a great service, a 24 hours service for children that you can pick your phone and ring and ask questions or information about something rather than you have to go and see a doctor, it would save seeing the GP is well."</p> <p>P1 AM: " I used it as to speak to a nurse and I have not got necessary to go a doctor department, and it did work very well for me."</p> <p>P2 AC: "Actually, it seems very good. Am, because when we called, am, you know, in some occasions we were calling because obviously it is out-of-hours service, and like regular GPs when their service is closed "</p> <p>P1 AM: "I think they should be another service in there where you do not have to go to the doctor and pay 50 Euro, because with children so many things would pop up. It is very expensive, I think that is why, you know, at least OOHs, and I rang them before about little thing, at least you</p>

Appendix 3.J

<p>Code 2 Familiarity with the service and being a previous users</p>	<p>This code refers to parents' use of OOH service as regular users and is familiar with it.</p>	<p>Inc. Cr.: Any statements describing the multiple use of the service</p>	<p>Parents described their perception about OOHs as being familiar with it and have used many times to acquire advice form the nurse over the telephone.</p>	<p>P1 AM: "I contacted OOHs numerous times about my child, I viewed it as a great service,</p> <p>P2 AC :“Yeah, I called them a lot of times, really since A was the age of 9 or 10 months old, probably we called them 5 or 6 times in that period.”</p>
<p>Code 3: Parents' perception of the consequences of child's illness on help-seeking /unknowing/ Uncertainty about treating child's symptoms</p>	<p>This code refers to participants' lack of awareness and information and being uncertain to what to do when their child is showing symptoms of sickness</p>	<p>Inc. Cr.: Any statements describing lack of information, unknowing or unaware to what to do when the child is unwell.</p> <p>Exc. Cr.: any statements about advice or information other than sickness.</p>	<p>This code describes participants ' statements of being unaware and have lack of information and knowledge how to act to relief child symptoms once the child starts to develop symptoms of sickness</p>	<p>P1 AM: "The rest of her body was hot, I did not know wither should I cover her, I didn't know what to do with her."</p> <p>P4 CW: "....., that advice I needed to know what to do, at that time I have no one to get advice from"</p> <p>P6 EOL: " it was my first time mother and I did not know what to do or expect what is wrong with my child,"</p>
<p>Code 4: self-acting</p>	<p>This code refers to parents' attempts to manage the symptoms of a sick child.</p>	<p>Inc. cr.: any statements that describe participants' intention to manage child's symptoms by her-self based on what she knows or from her previous experiences.</p> <p>Exc. cr.: any statements describing participants 'managing the</p>	<p>This code is linked with participant's view of how to manage the symptoms that the child has when they get unwell either by administering medication over the counter such as calpol and nurofen, or by applying self-care based on</p>	<p>P1 AM: "I had E (child) woke up at night with a high temperature during the day. I could not or I find it difficult to keep it down. I would wait here and give nurofen every six hours. So I gave nurofen whatever during the night...."</p>

<p>Sub-codes:</p> <ul style="list-style-type: none"> • Self-administering of medication • Self-monitoring 	<p>Giving over the counter medication based on her previous experience.</p> <p>Observing and monitoring child's symptoms and waiting for signs of improvement or signs that are worrying.</p>	<p>situation based on advice given from others such as nurse, friends, and mothers.</p>	<p>their level of understanding to what the situation is such applying pathing the child to cool him down or putting him into shower to get his temperature down. .</p>	<p>P1 AM: "..... I have set with her in the house at three clock in the morning and that is a deal for anything, you know, I would wait until the morning, I didn't sleep, I stayed with her."</p>
<p>Code 5: Parents' perception of child's illness / Emotionally disturbed</p> <p>Sub-codes:</p> <p>Anxious</p> <p>Worried</p> <p>Frightened</p> <p>Panicked</p> <p>Shocked</p>	<p>This means expressing the feeling of worry or getting a fright once the child is developing unexpected symptoms that are unknown to participants.</p>	<p>Inc. Cr. Any participant's statements that is indicating the experience of emotional states such as worry, afraid, fright and something that causes anxiety</p> <p>Exc. Cr. Any statements reflecting the opposite feeling to being worry, fright and afraid.</p>	<p>This code describes participants' views and perception of their emotional disturbances because of the worrying and the seriousness of the symptoms that children are developing such as rash, serious cough, convulsion.</p>	<p>P1 AM: "..., So I gave nurofen whatever during the night, I found her really hot, her feet were freezing cold, and heart rate is racing so I got a fright. So I rang OOHs."</p> <p>P1 AM: "When you worried about febrile convulsion I would ring them straight away, when my child had febrile convulsion"</p> <p>P8 MOK: "....., As type of personality I have, I would always bring him to the doctor when they get sick as I get very anxious especially babies when they are very young."</p>
<p>Code 6: parents' perception of reasons for call</p>	<p>This refers to participants' perception of what constitute a reasons for calling TAN</p> <p>Feeling of being reassured</p>	<p>Inc. Cr.: any statements about asking for reassurance and advice for the purpose of reassurance and relieving worrying feelings.</p>	<p>This code is linked with participants' main reasons for calling the service because they wanted to be reassured, guided, and directed to take a course of action that suited the</p>	<p>P1 AM: " I was not asking for recommendation, I was asking for guidance and reassurance what should I do and should I bring her to a doctor in the morning."</p>

Appendix 3.J

<ul style="list-style-type: none"> • Reassurance • Guidance • Advice • Seeking a second opinion for reassurance 	<p>Clear directions of how to act and manage the sickness of their children</p> <p>This sub-code refer to obtaining a second opinion? from a different health resource of information and advice other than speaking to the nurse working at TAN and for the purpose of reassurance about the same health concern</p>	<p>Exc. Cr. Any statements about reassurance and not related to child’s symptoms or sickness.</p> <p>Incl. Cr. any statements referring to seeking a second opinion from a medical person other than the nurse for reassurance about the same health concern.</p> <p>Exc. Cr. any statements referring to seeking a second advice from a non-medical person.</p>	<p>need of their children when they are sick and developing worrying symptoms.</p> <p>This sub- code is linked with participant’s decision to seek for a second opinion for the purpose of reassurance after speaking to a nurse working in TAN about the same health concern.</p>	<p>P2 AC: “ if my child is sick during the out-of-hours, I would definitely use OOHs, if I was reassured that she needed to see a doctor, I couldn’t wait till the morning and I can’t see any reasons why wouldn’t use OOHs”</p> <p>P4 CW: “I rang my sister in law, she said go go, I kind knew in that case that there is something really wrong when he and he starts to swell, he was weak and had a temperature, I just rang OOHs they said to me to see a doctor or to get him to a doctor.”</p> <p>P9 CC: “..., I rang to get my child assessed as he needs to be seen so I phoned to be reassured and get some help to what to do.”</p> <p>P1 AM: “ It was three clock in the morning when I rang the nurse ..., she advised me that cold feet are fine and heart racing because of the temperature..., and I rang OOHs at 0900am and they took me less, I would say 0930 am. “</p>
<p>Code 7: Description of the process of help-seeking from GP OOHs service</p> <p>Sub-codes:</p>	<p>This code means how participants describe the process of call when advice is needed. This also refers to who leads the call and what happen during the call.</p>	<p>Inc. Cr. Any statement that describes participants’ initial contact with TAN in order to meet their need of advice.</p> <p>Any statements that describe the role of the call taker.</p> <p>Any statements that describe the time spent over the telephone to deliver an advice.</p>	<p>Participants describe their initial contact with TAN by ringing the service and speaking to a receptionist first who registers their details, confirms their addresses and asks for a brief reasons for contacting the service, then the caller wait for some time where they receive a call back from</p>	<p>P1 AM: “ yeah, I rang and I spoke to a secretary, I was still through to someone and she got a nurse to ring me back within few minutes.”</p> <p>P2 AC: “usually, a receptionist, yeah, and then they well say I will get a nurse if I ask to speak to a nurse. Usually they say I get a nurse to phone you back. And so, then a nurse call me within 10 minutes.”</p>

<ul style="list-style-type: none"> • Call taker role/ Initial details recorded by receptionist • Nurse call back 	<p>This code specifies who answers the call and describes their role while dealing with the caller.</p> <p>The length of time that is necessary to deliver advice by the nurse over the telephone.</p>	<p>Exc. Cr.: any statements of participants' initial contact with services other than TAN such as GP clinic, Emergency Department.</p>	<p>the nurse who is available to give advice over the phone.</p> <p>Participants also describe that they were asked questions that confirm caller details and other questions relate to the health concern before giving the advice, which in turns indicate that the call taker follow a certain role and use some guidelines before delivering a proper advice.</p>	<p>P5 EMCE: "I think I spoke to a lady at the receptions, and she get the nurse to call me back,..."</p> <p>P6 EOL: " when you ring you speak to receptionist and they ask you questions and they say I will ring you back, so they take your details."</p> <p>P1 AM: "She advised me to leave her off cover and not to worry about the cold feet."</p> <p>P1 AM: "she asked my details, and child's details about the child, is the child on any medication. She did ask me if the child has cough, breathing problems if I remember from birthdate, and she did ask me about cough and breathing problem."</p> <p>P1 AM: "I would say the call last for about 4-5 minutes."</p> <p>P6 EOL: "when you ring you speak to receptionist and they ask you question and they say I will ring you back, so they take your details."</p>
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Appendix 3.J

<p>Code 8: Source of help seeking Parents' preference of Source of advice.</p> <p>Sub-code:</p> <ul style="list-style-type: none"> • Speaking to a nurse in TAN • Speaking to a friend • Speaking to mother • Searching the internet. • Speaking a nurse in Emergency Department. • Making their own decision 	<p>This code refers to participants' intention and preference of the different sources from which they obtain advice and information.</p>	<p>Inc. Cr. Any statements that describe participants preference of their choice to whom they ring as a source of information and advice.</p>	<p>Participants' views of the different source of obtaining advice. A participant prefer to speak to a nurse working in TAN rather than ringing a friend because of being quicker, previous uses, familiarity with the service and can give information about medication.</p>	<p>P1 AM: " yeah, I could, yeah I could rang a friend, no I would ring OOHs quicker! After 6 clocks, I would ring OOHs as it is quicker, I would ring OOHs as I would ask them about medication. I rang them one time about giving my child antihistamine. I ask them can I give Calpol and antihistamine."</p> <p>P8 MOK: " sometimes I would use internet and I would ring my mum as she as a mother she always say to me go with your mothers instinct and go with what you feel. As type of personality, I would always ring OOHs and bring him to the doctor when they get sick as I get very anxious especially baby when they are very young."</p> <p>P1 AM: "we rang OOHs, we were on receptionist, and we could not wait, because he started to get sick and we know there is something wrong,, we got them in the car seat and travelled to casualty and his eyes started to roll in his head, ..., I rang ambulance to meet us in the road."</p>
<p>Code 9: Length of call back</p>	<p>This code refers to participants' perception of the time waiting to be called back by a nurse to offer advice.</p>	<p>Inc. Cr. any statements that describes participants' concern or issues during their contact with the nurse over the telephone.</p> <p>Exc. Cr. any statements that describe participants' issues about OOHs and not during their</p>	<p>This code relates to participants' expression of what is thought to be an issue during their conversation with the call takers working at the OOHs and is causing participants' inconvenience.</p>	<p>P1 AM: "..., I kept waiting and waiting, even you know. Say I don't know how long, but it could be 10 or 20 minutes, and it was three clocks in the morning."</p> <p>P2 AC:" Am, I think it is very short really, am, I can't think of any particular occasion that is long</p>

		<p>conversation over the telephone with the call taker.</p>		<p>conversation probably 5 minutes or less. Wither just taking the main details and then advise me what to do.”</p> <p>P2 AC; “Am, it depends, like sometimes you might wish if I particularly worried with a little bit sooner, ..., you know, may be, it is not even 10 minutes. May be it felt like 10 minutes because you are waiting. I think there was an occasion and definitely it was 10 minutes if not long.”</p> <p>P3TC: “the nurse call me back Within half an hour..., there was another call that I made for my own care, I think in that case it wasn’t as urgent. But waiting for half an hour, probably I will be quiet anxious and worried. To be fair this is the longest I ever I had to wait for that time.”</p> <p>P6 EOL: “sometimes it could be 5 minutes and one time it took half an hour and thought they forget about me, and I needed them at that time when my child had a temperature.”</p>
<p>Code 10: Parents’ perception of the use of Guidelines</p>				<p>P1 AM: I would say they give advice based on both guidelines and experience, P2 AC: “they probably do have guidelines, but I did not feel no wrong or correct questions, it was kind of conversational talk.”</p>

Appendix 3.J

				P9 CC: "they going through a series of questions, like a sort of criteria and guidelines that they follow."
<p>Code 11: Nurse attitude</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Reassuring • Caring and being on the side of caution • Being good • Helpful • Understanding the problem • Very clear in giving instruction • Very patient • Sympathetic • Supportive • Have listening ears. • Offer a practical advice • Trusted expertise • Very practical 	<p>This code refers to the characteristics that defines the attitude of the nurse delivering the advice over the telephone</p>	<p>Inc. Cr. Any statement that describes nurses' manner, quality, and attitude while communicating with the caller over the telephone and working at the OOHs service.</p> <p>Exl. Cr. Any statements that describes nurses' manner working in other health service such as Emergency Department, Nurse working at Regular GPs.</p>	<p>Participants describe what they felt about the nurses' manner and attitude during their course of communication over the telephone. For example, one of the participants felt that the nurse is been lovely over the phone because she reassured her and give her advice how to manage her child's temperature.</p> <p>The same participants also comments by saying that every time she phones the OOHs she finds the nurse being on the side of caution and keep giving the advice if the parent is still worried that she/he can bring the child to OOHs or call back.</p> <p>A second participants who describes their view about the nurse attitude over the telephone as being very patient, very understanding, very clear in their instruction, very sympathetic particularly when I rang about breast feeding issues and supportive.</p>	<p>P1 AM: "..., I mean for fairness she was lovely, she reassured me and advised me to leave her off cover and not to worry about the cold feet."</p> <p>P1 AM: "No, why would I phone casualty while the nurse and OOHs are there. And I would find that nurses every time that I phone OOHs they are on the side of caution and make you go in to casualty if they thought there is any reason."</p> <p>P2 AC: "Yeah, I did, I found them very good, yeah, yeah, I don't have any complaint, and they are really helpful. They definitely listening to us and they ask many questions to make sure they understand the problem.</p> <p>P3TC: "oh! Yeah, am I found them very patient, very understanding, very clear in their instruction, very sympathetic particularly when I rang about breast feeding issues and supportive."</p>

<ul style="list-style-type: none"> • Very informed 			<p>Another participant who describes her view about the nurse attitude as being very good, really helpful, have listening ear and very understanding of the problem.</p> <p>Another participant describes the nurse attitude as being very good and helpful because she gave her a good advice about her child's temperature.</p> <p>Another participant who also describe the nurse manner as being very practical and very informed.</p>	<p>P4 CW: "..., OOHs were very helpful in their part. You know what I mean. And they were very helpful at keeping me calm. Because it was my first time to know more about children, as I was a bit panicky as any other mother anywhere."</p> <p>P5 EMCE: " ..., and she get the nurse to call me back, I found them very helpful, sometimes when she had high fever, they told me what to do, then she got a lot better, I found them very good, they give me a good advice.</p> <p>P6 EOL: "I found the nurses on the phone were really really helpful, it was my first time mother and I did not know what to do or expect what is wrong, there was one or two times when I rang them I did not take them any further I got a good advice from them."</p> <p>P9 CC: "I found them very practical and very informed, they going through a series of questions, like a sort of criteria and guidelines that they follow."</p>
<p>Code 12 parental choice for advice if TAN service doesn't exist. ED visit</p>	<p>This code means parental' decision to seek advice from an alternative health service if TAN doesn't exist.</p>	<p>Inc. Cr. any statement about the use of other health service as a source of advice.</p>	<p>In the absence of TAN service, Participants described their intention to contact Emergency Department (ED) by telephone</p>	<p>P1 AM: "if there was no OOHs service, could put her in the car and went to casualty."</p>

Appendix 3.J

<p>GP visit</p>		<p>Exc. Any statements relating to parental contact with their mothers and friends or the use of internet as a source of help and advice.</p>	<p>or making a visit to ED before contacting the same.</p>	<p>P2 AC: yeah, yeah, suppose, I have GP. But if they were open at that time I would probably contacted them. Like, my GP doesn't open at all during the weekend, actually the incidence happened at Sunday, and they wouldn't be available.</p> <p>P6 EOL: "I would have to go straight to ED in the hospital and that is manic because so many people, especially at the weekend they will be drunk"</p> <p>P6 EOL: " My first choice is my gp because he knows my son, and if they close I would go to OOHs."</p>
<p>Code 13 practical constraints of face-to-face consultation</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> Leaving other family member at home alone. 	<p>This code refers to the different constraints and barriers that prevent a parent from going for a face-to-face consultation or making a visit to TAN service or an alternative health service.</p> <p>Any matters or concerns that are thought to cause participants' inconvenience during their conversation with the call taker working at OOHs over the telephone.</p>	<p>Incl. Cr. any statements about the reasons constraining the participant to see a nurse or a doctor in TAN or an alternative health service.</p> <p>Excl. any statements about participants intention to visit a nurse and a doctor working at TAN or an alternative health service.</p>	<p>Participants describe their common concerns and barriers that prevent them from seeking a face –to- face consultation with a nurse or a doctor working in TAN and an alternative health service.</p> <p>Time to travel is seen as barrier to seek face-to-face consultation and for not making the service easy to</p>	<p>P1 AM: "I was asking for guidance and reassurance what should I do and should I bring her to a doctor in the morning; I have two young kids and a husband. ..., I would have to get someone else out of their bed, grandparents to come up, I had to say my worry, I had a worry that the whole of us would be going in."</p> <p>P3TC: "I think if OOHs have an separate advice line or a nurse helpline, just to ring the nurse for advice and not necessary to make an appointment, especially during the weekend and specially with a child who is new-born, I don't have very</p>

<ul style="list-style-type: none"> • <i>Time to travel</i> • <i>Perception of receptionist as a gatekeeper</i> 			<p>access. in contrast, seeking advice over the telephone is considered by a participant as a huge help.</p> <p>A participants described that speaking to receptionist when they ring straight away could be a barrier for not waiting to the nurse to call back because of the urgent need for an advice, therefore, parents make their own decision to bring children to an alternative health care service</p>	<p>easy access and access for advice over the telephone is a huge help.”</p> <p>P1 AM: “..., if we have to speak to nurse that day rather than secretary or a receptionist taking details, you know, if a nurse got on the phone that day to guided us rather than to travel, we could wait for her, but we weren’t offer that option.”</p> <p>P4 CW: “to save my time, we are very isolated in the country side and OOHs is half an hour far where I live.”</p>
<p>Code 14: Young Children cannot speak for themselves.</p>	<p>This code refers to children’s inability to express in speech what is hurting them and causing them to be distressed and cry.</p>	<p>Inc. Cr. any statements about children’s sign of irritability, crying, and any participants’ statements about children being unable to tell what is wrong with them.</p>	<p>A participant described their view about OOHs and commenting that it's a great service as a source of guidance and reassurance because young children can’t tell what is wrong with them.</p> <p>Two participants who perceived their child’s crying and being unsettled and</p>	<p>P1 AM: “It is great to have the service of OOHs for reassurance, to guide parents. You know a two year old cannot tell parents what is wrong with them.”</p> <p>P6 EOL: “..., other times it was when he has temperature and I was giving him calpol and nurofen and it wouldn’t get down, and he was crying crying not settled I was afraid</p>

Appendix 3.J

			<p>inability to express what is wrong with him as reason for being worried mother and a needy one for seeking advice over the telephone.</p>	<p>he may have convulsion, I was in my own away from OOHs, and my husband used to work shifts. I was talking to my mother and then I was thinking to ring the OOHs.”</p> <p>P8 MOK: “..., so I rang reception because he was constant crying and the nurse rang me and she went through question.”</p>
<p>Code 15: parent’s expected outcome of the call</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Home-care advice/ Guidance • OOHs Visit by an appointment • General Practitioner (GP) visit • Emergency Department visit 	<p>This code refers to the appropriate course of actions or recommendations offered by the nurse as an outcome of their call</p>	<p>Inc. Cr.</p> <ul style="list-style-type: none"> • Any statements indicating or describing the course of action and recommendation offered over the telephone by the nurse to parents. <p>Exc. Cri.</p> <ul style="list-style-type: none"> • Any statement for not following the nurse advice over the telephone. • Any statement referring to parents’ own decision to visit an alternative health service. 	<p>One of the parents described her expected outcome as she was offered a home care advice to manage her child temperature and then she was advised to visit her GP the next day. She stated that there was no much difference between the nurse advice and the advice offered by GP.</p> <p>A participant describes that she was given a home-care advice where she viewed it as a great advice because it save her from leaving home and brining her child to visit a doctor at OOHs, therefore, saving her time, her travel and cost.</p> <p>The same participant described her views about the nurse advice where the nurse offered her an appointment to visit the</p>	<p>P1 AM: “ I went to the GP the next day and they did not tell me anything different and still say to give the child Calpol and nurofen.”</p> <p>P1 AM: “She offered me that if I was not happy with what she told me and if not still happy with the conversation she has no problem to bring the child to a doctor in the OOHs.”</p> <p>P6 EOL: “There was one time with my son when he was three months old and had really, really blocked nose, and the nurse on the line told me to steam him in the shower in toilet.”</p> <p>P6 EOL: “it was one day when my son was crying and he had a temperature and she could hear him crying over the phone and she told me if that way he is crying, to me he does not sound well, I would bring him to see</p>

			<p>doctor working in the OOHs because of the seriousness of her child’s crying and the nurse could hear him crying over the telephone.</p> <p>A mother describing her expectation about the nurse advice where she was offered to bring the child and get seen in the OOHs and however after a month the rash did not improve and she rang again the OOHs and was referred again to an alternative service and ended up with same advice. Then she visited her own GP and treated her child.</p>	<p>the doctor and I would make him an appointment now.”</p> <p>P5 EMCE: “I have been to my gp twice and the symptoms did not improve. She did not improve for a month, I called OOHs, and sent me to a hospital and She did not improve for a month, and then I brought her to my original doctor eventually he knew what is wrong with her and it was a scabies rash.”</p> <p>P9 CC: “ am, suppose I don't know really, she may tell you to go OOHs service, or to bring to Casualty, I hope she give some recommendation and you have to do what she says.”</p>
<p>Code 16: parents’ experiences about nurse advice</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Practical advice for self-care • Trusting the advice 	<p>This code means the beliefs and the anticipations and the views that parents hold about the advice delivered from the nurse working in OOHs.</p>	<p>Incl. Cr. any statements that describe parents feeling about the advice delivered by the nurse and what do they expect to happen when they ring the OOHs.</p> <p>Any positive or negative statements that relate to nurse advice.</p>	<p>Most participants would agree that the advice given by the nurse over the phone is a good and a practical advice</p> <p>Another participants who described their experience with the nurse as trusty one</p>	<p>P2 AC: “I contacted them few times during the last year and an half; generally they give a good advice. And more often we had a very good experience. And many of the times we have to go to them. Over the last year and an half I would say Our expectation that they would give a good advice.”</p> <p>P3TC: “Am that was the advice I was given, I trusted their expertise. They were good and it was a good advice.”</p> <p>P3TC: “I would trust their advice and adhere to what they say.”</p>

Appendix 3.J

<ul style="list-style-type: none"> • Timely advice • Sound advice • Advice based on guidelines 		<p>Exc. Cr. Any statements describing advice delivered by a friend, doctor and internet as a source of advice.</p>	<p>In contrast, a participant described her experience with the nurse advice as unmet expectation because she thought that nurse did not think that her child needs to be seen straight away and instead</p>	<p>P5 EMCE: “ I think I spoke to a lady at the receptions, and she get the nurse to call me back</p> <p>P6 EOL: “ one time my son was blocked up and could not breathe and I did know that he has asthmatic attack because I am asthmatic, and the nurse on the phone told to run shower in the bath room holding the baby to steam him and advised to do that every three hours, and I think that did work really well in the morning he was cleared him up it seems to me a sound advice.”</p> <p>P9 CC: “..., they generally give good advice and to be on the safe side they recommend you to come in and they also say if not happy to come in.”</p> <p>P9 CC: “I really like my gp, I found them very good, probably the nurses in OOHs service as most of them are mothers and I feel that they offer a practical advice.”</p>
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			she offered her an appointment to visit OOHs within three hours.	
<p>Code 17 Parent's decision making rather than TAN advice</p> <p>Sub-codes</p> <ul style="list-style-type: none"> • Parents preference to be seen • Perception of urgency 	<p>This code refers to the common reasons that urge parents to make their own choice to visit TAN or an alternative service to TAN.</p>	<p>Incl. Cri. Any statements referring to parents own decision making to visit TAN or an alternative health service to TAN and not to seek advice over the telephone.</p>		<p>P8 MOK: " I rang OOHs because I want him get seen and did not want to speak to the nurse over the phone. I want him to get seen. So OOHs did not seem to me he needs to be seen straight away and they offer me an appointment to attend within 3hours because they were very busy. So I brought him straight in to Emergency department in wexford and I took me 15 minutes to be there,</p>
<p>Code 18 Parents beliefs about Emergency Departments as an alternative</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • Perception of long waiting time • perception of very busy • perception of understaffed • perception of availability of staff • Perception of not being heard • untrusted 	<p>This code refers to the beliefs, and the views that parents hold about their visit to see the nurse and the doctor in the emergency department.</p>	<p>Inc. Cr.</p> <ul style="list-style-type: none"> • Any statements about having positive experience, views and met expectations when parents made their visit to ED in a general hospital. • Any negative, experience, views, and unmet expectations about parents' visit to ED located in a general hospital. <p>Exc. Cr.: Any statements about parent's expectation about visiting other service except ED in a general hospital.</p>	<p>Participants reported different views and expectation about their visit to ED. For example, one of the participant described her experience with ED visit as positive experience because she panicked when had banged his head. She spoken to the nurse in ED and was reassured to bring her child to get seen and she did. She also expressed that despite waiting for few hours to see the doctor, she comments that she would always to listen to the nurse advice.</p> <p>In contrast, a parent described her experience and expectation about ED visit as a low experience because she was forced to wait long hours at the middle of the night to get her</p>	<p>P8 MOK: " I have a good experience with casualty but it is a country hospital...., See three weeks ago my little son fell and banged his head, had large swollen forehead, shocked, as a mother I got panic when I saw him, ... I rang casualty and she said to bring him in, and I did they kept him for one night, so the nurse said to me bring him and I went with the nurse thought over the phone and I have a good adherence, and I always listen to what they say."</p> <p>P4 CW: "In the country most hospitals are understaffed."</p> <p>P9 CC: " generally it is low experience , very long waiting, my son and husband were referred to go at 11 pm and was triaged straight away and it took him up to 5 clock in the morning to get admitted, generally speaking the nurse in A&E</p>

Appendix 3.J

			<p>child seen. She also comments that despite being seen straight away and triaged by the nurse, however, being slow and busy have made the parent to scale her visit and experience as 5 of 10.</p> <p>Another participant who described her experience as being a negative one because of long waiting time, very busy and understaffed.</p>	<p>are very life. It seems to be that they are very slow and they must be very busy, so my experience is in the middle of a scale of 10.”</p> <p>P5 EMCE: “I do not want to go again enough, it is a very long wait, there is nobody really down there, it was hard to find anyone to the, then very very long wait are very busy, it is a long wait, once we got seen , we got the same advice as said by gp and OOHs.”</p> <p>P6 EOL: “...., and with casualty is different and I feel they do not listen to you and would not have a great faith compared to OOHs. OOHs is valuable service,</p>
<p>Code 19: Adherence</p>	<p>This code refers to parents’ acceptance of the advice delivered over the telephone and their intention to follow it.</p>	<p>Incl. Cr. Any statements describing parents’ willingness to follow a nurse advice and implement what is told.</p> <p>Exc. Cr. Any statements relate to following advice given by other than the nurse working in OOHs. Such as Ambulance crew, ED nurse, Friends.</p>	<p>Most of participants describe their adherence to the nurse advice positively. The common reasons for their adherence are: the previous experience that parents had with nurse advice, parents’ belief that the nurse advice would make it easier to them and their would relief their panic.</p>	<p>P1 AM: “every situation when you ring is different! I would ring and follow the advice given, she was quiet happy for me to come in, I followed her advice, and she gave me her name and said to ring her straight back.”</p> <p>P2 AC: “O, yeah, definitely, I would definitely follow it, suppose because of the experience I had with them. It has been so good.”</p> <p>P5 EMCE: “I am very happy to get advice and take the advice as offered</p>

				<p>by the nurse, I followed their advice and adhere what they say, sometimes when you panicky, they make easier”</p> <p>P7 MOC: “I think OOHs is really working ...you speak to them over the phone, if they can put you to speak to the doctor, they just offer you advice and an appointment. I generally adhere to the advice they give over the phone.”</p>
<p>Code 20: parents preference/wants</p> <p>Sub-codes:</p> <ul style="list-style-type: none"> • preference for more staff • want quicker call back • preference for shorter waiting to see the doctor • Preference for face-to-face assessment. • Preference for a Professional Communication 	<p>This code refers to the parents’ demands of what is needed to improve the OOHs service so their needs can be met.</p>	<p>Inc. Cr.</p> <ul style="list-style-type: none"> • Any statement describing parents need for anything that is necessary but lacking. • Any statement relates to parents’ demand for improving the service of OOHs. <p>Exc. Cr. parents recommendation about other health services other than the OOHs service.</p>	<p>Most participants would agree that the service of OOHs is in need for improvement. One of the main needs that parents are in demand for is the need for more doctors so they can be seen quicker and reduces their waiting time.</p> <p>Another participant described her need if the nurse can ring back quickly because this may decrease their level of anxiety and this may save their time and travel to get assurance from others.</p>	<p>P2 AC: “They can improve the service, am, I suppose sometimes may be if they have more doctors, because I have been their one time the waiting with my child after getting an appointment for one hour an half.”</p> <p>P3TC: if they ring back quicker rather than waiting as there are many conditions that can escalate such in case of meningitis time is crucial, and I think if I am anxious I would go to see someone to be reassured.</p> <p>P4 CW: “To improve the service if they could ring quicker especially in emergency, to ensure that they call back as quick they can.”</p> <p>P5 EMCE: “sometime the waiting time, the last time I was waiting for two hours, sometimes I think no doctor on duty, see they tell you to come in and sometimes take long, so getting more doctor. May be they have to be a communication</p>

Appendix 3.J

<ul style="list-style-type: none"> • <i>between the OOHs and other services.</i> <i>A preference for children area.</i> 			<p>Another participant recommended the need for a triage nurse before seeing the doctor in the OOHs and the need for communication between the nurse who offers an appointment over the phone and the professional team in the OOHs as this may reduce their time of waiting to see the doctor.</p> <p>One more participants describe that the service is need for an area where children can be separated from adult patients.</p>	<p>between the nurse who give the appointment and the receptionist who we see when we go in as she tells me to take a seat, there is no nurse to triage before you see the doctor”</p> <p>P6 EOL: “I did not know if it is more staff they need over the phone. And me be they need two doctors, may be they need an area to children and an area for adults. Because it was a time when I was with my kid and an adult man who was vomiting and watching that a little girl is watching.”</p> <p>P8 MOK: “I rang OOHs because I want him get seen and I did not want to speak to the nurse over the phone. I want him to get seen . So OOHs offer me an appointment to attend within 3hours because they were very busy. I said to her I ca not wait that long.”</p>
<p>Code 21: Reasons for satisfaction and their on influence on parents’ help-seeking</p> <p>Sub-codes: <i>Positive experience with nurse advice</i> <i>Well-staffed</i> <i>Close location</i> <i>Availability of service after out-o- hours</i></p>	<p>This code refers to participants fulfilled needs and how satisfied or unsatisfied with the overall service of TAN.</p>	<p>Inc. Cr. any statements describing participants’ state of being satisfied with the service of OOHs and the nurse advice.</p> <p>Any statements about the failure of the fulfilment of parents’ need and their dissatisfaction with the nurse advice</p>	<p>Many of the participants would share the view of being satisfied with the nurse advice and the service of OOHs. On a scale of 0-10, participants stated that would rate their satisfaction between 7-10. The most common reason for their satisfaction are: First, the nurse provides an options wither parents are happy with the advice given</p>	<p>P3TC: “ I am very satisfied; I would give them 8 of 10, as a service over the phone I would give 7 out of ten, based on my experience and I have no emergency where I could test them. I would be satisfied with nurse advice, depending on what , depending on .., I mean in most case they give you the option to see the doctor if you want, in my experience I did not need that, they provide you</p>

<p><i>Dissatisfied</i></p>		<p>Exc. Cr. any statements referring to participants satisfaction with service other than OOHs</p>	<p>over the phone or to bring the child and get him seen by a doctor working at the OOHs.</p> <p>Second, availability of the service and being well-staffed in comparison to the other services such as Emergency Department.</p>	<p>with options, I found the service is going good.”</p> <p>P4 CW: “It is a great service to have in the area, I think they are well staffed. In the country most hospitals are understaffed.”</p> <p>P5 EMCE: “I am very happy to get advice and take the advice as offered by the nurse, I followed their advice and follow what they say, sometimes when you panicky, they make easier. I am very satisfied and very happy to be very close to the service.”</p> <p>P6 EOL: “I would say 8 out of 10. When I ring first I speak to them straight away 99% they give me advice.”</p> <p>P7 MOC: “OOHs is an evening service and if there is no one who open at night. I would use their service again, my satisfaction with the service I would give 9out of 10.”</p> <p>P9 CC: quiet satisfied I am not always satisfied, but generally speaking most of the doctor you meet are thorough up and go into a lot of details. But for not always satisfied is that when I had a problem from breast feeding of my child and I had mastitis, I rang the OOHs and went and see the doctor and she offered me an antibiotic and I want her to describe me another antibiotic and she</p>
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Appendix 3.J

				refused and I had what she give me and I ended up in few days later with bad infection and got admitted, another incidence where I visited the service within the six week check-up for my baby and ended up with paying 60 euro and it should be free. Otherwise I am satisfied with the service.
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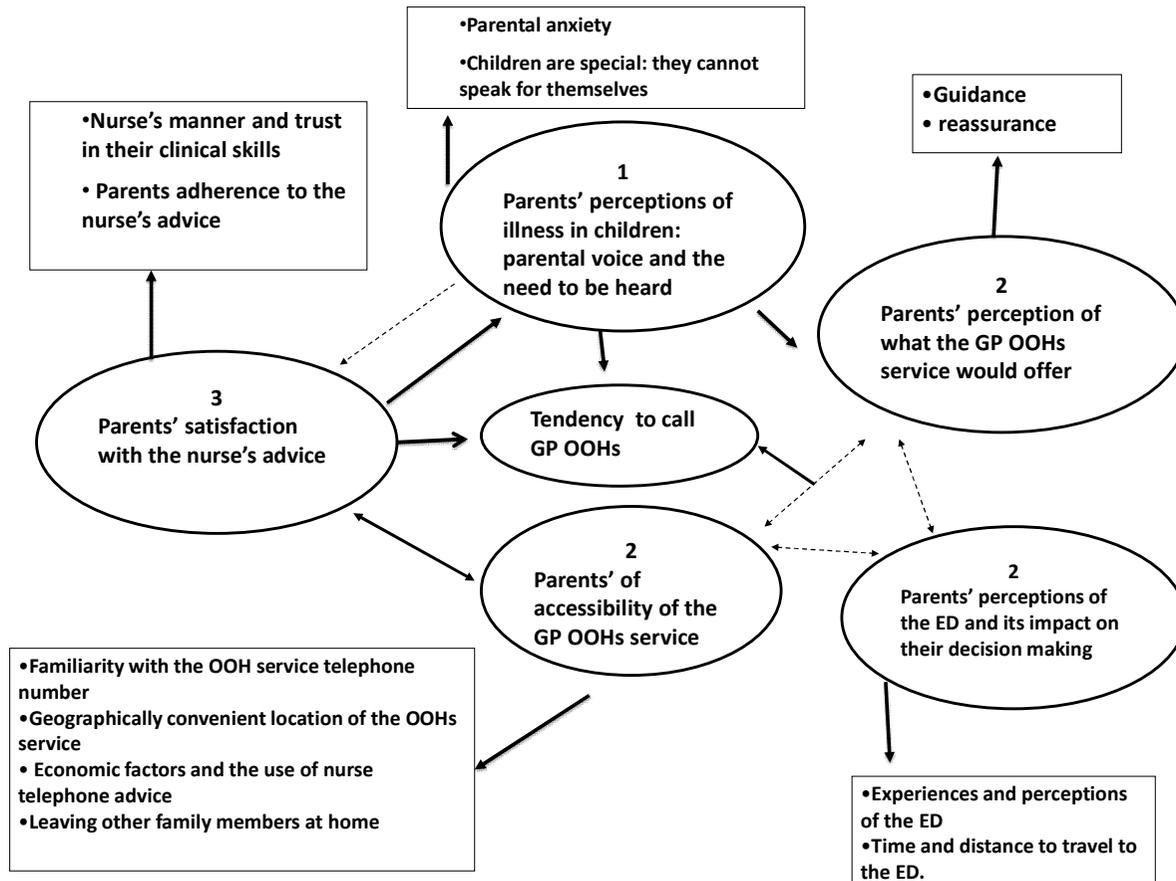
Appendix 3.K Table 3.3 Mapping the potential links between themes and sub-themes identified from the analysis

Table 3.3 mapping the potential links between themes and sub-themes identified from the analysis	
Potential theme	Potential links between codes and sub-codes
<i>Theme 1: Parents' perceptions of illness in children: parental voice and the need to be heard</i>	<ul style="list-style-type: none"> • Code 3: Parents' perception of the consequences of child's illness on help-seeking /unknowing/ uncertainty about treating child's symptoms. • Code 4: self-acting. Sub-codes: Self-administering of medication, self-monitoring. • Code 5: Parents' perception of child's illness / Emotionally disturbed. Sub-codes: Anxious, Worried, Frightened, Panicked, Shocked. • Code 14: Young Children cannot speak for themselves. • Code 17: Parent's decision making rather than TAN advice. Sub-codes: Parents preference to be seen, perception of urgency.
<i>Theme 2: Parents' perception of what the GP OOHs service would offer</i>	<ul style="list-style-type: none"> • Code 6: Parents' perception of reasons for call. Sub-codes: Reassurance, guidance, advice, seeking a second opinion for reassurance. • Code 15: parent's expected outcome of the call. Sub-codes: Home-care advice/ guidance, GP OOHs visit by an appointment, General Practitioner (GP) visit, ED visit. • Code 7: Description of the process of help-seeking from GP OOHs service. Sub-codes: Call taker role/ Initial details recorded by receptionist, nurse call back

Appendix 3.K

<p>Theme 3: Parents' of accessibility of the GP OOHs service</p>	<ul style="list-style-type: none"> • Code 1: Accessibility. Sub-codes: Geographical accessibility, functional accessibility, financial accessibility, telephone. • Code 2: Familiarity with the service and being a previous user. • Code 13: Practical constraints of face-to-face consultation. Sub-codes: Leaving other family member at home alone, time to travel, perception of receptionist as a gatekeeper.
<p>Theme 4: Parents' perceptions of the ED and its impact on their decision making</p>	<ul style="list-style-type: none"> • Code 8: Source of help-seeking Parents' preference of Source of advice. Sub-code: Speaking to a nurse in TAN, speaking to a friend, speaking to mother, searching the internet, speaking a nurse in Emergency Department, making their own decision. • Code 18: Parents beliefs about Emergency Departments as an alternative. Sub-codes: Perception of long waiting time, perception of very busy, perception of understaffed, perception of availability of staff, perception of not being heard, untrusted.
<p>Theme 5: Parents' satisfaction with the nurse's advice</p>	<ul style="list-style-type: none"> • Code 21: Reasons for satisfaction. Sub-codes: Positive experience with nurse advice, well-staffed, close location, availability of service after out-o- hours, dissatisfied. • Code 11: Nurse attitude. Sub-codes: Reassuring, caring and being on the side of caution, being good, helpful, understanding the problem, very clear in giving instruction, very patient, sympathetic, supportive, have listening ears, offer a practical advice, trusted expertise, very practical, very informed. • Code 12 parental choice for advice if TAN service doesn't exist. Sub-Codes: ED visit, GP visit. • Code 9: Length of call back.

Appendix 3.L A thematic map showing the outcome of the refinement process that defines and names the identified themes.



Appendix 4.A describes brief parents' summaries of what made them contacting the service of GP OOHs

P1's summary

P1 is a mother of two children who are three and two years old. She lives in the countryside which is poorly connected to urgent areas by minor roads. She works in administration in the HSE. It takes her 20-30 minutes' drive from where she lives to travel to the GP OOHs service. She describes contacting the service on previous occasions about her two years old child's high temperature. She has rung GP OOHs to ask them for advice about medication and gave an example about telephoning to ask about giving antihistamine to her child. She asked if she can give Calpol and antihistamine together. More recently, her child woke up at three o'clock in the morning, with a high temperature that had started during the day. She found it difficult to keep the temperature down. She decided at first to wait at home and give Nurofen every six hours. However, she found her child was really hot, her feet were freezing cold, and her heart rate was racing. P1 was very worried; she didn't know what to do or what might be causing the symptoms, and she did not know whether to cover her. Her initial thought was that it could be a viral infection. She thought that she could ring a friend however because it was after 6 o'clock she rang GP OOHs because she felt it would be quicker and she was concerned about the child. When P1 telephoned she expected to speak to a nurse but this was not the case. Instead, her call was answered by a receptionist. P1 got through receptionist straight away and had to wait for a nurse to ring back. She received a call back within 10-20 minutes. The conversation lasted for 4-5 minutes. The nurse asked about her own details, and details about the child, such as if the child is on any medication. The nurse also asked if the child had a cough or breathing problems.

P1 asked for guidance and reassurance about what she should do and whether she should bring the child to see a doctor in the morning. She described the nurse was 'lovely'. The nurse reassured her and advised her to give Nurofen, to leave the child's bed cover off, to help the child cool down and not to worry about the cold feet. She was reassured by the nurse that the child will be fine until the morning and then P1 could take the child to her GP. P1 stated that the nurses at the GP OOHs service are all very nice; they never indicate, or show any signs that they want to 'get you off the phone'. They give as much time as parents want, and they don't hang up the call until the parent felt happy. Nurses would offer an appointment, to come to GP OOHs even at night time if the parent was not satisfied with telephone advice.

The mother was particularly worried about febrile convulsion. She was also worried that she has two young kids and a husband and if she has to travel in the car on her own with her sick child then she would be more nervous. She also said that she would have to get someone else out of their bed, such as a grandparent, to come to help. P1 said her worry was that the whole family would need to go to GP OOHs service or ED. P1 suggested that if there was no GP OOHs service nearby, she could put her child in the car and go to the ED, a journey that takes her 30-35 minutes to drive. However, during the winter time it would take longer because of the icy bad roads.

P1 described her visit to the GP as a service by appointment only. She thought the use of the GP OOHs would avoid parents having to go to the doctor (which incurs a cost of 50 euros), because with children so many things would pop up. She viewed the GP OOHs as a great service as she used it to speak to a nurse, making it unnecessary to go to a doctor's department. She also said that it was great to have the service for reassurance, to guide parents, especially knowing a two year old cannot tell parents what is wrong with them. She still rings GP OOHs as her first choice of service and will wait for a call back no matter how long that will take. She would consider the ED but she is aware that visiting the ED will incur a charge and may have to wait a number of hours to be seen.

P1 described that the telephone provided easy access to the GP OOHs service and the location of the service is very important. P1 thought the service can be improved by letting parents speak directly to a nurse, without having to ring the secretary and wait for a call back. That would be very beneficial. She would ring and follow the advice given; the nurse was quite happy for P1 to bring her child to ED. P1 followed the nurse's advice.

P2's summary

P2 has one child who is aged two years. P2 and her husband are both working and during their working days the child attends a crèche. Recently, she has moved house to live in an area that takes her about 5 minutes to drive from where she lives to the GP OOHs service. She also attends her regular GP practice and it takes 20-25 drive to reach the surgery. P2 has called the GP OOHs service a lot of times, since her child was 9 or 10 months old for reasons such as breathing difficulties, temperature, cough and ear infection. More recently, she contacted GP OOHs service when her child had vomiting after a fall on a Sunday afternoon in the back garden. P2 used GP OOHs service on that occasion because her GP service was closed. She wanted to speak to the nurse and ask for advice and what to do; as well as to receive a bit of reassurance and help and to know whether to worry or not.

She thought that vomiting in this case (following a fall) is not like other cases where she would just go to a chemist and ask for medication; she was not sure whether her child needed to see a doctor or not. The mother described that her use of the GP OOHs service is mainly at night time as this was when her child tended to show signs of sickness. When she calls GP OOHs a receptionist confirms her details and the child's details and the reason for call. The mother asked if she could speak to the nurse first, however she was told by the receptionist a nurse will call her back. The nurse called her back within 10 minutes. Because of being worried, the mother felt that 10 minutes is a bit long and would prefer the nurse to call sooner. Previously, P2 rang GP OOHs service when her child had an ear infection which was very unpleasant and really upset child. The mother spoke with the nurse for quite a few minutes and the nurse asked the mother many questions. The nurse advised the mother to give paracetamol to keep her temperature down and also to let her have plenty of fluid. The nurse also offered to make an appointment to bring the child to see the doctor. P2 reported that her call was answered very quickly, and that she did not have to wait long. P2 also described that nurses are usually very good, very helpful, and tend to be understanding about every situation. However, they are also very cautious, and understandably, cannot and do not diagnose the child over the phone. P2 also stated that the nurse really listened to her and asked many questions to make sure the nurse understood the problem. During the conversation she felt that the nurse was using some sort of guidelines. The nurse referred P2 to go immediately to ED department in the hospital.

The nearest ED to P2 is about 40 minutes' drive. P2 described her visit to ED as not a great experience because when she arrived at 5 am, she found nobody at the reception. There was a sign that advised patients to report to the nurse station, but she felt that nobody acknowledged her for over 5 minutes. Eventually P2 was seen by the ED nurse who sat the mother and the child in the middle of the corridor and took the child's blood pressure. The mother and the child were then placed in a cubicle and waited for a doctor. When the doctor examined the child, P2 was told that the child is fine. The mother described that while she was waiting, another doctor came back to see the child and told P2 that the child has fluid on her lung and the child's urine sample show that the child has a kidney infection. P2 became nervous and told the doctor that her child was mixed up with another child and that her child was in ED because she had bumped her head. P2 also stated that during that occasion she was sent back home with a prescription with antibiotic and then the mother discovered that she was given a prescription for a 10 year old. She stated: *"it was really a very bad experience. I mean, I know they were under a lot of pressure."*

P2 would definitely follow the advice offered by the nurse working at OOHs, because of the positive experience that she had with GP OOHs. She described it as “so good” but if the doctor made a misdiagnosis, then she would think about not using it again; however, that has never happened. P2 believes that every time she asked to visit GP OOHs, she found the doctor caring, and is able to make a diagnosis straight away. The mother described that she needed the GP OOHs service because it covers those times when GPs are closed. For parents who are both working, when the child becomes sick this impacts on the parents working life, when one or both are obliged to ask for a day off from work to take the child to the service. P2 described accessibility and location of the GP OOHs service as easy, the service telephone number is known to her and she is able to visit GP OOHs service within 5 minutes. However, for a parent who lives far away, this could be difficult, especially if they don't have access to a car.

As a source of information, P2 would seek advice from her sister-in-law, because she is a paediatric nurse. She would also call her mother for her parenting experience. P2 would also look up symptoms and search the internet. She would look up the NHS website as a source of information because it is reputable site. P2 suggests that the GP OOHs service could be improved by having more doctors, because she was given an appointment one day to visit the GP OOHs service and had to wait with her child for one and a half hours to see the doctor. However, her first choice of service is to use her GP surgery because it is slightly cheaper (55 euros) than the cost of attending a GP OOHs appointment (60 euros).

P3's summary

P3 is a mother of two children who are 1 month and 16 months old. She works as a doctor and an education officer. The nearest GP OOHs service is around 15 minutes' drive and the nearest ED is approximately 30 minutes' drive. P3 has used the service once or twice for her child, to seek advice about a high temperature and rash during the night. She was concerned that Paracetamol was not bringing her child's temperature down. When she rang the GP OOHs service, she expected to speak to a nurse. However, she spoke to a receptionist and then received a follow up call from the nurse within half an hour. P3 stated that she is a doctor, but for mothers who are not doctors, she felt that a wait of half an hour was a long time. She was quite anxious and worried and stated that was the longest ever time she had to wait. P3 thought that the symptoms could be caused by an infection, some sort of allergy or a reaction to a new food. Her main reason for calling was the fever, an unusual rash, and she was worried that the child had become limp and unresponsive. The mother also stated that she would ring the service for reasons that are beyond her knowledge, to get professional advice. What she wanted was reassurance and a sense of hope.

The nurse advised P3 that a temperature of 38.5 is not too much a cause for concern but suggested she give Paracetamol, remove the clothes from the baby and then monitor her. The nurse also advised to ensure the baby is getting plenty of fluid and to check for nappy rash due to hot weather and heating. P3 comments that her conversation with the nurse was fairly quick. However, she trusts the expertise of the service and would adhere to the advice that the nurse offers over the telephone. She felt she was given good, prompt and professional advice because the child's temperature came down quickly. As a new mother, she thought that the nurse knew how to advise because she has more experience than her. P3 felt the nurse was very patient, very understanding, very clear in her instructions, very sympathetic, and very supportive. The nurse asked P3 many questions as in the form of checklist about her details, the child's details and if the child's colour has changed. The nurse suggested that the mother call back if there was any problem and was given a direct number that she could call back without going through the switchboard, which she found very helpful.

As other sources of information, her first option is to ask her mother as well as accessing information on the internet about a particular concern. If P3 is not reassured then she would ring the GP OOHs service. If the GP OOHs service didn't exist, she thought that she would make the journey to ED. The mother does not have much experience with using the ED for her child as she has not needed to. The mother was very satisfied with the GP OOHs service and would rate her satisfaction on a scale from 1-10 as 7. In most cases the nurse offers the option for the caller to see the doctor if the parent wants to have that choice, but in this mother's experience she did not need that, she found that nurse advice was sufficient for her needs. P3 described her access to the GP OOHs service as easy and felt that the location of the service is convenient. P3 suggested that the GP OOH service could be improved if parents of young children have a separate advice line or a nurse helpline, through which they could just ring the nurse for advice especially during the weekend. She also suggests if they ring back quicker rather than waiting as there are many conditions that can rapidly escalate; for example in the case of meningitis time is crucial.

P4's summary

P4 is a mother who has a part time job; her only child is 19 months old. She lives half an hour's drive from the GP OOHs service and about 40 minutes' drive from the ED. She has used the GP OOHs service few times when her child started to swell, got very weak, had a high temperature and a raised, circular rash with black and purple colour in the inside. She felt panicked and was worried was about meningitis. The mother gave the usual medicine such as Calpol and Nurofen. She used the internet to look up information and did the glass test on the

rash. She also rang her sister-in-law who advised to attend hospital or to ring the GP OOHs service. She chose to ring the GP OOHs service where P4 spoke to a receptionist who asked for her details and was told that a nurse will ring her back. The nurse rang back quickly. The nurse asked questions about the rash and advised her to calm down and to attend the nearest ED. The nurse also made a referral call to the ED nurse to inform her that the child would be attending with a suspected case of meningitis. The mother felt that the conversation with nurse lasted for 4-5 minutes. P4 described the nurse's manner as very helpful because she was referred to ED straight away, was seen very quickly and this process helped keep the mother calm. The mother also stated that the nurse was helpful because she asked direct questions about the rash to find out as much information as she could.

P4 described the location of GP OOHs service as the nearest service to where she lives. She used the GP OOHs service before when she rang about her father-in-law; in that case she waited 45 minutes for a call back from the nurse. When P4 rang the GP OOHs service for her child, her expectation was to get advice either from a nurse or a doctor, but she stated the nurse had a lot more experience. She describes the nurse's manner as being very helpful, very nice, and advised her to attend an ED which helped her to save both time and travel. The mother thought that the occasion was a real emergency. P4 described her experience with ED as very bad and suggested that she would do anything to avoid going to the hospital. She would always ring the GP OOHs service and hope that a doctor or a nurse can sort out her problem. P4 believes that the ED was very understaffed and this caused her to experience a long waiting time. At the ED at night, the ED staff ruled out meningitis straight away, but the mother and the child stayed waiting for hours after because there was no paediatrician available. P4 lives in the countryside and feels that she is isolated from health services; she would prefer to use the GP OOHs service than go to hospital, to save her time. The mother is also registered with her GP, but has never been referred by the GP OOHs nurse to visit her GP.

The mother's general satisfaction about the GP OOHs service and the staff is very good; on a scale out of 10 she would rate the service as 10. The reasons she gave for this included, that the service is well-staffed in comparison to ED and nurses are particularly cautious when giving advice over the telephone because they cannot see the patients. To improve GP OOHs services, P4 suggested that the nurse could call back more quickly.

P5's summary

P5 is a mother of two children who are 23 months and 4 years old. She does not and lives 7 kilometres away from the GP OOHs service. It takes her 5 minutes to drive to the GP OOHs service and 25-30 minutes to the ED. The mother has used the OOH service a lot of times. P5 gave an example of using the service to get advice when her 4 years old child started vomiting and developed a high temperature. More recently, P5 used the service when her daughter developed an itchy rash on her head. Prior to calling she had visited her local GP twice but the rash had not improved. When the symptoms worsened during the night, she rang the GP OOHs service because she was seeking different advice from the GP. The mother spoke to a receptionist and took her details and told the mother to wait for a nurse to call her back. The nurse rang back within 20 minutes. The mother did not mind waiting for the call back as it was not an emergency. She has never had a problem with accessing the service and described access as "easy". However, in an emergency she would expect the nurse to ring back quickly.

The mother described the nurse's manner on both occasions as being very helpful, very good, and very accommodating. P5 felt that the nurse gave good advice, which included doing the glass test, and was offered an appointment to be seen at the GP OOHs service by the available doctor. The mother adhered to this advice. When she attended the GP OOHs service, she waited for some time to be seen. She described the nurse as very nice and very good, and reassuring. P5 also stated that the nurse was really great, because when she rings her own GP, the GP does not offer advice over the telephone. On a previous experience P5 used the GP OOHs service when her 4 year old child swallowed some hair conditioner. The nurse asked her a list of questions and then gave her the number for the poisoning centre to get information. P5 described that the telephone conversation with the GP OOHs nurse would typically last for five minutes; the nurse never tried to get the mother off the phone and the nurse ended the call by advising the mother to ring back if needed and to keep an eye on the child.

P5 described her experience with ED. She was referred to the ED by the GP OOHs nurse about 7 or 8 pm. On arrival, she did not see many staff present as they were busy. Eventually, her husband found someone who told them to register with the receptionist and wait. Although the mother had been given a referral letter from the GP OOHs service, she waited for a long time, roughly 4-5 hours in the ED. P5 stated she does not want to go because the waiting time is too long. The mother was also unhappy because the child was not getting any better, was becoming very distressed and was not sleeping during the night. The child kept scratching her head all the time. However, after Christmas, P5 visited her previous GP after making an appointment 4 days before seeing him. Her previous GP examined the rash through a microscope and gave her the proper cream to apply on the child's head. A few days later the child had improved and was better.

In comparison between her current GP and the GP OOHs service, P5 stated if she had to ring her current GP she would speak to a receptionist who would offer an appointment to attend the surgery and will be charged 50 euro each visit. Also, her GP will not give advice over the telephone. However, she likes to ring GP OOHs because they provide her with more information than her GP does, she is given more time to speak, to explain things more, and the nurses give advice. When her child developed the itchy rash, she just wanted to speak to a nurse to get advice because she was worried. She found the GP OOHs service good and equivalent to her GP and in terms of charges, the GP OOHs is the same as the GP. The mother also said that using the telephone would save her money. In a case where the child develops fever, becomes limp and really sick looking, her intention is to ring the GP OOHs service or go to ED. Her concern is to get reassurance.

The mother's expectation about the GP OOHs service is that she has a very good experience. Despite sometimes having to wait 20 - 30 minutes for a call back, which can be annoying, P5 is satisfied and would rate the service between 7-8 on a scale out of 10. This score is because the location of the service is near to her and is convenient, and the nurse over the telephone was quite friendly and nice. The mother liked the nurse's advice because she was panicky and wanted to be told what to do. P5 said she was very happy to get, and then follow, the nurse's advice. P5 would ring the GP OOHs service for different reasons such as a child's rash, if a cough doesn't get better, if her child has a temperature at night and just to receive reassurances. However, sometimes the mother looks up things on the internet. Her preference is the GP OOHs service, as a nurse will ring back and give advice.

To improve the service of the GP OOHs service, P5 suggests the administration should get more doctors; there should a triage nurse before seeing the doctor and it would be appreciated if the administration could reduce the length of time waiting to see the doctor. She also suggested it would be a good idea if the nurse could communicate and inform the GP OOHs receptionist of the parents' details before seeing the doctor. The last time when P5 was given an appointment she waited for two hours.

P6's summary

P6 is the mother of a 15-month old son. She and her husband are both working. Recently she moved house which is 15 minutes' drive from the GP OOHs service. P6's son is her first child and he was a sickly baby. Every time the child gets sick she rings the GP OOHs service for advice; she has used the service many times. Each time the mother spoke to a receptionist she was told that a nurse will ring her back. The mother stated that

sometimes the nurse rings within five minutes and, on another occasion, she was waiting for a half an hour to receive a call back. P6 thought in this instance that the nurse had forgotten to ring her back. The nurse advised the mother to steam the child in the shower every three hours. The mother reported that she never heard such advice before but felt it was sound advice. She stated that this advice worked and had saved the mother from a visit to the doctor. On the most recent occasion, she rang GP OOHs service for her child's high temperature. At that time, her son was young and the mother was afraid of meningitis or of another disease that she did not know about. She was giving him Calpol and Nurofen but the temperature would not come down. The child was crying and unsettled. P6 was afraid he may have a convulsion: she was alone in the house at night, and her husband was working a late shift, so she rang her mother. Because the baby was a new-born she decided to ring the GP OOHs service. She spoke to a receptionist who asked a few questions and said that the nurse will ring back. The nurse rang within 15 minutes. The nurse could hear the screaming child and advised the mother to get the child checked by the GP OOHs doctor and offered an appointment.

P6 describes the nurse's attitude over the phone as really helpful; she found the nurses and the doctors in the GP OOHs service very helpful and really caring. The nurse would stay on the phone until the mother was satisfied, then the nurse asked if there was anything else that she could do to help. The mother felt that the nurse was very quick to assess the problem and get the help that was needed. The mother also stated that the nurse would ask a few questions that are relevant, such as if the child has a rash, vomiting, high temperature, any marks, or lumps. A lot of the answers would be no but the nurse had to rule out everything. P6 stated that the nurse was very caring because before ending the call she had offered an appointment to bring the young child to GP OOHs. She also stated that the nurse knows a lot because the nurse deals with the public a lot, so she prefers to ring the nurse straight away.

P6 reported that the GP OOHs service is close to where she lives and access to the service by telephone is an easy and convenient one. The mother also stated that she is registered with a GP surgery that opens from 9am-6pm. However, after 6pm and if the GP surgery is closed, she had to use the GP OOHs service. In a scenario where no GP OOHs services are available, P6 stated that she would go straight to ED and that would take 30-40 minutes' drive. P6 describes her view of ED as a manic environment, because at the weekend there are people who are drunk whilst she would be sitting waiting for attention with a screaming baby. The mother reported negative experiences with the ED. Once or twice she went to the GP OOHs service and was referred to ED with a letter. Once she got to ED she was seen straight away before everybody because he was a new born baby. She gave another example of being referred to the ED by the GP OOHs doctor regarding a possible kidney infection. The child was very young and had a problem with his testicles. Both the mother and the child were waiting in

the ED for three hours and were sent home after that. On the next day, the mother noticed some blood in the child's nappy. P6 rang the ED on Sunday because she was afraid of kidney infection. P6 revisited the ED and was really angry with the receptionist. The mother told the receptionist that she spent a half day with ED doctor and was told that he was fine. The mother and the child ended up being admitted and received treatment for a kidney infection. P6 described that she made a complaint.

P6's satisfaction with the GP OOHs service was high, and that she would rate it as 8 on a scale out of 10. The only issue or complaint, as a worried mother, is the long waiting time before the nurse rings back and the long waiting time to see the doctor in the GP OOHs service. To improve the service the mother suggested that a more prompt and quicker response time could be offered, more nurses to answer the calls, more doctors on duty, an option to speak to the nurse directly and a children's area separated from patients who are adults. P6's reason for wanting an adult-free zone is that once, at the time when she was waiting to see a doctor, an adult patient started to vomit. The mother and the child had to watch that incident.

P7's summary

P7 is a mother of two children who are 23 months and 4 years old. She is unemployed and lives 7 miles from the GP OOHs service. It takes P7 around 10-15 minutes' drive attend the GP OOHs service and she is one hour away for the ED. P7 has used the GP OOHs service many times when her children have become unwell. Recently, P7 called because a rash had covered her child's body and some flu-like symptoms had also appeared. She was very worried and did not know what was causing the rash. The mother thought that it could be a viral infection and was concerned about meningitis. P7's first intention is to ring her GP or her cousin who is a doctor; however, her child's sickness happened during the night. In her opinion, the telephone access to the GP OOHs service is very good.

P7 stated that she spoke to a receptionist first who asked questions such as what was wrong with the child and took other details, and then the nurse rang back. Sometimes, it may take only a few minutes to receive a call back, and sometimes she has to wait a long time. The nurse either offers advice or the option of an appointment to be seen at the GP OOHs service. Generally, P7 found the nurse very good, 'fantastic' in her words. She reported adhering to the advice the nurse gives over the phone.

P7 described the nurse's manner over the telephone as being very nice, the nurse introduced her name first, and asked questions that are related to the child's symptoms. The advice lasted for three minutes and the

nurse reassured the mother and advised her to bring the child for a check-up and to give Calpol and Nurofen. Because P7's GP is about 7 miles away from her house, the mother would prefer to ring the GP OOHs first. P7 described the GP OOHs service as an evening service and if there is no one who is open at night she would take the child to ED. P7 is satisfied with the service and on a scale out of 10 she would rate it as 9. The mother has used the service many times; the service is very good, reliable and trustworthy. Every time she rang the GP OOHs service, especially in the middle of the night, the nurse offered her an appointment and the doctor would give her a prescription. Once before, P7 rang the nurse and was referred to ED and that was a journey of 50 minutes. The mother stated that the ED is always very busy. P7 suggested the GP OOHs service could be improved by appointing two doctors and more nursing staff.

P8's summary

P8 is a mother of two children who are 9 months and 9 years. She works as a full time mum and lives 7 minutes' drive from the GP OOHs service. The mother has used the service many times. When her youngest child was 5 months old, the child woke up with a croup cough which is similar to the cough that her 9 year old son had before. P8 is an asthmatic mother and would recognise the difference between a croup cough and an asthma cough. Nevertheless, she rang the GP OOHs service for the purpose of getting an appointment and to get the child seen by a doctor because he had a temperature, was constantly crying and had a croup cough. She had not intended to speak to the nurse. When P8 rang, she spoke to a receptionist and then a nurse called her back quickly. The mother stated that the nurse asked many questions such as if his breathing was ok, if he had a rash, the colour of his lips, and another 10 questions.

P8 said most of the questions were answered "no" and thought that the nurse had offered her own opinion when the nurse said: *"I don't think he needs to see the doctor straight away"*. However, the mother thanked the nurse, but said *"I am going to take him to ED"*. The mother did not intend to speak to the nurse because she believed that the child had different symptoms as compared to what she had experience with her other 9 years old. The mother declared that nurses and doctors are fantastic, but P8 felt that the nurse did view that her child needed to be seen urgently. P8 was given an appointment to attend within three hours because the staffs at the GP OOHs service were very busy. P8 stated that she was worried because the child's face and behaviour were not ok. The mother made her own decision to go to ED and drove there in about 40 minutes. The child was seen straight away by the ED nurse, was given a nebuliser and was kept in overnight.

P8 described the GP OOHs nurse's manner as very understanding, compassionate. She gave an example of her eldest child, who is asthmatic. On one occasion he had a lot of difficulty breathing and was seen in the GP OOHs service where he was given a nebuliser and inhaler; since then he has been fine. However in the most recent episode with her baby with his cough, from her experience she knew there was something wrong. P8 thought that in this particular incidence the nurse was going 'by the book' and was probably 'going through the motions' when she gave that advice.

As a source of health information, P8's first choice is to ring the GP OOHs service for advice and reassurance from the nurse over the telephone. However, sometimes she would also use the internet and ring her mum. The mother describes her personality as a type "one" and would always bring her sons to the doctor when they get sick, because P8 becomes very anxious, as she did with her baby when he was very young. Given the example of P8's sister, P8 said that her sister has a different, less anxious, personality so she would wait for few days before she would take her child to see the doctor.

P8 describes that she had a good experience with ED and GP OOHs, but ED is quite a distance from where she lives. Nevertheless, when she goes to ED she has to wait and see the doctor. Three weeks before the interview time, the mother stated that her young child fell and banged his head and had a swelling on his forehead. The mother was shocked and panicked. P8 said: the child did not get sick or pass out, and did not get confused or dizzy. Her husband told her that the child was fine and he did not need to go to hospital. However, P8 rang the nurse in ED was told to bring him in and he was kept in for one night, for observation.

P8 stated that she is satisfied and very happy with the GP OOHs service. She would always listen and adhere to what the nurse says to her. She also stated that the location of the service is near to where she lives and the telephone number is available and accessible. However, to improve the service, the mother would advise if the nurse could say over the telephone to a parent who is worried "we would love to seem see him, but that is unfortunately not possible at the moment, so I advise you to take him to ED". Understandably, P8 stated that the nurse don't see the child over the telephone, maybe the nurse did not want P8 to panic, and a lot of the time the nurse would say to bring the child in. However, in that particular incident she was disappointed.

P9's summary

P9 is a working mother of three children who are 19 months, 5 and 8 years old. She lives about 10 kilometres away from the GP OOHs service. It takes P9 approximately 10-15 minutes to drive to the GP OOHs and about

the same time (10-15 minutes) away from the ED. She used the GP OOHs service a lot because her youngest child has asthma. P9 stated that she uses the GP OOHs service even for small things such as high temperature, breathing difficulty and when her child needed to have a nebuliser. When the child gets sick she rings the service, speaks to a receptionist and then waits for the nurse to call back. The mother outlined that sometimes the nurse ring back within half an hour and sometimes she could wait for 15 minutes or less to receive a call back. However, if the child is really sick as he is asthmatic, P9 would make a choice to visit the GP OOHs service or to ring an ambulance, rather than waiting for the nurse to ring back.

P9 described access to the service as really good, commenting that it was an 'expert service'. She also described the nurse's telephone manner as very good, very calm, very practical, very informed; quite thorough, especially that the nurse would ask for a lot of details. In terms of the nurse's advice, the mother said that the nurse would offer good advice, and to be on the safe side the nurse would offer an appointment to bring the child to be seen by the doctor. One time, her son swallowed a piece of a fire lighter. P9 was worried and rang the service of the GP OOHs service. The nurse asked a series of questions and told the mother that the nurse would have to call her back after getting more information about fire lighter. However, to be on the side of caution, the nurse rang back and offered an advice how to deal with the symptoms and gave good practical suggestions.

The mother described her view about visiting ED as a 'low' that is a negative experience. On one occasion P9's husband and the child were referred to ED by the GP OOHs service and were obliged to wait after being triaged for five hours. P9 stated that it was a very long waiting time and it seemed to be that the ED staffs were both very busy and very slow. On a scale of 10, P9 would rate her satisfaction with the ED as 5 out of 10. When P9 rings the GP OOHs service, she would expect that the nurse would assess the child over the telephone, offer advice and, if necessary, make an appointment to get the child seen, offer reassurance and provide a sense of help regarding what to do. The mother's satisfaction is mixed; she is sometimes satisfied but not always. P9 stated that she is satisfied because the doctors and nurses are thorough and asked a lot of questions to obtain a lot of details. But an example of not always being satisfied was when the mother had mastitis from breast feeding. She rang the GP OOHs service and was advised to visit the OOH's doctor and was offered an antibiotic. The mother told the doctor that she wanted a different antibiotic; however, the doctor refused. A few days later, the mother ended up with bad infection and was admitted into a hospital. Another incident happened when P9 visited the GP OOHs service for a six weeks check-up for her young son by the GP OOHs doctor. The mother paid 60 euro and she thought the check -up should be free of charge.

The mother stated that she would adhere to the nurse's advice and listen to what the nurse said. She felt that the nurse sometimes offers advice and little tips regarding the symptoms of the child. She also trusted the nurse and she always found it good to deal with the nurse. As a source of information, P9 would ring her GP first, but in the out-of-hours she would ring the GP OOHs service. P9 thinks that the location of GP OOHs is acceptable and the telephone made it easy for her to save time and travel. In order to improve the service of GP OOHs, P9 recommended two points: first, if the service can provide more nurses especially when a parent is exposed to an emergency situation and needed to be called back straight away; second, if the nurse can follow up parents especially those parents with really sick children. P9 mentioned that one time before the interview time she rang the service and the nurse who she had spoken to that time rang the mother back in a different day to find out how P9 got on and how the child was doing. P9 ended the interview declaring that she really likes her GP; she found the nurses working in GP OOHs service very good as most of them are mothers and she felt that nurses offer a very practical advice service. P9 also mentioned that the GP OOHs service is a 'great and fantastic' service; she had very positive experiences with the GP OOHs service, in comparison to ED.

Glossary of terms

Health Advice: can be defined as recommendations on how care-seekers can manage their health problems at home by themselves or with relatives.

Call centre: The call centre is the initial point of contact for a patient requiring medical attention out of hours'. The centre comprises call taking and assessment and in most cases advice or referral for triage.

Information and Telecommunications Technology: is the capturing, processing, storage, transmission, and exchange of information via electronic communication using digital and analogue technologies, and have the potential to improve information management, access to health services, quality of care, continuity of services, and cost containments.

Out-of-Hours: Outside of normal working hours between 6pm and 8am on Monday to Friday and for the 24 hour period on Saturday, Sunday and Bank Holidays.

Telecare: is a remote healthcare system technology that typically uses a series of sensors to monitor for potentially dangerous situations, patient's activities and safety, to provide virtual home visiting, to activate reminder systems, to increase home security, to monitor vital signs and to convey information.

Telephone Advice Nursing: is the focus of this study, and is defined as the use of telecommunication technology to help nurses working in call centres to deliver nursing services remotely such as providing patients with health information and advice over the telephone based on agreed guidelines, referring callers to visit their general practitioner on call, contacting the ambulance service, referring callers to the appropriate level of care such as an emergency department.

Telephone Triage: The process that requires the clinician to prioritise a caller's presenting symptoms and associated past medical history, according to their urgency and simultaneously makes a safe, effective and appropriate decision by telephone to establish if the patient requires to be seen or if evidence based advice is appropriate. If the patient needs to be seen the clinician determines how urgently this is required, where the patient needs to be seen and by whom.

Telemedicine: the use of audio, video and other telecommunications and electronic information processing technologies for the transmission of information and data relevant to the diagnosis and treatment of medical conditions, or to provide health services or aid healthcare personnel at distant sites.

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