Talk about medicines

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Abstract

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Background

Thousands of patients and general practitioners (GPs) talk about medicines every day during their consultations. Due to the confidential setting in which these conversations take place, little is known about the ways in which they play out between participants. Alongside the benefits provided by medicines doctors prescribe, there is a worrying degree of avoidable harm and expenditure introduced by errors and misunderstandings about these treatments. This thesis sets out to explore talk about medicines in GP consultations and enhance our understanding of the ways in which medicines are requested, reviewed and included in the fabric of talk-in-interaction.

Methods

GPs working at five practices were approached. Eight GPs agreed to take part. Surgery lists were assigned to the research and adult patients from each surgery were contacted. Information about the research was provided to all patients recruited to take part in the study. Video recordings of their consultations were made with the participants' consent. These were collected at eleven surgeries. Talk from the recordings of these consultations were analysed using a conversation analytic approach. The analysis of conversation was made alongside review of non-verbal communication and body position of participants captured in the video recordings.

Results

Seventy-nine patients were recruited and 78 consultations were recorded. Patients and GPs used a spectrum of practices during their talk about medicines. Features of patient talk included expression of their lifeworld experiences, concerns and considerations in relation to medicines. Doctors varied in their responses to these biopsychosocial contexts, with a range of practices. Some took a biomedical perspective and excluded these contexts; others embraced the lifeworld as part of the fabric of their consultation. Requests for medicines were made during a variety of consultation activities. Doctors and patients were both seen to orient to contingencies around the supply of prescription medicines as part of this talk. In the review of medicines, the electronic record played a powerful part in the consultation. Doctors used a range of conversational and non-verbal practices in relation to this resource. Some practices inhibited and constrained patient slots in conversation, and some opened out possibilities for patients to participate in talk.

Conclusions

The analysis of talk that takes place between GPs and patients as they discuss medicines has revealed a rich and informative insight into the ways in which participants conduct these conversations. The findings from this research can help guide future design of education and practice, focused on the creation of slots for talk about medicines during medical consultation.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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The Author

I currently work as a senior lecturer at Manchester Medical School, supervising teaching and learning related to medicines safety and prescribing for the course. I am also a part-time GP.

Chapter 1: Introduction

"Er I haven't to have any more (.) er prescriptions until I've seen a doctor."

- Patient talk at the beginning of a primary care consultation.

1.1 Talk about medicines

Every day, thousands of patients and doctors talk about medicines during their primary care consultations. These conversations are a valuable resource for both parties, since treatment of illness through the provision of drug therapy forms the bedrock of much modern medical intervention (NICE 2018). Through the observation and analysis of conversation about medicines in primary care medical consultations, this dissertation sets out to present a rich, qualitative review of the ways in which this talk plays out. Non-verbal practices that may accompany talk (gaze, gesture and body position) are also considered. The analyses will show how these facets of communication influence the ways in which discussion proceeds in data collected for my research.

Findings from this analysis will help to design more nuanced and evidence-informed teaching for trainees and practitioners, as they learn how best to converse with patients about medicines. The research questions that guided this thesis are recorded in section 1.2. A synopsis of Chapters follows in section 1.3.

1.2 Research questions

This dissertation will consider the following research questions, through literature review (Chapter 2), and the analysis and report of new data collected for this thesis as described in Chapter 3:

Methods of data collection and analysis.

1) How do doctors and patient initiate conversations about medicines?

(See Chapters 2,4,5,6,7).

2) What hurdles may stand in the way of talk about medicines and how are these overcome?

(See Chapters 2,4,5,6,7).

3) How is lifeworld context dealt with during talk about medicines?

(See Chapters 2,4,5).

4) Where and how do patients place requests for medicines to their GP?

(See Chapters 2,4,6,7)

5) How do GPs respond to patient requests for medicines?

(See Chapters 4,6).

6) In what ways are conversation and the electronic clinical record used to review medicines listed in the patient's notes?

(See Chapter 7).

7) How can findings from real consultation data help inform better practice related to talk about medicines?

(See Chapter 8).

8) How can findings from real consultation data help inform medical education related to talk about medicines?

(See Chapter 8).

1.3 Synopsis of Chapters

To begin this study, a review of relevant literature is presented in Chapter 2. Medical consultation about medicines will be located in the current sociopolitical climate in which it takes place, before moving to literature related to the study of talk, and in particular talk that occurs between patients and doctors in medical settings. This represents a huge body of work. However, a comprehensive review of all of this work is beyond the scope of the thesis. I have elected to focus on the Conversation Analysis (CA) literature, in line with the method of study I have selected to analyse the present data. This method has been used to examine some aspects of talk about medicines between doctors, patients and their carers during their consultations.

Chapter 3 details participant recruitment, data capture and analysis, and approach to the presentation of findings made in this thesis.

In Chapter 4, a single consultation taken from the present data is analysed. This shows all the talk that took place, and shows the opportunities for, and conduct of, talk about medicines. The data are described using a conversation analytic approach. The consultation selected for presentation in this Chapter was chosen as the patient presented with symptoms consistent with a condition commonly encountered in primary care: an upper respiratory tract infection. There is a wealth of research regarding GP prescribing of antibiotics when encountering patients with this complaint, despite this action causing harm from a population health perspective (Cole 2014; Fletcher-Lartey et al. 2016; Kumar, Little and Britten 2003; Stivers et al. 2003; Tonkin-Crine, Yardley and Little 2011). Design of talk-in-interaction during the discussion of antibiotic treatment has been made the subject of conversation analytic study elsewhere (Heritage et al. 2010; Nielsen 2011; Stivers 2002a; Stivers 2002b; Stivers et al. 2017). The Chapter sets the scene for the different ways in which talk about medicines is raised and how it unfolds, and provides opportunities to demonstrate and support previous findings in CA research and to highlight new aspects of talk about medicines observed in the present data.

Chapter 5 shows how talk about medicines in the present data was intertwined with patients' sharing of their lifeworld view. Four consultations stood out as most prominent examples of doctors using conversation to explore their patients' shared lifeworld experiences, concerns and considerations to reach common ground in their conversation about medicines. Doctors were also observed to ignore the patients' sharing of the lifeworld. Two consultations were notable. In these, patients repeatedly returned to talk about their lifeworld, yet doctors pursued a biomedical agenda. In these examples, an agenda for biomedical talk had been pre-defined by the doctors.

Chapter 6 focuses on placement of requests by patients. This topic has been explored elsewhere using CA, but in different settings and with different patient or carer groups. The present data shows new features of request placement and design and these are presented and discussed.

Chapter 7 examines talk during the review of prescribed medicines treatment, and how the electronic patient record is accommodated by participants during these conversations. The present data shows ways in which the electronic record may work as a secondary point of reference, or dominate the consultation as primary information source.

Chapter 8 provides summarises findings from the present data, and in the light of these, addresses implications for practice and medical education. A summary of study limitations and directions for future research are outlined.

Chapter 2: Literature review

2.1 Chapter outline

To begin this literature review, an outline of the chapter is as follows. The control of access to medicines in the UK is reviewed in section 2.2. This details doctors' professional responsibilities related to prescribed medicines, intended to afford society safe and optimal therapies (General Medical Council 2013a; NICE 2015). The section also provides an overview of what is known about actual medicines use versus directions for use on prescriptions, and the inadequacies doctors may possess in their recognition of, and dealings with, these.

Section 2.3 considers biomedical and biopsychosocial approaches to disease and illness, and how these approaches may influence negotiations and sharing of decisions about medicines in primary care.

Section 2.4 presents an overview of the current climate within medical education, outlining responses to problems related to harm caused by medicines, in relation to matters concerned with their prescribing. Safe prescribing practice is said to rely on an array of knowledge and skills, including drug information interpretation, calculation skills, and therapeutic knowledge (Maxwell and Walley 2003). Alongside this, communication about medicines between doctor and patient has been highlighted as a key area requiring attention (Makoul, Arntson and Schofield 1995; NICE 2015). Much of this guidance has focused on patient education and empowerment. Patient engagement, autonomy, sharing of decisions and a patient-centred approach in consultation are all heralded as necessary strategies in the delivery of modern healthcare (Hibbard and Greene 2013; RCGP 2013a; Richards, Coulter and Wicks 2015). These strategies are said to seek to promote the sharing of decisions with patients through their conversation with doctors and other healthcare professionals about medicine treatments (e-LfH 2016; Ellins and McIver 2009; Elwyn et al. 2012; Elwyn et al. 2010). An overview of literature related to these aspirations is presented.

Section 2.5 presents an overview of studies of talk between doctors and patients from a variety of communication research approaches. Given that participation in conversation is the predominant form of social interaction for "getting things done" (Sidnell 2010b), this thesis focuses on the fine grained analysis of face-to-face talk about medicines between doctors and patients. A brief history and important features of Conversation Analysis are presented. This method was used in the analyses of the present data.

Section 2.6 focuses on Conversation Analysis findings related to talk about medicines in healthcare settings. A variety of observations made in relevant areas of this research literature are described and gaps identified in our understanding related to talk about medicines. Section 2.7 presents a summary of the literature review.

2.2 Accessing medicines

Humans have used medicines as part of the art of healing for thousands of years, as shown through archeological and anthropological evidence of the use of plants and plant extracts (Askitopoulou, Ramoutsaki and Konsolaki 2002; Etkin 1988). Whilst herbal remedies are still used in developed and developing countries, the production of synthetic and refined drug treatments are a huge commercial venture in the developed world (British Broadcasting Corporation 2014). The design and manufacture of conventional medicines are complex processes, involving much research, financial investment and industrial production (Hay et al. 2014). The refined drugs which are commercially produced possess powerful pharmacological actions, holding potential for both beneficial impact on health and disease, and deleterious effects if used inappropriately (Juhn, Phillips and Buto 2007).

Although medicines are prescribed with the intention of providing help for patients, iatrogenic disease through adverse effects of medicines is a well-recognised risk (Khan 2013; Kongkaew, Noyce and Ashcroft 2008; Lazarou, Pomeranz and Corey 1998; Pirmohamed et al. 2004), particularly for those who use medicines most: the elderly patients and those with multi-morbidity (Onder et al. 2013; Wallace et al. 2015). It is of no surprise, then, that the use of medicines is

subject to restriction in the developed world. These restrictions influence the clinical, social and political climate within which consultations between doctors and patients are played out. An overview of some of the controls used to limit access to medicines is presented below.

In the UK, access to medicines is sanctioned by legislation under the Medicines Act (UKPGA 1968). The act defines three categories of medicines: those allocated to a general sales list and available to all consumers for direct purchase at any retailer; those only available for sale under the supervision of a pharmacist ('P' medicines), and those available through presentation of a prescription, obtained from an appropriate practitioner. Treatments in the latter group are classified as Prescription Only Medicines (POMs). POM status is granted to medicines to reduce inappropriate use, providing society with some protection against harms caused by medicines, including mistreatment, addiction and dependence (MHRA 2014). Medicines available by provision of prescription are considered in section 2.2.1.

Several types of practitioner may provide prescriptions, including dentists and 'non-medical' healthcare providers who qualify as independent prescribers (Department of Health 2017; UKPGA 1968). However, in the UK, it is doctors who usually write prescriptions (NHS NHS Digital 2013). The legislative control related to medicines therefore places prescribers, and particularly doctors, as gatekeepers to public access for many medicines. Alongside abidance to legislation restricting access to medicines, prescribers must make clinical, ethical and moral judgments when considering what to prescribe and when; their choices are relevant to both individual care and population health (General Medical Council, 2013a).

2.2.1 Prescribed medicines in primary care

General practitioners are the first point of access for many aspects of healthcare. They provide on-going, longitudinal care for their patients, dealing with a broad range of health and illness.

According to national policy, their remit is to:

"treat all common medical conditions and refer patients to hospitals and other medical services for urgent and specialist treatment. They focus on the health of the whole person combining physical, psychological and social aspects of care."

UK GP services are free at the point of care, and the majority of prescription medicines are supplied to patients free of charge (Department of Health 2016). Prescribing medicines is reported as a key task for GPs (Petty, Zermansky and Alldred 2014). Around 1 billion prescriptions for medicines are written each year in English primary care (Prescribing and Medicines Team Health and Social Care Information Centre 2015), at a cost of £8.6 billion (HSCIC 2014b). UK survey data suggests that a quarter to a half of all patients who attend their GP expect to be provided with a prescription (Britten and Ukoumunne 1997; Little et al. 2001; McKinley and Middleton 1999; Williams et al. 1995). United States of America (USA) structured interview data suggests that when a pre-consultation expectation of a prescription for medicine is not met, it is predictive of low satisfaction ratings by patients, in contrast to expectations held preconsultation for tests or referrals, which showed no impact (Mitchell et al. 2004).

UK data from the Health Survey for England reports the taking of prescribed medicines as a common occurrence, with 43 percent of men and 50 percent of women disclosing taking at least one prescribed medicine in the preceding week, and the number of medicines reported to have been taken increasing with age of survey participant; more than half of those aged 65-74 years old and more than 70 percent of these aged over 75 disclosed taking three or more medicines in the week preceding the survey (HSCIC 2014a).

The above data shows that whilst there are constraints relating to the access to prescription medicines in the UK, these do not lead to infrequent granting of supply: millions of prescriptions are obtained for a wide variety of reasons by patients each day (Prescribing and Medicines Team Health and Social Care Information Centre 2015). Prescriptions are written to provide treatment for acute or chronic illness and related symptomatology, to prevent disease and to support lifestyle choices (NICE 2018). Patients may be provided with a prescription for a medicine for use on one occasion, with the need to re-consult with their doctor before further prescriptions are provided. This introduces greater control and supervision over consumption of medicines, but brings with it a greater workload for prescribing doctors and potential inconvenience for patients. Repeat prescriptions, where patients are able to reorder treatments from their GP surgery at

regular intervals without further consultation, are often written. The majority of items are provided to patients on repeat prescriptions (Petty, Zermansky and Alldred 2014).

The control of access to medicines aims to reduce iatrogenic disease and inappropriate use.

Despite doctors holding moral, professional and societal responsibility for the safe use of many medicines, avoidable harms from drug treatment are well documented and common. These are considered in section 2.2.2

2.2.2 Harm due to medicine (mis)treatments

Although medicines are used with the aim of beneficence, they may cause adverse effects (Edwards and Aronson 2000). Some of these events are unexpected, but they also occur through predictable interactions with other medicines taken concomitantly, and/or through predictable interaction with diseases that the patient suffers with (ibid.). The prediction of likely benefits versus adverse effects of medicines becomes more difficult in the face of multi-morbidity, where a patient suffers with more than one condition and may take many medicines concurrently (NICE 2016; Shiner et al. 2014).

Doctors have responded to patients suffering with multi-morbidity through provision of many prescribed treatments, defined as treatment with 'polypharmacy'. Polypharmacy is, in itself, a hazardous intervention; combined risks of, and interactions between, multiple medicines often outweigh benefits and can worsen physical and psychological patient wellbeing (Mohammed, Moles and Chen 2016; Shiner et al. 2014). Qualitative interview research has shown that patients asked to take multiple treatments recognise the risks this entails (Britten et al. 2004; Haslbeck and Schaeffer 2009; Mann et al. 2009).

Adverse drug reactions (ADRs) to medicines are a common reason for an emergency referral to hospital, thought to account for up to one in six of non-scheduled admissions (Pirmohamed et al. 2004). Many of these ADRs may be preventable, as they frequently occur following mistakes in the writing of prescription for medicines (ibid.). UK research has quantified rates of prescription

error in community and hospital settings, with up to one in ten items of medicine prescribed incorrectly (Avery et al. 2012; Dornan et al. 2009; Elliott et al. 2018; Ryan et al. 2014).

Research has reported that patients are informed with regard to the risks of prescription medicines: interview data document fears regarding dependence and harm, with these concerns contributing to poor adherence to treatment (Mishra et al. 2011). Survey research reports similar findings, with patients holding strong concerns about their medicines most likely to also report unintentional non-adherences to their treatments (Unni and Farris 2011). Despite these concerns that patients hold about adverse effects of medicines, focus group research with doctors has reported reluctance to provide information about potential unpleasant and/or harmful consequences of the medicines they prescribe (Nair et al. 2002).

2.2.3 Adherence to medicines

It is thought that around half of all patients taking medicines for long term conditions do not take them as prescribed (WHO 2003). Doctors are reported to be poor at spotting and dealing with this issue (Osterberg and Blaschke 2005). Poor communication between patients and physicians is proposed to contribute to intentional or unintentional non-adherence to treatment (Brown and Bussell 2011; Horne et al. 2005; Mukhtar, Weinman and Jackson 2014). Conversely, a good patient-doctor relationship has been presented as pivotal in the promotion of treatment adherence (Moen et al. 2009).

Patients (and their carers) choose whether or not they wish to take medicines, and how to take them when they do (Nunes et al. 2009). Meta-ethnographic synthesis of studies of patients' experiences of medicine-taking has suggested that a wide variety of their concerns impact negatively on the ways in which medicines are used (National Collaborating Centre for Primary Care UK 2009). These include worries about adverse effects, concerns about stigma perceived to be associated with conditions requiring treatment such as HIV and mental illness, difficulties reported in evaluating the lifeworld benefits of prescribed treatment and the impacts of treatment on day-to-day life. Without effective conversation in consultations to explore patients' actual medicines use, doctors may hold an incomplete understanding of the ways in which medicines

are taken. This raises a number of issues, including mistrust between patient and doctor (Ledford et al. 2010; Osterberg and Blaschke 2005; Polinski et al. 2014), avoidable financial costs incurred through failure to recognise and address actual medicine use (Osterberg and Blaschke 2005), and dangerous decisions regarding treatment changes (Martin et al. 2005).

A systematic review of studies examining interventions to enhance adherence to medicines concluded that "effective ways to help people follow medical treatments could have far larger effects on health than any treatment itself." (Haynes et al. 2008). Despite this evidence, the historical focus of healthcare research has been in the development of new treatments, rather than ways in which established treatments may be optimised (Nunes et al. 2009). Furthermore, the planning of medicines treatment, whether based on existing or new medicines, may lead to doctors making clinical judgements that cause harm:

"When physicians erroneously assume that their patients have taken prescribed medication(s), they may make inappropriate medication and/or dosage changes, which can then result in further complications and suboptimal health outcomes. Thus, not only do non-adherent patients fail to benefit from effective medication, they also risk being harmed by less than ideal medication and dosage choices". Martin et al. (2005)

So, if any discrepancies between perceived and actual medicines-taking are not resolved, this may have negative impacts in a variety of ways: potential damage to the patient/carer/doctor relationship; avoidable financial waste; and detrimental effects on future plans for prescribed treatment regimens, as they will be made on the basis of incomplete and/or incorrect information. Literature review of current medical perspectives therefore presents failings across multiple fronts related to the provision of medicines.

This section has shown that prescribers hold responsibilities as gatekeepers to treatment.

Despite the protection this is designed to provide, prescription medicines cause harm. Patients and doctors recognise the risks of treatment, but medicines are still prescribed in huge numbers, particularly in primary care. The primary care consultation functions as the social setting in which many negotiations about medicines between patients and GPs take place. The conduct of these negotiations is considered in the sections that follow.

2.3 Biomedical and biopsychosocial approaches to disease and illness in primary care

Medical encounters can focus on a narrow biomedical model, or may recognise and include talk to explore a broader patient lifeworld perspective (Barry et al. 2001; Engel 1977; Engel 1980; Mishler 1984; White 2005). A biomedical model of health is "strictly concerned with organic malfunction", focusing on the recognition of, and treatment for, 'disease' rather than 'illness', translating "into a medicine exclusively concerned with the physical aspects of illness" (Farre and Rapley 2017). Engel (1977) argued that the biomedical model was reductionist, failing to recognise the human experience of illness. He called for doctors to adopt a broader, biopsychosocial model: to recognise and include social, psychological and behavioural dimensions of illness as part of their provision of care for their patients.

Mishler's (1984) work in discourse analysis examined the ways in which doctors and patients talked together in US private and hospital care. His analysis of audio-recordings collected from 25 consultations was used to show how the conversations captured within each played out. He argued that his data revealed two different and distinct voices, borne out through doctors' and patients' turns at talk. The patient's narrative expressed details related to their concerns in ways that revealed 'contextually-grounded experiences of events and problems' (pg. 104), termed the 'voice of the lifeworld' by Mishler. Doctors used their turns at talk to pursue questioning on their own terms and only attending to biomedical context. Social, psychological and behavioural cues provided in patients' turns at talk were missed or ignored by the doctors. Mishler defined this approach as the 'voice of medicine'.

Mishler argued that doctors must recognise the patient's problems as they would experience them from their lifeworld view. This approach would require exploration of biopsychosocial contexts, just as Engel (1977) had called for. His data demonstrated that the doctors he recorded often narrowed their considerations and conversations to only biomedical matters. They used their questions to maintain control of the consultation and focus on disease process rather than illness experience. Despite patients "sometimes talking about problems in their lives that were

related to or resulted from their symptoms or illnesses" (Mishler 1984), these contributions to talk were typically quickly supressed and discounted by doctors. He called for doctors to talk with patients in a way that displayed "a responsiveness to the patient's attempts to construct meaningful accounts of their problems" and to foster "non-coercive discourse" with "reciprocity rather than... dominance-subordination".

An understanding of the patient's lifeworld view offers the opportunity for doctors to provide care that is patient-centred (Bardes 2012; Kramer et al. 2014). Stewart (2001) talks of participants seeking to find 'common ground'; a realisation of doctors and patients working as equal partners, each bringing their expertise and perspectives into their conversations.

2.3.1 Negotiations about medicines

The National Institute for Health and Clinical Excellence (NICE, 2012) has published guidance for healthcare professionals calling for holistic care for patients. Part of this guidance asks that practitioners ensure that:

"Patients are actively involved in shared decision-making and supported by healthcare professionals to make fully informed choices about investigations, treatment and care that reflect *what is important to them*" (italics added).

Current NHS policy values patient engagement, participation and shared decisions about health and illness (NHS England 2014; The Health Foundation 2014).

The Royal College of General Practice (RCGP 2013b) stipulates that the modern GP provides:

"whole-person care - integrating a biomedical, psychological, social, cultural and holistic knowledge of the patient and community and applying this understanding to practical care planning through person-centred approaches, including shared decision-making".

A key element of patient empowerment is determined by their degree of control over their participation in decisions (Stewart 2001; Stewart et al. 2003). At decision points in talk, the patient may 'abdicate their responsibilities and hand them over to the clinician' (Brown, Weston and Stewart 2003). Conversely, they may want to take a more active role in the planning and

review of their treatment. In reaching common ground about the goals related to medicines, the doctor and patient must 'move to a meeting of minds' if patient-centred care is to be delivered (ibid. page 96).

2.3.2 Sharing decisions in talk about medicines

When patients participate in the planning and review of treatment options in partnership with their doctor, they take part in a shared decision (Elwyn et al. 2010). It is said that a shared decision requires effective provision of information and supported deliberation of the healthcare decisions available (Elwyn et al. 2012). To aid healthcare professionals in their discussions with patients about treatment with medicines, NICE offers national online guidance. This is accessible as part of the NICE pathways online tool (NICE 2009):

- Offer all patients the opportunity to be involved in making decisions about prescribed medicines. Establish what level of involvement in decision-making the patient would like.
- Healthcare professionals have a duty to help patients to make decisions about their treatment based on an understanding of the likely benefits and risks rather than on misconceptions.
- Avoid making assumptions about patient preferences about treatment. Talk to the
 patient to find out their preferences, and note any non-verbal cues that may indicate
 you need to explore the patient's perspective further.
- Ask patients what they know, believe and understand about medicines before
 prescribing new treatments and when reviewing medicines.
- Explain the medical aims of the treatment to patients and openly discuss the pros and cons of proposed medicines.
- 6. Discuss with the patient why they might benefit from the treatment. Clearly explain the disease or condition and how the medicine will influence this.

Alongside NICE pathways, outcomes from the Making Good Decisions in Collaboration (MAGIC) programme (Joseph-Williams et al. 2017) have provided further training and guidance to all NHS staff, made available via the eLearning for Healthcare platform (e-LfH 2016). This training uses a

three-step model to guide an approach to discussions: 'choice talk' to ensure patients are aware of 'reasonable' options that exist; 'options talk' to provide further detail about the choices, including potential benefits and risks or harms of each approach; and 'decisions talk' where preferences are elicited and a decision is made or deferred.

Many practitioners are reported to have accepted and welcomed sharing of decisions with patients as a primary aim for modern medical practice (Elwyn et al. 2010; Hoffmann et al. 2014; NHS England 2016; Oshima Lee and Emanuel 2013; Quill and Brody 1996; RCGP 2013b). Research into the effects of shared decisions reports a positive impact on patient satisfaction, knowledge and adherence to medicines (Joosten et al. 2008). Patients who take an active role in determining their healthcare have been suggested to have improved health outcomes (Joosten et al. 2008; O'Connor et al. 2009), although this is an area of uncertainty and controversy: systematic reviews of the literature searching for robust evidence of positive health impacts have been inconclusive (Clayman et al. 2016; Shay and Lafata 2015; Tousignant-Laflamme et al. 2017). Despite controversies, practitioners recognize that SDM holds potential to build stronger therapeutic relationships, help patients to take more control over their health, and reduce complaints and litigation.

A medication review is a key area of national guidance to promote 'optimisation of treatment' (NICE 2015), sitting within a national medicines optimisation framework (Figure 1). Within the medication review, the doctor is asked to dedicate discussion to the exploration of a patient's knowledge, understanding, and concerns about their medicines, including patient choice and need in negotiations related to prescribed medicines (Duerden, Avery and Payne 2013; NICE 2015; Shiner et al. 2014).

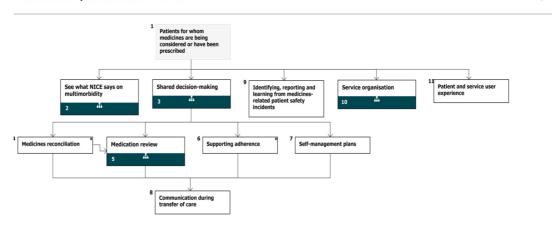


Figure 1: Medicines optimisation overview.

(Available at https://pathways.nice.org.uk/pathways/medicines-optimisation)

Patient groups identified as in particular need of careful attention include those prescribed multiple medicines (Duerden, Avery and Payne 2013), those with chronic or long-term conditions (Wallace et al. 2015) and the elderly (Patterson et al. 2012).

Sharing of decisions about prescription medicines presents dilemmas for prescribers as they balance professional practice with consumer demand (Hibbard and Greene 2013; Richards, Coulter and Wicks 2015). There have been worries within the medical profession that they 'overprescribe' as a consequence of being at the mercy of patient satisfaction (Arney, Richard L. Street and Naik 2014; Fletcher-Lartey et al. 2016; Gallagher et al. 1997; Peyrot et al. 1998; Prosser, Almond and Walley 2003; Stevenson et al. 1999; Weinstein 2001), with poor satisfaction translating into emotional, financial and even professional penalties (Brett and McCullough 2012; Britten and Ukoumunne 1997; Lewis and Tully 2011; Malhotra et al. 2015; Zgierska, Miller and Rabago 2012).

2.4 Medical education and guidance to promote safe use of medicines

Concerns around safety issues related to medicines have prompted the medical profession to carefully consider the errors in the processes involved in treatment provision (Avery et al. 2012; Dornan et al. 2009; Payne and Avery 2011). As prescribing error has been highlighted as a significant issue (ibid.), improvements in the clinical, technical and communication skills needed

to ensure medicines safety are key priorities for undergraduate training (Maxwell 2012; Maxwell, Cameron and Webb 2015; Maxwell and Walley 2003; Mucklow, Bollington and Maxwell 2012; Ross and Maxwell 2012) and postgraduate practice (Duerden, Avery and Payne 2013; Ryan et al. 2014). Healthcare professions have been asked to be more judicious in their prescribing and to 'optimise' treatment (Duerden, Avery and Payne 2013; Milton and Jackson 2007; Schiff et al. 2011).

2.4.1 Undergraduate teaching of communication about medicines and safe prescribing

Effective communication is a core requirement for undergraduate training (Peters and Livia 2006). Formal teaching time for communication skills is assigned within medical curricula, with UK medical schools abiding by a consensus agreement regarding curriculum content in this area (Von Fragstein et al. 2008). The latest guidance from the General Medical Council (2015) has continued to stipulate that medical students must learn to communicate effectively with patients and colleagues in a medical context; part of this communication will inevitably be related to medicines treatment.

Section 2.2 referenced that doctors are by far the most common prescribers and that the majority of prescriptions are written by junior doctors and GPs. Furthermore, the largest number of graduates plan careers in general practice after their foundation training (UK Foundation Programme 2016). There have been repeated assertions from those involved in healthcare education that medical students must receive better teaching and assessment in prescribing and prescribing-related skills, right from the beginning of their courses (Maxwell 2012; Maxwell, Cameron and Webb 2015; Mucklow, Bollington and Maxwell 2012; Ross and Maxwell 2012). National curricula requirements for undergraduate medical education include specific intended learning outcomes (General Medical Council 2015):

"Prescribe drugs safely, effectively and economically.

- (a) Establish an accurate drug history, covering both prescribed and other medication.
- (e) Provide patients with appropriate information about their medicines."

2.4.2 Assessing prescribing and medicines safety in undergraduate education

Medical undergraduate assessment in prescribing and medicines safety is now standardised and supported by the Medical Schools Council and the British Pharmacological Society. This has been bought about through the introduction of a mandatory, two-hour online examination. The 'prescribing safety assessment' offers the following justification for the examination:

'Prescribing is a fundamental part of the work of Foundation Year 1 doctors, who write and review many prescriptions each day. It is a complex task requiring knowledge of medicines and the diseases they are used to treat, careful judgement of risks and benefits of treatment, and attention to detail.'

(see prescribingsafetyasssessment.ac.uk)

A pass in this examination is required before doctors can progress into their second year of foundation training, and those who have not passed are expected to undergo a programme of remediation prior to retaking the examination.

It is hoped that through better training, more effective and inclusive communication in consultations, and more focus on prescribing and medicines safety, the benefits of optimised medicines therapy will be realised (NICE 2015). Since discussions related to medicines treatment, provision of prescribed medicines and review of medications all occur during the healthcare consultation, educators must be aware of *how* this conversation happens. This understanding is necessary to focus and design education in this area. However, due to the private nature of the medical consultation, the vast majority of conversations that may take place in this institutional setting sit within a 'black box' of communication. These conversations are not usually recorded in real time as they happen. Rather, the doctor makes notes to document the talk that took place in the patient's clinical record, and the patient usually relies solely on their recollections of the conversation.

This set-up protects patient confidentiality, but also obscures opportunities to understand the design and conduct of talk that may take place, related to medicines. It raises some intriguing and important questions: How do patients initiate talk to obtain medicine treatments? How might conversations between patients and doctors reduce the avoidable harm caused by medicines? In

what way(s) does talk in consultation explore actual medicines use? How are decisions about treatments with medicines be shared through conversation? Where is talk about medicine situated within other talk that occurs in the consultation? A major component of the communication required to empower patients, to explore actual medicines use, and to share decisions, rests on the conversational turns at talk taken by participants in the consultation. Section 2.5 provides an overview of approaches to the study of conversation about medicines between patients and doctors.

2.5 Studying conversation about medicines between doctors and patients

Studying dialogue between participants in consultations allows analysis of where and how conversations about medicines occur, and how they are designed (Heritage and Maynard 2006b). Whilst there is extensive literature with regard to the study and report of the doctor-patient consultation, inclusion of all of this work in the literature review is beyond the scope of the thesis. The literature review will now consider findings from the microanalysis of talk in medical encounters. From a methodological viewpoint, investigation of real consultation discussion has developed using two approaches. One is through interactional process analysis, and the other through microanalysis methodologies. Both rely on the capture of real consultation conversations, studying what was said by participants (Charon, Greene and Adelman 1994).

These research techniques rely on audio or audio-visual recording, capturing first-hand data for subsequent analysis. Such studies have examined consultation design and participation as a whole, with some focus on talk related to medicines. Relevant findings from interactional process analysis research are considered briefly below, followed by more in-depth consideration of microanalytic findings, the basis for the methodology chosen for this thesis.

2.5.1 Interactional process analysis

Interactional process analysis (IPA) methodology was first introduced by Bales (1949). In this approach, a team of researchers observes conversation, and the dialogue is categorised against

a predetermined group of interactional behaviours. The researchers perform their categorisation independently, and then compare their assessments to reach consensus (Charon, Greene and Adelman 1994; Hall, Roter and Katz 1988; Mead and Bower 2000; Ong et al. 1995; Roter et al. 1998; Roter and Larson 2002). The majority of IPA research has examined task-focused and affective communicative behaviours in consultations, coding patients' expression of their concerns and how doctors respond to these (Heritage and Maynard 2006b; Ong et al. 1995).

Through coding, objective measurements of presences and absences of communication features in consultations can be proposed. Of the various coding methods, the 'Roter Interaction Analysis System' (RIAS) coding system (Cooper & Roter, 2003; Roter & Larson, 2002; Roter & Larson, 2001) is widely used, often employed to study conversations between doctors and patients (Deveugele et al. 2002; Heritage and Maynard 2006b; van den Brink-Muinen et al. 2003). Affective and instrumental task-orientated communication behaviours of doctors and patients are categorised; each RIAS category is coded, with each unit of analysis defined as the 'smallest meaningful string of words' (Deveugele et al. 2004). Categories of talk regarded as important are identified quantitatively by dominance or by rarity, with the reported research often including statistical analysis (Roter and Frankel 1992; Roter et al. 1997).

Analysis of US outpatient care using IPA has shown that discussion about medicines represented a significant activity in consultations, taking on average 20% of total consultation time (Sleath et al. 1999). This research involved the review and coding of 467 consultations across 11 outpatient clinics. The authors noted that doctors asked significantly more questions about medicines than patients did. They almost always avoided an 'open question' design in doing so, according to the study results. Instead, closed questions were used by the doctor, seeking confirmation of what medications the patient was taking, how the medication was influencing the patient's condition, the quantity or supply, the interval, dosage, and barriers or side effects.

Nearly half of all patients were reported to not ask anything during their consultation about the medicines they currently took. However, where the doctor suggested treatment with a new medicine, the likelihood of the patient asking questions about this treatment doubled. They were reported, most frequently, to ask questions about the quantity and/or supply of their medication,

and 'what medications they were taking'. It is unclear from this study how participants designed and responded to questions about medicines in the consultations.

More recent IPA research of Canadian primary care reported discussion of medicines occurring in more than 90 percent of 462 consultations analysed (Richard and Lussier 2006). This study showed that doctors and patients most frequently discussed the medicine name, dosage, effect and reason for taking the medication. Adverse effects, pharmacological action of medicine(s), allergies or intolerances, and patients' doubts or concerns about the treatment were rarely discussed.

IPA research into consultations in US outpatient clinics, by family doctors and cardiologists, examined information provided to patients when new medicines were prescribed (Tarn et al. 2006). The analysis was taken from 44 physicians prescribing 244 new medications to 185 patients. Doctors were reported to often miss provision of crucial information; for example, adverse effects, and detail related to dosing and length of treatment, were not discussed in more than half of the consultations.

The design of doctors' talk has been shown to influence the level of patient recall about medicine regimens by those attending geriatric services in the US (Rost and Roter 1987). According to the research, where doctors used more closed-ended questions and provided more information, patients were more able to remember the doctors' recommendation about their medicines.

The length of time taken used by doctors to provide patients with information about new medicines has been examined in more recent US consultation data (Tarn et al. 2008). Coding was undertaken on audiotaped talk that took place between primary and secondary care doctors and patients in 181 outpatient encounters. These were selected from a larger dataset of 909 consultations, on the basis of new medicine(s) being prescribed. The authors reported that the encounters lasted for an average of 15.9 minutes. Doctors spoke with patients about their new medicines for a mean of just 49 seconds. Crucial information was often missed: for example, of the consultations recorded, duration of medicines use was only discussed in 26.1% and adverse effects in 37.6% of cases.

The use of coding allows high volume, quantitative analysis of talk in consultations. However, since talk-in-interaction is context-shaped and context-renewing, and therefore unique in each encounter, important aspects of conversation may be missed or under-reported in such approaches (Heritage 1984; Heritage and Maynard 2006a). A microanalytic approach offers qualitative insights into the way in which context is shaped and how social actions are achieved through talk.

2.5.2 Micro-analysis of conversation

Conversation Analysis (CA) originates from Garfinkel's pioneering work of ethnomethodology: the study of the methods people use to make sense of the social world in which they live (Garfinkel 1967; Heritage 1984). CA involves the recording and fine-grain analysis of activities bought about through discussion. It enables us to view the interactional accomplishments of verbal communication between participants as talk unfolds (Sidnell 2010b). CA involves repeated review of the recordings made, with attention to utterances, and their placement within a sequence of dialogue, examining the ways in which conversation performs social actions.

CA emerged in 1960s through the collaboration of Harvey Sacks, Emanuel Schegloff and Gail Jefferson. Its inception was influenced by the works of Erving Goffman and Harold Garfinkel (see Heritage and Clayman 2010; Sidnell 2010b). Goffman described "interactional order": the organisation of social interaction that participants recognise and adopt, using interactional rights, rules, expectations and obligations (Goffman 1983; Sidnell 2010b). Garfinkel conceptualised and established ethnomethodology (Garfinkel 1967), He argued that social life rests upon individuals using a foundation of practical reasoning to understand and determine the social actions that are expected by society in a given social situation. This requires participants to share a sense of the social world they interact within. Garfinkel's work demonstrated that "social actions, shared understandings, and ultimately social institutions are underpinned by a complex body of presuppositions, tacit assumptions, and methods of inference – in short, a body of methods or methodology." (Heritage and Clayman 2010).

Sacks began his investigation into conversation through study of recorded calls to an emergency

psychiatric hospital (Sacks 2010). The hospital had set up a helpline as part of a suicide-prevention programme. Sacks used the recorded conversations to investigate talk-in-interaction. In making his analysis, he listened to the recorded conversations repeatedly and transcribed the talk that took place. His studies helped him to identifying ways in which callers designed their turns at talk, and the rules that appeared to govern sequences of talk within the conversations he heard. Along with Gail Jefferson and Emanuel Schegloff, his work initiated a new methodology in the study of conversation. CA has studied conversation in ever day (or as often quoted in CA literature, 'mundane') and institutional settings. For examples, see Drew and Heritage (1992) and Sacks (1989).

CA has shown how turn-taking is fundamental to the way in which conversation works. Sacks, Jefferson and Schegloff's (1974) key study showed that during conversation, overwhelmingly, one participant speaks at a time, speaker overlap is common but usually brief, and that transitions between speakers usually occur with no gaps, slight gaps or slight overlap (Sacks, Schegloff and Jefferson 1974). During a turn, the speaker may select who speaks next, or another speaker may self-select and start the following turn (ibid.).

In order to co-construct conversation, participants monitor each other's turns so that they each know where they may contribute to talk, and what response is appropriate depending on what they wish to achieve by talking (Drew 2005; Sacks, Schegloff and Jefferson 1974). Each turn is built upon participants' interpretations of prior turns in the conversation (Hutchby and Wooffitt 1998).

The ways in which turns at talk are placed within sequences of conversation and designed by the speaker determines the ways in which they are understood by participants, and the social actions that these turns perform (Drew 2013; Sidnell 2010a). CA has shown that talk is often organised into sequences of paired actions; for example a greeting is usually met with a greeting, a question with an answer, and a request with granting or refusal (Schegloff and Sacks 1973). The 'recipient design' of a turn at talk influences the recipient's response, and their response embodies their

understanding of what was meant by the preceding turn (Drew 2013). For an overview of sequence, see Schegloff (2007b).

Adjacency pairs in talk are composed of two turns, each taken by a different speaker, and by definition are placed next to each other (Schegloff 2007a). They are designed in a way that means the response projected is determined by the design of the first part of each pair, and so the first pair part has always to precede the second part (Stivers 2013). Adjacency pairing of talk represents an elementary feature of the ways in which turns at talk occur in sequence. CA has shown that design of talk within sequences introduces other recurrent features, including talk that may be placed prior to and after adjacency pairs (pre and post expansions), and insertions that may be placed between them.

An understanding of corrections and re-initiations in speech made by participants during talk-in-interaction represents another key feature of conversation revealed by CA. As part of the flow of talk between participants in conversation, participants "repair" their speech in their turns at talk (Schegloff, Jefferson and Sacks 1977). A fundamental feature observed in Schegloff et al.'s (ibid.) work is that self-repair predominates over that initiated by another speaker.

In constructing our turns at talk, we may do so with a preferred response from our participant in mind. CA has shown how participants in conversation recurrently design their turns in ways that seek a certain response (*recipient design*). It has shown how the participants recurrently recognise and react to the ways in which their participant's preceding turn is constructed. For example, in response to a request, agreements are usually offered in overlap or without a pause. Disagreements may be placed with less ease. These are often preceded with a brief pause and are sometimes prefaced with exclamations such as "well" or other vocal sounds such in draws of breath, or accounts to explain why an agreement cannot be offered. For reviews of preference, see Pomerantz and Heritage (2012); Sidnell (2010c).

The basis of CA is, therefore, to consider the process through which sequences of talk progress: the ways in which turns during talk-in-interaction between participants follow on from one another.

The construction of each turn is made relevant through the prior turn, and is in itself context-

renewing for the conversation that follows (Heritage 1984). Analysis of the raw data reports communication as it occurred, showing how the participants co-construct talk. The recording is transcribed to display lexical information and features of talk such as intonation, timing and placement of utterances, and pauses in conversation (Jefferson 1984b). See appendix 4 for the transcription notation.

2.6 Conversation analysis and talk about medicines

Since treatment with medicines is a recurrent feature in the provision of healthcare, at first glance the medical consultation as a whole event might be seen as offering an opportunity to talk about medicines. However, whilst talk within the healthcare institutional settings shares features of everyday, mundane talk, there are some important differences. Social interaction related to health and illness are bound by specific goals for the conversation to be had; participants orient much of their talk to matters related to health and illness, in contrast to less focused, everyday conversation.

Participants in medical consultations orient to a shared understanding of the ways in which the medical consultation proceeds (Robinson 2013). The consultation is co-constructed by its participants, as talk progresses through normatively ordered, consecutive activities (Heritage and Maynard 2006a; Robinson 2003; Robinson 2013). These include greetings, problem presentations, information gathering, sharing diagnoses, treatment discussions and closings. Each of these activities affords different opportunities for participants to talk about medicines. The complex organisation of talk within each consultation means that participants are able to discuss medication in particular 'slots'. In orienting talk to the goals of conversation in institutional settings, there are interactional constraints on conversation as to "what will be allowable to the business at hand" (Heritage 2005). In the sections that follow, some remarkable findings related to the micro-analysis of talk about medicines are presented.

2.6.1 Patient lifeworld and talk about medicines

Research by Barry et al. (2001), conducted in UK primary care, showed doctors aligning to inclusion or exclusion of patients' lifeworld experience, concerns and considerations. Their data was taken from 35 recorded consultations, selected from a total of 62 collected in the midlands and south-east England. The authors report that these were chosen to "represent consultations with prescribing decisions, as the main interest was communication about drugs, i.e. where new or repeat prescriptions had been wanted by patients, or considered as an option by doctors or actually prescribed in the consultation." (pg. 491).

Barry et al.'s work used a mixed approach, including interviews with consultation participants, transcription of recorded consultations, and interpretation of talk through coding and CA. The results are presented as overall patterns of communication across consultation activities. These are assigned to four categories: strictly medicine, lifeworld blocked, lifeworld ignored and mutual lifeworld.

The authors reported that, in 11 of the consultations, only biomedical talk was used by patients and doctors. Eight of these 11 consultations were for acute physical problems and were not prebooked appointments. In the other 24 consultations recorded, patients raised lifeworld concerns and experiences. These patients suffered with chronic ill health, and were attending for longer-term care. The doctors were reported to fail to address patients' lifeworld talk in 15 consultations. Instead, the authors concluded that the doctors maintained a biomedical focus, and lifeworld context provided by the patients was blocked or ignored. In the remaining nine consultations, doctors were reported to attend to patient lifeworld experiences and concerns, actively exploring this context through inquiry and through the use of continuer tokens to promote patient expansions. The authors argued that by blocking or ignoring the voice of the lifeworld offered to them by their patients, doctors failed to recognise and deliver 'whole person' care.

More recently, Beach and Mandelbaum (2005) argue that the conversation analysis of healthcare consultations has shown how patients "voluntarily elaborate about their lifeworld circumstances, raising matters that could be heard to extend beyond what care providers were focusing on in prior questions." Despite these opportunities for talk, their analysis of conversation between a

physician assistant (PA) and a patient during an annual health review showed that psychosocial and lifeworld perspectives were not addressed. Instead, a biomedical agenda was pursued.

Analysis of talk in consultations in another healthcare specialty, audiology, has revealed similar findings (Ekberg, Grenness and Hickson 2014).

1.6.2 Requesting medicines

In order to guide analysis of talk to identify patient requests for medicines, it is important to define what counts as a 'request'. During conversation, where one participant makes a request and the other decides whether to grant or refuse it, participants orient to one-another's epistemic and deontic authorities (Robinson 2001b; West 2006). This consideration is of particular relevance to requests made by the patient in the medical institutional setting; requests are made in the context of asymmetries in biomedical and lifeworld perspectives (Stevanovic and Peräkylä 2012).

Requests project "an asymmetrical distribution of benefits such that one party is cast as the benefactor and the other the beneficiary" (Clayman and Heritage 2014). The requester projects action from the other participant that will provide benefit to the participant making the request. There is no benefit of the future action projected for the receiver of the request, beyond meeting it and maintaining cordiality. This definition was used to identify conversation where patients made requests for medicines, as illustrated in the table below.

	Agent of future action	Beneficiary of future
		action
Proposal	Self and other	Self and other
Offer	Self	Other
Request	Other	Self
Suggestion	Other	Other

Table 1: Benefactors and beneficiaries in proposals, offers, requests and suggestions. Reproduced from Couper-Kuhlen (2014).

By placing a request for a medicine, the patient can set the agenda for talk in the activity that follows. Since modern practice aspires to provide patient-centred care, with communication that embraces a biopsychosocial model and shared decisions, one might infer that patients and their carers would be empowered to make requests for medicines: that they would hold confidence to voice these directly. However, without attention to the ways in which conversation plays out in actual consultations, this remains a 'black box'. CA research has examined and revealed the ways in which requests for medicines are actually made in a variety of settings. Some notable findings from this research are reviewed below.

2.6.2.1 Request design

One recurrent theme from CA research relates to the 'directness' with which the patients' design their requests for medicines. Robinson (2001a) reported a single case analysis of a consultation that took place in US primary care. Within this consultation, the patient places two requests for medicines. The patient's first request is made as a report, in response to the doctor's inquiries about the reason for his consultation (bold text added):

```
08 DOC: So what's n[ew. what can I do for ya.]
09 PAT: ( )] heh heh
10 (.)
11 PAT: Well, it- there was some- (.) (d) - (1.4) discussion
12 about the: (.) Tylenol three:.
13 (0.8)
14 DOC: mtch=Oh ye:s:.
```

```
15 PAT: A:nduh (.) you know I = (d-) I (doe)- I don't believe
16 I've used that much of it, (.) but it's up to you:.
```

The medicine in this case is an analgesic. The patient orients his request design to potential controversies related to analgesic (mis)use, through an inclusion of comment about his reasonable medicines use; "I don't believe I've used that much of it," (line 15-16). Furthermore, the patient adds a tag, aligned to the doctor's authority held in request-granting; "but it's up to you:.". By ending his report with this tag, his turns works as an indirect request for a further supply.

The patient's second request occurs later in the consultation at line 91. He asks the doctor for a 'face cream' he had previously received.

```
91 PAT: Now (.) one other thing, .hh uh (0.7) I need eh e-=summa that (.) face cream ya gave me.
```

The later request is made as an additional concern through prefacing with "one other thing". It is more direct, using a polar declarative design through beginning with "I need". There is no reference to potential contingencies around the granting of this request.

Stivers' (2002a, 2002b, 2005) work provides an overview of a much larger US dataset, collected from 350 consultations between paediatricians, children and their parents. Patients in Stivers' research had presented acutely with ear pain, throat pain, cough, or congestion. Her work showed that direct parental requests for medicines were almost never made. Instead, parents formulated their requests for antibiotic treatment using subtle and implicit designs. These were labelled as stated desires, inquiries, and mentioning of past experiences with antibiotic treatment. All of these designs avoided asking for antibiotics outright, but bought them up as topics in conversation with the doctor. The doctor was left to interpret the parents' turns in their interpretations of the parents' perspective and wishes.

Part of an extract from Stivers' (2002a) work is displayed below (bold text style added). Here, a mother makes a request for antibiotics made as part of her account for their visit to the doctor:

```
1 DOC: Are we ready::.
2 MOM: Hi: Doctor Sa:[nders,
3 DOC: [W- well hi:. How are you guy::s.=h
4 DOC: .h[h
5 MOM: [Well:-
```

```
DOC:
          We have two victims he:[:re.
7
   MOM:
                                  [Two victims. We added one when
8
          I picked [Sara up from schoo:1.
   DOC:
                    [fThat's oka :y?, f
10 MOM:=> Actually: we wouldn't be here Doctor Sanders except=h
          You're ta[king the trip. huh huh
11 DOC:
12 MOM:=>
                      [I'm looking for: uh uh I'm looking for a
13
       => miracle from you.
14 DOC:
          Okay::, heh heh
15 MOM:=> Martin has: uh his very fi: st major: (.) five year old
       => birthday party tomorrow,
16
17
           (1.0)
18 MOM:
          And his temperature's been:=hh UH hundred an FI:VE,
19
           ((wail))
20 DOC:
          His birthday or is [(he) going tuh huh hah hah hah
21 MOM:
                              [His birthday. Tomorrow:. and he's so:
22
          sick and I NEED UH MIRACLE! [hhha ha huh huh:
23
                                        [ A H : : : [: .
24 MOM:
                                                    [£I need
25
          a miracle.
26 MOM:=> .hh I'm h- .hh I \underline{know} he probably \underline{ju}st has thuh common
27
          cold but I'm like praying he has a horrible bacterial
28
           infection in his ears and YOU'RE GONNA C:URE IT
          WITH TWO DOSES OF ANTIBIOTIC [ha ha ha ha ha ha ha ha ha
29
30 DOC:
                                         [Ha ha ha ha ha ha ha
```

The consultation begins with an exchange of greetings and some light-hearted talk (lines 1 to 9). The mother's account for her visit begins at line 10. She uses a declarative with falling intonation at line 12, "I'm looking for a miracle from you." The doctor responds with "Okay::," as a continuer and some laughter particles. The mother's turns from line 15 to 22 provide narrative to the doctor, setting the scene and sharing context for the upcoming request. Ruusuvuori (2000) analysed Finnish primary care consultations and showed that patients used narrative as part of presentation of their complaints. Through design of their complaint as a story, Ruusuvuori argues that patients "gain at least temporary control over the space available for presenting their problem" (pg. 124, lbid.).

Stivers observes that the animated talk and laughter particles used by the mother "conveys her orientation to the delicacy of her action" in her preparations for her request for antibiotic treatment. The request is made at lines 27-29, and is designed indirectly as a stated desire rather than a direct request: "I'm like praying he has a horrible bacterial infection in his ears and YOU'RE GONNA C:URE IT WITH TWO DOSES OF ANTIBIOTIC".

Stivers comments on the mother's turn at lines 15 and 16, "Martin has: uh his very fir:st major: (.) five year old birthday party tomorrow,". She observes that:

"the mother offers her account for wanting her son to have an ear infection and wanting antibiotic treatment- that he is having a birthday party. This account is one not related to his illness or past illness experiences but is about their lifeworld circumstances." (pg. 1117).

Stivers does not pursue this observation in other extracts or in her discussion. However, it is an important point to consider, given the modern stance held by the medical profession with respect to seeking to provide care that is patient centred. The narrative provides the doctor with a lifeworld concern, an important upcoming life event prompting the mother's prayer for the doctor's granting of a miracle cure.

Stivers (2002b) undertook further analysis of the data set, examining the way in which the child's problem was presented to the doctors. She found that the parents commonly used one of two practices in accomplishment of this activity: presentation of the child's symptoms alone (52% of cases), or presentation of the child's symptoms and a 'candidate diagnosis' (19% of cases), outlining the kind of infection that they felt the child might be suffering from (e.g. sinusitis, ear infection, etcetera).

Where parents presented their child's problem using a symptoms-only description, doctors responded primarily with a medical evaluation of the child. Discussion regarding the provision of an antibiotic only occurred in 8% of the consultations. Where parents presented their child's problems using a candidate diagnosis (e.g. ear infection, sinusitis), some doctors responded differently. Antibiotics were offered as delayed prescriptions or contingency plans in 20% of these consultations. Stivers argued that parents who offered a candidate diagnosis might have done so as part of their intention to legitimise their decision to attend- to present their child's problem as 'doctorable', rather than in pursuit of a prescription for medicine treatment. She argues that a patient's sharing of a candidate diagnosis might have been mis-interpreted as a request for treatment.

Infrequent use of direct requests observed in Stivers' data were at odds with more recent CA observations. Buchbinder et al. (2015) presented analysis of patients' requests for analgesics in

a US emergency department setting. Conversations were audio-recorded between 30 healthcare providers (12 attending physicians, seven medical residents and 11 nurse practitioners) and 74 patients. Requests for medicines were documented in 15 of the 74 encounters. Eight of these were direct requests for medication. These were defined as instances in which the patient explicitly asked the provider for medication. The other seven requests were made in an indirect fashion; whilst the patient hinted at a desire for medicine(s), no outright request was made. These consultations included patient reports of desires to be free of pain, discussion around efficacy of a medication consumed in the past, or making an inquiry about a treatment that the patient had previously discussed with another prescriber. The indirect requests fell into the three latter categories used in Stivers' studies (stated desires, inquiries, and mentioning of past experiences).

Nielsen (2011) analysis of 52 consultations in Danish primary care showed how one patient's account for his visit provided an opportunity for this patient to request a prescription. Nielsen's research focused on the ways in which GPs dealt with requests for services made at consultation openings.

```
01 D: Hello.
02 P: You know- I merely wondered if
03 P: I could have some penicillin for
04 P: erh my \tag{throat, .hh}
```

05 D: ↑Yes

(reproduced from Nielsen 2011)

In the extract above, the patient designs his turn with alignment to issues around entitlement through prefacing (Curl and Drew 2008), and with some hesitation. These features show his request to be less direct and more oriented to contingencies than the second request made by the patient in Robinson's data:

"I need eh e-=summa that (.) face cream ya gave me."

Neilson went on to show that the doctors in his data neither granted nor refused requests for services (including the provision of a prescription) made at consultation openings; rather, they deferred their decision and gathered more information to guide their choice.

2.6.2.2 Request position

CA has shown requests for medicines positioned during accounts for visits to the doctor in the US (Robinson 2001a; Stivers 2002a) and in Denmark (Nielsen 2011). The requests observed in Robinson's and Nielsen's data are reported in section 2.6.2.1.

Buchbinder et al. (2015) showed requests for analgesia similarly positioned during patient accounts in their data gathered in a US academic emergency department. Additionally, their analysis showed a request positioned as an insertion during information gathering:

```
D: Ok, um, do you get have you ever had your prostate checked?
P: Yeah.
D: Ok and that's always been [normal?
P: [Last year.
P:=> Yeah. (.) Oh, can you give me anything? Anything to help with this pain?
D: Yeah, I can give you - we can get you medicine for pain.
```

Other extracts were included in Buchbinder et al.'s report, but the focus of the paper was on request design and the degree of 'directness' the variety of requests they observed afforded.

Positioning of requests within consultation activity was not directly reported and was not possible to clearly interpret, on the basis of the other transcribed talk displayed.

Stivers (2002a) data similarly focused on request design. Her extracts were more complete, and clearly showed the placement of the requests she reported in reference to consultation activities. An indirect request made by a mother during her account for her visit is detailed in section 2.6.2.1. Stivers reported a request made by a mother in overlap with a doctor's assessment of her child:

```
38 DOC: .hhh Uh: [m-
39 MOM: [Cuz it's such a big deal to come here [()
40 DOC:=> I mean: if you wa: nt ya know- I mean she looks.=
41 MOM:=> =Can I at least have thuh prescription an' I'll decide
42 whether or not to fill it in a couple day:s,
```

She observed that "Such inquiries are generally positioned following a treatment recommendation or at a point in the encounter where a non-antibiotic treatment recommendation has been implied" (pg. 1117).

Her data showed two indirect requests positioned during physical examination of the child. These were designed as 'mentions of past experience'. One of the extracts is displayed below.

```
DOC:=> So:- Let's take uh listen to 'er che:st,
2
   MOM:
           (Alright),
3
             (.)
           Remember she- she:=uhm had something like this: in
   MOM:
           December?
6
   DOC:
           Uh huh,
7
             (0.5)
8
           Hhh. = .h
   GIR:
   MOM:=> (n') She was on an antibiotic.
```

The doctor's turn at line 1 signals a new upcoming activity; an examination of the child's chest. The turn is prefaced with "So:-" to mark the transition (Bolden 2006). The mother agrees, but then after a short pause at line 3, begins her mentioning of her past experiences. The doctor responds with a continuer token at line 6. The child's expiration and inspiration is noted in the extract as the doctor examines her chest, presumably with a stethoscope (line 8). The mother's indirect request is placed at line 9.

The literature shows a variety of designs used by patients and patients' parents in their requests for medicines, and positioning of these across the activities of accounts for visits, as insertions during information gathering, and following doctors' assessments. Whether the findings of Stivers and Buchbinder are transferable to medicines talk in UK adult primary care is debatable.

Differences in setting in which the requests were made in their data include the nature of the problem for which a medicine was considered, and the clinical, cultural and societal environments in which medicine was practiced and experienced. The analyses presented by Robinson (2001a) and Nielsen (2011) were both conducted in primary care, and showed patients using indirect designs in their requests for medicines, but the two case studies only provide a small insight into practice that involves thousands of patients and doctors each day.

Stivers' data showed a single encounter where a mother used her sharing of her lifeworld concerns as part of her narrative preceding her medicine request. Ruusovori considered patients' use of narrative as part of their presentation of their complaints. What is known about the ways in which doctors accommodate patients' sharing of their lifeworld is considered in section 2.6.3. Gaps in the literature with regard to medicine request design and placement in UK primary care are addressed in analysis of the present data in Chapters 4 and 6.

2.6.3 Negotiating and reviewing treatment

CA literature in medical settings has focused on talk used by doctors in their communication of decisions and directives, and patient responses to it. As outlined in section 2.3, current exemplary practice is seen as patient-centred, with patients taking an active part in consultations and sharing in decision-making about treatments. CA has investigated the ways in which talk related to treatment choices is conducted in healthcare consultations: in particular, the ways in which doctors use talk when decisions about medicines are required.

Findings from CA research show that healthcare professionals use a spectrum of conversational practices during decision talk (Collins et al. 2005; Costello and Roberts 2001; Toerien et al. 2011; Toerien, Shaw and Reuber 2013). These studies have challenged the traditional view of the doctor/patient relationship as paternalistic, with evidence of conversation that encourages participation, shares decisions and realises parts of the patient narrative in negotiations about treatment.

Britten et al. (2000) recorded 35 primary care consultations across 20 general practices in West Midlands and South East England. They used a mixed methods approach, including interviews with participants pre- and post-consultation, and CA of audio recorded talk that took place between them during the consultations. They found that 26 patients received prescriptions. In post-consultation interviews, five patients reported that they had not wanted a prescription, 14 told the interviewer that they had not received the information they required, and seven patients did not take their prescribed medicine as intended by the doctor. Comparison of data collected in interviews with talk in consultations revealed instances of poor patient participation, and assumptions and guesses made by both doctors and patients.

Costello and Roberts (2001) showed how decision-making about treatment plans were jointly constructed by doctors and patients in consultations in US general medical clinics. Patients were observed to use their turns at talk to display resistance to some of the medicines treatment proposals that doctors made. They did this through meeting the doctors' proposals with silence or counter proposals, rather than agreement. Silence was interpreted as 'passive resistance', and was shown in the analysis to prompt the doctors to reformulate their treatment proposals.

Following these reformulations, and where patients placed counter proposals, doctors and patients entered into negotiation to maximise agreement about future medicines therapy.

Stivers (2006) showed that doctors actively sought to elicit acceptance of acute treatment recommendations from their patients/parents of patient, in the face of passive and active resistance. The doctors responded to patient resistance through offering concessions in their treatment plans, or providing accounts to support the plan they had recommended in previous turns. Her data showed doctors advising *against* treatment options were likely to encounter resistance, and for this reason she recommended avoidance of *negatively* formatted treatment recommendations.

Koenig (2011) found similar patient resistance to treatment proposals data from in US ambulatory care. The analysis revealed instances of passive resistance through weak acceptance or silence from patients in response to offers. Patients actively resisted treatment proposals, through the opening of negotiations with the doctor.

Collins et al. (2005) observed that doctors used 'unilateral' or 'bilateral' decision talk. In 'unilateral' approaches, patients' views or preferences were not explored, and the doctor presented treatment plans as already formulated and decided. The doctors used their turns to seek agreement to their proposed plans. In more 'bilateral' talk, they invited patients to share their understanding, preferences and views, and used this conversation to shape decision talk that followed. The latter offered more opportunities for patient contribution and participation in decision-making about medicines.

Studies of doctors' option talk related to medicines treatments has demonstrated that patients may be presented with a menu of choices, or a recommended single course of action (Toerien et al. 2011; Toerien, Shaw and Reuber 2013). One might presume that a menu of options offers patients freedom to choose, and indeed by the presentation of more than one choice, might offer more flexibility. However, the doctor may present options in ways that constrain the sharing of this process (Toerien et al. 2011; Toerien, Shaw and Reuber 2013). Through their turn design, doctors can promote their preferred option, constraining the degree of patient choice in

negotiations (Toerien et al. 2011). Regardless, the presentation of choices offers more opportunities for patient participation than that provided by the doctor recommending a single treatment choice (Toerien, Shaw and Reuber 2013).

Angell and Bolden (2015) showed ways in which psychiatrists dealt with patient resistance to their medicines treatment proposals. Their analysis of conversation revealed doctors accounting for their decisions, and doings so in two different ways: termed by the authors as 'client-attentive' and 'professional authority' based approaches. In a 'client attentive' approach, the psychiatrists' treatment recommendations were formulated using prior patient narrative, citing concerns the patient had mentioned as part of their accounts. In the 'professional authority' approach, the psychiatrists cited clinical data, diagnostic and prognostic information as part of their accounts. The authors made no judgement as to which approach might be 'better'. Indeed, they showed that the psychiatrists used these approaches in combination during their consultations with individual patients.

Barnes (2017) examined doctors' sequence design in the lead up to treatment recommendations made in UK primary care. Her data showed doctors using pre-sequences of inquiry prior to treatment recommendations, exploring experiences of past treatments used by the patient, and their views about these. These pre-recommendation sequences flagged potential patient resistance to upcoming recommendations, producing a slot for patients to share their concerns and take part in decision-making. See Chapter 4 for an example of a treatment recommendation pre-sequence in the present data.

Stivers et al. (2017) examined the design of talk used by doctors in making treatment recommendations. Data was taken from US and UK primary care. The analysis showed that doctors used pronouncements, suggestions, proposals, offers and in a minority of cases, assertions. There were statistical differences with regards to the frequency of some of these designs, with pronouncements used much less in the UK. Offers, proposals and assertions were used much less in the US. Each of these recommending actions carries with it a differing conveyance of epistemic and deontic authorities to the patient. A pronouncement shown in the paper is reproduced below:

```
DOC: Okay. So, (0.2) uh::m, (0.6) <I'm goi:ng to:>
start you on Bactrim,
```

In the case of recommendations made as pronouncements, the format fits with the unilateral approach to decision talk observed by Collins et al. (2005). Here, the doctor presents the recommendation as decided and non-negotiable. At the other end of the spectrum, an assertion about a potential treatment leaves much wider interpretation open to the patient. An assertion shown in the paper is reproduced below:

```
8 DOC: There is medication. and we[: have it here.
9 PAT: [Okay:,
```

The assertion may taken to be simply a display of educative information or could be interpreted as an offer of treatment.

Further analysis in UK neurology clinics has examined patient responses to treatment assertions, and the doctors' dealings with these responses (Toerien 2017). This data showed that patients overwhelmingly treated treatment assertions as information provision, with neurologists having to do more conversational work to reach a decision point about medicines treatment.

The studies presented in this section explored the ways in which changes to treatments and new treatments were discussed and recommended, considered the ways in which patients resisted recommendations, and the ways in which doctors dealt with potential and real barriers in making them. Studies reviewed in section 2.6.1 and 2.6.2 raise the issues of accommodation of the patient's lifeworld perspective, and how doctors might accommodate this talk in the consultation. Direct focus on the conversational practices used by doctors to achieve this during talk about medicines, and the impacts such practices might have on the progression of conversation, have only been subject to very limited consideration. This gap in the literature is addressed in Chapter 5, using present data collected for this thesis.

CA research identified in the literature does not specifically study the review of long-term medicine treatment with patients. As shown in section 2.3.2, this activity is seen as crucial to the provision of optimised treatment, and to the promotion of patient involvement in their healthcare.

2.7 Summary

In the primary care setting it is the patient (or their carer) who chooses whether or not to take the medicines, and their choices may differ from the way in which their treatment is prescribed (Brown and Bussell 2011; Horne et al. 2005; Mukhtar, Weinman and Jackson 2014; Unni and Farris 2011; WHO 2003). In order for these choices to be informed and considered, primary care doctors need to provide individual patients with education about their treatments, and share decisions with them when confronted with medicines choices. Modern practice pursues the provision of 'whole person' care (Barry et al. 2001; Britten et al. 2000; Health Education England 2018; RCGP 2013b; Stewart 2001), which in turn is obliged to accommodate the patient's lifeworld view (Barry et al. 2001). Patients need to feel that they are properly listened to and that they can trust their GP. As well as supporting and optimising treatment for individual patients, doctors are required by society to act as gatekeepers to treatments, reducing waste and harm. All of these tasks rest upon meaningful conversation between participants in consultation.

Findings from CA research make visible how aspirations for better consultation practice play out in real consultation talk. In their role as experts in healthcare, doctors and patients undertake conversation about medicines in a variety of settings. However, there are gaps in what is known about talk about medicines, and the ways in which this talk is interwoven into activities of conversation tackling other matters and concerns. Through collection and analysis of conversation data, the placement and design of participants' talk about medicines can be dissected and interpreted.

Chapter 3: Methods of data collection and analysis

3.1 Introduction

As outlined by the thesis research questions (section 1.2), this study centres on investigating the characteristic features of talk about medicines in consultations between patients and doctors in primary care. In particular, to examine how social actions such as requesting and considering medicines are accomplished through talk-in-interaction, and how this talk is interwoven with other matters and concerns.

The purposes of this Chapter are as follows: it will provide a brief outline of the methods and processes used in recruitment of participants for data collection (section 3.2). This will start with recruitment of doctors and of patients. The equipment used in data collection, the composition of the corpus, and practicalities faced during recruitment of research participants are then described. Next, in section 3.3, ethical considerations raised by this research and their management are addressed. The approaches used in the storage and display of the present data is outlined. Section 3.4 describes the application of conversation analysis to collected data and section 3.5 provides a summary.

3.2 Data collection

Both hospital and community healthcare have medicines as part of their armouries for treatment, and a variety of healthcare professions form the healthcare team. The locations for data collection in the present study were considered.

It was clear that community settings provided most favourable opportunities for conversation about medicines to be captured. Primary care addresses a wide range of health topics, covering management of many different chronic and acute illnesses, as well as medicines for disease

prevention. Acute illness requiring hospital admission impedes the opportunities for observation of talk between doctors and patients. This may, in part, be due to the immediate impacts of the patient's ailment. There is also often the need for immediate investigations and management of the patient's condition. These pressures raise ethical implications related to obtaining informed consent and collecting data.

In order to present a detailed picture of communication between doctors and patients in primary care settings, as they talk about treatment with medicines, the analysis of recordings of actual GP consultations between these parties was required. In this section, the recruitment of participants is described (section 3.2.1). The pragmatic approach to this process is considered, along with the potential for bias that this may have introduced during data collection. Subsequently, video recording for data collection is described in section 3.2.2. In total, sixteen hours and thirty-three minutes of consultation time were recorded. These took place over 78 consultations, conducted across five general practice surgery premises.

3.2.1 Participant recruitment

Recruitment was divided into two stages: first, recruiting GPs, and second, recruiting patients due to see participating GPs in their surgeries. A pragmatic approach was taken in the selection of GP surgeries for collection of data. In the first few months of the research, practice managers at five GP surgeries based in the Northwest of England were contacted by telephone and letter. These practices tutored medical students at the University of Manchester as part of their services in the training of undergraduates. This link with the medical school provided an immediate point of reference with the author through his previous work as a University of Manchester lecturer in community-based medical education.

The author contacted the practice with an introductory letter (see Appendix 1), and then attended practice meetings at five surgeries and presented information about the study as a Powerpoint presentation to the practice staff. He also provided doctors and the practice managers with written participant information (see Appendix 2). At all of these meetings, one or two of the GPs

working at the practice visited agreed to take part. In total, eight GPs (five female, three male) agreed to participate.

Two of the practices served suburban populations, and the remaining three were located to serve inner city populations. Further information about the populations they served is outlined in the table below. The practice names have been removed to protect confidentiality

Practice	List size (number of patients at time of study to nearest 1000)	Area served	Other detail
А	13,000	Suburban	Majority British white patients with fewer ethnic minorities Over representation of patient aged 60 or older
В	6,000	Urban	Large ethnic mix Over representation of younger patients, including University students
С	4,000	Suburban	Majority British white patients, although some ethnic diversity
D	16,000	Urban	Majority British white patients with fewer ethnic minorities, although growing population of Polish nationals
Е	18,000	Urban	Large ethnic mix Over representation of younger patients, including University students

Table 2: Practice characteristics.

By collecting data across these populations, a greater variety of patient groups were accommodated; together, the surgeries provided care for patients from a diversity of backgrounds, ages and ethnicities.

The second stage of recruitment involved contacting patients eligible for study under the terms agreed in the ethics approval: those over eighteen years old, booked for upcoming appointments at least forty-eight hours before these were due to take place. This window provided time for the patients to consider the participant information and reflect on the request to take part, before consenting to the recording of their consultation.

Through talk with the practice managers and participating GPs, it was decided that the most time-efficient way to organise the collection of data was through identifying complete surgeries and contacting the eligible patients booked for these. In total, eleven surgery lists were allocated for data collection. The lists varied in length depending on the set-up for appointments at each surgery, and ranged between twelve and fifteen appointment slots. The pre-allocated time for each appointment was ten minutes at four of the surgeries and fifteen minutes at the fifth. The surgeries allocated for research were scheduled over a time period of one year, from August 2014 to August 2015. The flowchart below outlines patient participation and their flow through the research.

Research practices

Patients booked on to surgery lists as usual at their practice.



Patient recruitment

Those patients who happened to book on to a surgery list allocated to research were considered for recruitment, in line with ethical approval for the study.



Study information

All patients eligible to take part were sent participant information by post to arrive at least 48 hours before their appointment (see appendix 2).



Priot to patient appointments on the day of surgeries

Primary investigator met with each eligible patient.

Had they received written information about the study in good time?

Any questions about the research?



Completion of the first part of the consent form (see appendix 3)

Consenting patients saw their doctor as planned, and the consultation was recorded.



Post patient appointments on the day of surgeries

Primary investigator met with each participating patient after their appointment.

Was patient happy for the recording of their consultation to be used? Any questions about the research and data storage?



Completion of the second part of the consent form (see appendix 3)

Each patient was reminded that they had contact details for the research team in their participant information sheet.

Flowchart: Patient recruitment and participation in research.

Eligible patients were contacted via letter with participation information (see Appendix 2). On the day of their surgery appointment, the author was present in the waiting area. Prior to seeing the doctor, each eligible patient was identified by the reception staff on arriving for their appointment. The author approached each of the patients who had been sent participant information and asked them whether they would be willing to discuss the study before they saw the doctor. Of the 120 patients contacted, 80 agreed to talk with the author. All of these patients were invited to move to

a private area of the surgery and offered the opportunity to discuss the research, to review the patient information already provided, and to give their consent to the recording of their consultation should they wish to. Consent forms used for patients and doctors are included in Appendix 3. 79 patients agreed to take part at this time immediately pre-appointment.

On completion of their appointment, the author spoke with each patient again in private, and reaffirmed their consent for use of their recorded consultation for the research, or for it to be removed from the data and erased. All of the patients who agreed prior to their appointment commencing were happy for the data to be used, and reaffirmed their consent. Participating GPs were approached similarly by the author, with discussion and consent prior to the beginning of their allocated research surgery, and further discussion and reaffirmation of consent on its completion. See appendix 3 for copies of the consent forms used.

In total, seventy-eight consultation recordings were made. One of the consultations was for a husband and wife with a joint appointment. Six patients did not attend their booked appointments. Thirty-five patients did not wish to take part in the study. Participation rates varied across the eight surgeries, ranging from only two patients agreeing to take part in one surgery from a booked list of twelve patients, to all patients agreeing to take part in three of the surgeries.

3.2.2 Recording conversation

Two digital cameras were placed on tripods, and microphones distributed in the consultation room to collect all talk that took place between patients and doctors consenting to take part in the study. Through the use of recording from two positions, verbal and non-verbal communication was captured from different perspectives, reducing the compromise that could be introduced through one angle of filming, and improving opportunities for analysis of features of talk-in-interaction. This arrangement of recording equipment was discussed and agreed at each practice meeting prior to the research surgery taking place. Equipment was installed by the author in good time before the surgery commenced at each practice on the day agreed in advance.

The set up for recording of data needed to balance the advantages of direct collection of conversation data and operation of camera in the consultation room, with the impact that this equipment might have on the conversation that took place. Direct operation of the video equipment by the author would provide immediate and direct ability to deal with technical issues, but would introduce a physical presence of additional people in the consultation. The risk of this approach was agreed to be a greater encroachment and influence on conversation. At the other extreme, observation of consultation using hidden cameras and microphones would be technically challenging to achieve. It would also be ethically inappropriate, as the visibility of recording equipment was described to doctors and patients as part of the consent process (see Appendix 2 for participant information).

The author reached an agreement with each practice that he would be present at the premises at each research surgery, and available to help from a technical perspective as requested by GPs or patients, but would not be present or operate the equipment during the surgery appointments as they took place. Prior to data collection, each participating GP was therefore instructed on the use of the video camera equipment, and the primary investigator remained on premises to confirm continued consent following each consultation, and to be on hand in case of any problems. The cameras were left running throughout consultations without the presence of the primary investigator in the room, relying on the automatic features including focus and internal storage of footage.

The author was conscious that the cameras capturing the video recordings still had presence in room even when an operator was not present, and so it was important to reduce their intrusion as much as possible. They were placed so that cameras were focused at angles that excluded video recording of any intimate examination, and microphones were positioned below the natural line of sight between patients and doctors as they talked.

There has been debate about the 'influence' the recording of interaction may have in and of itself during the collection of data. Potter (2012) argued against concerns of the 'reactivity' of participants 'contaminating' the collection of naturalistic data on a number of fronts: those include that any reactivity within data collected naturalistically withers in comparison to that collected

within the constraints of interview or experiment; that analysis of recordings that were made regardless of the instigation of research (for example, police interviews with suspects) show little systemic difference to those made *for* research; that the repeating of recordings shows evidence of 'acclimatization' of the participants to the presence of recording equipment. Further, Speer and Hutchby (2003) have shown the ways in which participants may orient their talk to the presence of the recording equipment, and by doing so, present opportunities to explore 'the precise kinds of situated interactional work in which such orientations are involved'.

In the present data, both patients and doctors made reference to the recording taking place.

Conversation was oriented to the presence of the filming equipment made during the initiation of consultations; one patient did so with the inclusion of humour as the doctor discussed the positioning of cameras to prevent the visual recording of a planned intimate examination. Doctors reassured patients that no aspects of physical examination would be recorded at later points in other consultations. At the ending of consultations, doctors were seen to make reference to the need for patients to affirm their consent for the recording to be kept.

3.3 Ethical considerations

GPs offer pre-booked appointments for patients to make in advance, and "on the day" appointments for patients to be seen more promptly. During surgery hours, they are obliged to see patients who might present to the surgery with symptoms or signs requiring immediate assessment and/or treatment (for example chest pain, acute asthma etcetera), and go to visit patients at their residences if they are not able to attend the surgery premises. The ethical approval gained for the research excluded all of the above encounters from the study. Recruitment was only allowed for patients who had had the opportunity to reflect on research proposals before entering in to consultation, affording them the opportunity to provide informed consent.

Other patient groups excluded from study in the ethics clearance were these unable to give their own consent due to incapacity to do so (for example, patients with advanced dementia), any

patient under the age of eighteen years old, and those without a fluent command of English. For the latter reason, any patient booked with an interpreter was automatically excluded from study.

3.3.1 Storing and anonymizing collected data

Raw data was transferred from the digital cameras on the day of filming and removed from the camera memory thereafter. The data was subsequently stored using two hard drives and a computer, all of which were password locked and encrypted. The hard drives were held in secure premises at the University. Data logs that tracked participants' information alongside recording code numbers were stored as encrypted files on the computer and locked with another password.

Any video footage and transcribed extracts of talk presented outside of data sessions with the primary research team were anonymized. This approach was adopted for external data sessions, conference presentations, and in preparation for publications. This entailed the following:

- For transcribed talk, all personal names were deleted, along with any geographical data
 in the talk that might lead to participant identification, such as place names. These data
 were replaced with pseudonyms to maintain some authenticity in the structure of talk
 presented.
- For audio material, the pitch of conversation was modified using Adobe Premier, to 3
 semitones above or below the unaltered voice (whichever was more difficult to equate
 with the original recording). Any personal identifying information shared in talk was
 removed by digitally silencing the audio.
- For video material, Adobe PremierTM software was used to adapt the video images as
 outlines with the 'edge detector' permanent filter, along with removing audio content that
 identified participants and changing vocal tone to disguise participants. For an example,
 see Figure 2 below:



Figure 2. An anonymized still from a video recording presented publicly.

The process of anonymisation was similarly applied to video screen shots used as part of this thesis, using Adobe photoshop™ to 'find edges'. During the consent process, participants were informed of the methods of storage and display of collected data (see Appendices 2 and 3). They were also informed that they were able to withdraw from the study at any point, and that the raw footage collected would subsequently be destroyed, along with anonymised data of their consultation should they wish for this. To date, no participants have withdrawn after recordings were made.

3.4 Application of conversation analysis to collected data

CA was used as method of analysis to the conversations captured during the medical encounters collected for this thesis. The aim was to seek insights into the ways in which policies, guidelines and edicts related to medicines treatments may translate into discussion between patients and doctors. For overviews of CA methodology and its application, see Antaki (2011); Drew (2005); Drew, Chatwin and Collins (2001); Hepburn and Bolden (2012); Seedhouse (2004); Sidnell and Stivers (2013); Wooffitt (2005).

The thesis author used an iterative approach to the analysis of the collected data. Analysis began through the identification of requests for prescription treatments made by patients, as their turns at talk clearly attempted to initiate talk about medicines (see chapters 3 and 5 for results from the dataset). The whole data set was carefully viewed by the primary investigator to note where requests were made, and the times at which these occurred in the consultation videos was noted. Having identified these instances, talk was transcribed as outlined in section 3.4.2. The transcriptions were reviewed alongside relevant portions of the consultation videos by the primary investigator and the thesis supervisors at regular data meetings.

Through the supervisors' expert guidance, it soon became apparent to the primary investigator that talk leading up to, and following on from, the requests for prescription medicines discussed was often important to include in the fine-grained analysis. The conversation that preceded requests helped set the scene for the request to be made. It shaped the context in which requests were placed and designed. Similarly, the talk that followed showed different ways in which the request was dealt with, and the ways in which the conversation used by participants was context renewing. The primary investigator went on to use a similar iterative approach to the data in the analysis of other features of conversations about medicines.

Application of CA to data collected for this thesis was used to provide a display of the 'intersubjectivity' held by participants, a mutual sense making through coordination of the turns at talk. As Sidnell (pg. 12, 2010b) describes:

"In talk-in-interaction each utterance displays a hearing analysis of a preceding one and, thus, the very organization of talk provides a means by which intersubjective understanding can not only be continually demonstrated but also checked and, where found to be wanting, repaired."

The analysis of individual turns, sequences of turns, activities and overall structure of talk-ininteraction were used by the author to explore ways in which the participants co-constructed their intersubjective understanding during talk about medicines.

3.4.2 Transcription and analysis

Following data collection at each research surgery, data that had been transferred from the cameras and encrypted on to one of the University hard drives was transcribed verbatim. The author viewed and listened to all of the consultation recordings several times, in conjunction with the verbatim conversation notes. Detailed notes were made electronically on the author's computer, highlighting areas of analytical interest. An ExcelTM spreadsheet was also created. This was used to record consultation activities related to talk about medicines within each recording, and the timings related to occurrences of these sequences talk.

After review of all seventy-eight recordings in the present data, the author closely analysed all consultations where medicines were discussed in full, using Audacity™ software to precisely analyse intervals in talk, overlap of talk between participants and contrasts in rate and volume of utterances in participant turns. These sequences were transcribed using the conversation analysis transcription notation system (Jefferson 1984b). See appendix 4.

Creation of detailed transcripts of the consultations proved sufficient to include instances of patients' requests and doctors' offers of treatment with medicines; sequences of talk related to medicines with biomedical and biopsychosocial perspectives and context; reviews of medicines listed in the electronic patient record through discussion between consultation participants.

Sequences of other activities within consultations were also transcribed where needed.

The author used the 'next-turn proof procedure' in application of CA as method. Since talk-in-interaction occurs in sequences of turns, "speakers display in their sequentially 'next' turns an understanding of what the 'prior' turn was about" (Hutchby and Wooffitt 1998). Through this approach, the analyst "...can see in the recipient's response just how s/he understood the prior turn, and we can use this to ground our own analysis of what a speaker meant to be doing by producing that turn." (pg. 79, Sidnell 2013).

Alongside vocal features of data, non-verbal aspects of communication including posture, gesture, gaze, body position within the consultation and reference to physical objects were noted. These non-vocal aspects were recorded in the transcripts. Descriptions of non-vocal activity are supplied in double brackets alongside the talk they accompanied. To further demonstrate non-

verbal communication as part of the analyses presented in this thesis, Adobe Photoshop™ was used to capture and anonymise video stills from the recordings. Each of these stills is accompanied by a line from the transcription to demonstrate its position within the sequence of interaction. The use of non-verbal communication during incorporation of information in the electronic record whilst reviewing medicines is focused on in Chapter 7. Other Chapters include video stills to reference some of the non-verbal communication observed in the present data.

In making detailed analysis of the recordings, patterns and features of turn and sequence design became apparent in the pursuit of answers to the questions raised by the literature review. These instances in talk were collected together and compared, facilitating the identification of practices used by participants in their conversation related to medicines (Stivers 2002a). For example, in the analysis of patient requests for medicines, every instance was collected and compared to seek similarity and contrast in sequence placement, packaging with other concerns and design. This process prompted new direction and further analysis.

3.5 Summary

This Chapter has outlined the recruitment of participants to take part in the study. As part of this outline, consideration of ethical issues raised in collecting data have been highlighted, including the limitations imposed through exclusion of patients, and the intrusions that the recordings might have on the conduct of conversation. The analytical processes involved in its application have been provided.

In the Chapter that follows, CA is used in the exploration of a single consultation, showing the the different ways in which talk about medicines is raised and how it unfolds, the placement of the talk about medicines across activities, and the design of patient and doctor turns. Through the display of utterance, turn and sequence, the Chapter shows how the present data supports findings from CA undertaken elsewhere, and identifies new features.

Chapter 4: Talk about medicines during a medical consultation

4.1 Introduction

CA research has shown that doctors, patients, and when present, their carers, orient their talk to internal boundaries that constrain the contributions that may be made (see Heritage and Maynard 2006a; Heritage and Maynard 2006b; Robinson 2003; ten Have 2002). These constraints on conversation vary at different points in the consultation. The structural organisation of the consultation is therefore displayed and co-constructed by the participants through their talk.

The talk in the consultation selected from the present data is transcribed below, under activity headings described by Robinson (2003). He analysed 69 audio- and video-recored adult, primary-care, acute visits conducted in Southern California between 1995–1998. Robinson (ibid.) provided a figure to describe the structure of consultations he observed, showing the progression of activities. Activity progression is displayed in figure 3 below:

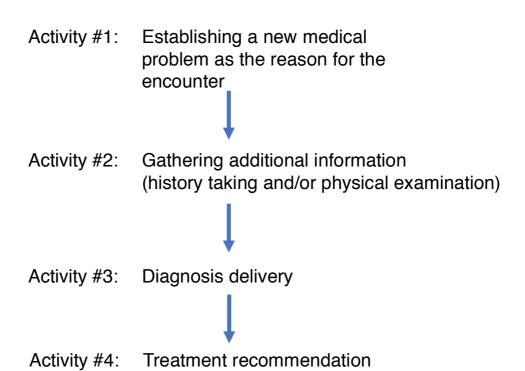


Figure 3: Structural schema for the project of solving patients' new medical problems. (Adapted from Robinson, 2003).

Robinson observed that the activities in the structure followed on from one another. The establishment of a new problem made a treatment recommendation of that problem an optimal outcome (activity 4). This activity was contingent on reaching a diagnosis (activity 3), which in itself required the doctor to gather information (activity 2).

4.2 Talk about medicines across activities in one consultation

In this Chapter, an entire consultation is presented as sequences, across a range of activities. During this consultation, the patient attends with a new medical problem as the reason for the encounter. Each consultation activity is analysed to see where and how talk about medicines takes place. Anonymised screen shots from the video recording are included where relevant. Each extract is presented using Jefferson notation (Jefferson 1984b), see appendix 4.

4.2.1 Establishing a new medical problem as the reason for the encounter

The first consultation activity described by Robinson was the participants establishing a new medical problem as the reason for their encounter. The extract below is taken from the start of the video recording, and begins with a sequence where the patient and doctor exchange greetings.

(All data taken from consultation 20.10.14C5)



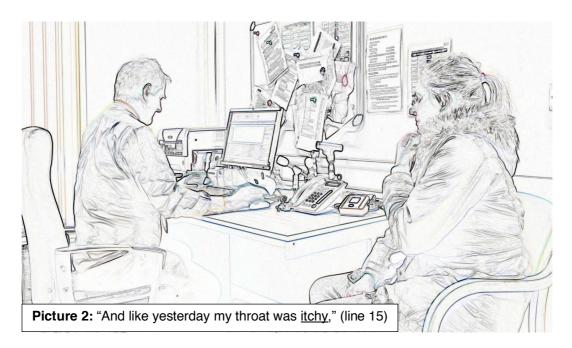
```
1
   D:
        Hello:.
                  ((knock at door))
2
   D:
               ((patient enters consultation room))
3
   P:
        Thanks for seeing me. ((patient coughs))
        You're welcome,=
5
   D:
        =Have we-
   D:=> Have we met before? ((patient sits down))
   P:=> Yes.
        Okay.
   P:=> But I looked a little bit then better than I did- (.)
10
        £than I di-(h) d(h)o to(h)day. ((doctor smiles))
11 D:=> fAh (.) [y(h)eah.
```

After an exchange of greetings and pleasantries (lines 1-4), the doctor seeks to establish whether they have met before. The patient's confirmation that they have met is made with emphasis (line 7). The doctor uses "okay" in third turn position (Beach 1993). His turn acts both as receipt of the patient's answer and as a resource to seek expansion following the patient's response. The patient follows with a reason for the doctor not knowing, pre-empting discomfort caused by his unfamiliarity (But I looked a little bit then better than I did- (.) £than I di-(h) d(h)o to(h)day.). The patient does so with some laughter as she finishes her turn. Laughter particles may be used during 'troubles telling' by the troubles teller (Jefferson 1984a): as an expression of being able to take the troubles 'lightly'. The doctor reciprocates with a wide smile and a laughter particle at line 11, aligning his response to the patient's prior turn (Haakana 2002).

The doctor's body position is made visible in the screen shot (picture 1). His legs and torso face the computer, and his head is turned towards the patient as he speaks. He maintains this bodily position, facing the computer, for the majority of the consultation. Coordination of talk, gaze and

body posture used by doctors in the primary care setting communicates engagement and disengagement with the patient (Robinson 1998; Ruusuvuori 2001). The doctor's body and gaze in the present data show him to be facing the electronic record as his home position (Ruusuvuori 2001).

Apart from the patient's explanation for the doctor's unfamiliarity due to her change in appearance, the reason(s) for the consultation are not yet clear. A continuation of the extract is shown below. The patient starts to establish the reason for her visit, a new medical problem, in the extract below.



```
9
   P:
        But I looked a little bit then better than I did- (.)
10
        £than I di-(h) d(h)o to(h)day.
                                         ((doctor smiles))
   D:
11
        fAh (.) [y(h)eah.
12
   P:=>
                 [Erm I feel- I feel absolutely shocking,
13 P:
        I feel like I can't get my breath properly in my throat.
14
           (1.0) ((doctor turns to computer))
        And like yesterday my throat was itchy, ((doctor typing))
15 P:
16 P:=> Erm, I have been viral for a few days before.
17
           (1.0) ((doctor typing))
```

The doctor's response "£Ah (.) {y(h)eah." at line 11 passes speakership back to the patient. The patient continues in overlap at line 12, starting to provide the doctor with a report of her symptoms. Kendrick and Drew (2016) have shown that conversation employed in informal social interactions among friends, family, and colleagues for the recruitment of assistance is performed across a spectrum, from explicit requesting to more implicit methods such as a report of

difficulties. Here, in the institutional setting of medical interaction, the report provided by the patient is used in a similar fashion; as conversational resource used in the social action of recruitment of assistance from the doctor.

Alongside recruitment, the patient's report specifies symptomatology that she wishes the doctor to deal with (Heritage and Robinson 2006). Reasons to consult with the doctor are often legitimised by patients through presenting their concern(s) in a way that adds justification to their decision to seek medical attention: to show that their problem is 'doctorable' (Heritage and Robinson 2006).

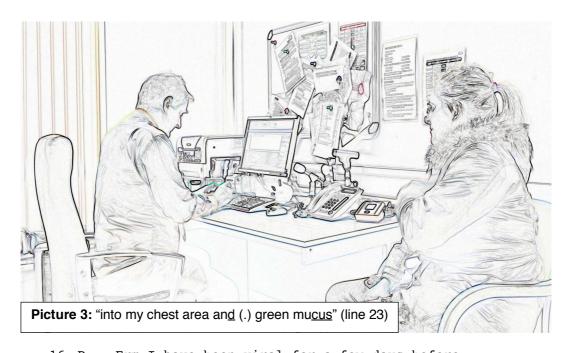
In this consultation, the patient defines the forthcoming consultation activity as a request for attention to a *new problem* (Robinson 2006), describing recent events in her description of symptoms (lines 12-16). She legitimizes her decision to consult through extreme case formulation, as displayed in her descriptors of feeling "absolutely shocking" at line 12 and in her telling to the doctor that "I can't get my breath properly" at line 13 (Pomerantz 1986). She completes the sequence with a diagnostic claim to have been 'viral' (I have been viral for a few days before) at line 16. This offers the doctor a 'candidate diagnosis', as described in section 2.6.2.1 (Heritage and Robinson 2006; Stivers 2002b).

The doctor turns his gaze away from the patient, to face the computer screen at line 14. This change in positioning of his gaze interrupts the flow of conversation (Heath 1984; Robinson 1998; Ruusuvuori 2001). The pause in talk lasts for one second as he does so. His position is shown in picture 2, as the patient continues her report at line 15. A pause is evident again at line 17, as the doctor maintains his position facing the computer screen, and types.

The doctor is able to recruit and add information to the patient's electronic clinical notes, viewable to him on the computer screen. As well as a repository for the recording of events, the electronic clinical notes contain previously documented information about the patient. Doctors are instructed that they have a professional responsibility to maintain patient records "at the same time as the events you are recording or as soon as possible afterwards." (General Medical Council 2013b).

The doctor's adding to the clinical record during the consultation is performed without any verbal explanation from the doctor about this activity. Nielsen (2016) has shown that doctors in his data used a range of conversational practices alongside their shift of their gaze to view information on the computer. These included no explanation being provided, an explicit explanation of the doctor's need to look at the record, and movement of gaze with simultaneous placement of a question to the patient, alluding to the information the doctor was looking for.

Following her concluding remark at line 16, the doctor remains silent, leaving the floor open for more talk on her part. This provides the patient with more opportunity to provide a history of her symptoms. A continuation of the extract is provided below.



```
16 P:
        Erm I have been viral for a few days before.
17
           (1.0) ((doctor typing))
18 P:
        Erm,
19
           (1.2)
20 P:
        It was itching like a scratchy sort of (.) er feeling last
21
        night,
22 P:=> And then as the night wor:e on .hh it was like coughing up
23
        razor blades and all (.) into my chest area and (.) green
24
        mucus ((sniff)) coming up. ((gestures to throat))
25 P:
        Erm
           (1.0)
26
        And my nose is all blocked and I feel achy all round my
27 P:
28
        neck area,
           (2.0) ((gestures to nose and neck))
29
30 P:
        And my thr- it's my throat.=
31 P:
        =I feel <u>sick</u> as well.
           (4.0) ((doctor typing for 3 seconds then stops))
32
33 D:=> Yep >fcarry fon<. .hh ((glances at patient and smiles))</pre>
```

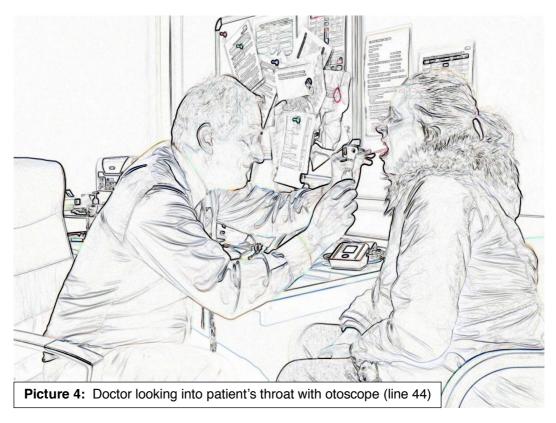
```
34
           (0.4)
35 P:
        (An I) just feel really erm (1.2) like I can't brea:the=
36 P:
        You know my- (.) my throat's swollen. ((patient gestures
37
        towards throat))
           (6.0) ((doctor typing))
38
39 P:
        It's really sore when I swallow.
40
           (8.0) ((doctor typing))
41 D:
        >Let's have a look.<
42
           (1.2) ((doctor picks up otoscope))
```

The doctor maintains his body and gaze in home position, facing the computer. After a couple of pauses, the patient continues her account with more narrative, describing her symptoms in more detail. The doctor's gaze and body position remain facing the keyboard and computer screen, and he types as the patient speaks (picture 3). Her description of multiple symptoms represent her conversational work to present her problem as 'doctorable' (Robinson and Heritage 2005). She describes noticing "green mucus" when she coughs (line 23). Survey data suggests that patients often believe that discoloured sputum will improve more quickly with antibiotics (McNulty et al. 2013).

The doctor types for a period of three seconds at line 32. Despite the patient's extreme case formulations (lines 22, 23 & 35) and multiple symptoms, the doctor's turn at line 33 suggests that they are not as yet complete. He asks the patient to continue her report (Yep >£carry £on<. .hh). His turn is made with a smile as he says "carry on". The video recording shows that the patient does not join his smile. At this point in this consultation, the doctor uses continuers to promote talk from the patient. The doctor declares his need to physically examine the patient at line 41, picking up his otoscope and moving towards the patient at line 42.

4.2.2 Gathering additional information

The doctor's declarative at line 41 ">Let's have a look.<" and his physical action of picking up the otoscope signals a move to a new activity to the patient. The patient is complicit in this, moving her position and opening her mouth to facilitate his examination of her oropharynx. Talk within the new activity is provided in the extract below.



```
41 D:
       >Let's have a look.<
42
          (1.2) ((doctor picks up otoscope))
43 D:
        ºHang on⁰ ((doctor picks up tongue depressor))
44
          (12.0) ((doctor looking at throat with otoscope))
45 D:=> Well that's \uparrowabsolutely normal in there,
46
          (2.0) ((doctor puts otoscope down))
47 D:
       Which \inea:ns,
48 D:
        ºLet me just have a-º ((gestures to move forward))
          (1.8) ((patient moves head and neck towards doctor))
49
50 D:
       51 P:
       ºYeahº
52
          (0.7) ((doctor examining patient's neck))
53 D:
       Is that sore when I press?
       Yeah it's really sore.
54 P:
55
          (3.0) ((doctor examining patient's neck))
```

The doctor spends 12 seconds looking through his otoscope at various areas of the patient's oropharynx (line 44), before sharing his findings with the patient at line 45. The patient has made many verbal and gestural references to her throat as a source of her symptoms in her accounting for her visit (lines 13,15, 30, 36, 39). The doctor comments as he examines the patient (picture 4), describing his examination of her oropharynx to be "absolutely normal". The doctor's declarative is cut short at line 48, with a gesture of his hands for the patient to move her head and neck forwards towards him at the end of his declarative utterance "oLet me just have a-2". The patient obliges (line 49), and the doctor begins to examine her. The doctor's request for the patient to "just relax" at line 50 is made quietly, and answered positively and quietly by the patient without delay. The doctor locates a point on the patient's neck, and his polar interrogative "Is that

sore when I press?" at line 53 is confirmed and upgraded by the patient "Yeah it's really sore".

The patient allows the doctor to continue his examination.

At the end of his physical examination of the patient's oropharynx (line 46), the doctor begins a turn but then pauses. This turn is made following his comment of the normal examination of the patient's oropharynx at line 45. He changes the focus of his physical examination, gesturing with his hands to the patient at line 48 for her to move forward towards him. After completion of the doctor's examination, confirming a painful area of the patient's neck, there is a marked pause at line 55 as the doctor continues to palpate.



The doctor continues his physical examination through palpation of the patient's neck at lines 55-59. His physical examination of her neck is followed by further verbal information-gathering in overlap (picture 5). These two activities are performed simultaneously at this point in the consultation.

In making his question at line 56, the doctor speaks clearly to the patient. It is met with a prolonged pause, followed by an open class next turn repair initiator, "Pardon?", at line 58. As Drew (1997) showed, an open class next turn repair initiator such as "pardon" may be used as a response when the prior speaker's turn was not heard or understood; and how, alternatively, it may be used to express trouble with the prior speaker's turn:

"one in which the repairable turn does not appear to connect referentially with its prior turn, and hence from the recipient's perspective seems to be topically disconnected with what was being talked about." (Ibid, 93).

It is possible that it is not clear to the patient how the doctor's question is sequentially coherent to the talk that immediately preceded it. Furthermore, his questioning is placed while physical examination is ongoing (picture 5). The doctor's turn at line 59 ('This started when sorry') places emphasis on the time in which something was first noticed by the patient, but does not provide information to clarify exactly *what* it is he is enquiring about. His prompt introduces troubles into talk. The patient begins her narrative about her sore throat, her confusion made evident through hesitant speech (line 60). The doctor realigns his talk to the beginnings of the narrative at line 61. In designing this turn, he includes the candidate diagnosis the patient made earlier during consultation openings. The doctor emphasises the word "viral" in his polar declarative. A continuation of the talk that followed is transcribed below.

```
61 D:=> [And you were saying you were viral as well.
         [Erm- ((doctor gazing at computer screen))
63 P:=> M- m- I have a three year old and a one year old and (.)
         they were viral to begin with,=
64
65 P:
         =And then I (.) caught the virus symptoms and then
         obviously this throat thing \underline{\text{star}}\text{ted} yesterday.
66
           (4.0) ((doctor gazing at computer screen))
67
68 D:
         And is the green from your chest or from your nose?
         Er no it was from my \underline{\text{chest}} when I was coughing up in the
69 P:
70
         night.
71
           (7.0)
                   ((doctor typing))
```

Rather than answering the doctor's inquiry about her own 'viral' symptoms she alluded to at line 16, the patient reports similar symptoms affecting her children, answering more than the doctor's question at line 63 with a narrative expansion (Stivers and Heritage 2001). CA research of medical consultation has noted that in patients' answers to doctors' questions, "expansions can be arrayed along a continuum in terms of the extent to which their provision departs from the agenda of the question" (ibid.).

The patient's narrative provides the doctor with lifeworld context, as she tells him about her young children's recent ill health that preceded her symptoms. The doctor types as the patient shares this narrative. There is a four second pause at line 67, and then the doctor refocuses the patient's account with his turn at line 68, using an 'alternative' question design to ask the patient about her own symptoms (Stivers 2010). There is a seven second pause at the end of this sequence, as the doctor continues to type (line 71), again demonstrating the interruptions that the doctor's attention to the clinical record may make to conversation (Heath 1984; Nielsen 2016; Robinson 1998; Ruusuvuori 2001). The doctor resumes conversation with more information gathering talk.



```
71
           (7.0) ((doctor typing))
72 D:
        Tch pains? ((doctor glances to patient))
73 P:
        Er- All just all here and (0.2) in my- (.) and then when
        I'm coughing .hh (0.9) it's really sore in my chest area.=
74
        =You know going from my throat into my chest (.) it's like
75 P:
76
        it's really sore to cough.
77
           (0.4)
78 D:=> How was the children affected?
                                         ((glances to patient))
79 P:
        .hh Just (.) erm (0.2) coughing (0.8) erm, like a barking
80
        cough.
81 P:
        .hh Erm and m- my little boy who's one, he was being sick
        and just crying and (.) just generally off and .hh coughing
82
83
        every now and again.
        My daughter was just (.) er the same really.
84
  P:=> But I seem to have (0.3) got- got it worse than t(h)hem hah.
```

The doctor begins the next sequence with a prompt for expansion on the patient's pain symptoms (line 72). In doing so, he glances at the patient at the end of his turn (picture 6). The patient's response reflects some confusion as to the detail he is seeking, with hesitancy at the beginning of her turn. As the patient describes the pain that she is experiencing, the doctor turns his gaze

back to the computer screen. In response to the patient's earlier narrative expansion, the doctor returns his enquiry to the patient's children at line 78. The patient provides further narrative about them, before focusing talk back to her condition at line 83. In doing so, she again provides an extreme case formulation, with some nervous laughter particles at the end of her turn, which may outlining the delicate nature of this for her (Haakana 2001).

The patient has not yet made any explicit request for a medicine during the consultation. However, there have been some more implicit suggestions in the patient's turn that point to treatment being sought by her: she made a candidate diagnosis at line 16 (Stivers 2002b), and presented her claims of illness using extreme case formulation design (Pomerantz 1986). Scott et al. (2001) ethnographic analysis of US primary care claims that patients make 'implied candidate diagnosis' indicating antibiotic treatment, through sharing of a set of symptoms that may specifically index a particular condition. Further, Scott et al. (2001) claim that portraying severity of illness, and inclusion of life-world circumstances, are both used by patients to seek this treatment. The analysis of this consultation shows that all of these elements were used in the patient's presentation of her condition. The consultation continues in the extract below.

```
85 P: But I seem to have (0.3) got- got it worse than t(h)hem hah.
86 (0.6)
87 D:=> Your worry your concern is ↓what.
88 P: I'm just in pain.
89 P: Coughing up green phlegm and-
```

After a pause, the doctor's turn at line 87 is delivered with emphasis and with a marked lowering of tone on its completion (line 87), seeking clarification from the patient: "Your worry your concern is \underwhat." In answering the doctor's inquiry, the patient begins with a further report of her pain. She reiterates her description of a purulent cough once more. The first mention of medicines is initiated by the doctor in the talk that follows.

```
89 P:
        Coughing up green phlegm and-
90 D:=> Have you: >taken any< painkillers,
91 D:
        [Paracetamol.
92 P:=> [Yeah I've been taking zapain because it's been so bad and I
93
        hate taking those tablets, .hhhh ((doctor gaze to screen))
94
          (3.0) ((doctor gaze turns to patient))
        I f[eel like I can't breathe.
95 P:
        [W-why not- wh-why not just simple (.) p- paracetamol.
96 D:
97
          (1.1) ((patient shakes head))
        I- cos last night they just weren't cutting it for me.=
98 P:
99 P:
        =Th- the paracetamol cos I couldn't get to sleep cos the
```

The doctor changes topic at line 90, gathering additional information regarding treatment the patient may have already tried. The sequence begins with a closed question from the doctor "Have you: >taken any< painkillers,". The doctor's question design is seeking an affirmative answer as a type-conforming response (Raymond 2003). The doctor suggests paracetamol as a potential analgesic the patient might have tried at line 91. By doing this, the doctor is offering the patient a candidate answer (Pomerantz 1988). CA of conversation across a broad range of institutional and informal settings has shown that through the inclusion of a candidate answer, the speaker may:

- provide a model that can guide the respondent to know what would satisfy the purpose-for-asking
- display his/her knowledge of, and familiarity with, the situation
- display his/her attitude toward, or expectations of, the relevant persons
 (bullet points added, pg. 372, Ibid.)

Further, the doctor may be making his enquiry about medicines the patient has already used as a pre-sequence in the run up to treatment recommendations. Barnes (2017) recent analysis of UK primary care consultations showed GPs used this pre-sequence design to "not only identify obstacles to acceptance but also to inform their recommendation in order to avoid resistance."

In describing the analgesia she has been using at lines 92-93, the patient uses extreme case formulation ('because it's been so bad and I hate taking those tablets'). Zapain is a proprietary preparation, containing a combination of paracetamol and codeine at doses only available on prescription. As the patient speaks, the doctor is gazing at the computer screen and begins to type. The patient's revelation is met with a three second pause in conversation (line 94), and a clear shift of the doctor's gaze, which may mark the patient's preceding turn as significant to the doctor (Ruusuvuori 2001). The doctor requests an explanation on her decision to use a potent, prescription-only analgesic at line 96. The patient makes a claim to having tried paracetamol but it not working, casting her decision to try a stronger analgesic as a 'reasonable' choice.

4.2.3 Treatment recommendation

The doctor moves conversation on to a new activity, considering next steps in her treatment Robinson outlined this as activity 4 in his structural representation of activity progression in consultations for new medical problems, and that this activity was dependent on activity 3, diagnosis delivery. Of note, although the patient has shared a candidate diagnosis at line 16 and the doctor has acknowledged receipt of this information (line 61), the doctor has not yet made his own diagnosis delivery. The conversation that followed is displayed in the extract below.



```
=Th- the paracetamol cos I couldn't get to sleep cos the
99 P:
100
        pain was so bad when I was swallowing (0.4) to try and go to
        sleep.
101
102 D:
        What would you like me to do.=
103 D:=> =£What are you hoping I will do. ((doctor smiles))
104 P:=> Give me some antibiotics [to shift it.
                                  [Okay I'll- (.) ↓agree:d ºha.º
105 D:=>
106 P:
        Haha.
107
           (0.2)
```

The doctor begins a new sequence of talk at line 102, focusing talk on future treatment. He uses a Q-word interrogative question design (Stivers 2010; Weber 1993). A 'q-word' question uses a range of so called 'Q-words': who, what, where, when, why and how. This is initially made with more deontological authority provided to the patient at line 109: "what would you like me to do.=" (Landmark, Gulbrandsen and Svennevig 2015; Landmark, Svennevig and Gulbrandsen 2016; Stevanovic and Peräkylä 2012). The question is made as the doctor's gaze is facing the computer. Before the patient has an opportunity to answer, it is repaired and presented with less authority granted to the patient. The doctor does this with substitution of 'like' with 'hope',

maintaining greater authority in the decision. In addition, he shifts his gaze towards the patient (picture 7). The repaired question is still 'bilateral' in design, providing opportunity for the patient to participate in decision making (Collins et al. 2005). The doctor's turn is made with a smile on its completion from the doctor, again not joined with by the patient.

The patient makes a request for antibiotics at line 104, with the doctor granting it in overlap at line 105. The doctor's turn is made with a repair, followed by "agreed". This part of his turn is made with a lowering of intonation, and a particle of nervous laughter. The patient greets the doctor's granting with some nervous laughter. Both participants' laughter particles acknowledge prior talk as somewhat delicate (Haakana 2001; Haakana 2002). An air of tension seems to resolve following this sequence. The patient's account has provided a 'doctorable' problem, with an agreement to her request for antibiotics, although it has required a significant amount of conversational work.

Among the practices observed by Stivers (2002a), patient's carers were observed to make direct requests, albeit rarely:

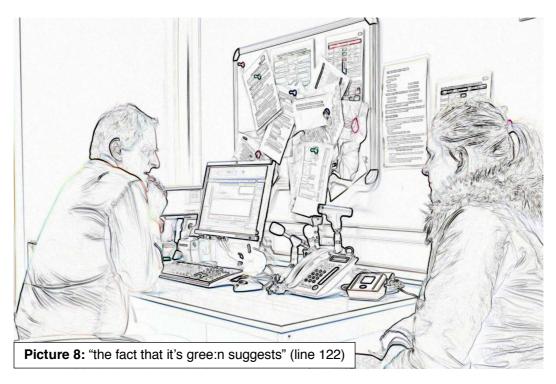
MOM: =can I at least have thuh prescription an' I'll decide whether or not to fill it in a couple of day:s

The medicine request at line 104 in this consultation is designed as an imperative, and in a different sequential position to the one above from Stivers' data: it is placed in second position as a response to the offer from the doctor. Following on from their agreement for treatment with an antibiotic, the patient talk returns to a request for diagnosis delivery (activity 3).

4.2.4 Diagnosis delivery

Through verbal and physical examination, the doctor has had opportunity to gather information. Although an agreement has been reached with regard to treatment for the patient's condition, the doctor has not made a delivery of diagnostic information. Much is made of the asymmetrical nature of control of progression (in favour of the doctor) during medical consultation (Maynard 1991; Pilnick and Dingwall 2011; Robinson 2001a; ten Have 1991). However, at this point the

consultation, it is the patient takes control and introduces topic change, asking the doctor to provide a rationale for her symptoms.



```
103 D:=> =fWhat are you hoping I will do. ((doctor smiles))
104 P:=> Give me some antibiotics [to shift it.
                                  [Okay I'll- (.) ↓agree:d ºha.º
105 D:=>
106 P:
        Haha.
107
           (0.2)
108 P:=> What do you think it is?
109 D:
        Well it's just- it's-
110
        (1.0)
        You're right I mean these things start as a virus (3.5) and
111 D:
112
        (2.0) I can't name which particular virus (0.5) but (0.5) it
        sounds like a condition called tracheitis,
113
114 D:
        Now (.) erm (.) it means inflammation.
115 P:
        Yea[h
116 D:
           [The trachea is from the trachea .hh which is the big
117
        breathing tube before it splits but going down to the two
118
        lungs so it's- it's the bit if you like from the (1.0) .hhh
119
        er from the mouth and the vocal chords [dow:n to the chest.
120 P:
                                                [Right.
121
           (2.2)
122 D:=> The fact that it's gree:n suggests that pro:bably it's
        become infected secondarily by bacterium >as opposed to just
123
124
        being virus.< [so-
125 P:
                      [Right.
126 D:=> >So< if the antibiotic hel:ps, (.) it'll be helping (.)
127
        because of that.
128 P:
        Right.
129 P:
        Okay.
           (2.5) ((doctor typing))
130
```

The patient's turn at line 108 aligns with the doctor's epistemic authority, seeking diagnostic information. The doctor's reply is hesitant and repaired (lines 109 & 110), suggesting some

uncertainty in his upcoming explanation. After a delay of one second, he begins to offer diagnostic information. He does this through affiliation with the patient's candidate diagnosis of 'viral' infection as an initial condition (line 111). After further pauses in his talk, he provides the patient with a new diagnostic label for her symptoms (tracheitis) at line 113. This is followed with further explanations, sharing information about pathology and anatomy.

Doctors may share some of their clinical reasoning as part of their diagnosis delivery (Perakyla 2006). This conversational practice is preferred in circumstances where doctors were pressured to provide greater visibility and intelligibility of the evidence for their diagnostic information. The instances in which this practice was observed to occur was when diagnositic delivery was:

"temporally detached from the relevant examinations, when the examination [was] opaque for the patient, when there [was] uncertainty, or where there [were] discrepant views concerning the diagnosis." (page 233).

Diagnosis delivery in the present consultation is in keeping with existing CA research: the condition is named (line 113) and *the doctor explicates the evidences for his diagnostic conclusion* in expansion at lines 122-127 (Perakyla 1998; Perakyla 2006). His turns align with the patient's description of her symptoms: in particular with her description of green phlegm. Doctors have been observed to use qualified confirming assessments where symptoms exhibited by the patient align with their displayed perspectives (Gill and Maynard 2006). He qualifies his assessment with "suggests that pro:bably it's become infected secondarily by bacterium" (lines 122-3), justifying his agreement to provide antibiotics to the patient.

The doctor's sharing of his diagnosis and clinical reasoning in the preceding sequences makes talk about medicines relevant at line 126. The doctor provides justification for the potential for antibiotics to be of benefit, although his turn at lines 126-127 are made with some hesitation and uncertainty. The patient is accepting of his assessment of the treatment.

At this point in the consultation, the doctor has provided the patient with a diagnosis and his rationale for reaching it, and in keeping with CA research conducted in other European primary care settings, the patient responds to the doctor's turns with minimal acknowledgement tokens at

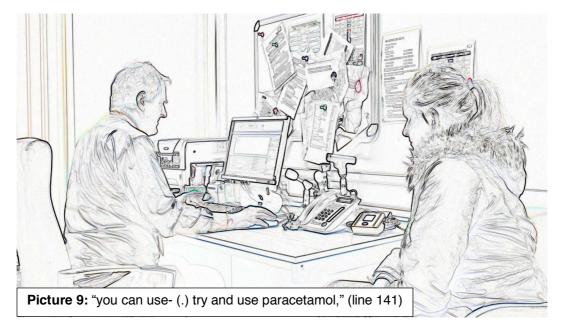
lines 115, 120 and 125 (Perakyla 1998; Perakyla 2006). The patient changes topic at line 131 and begins more talk about the impact of her illness on others.

```
130
           (2.5) ((doctor typing))
131 P:
        I just want to be back to normal so I can look after my
132
        children properly you know?=
        =I'm just pleased that my husband's off work today but he's
133 P:
        back at work tomo(h)rrow hah.
134
135
           (1.0) ((doctor typing, slight smile))
        So I think I'll just spend the day in bed and try and get
136
137
        myself right.
        Ab- absolutely just nurse yourself through it.
138 D:
139 P:
140
           (2.5)
```

At line 131, the patient returns talk to her lifeworld concerns, providing the doctor with lifeworld concern about the impact of her condition (I just want to be back to normal so I can look after my children properly you know?). The patient provides further detail of her current social circumstance with regard to child care at line 133, "I'm just pleased that my husband's off work today but he's back at work tomo(h)rrow hah.)". As she talks, the doctor maintains his gaze at the computer screen and types. Her comment about her husband being available to help with child care is met with a slight smile from the doctor, affiliating with her perspective (Haakana 2010). The patient's suggestion at line 136 ("So I think I'll just spend the day in bed and try and get myself right.") is positively endorsed by the doctor ("Ab- absolutely just nurse yourself through it."), demonstrating his affiliation with her plan and with her lifeworld perspective.

4.2.5 A return to treatment recommendation

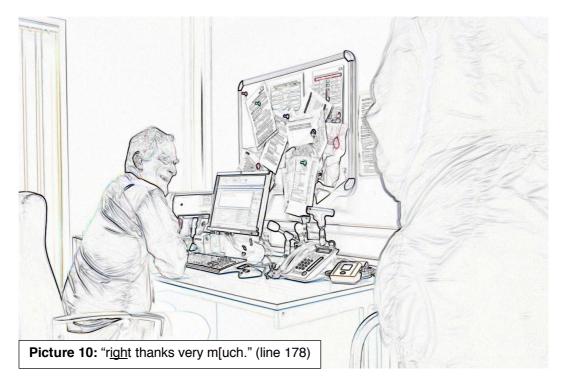
In the activity below, the doctor returns to his treatment recommendations as he signs a prescription for the patient. As shown above, he has already agreed to provide an antibiotic following the explicit request from the patient.



```
140
            (2.5)
141 D:=>
            You can use- (.) >try and use paracetamol<=
142 D:=>
            =I agree with you Zapain's a bit (.) potent¿
143 P:=>
            It is.=
144 P:
            =It makes me feel really ti:red.
         >Y [know even< \underline{\text{more}} tired than normal.
145 P:
146 D:
            [Well, y-
         Yes fyes >you were< (.) \underline{t}ired and run down as it is.
147 D:
148 D:
         .Hhh okay.
149 P:
         Mm.
         Tch ((doctor looking at printer))
150 D:
151
            (6.0)
152 D:
         >Gosh< that took it's ftime. ((printer whirring)
153 P:
         Hahaha er,
154
            (2.0)
```

A new sequence of talk begins at line 141, with a recommendation about treatment for her pain from the doctor, formulated as a suggestion (Stivers et al. 2017). He begins this suggestion and then self-repairs, in light of the patient's previous telling of the inadequate relief this medicine has provided. However, they reach consensus that the prescription analgesic (Zapain™) is too potent. The doctor's turn at line 148 is made with an in-breath and "okay" with falling intonation, signalling closure. His turn is met with agreement from the patient. This talk is followed by a 6-second interval, with the doctor turning his gaze to look at the printer. It begins to whirr at the end of this interval, printing the patient's prescription. The doctor's jovial turn at line 152 is made with a smile, and the patient responds with some laughter, in keeping with his recipient design (Haakana 2010).

4.2.6 Closing the consultation



```
152 D:
        >Gosh< that took it's ftime. ((printer whirring)
153 P:
        Hahaha er,
154
           (2.0)
155 P:
        £I bet you need to be taking a lot of Echinacea don't you
156
        doing this job erm especially at this time of the year.
        No I have this theory that as long as it's sort of:: you
157 D:
158
        know five ten minutes (2.5) er::m and people don't cough
159
        over me or
160
        [sneeze over me,
161 P:
        [mm
162 P:
        >Then you< shouldn't be too bad,
163 D:
        Then I- (0.5) hopefully I'm developing immunity to all the
164
        things that you bring in.
165 P:
        Righ::t.
166 P:
        Yeah.
167 D:
        So.
168 P:
        That's a good theory.
169 D:
170 P:
        Thank you. ((patient stands up))
172 D:
        It also helps if I'm not run down (.) so.
173 P:
        Exactly.
174 P:
        So you have to stay off the vino then cos that's what I
175
        have to do now.
176 D:
        £Ok(h)ay.
177 P:
        You'll have to stay off the red wine.
178 P:
        Right thanks very m[uch. ((patient leaves room))
179 D:
                            [Take care.
180 P:
        ºThanks bye.º
```

After another pause, the patient changes topic, moving conversation to more social matters, building and maintaining her relationship with the doctor. She makes a jovial suggestion about how he manages to avoid illness, beginning at line 155. Her suggestion references Echinacea, a herbal medicine marketed to prevent viral upper respiratory tract infections ('colds'). The doctor

aligns his talk to this topic, and his affiliative talk works to affirm the positive relationship between them. The patient signals sequence closure at line 165 with "Righ::<u>t</u>". The laughter from the doctor is followed by the patient standing up as she thanks him at line 170, standing up from her chair. More expansion is added by the doctor as she does so, and this leads to further jovial exchanges (from line 172). Finally, the patient closes the sequence again with "Right" (line 178), and the patient and doctor exchange farewells.

4.3 Discussion

Talk referenced medicines in a variety of contexts. Whilst there were potential slots for talk about medicines earlier on in the consultation, discussion did not touch on this topic until the doctor instigated a conversational activity at line 90, asking the patient whether she had "taken any painkillers". When he did so, the patient oriented her talk to self-management with medicines prior to the consultation. The doctor's inquiry about treatments the patients may have tried already placed an onus on the patient to present herself as having taken 'reasonable steps' to manage her condition prior to their encounter. She used her description of use of a potent prescription-only analgesic as part of her response, recruiting her necessity to use this medicine as part of her display of the severity of her symptoms. This worked as part of her extreme case formulation (Pomerantz 1986), legitimizing her need for the doctor's attention, and building towards her request for antibiotics to treat her condition.

Talk about medicines was woven in to other conversation, making it part of the fabric of the consultation. The patient's turns at talk displayed biopsychosocial information. Her narrative shared the way in which her symptoms had developed, the impacts of her illness on her and her family, her prior experiences of self-management with medicines and her plans for rest and recruitment of her husband's help in supervision of her children. All of these features added detail and context to her medicine request. The doctor accommodated the patient's lifeworld experience, concerns and considerations through his inquiry in to the way(s) in which the patient's children had been affected by illness, and by supporting the patient's plan of treatment, including her wish to take rest and seek help with child-care.

In designing her request, the patient did so without hesitation and with an imperative linguistic form (Give me some antibiotics [to shift it.). It was not prefaced in any way that suggested contingencies related to the granting of her request (Curl and Drew 2008), or a likelihood of acquiescence from her in the face of a negative judgement from the doctor. The doctor's response aligned to the direct and imperative request design used by the patient. He immediately agreed to supply the treatment, and his turn was made with some nervous laughter particles. The patient joined the nervous laughter. These features of talk demonstrated both participants oriented to the delicate nature of this decision. In the doctor's later return to talk about the antibiotic treatment, made relevant by the doctor in his sharing of his clinical reasoning, he expressed uncertainty with regard to the diagnosis and to the likelihood it would be of benefit. The design of his talk fits with the reported survey and interview analysis: doctors feel may meet patients' requests for antibiotics to maintain their relationship with them, despite judging that these may be unlikely to be helpful (Fletcher-Lartey et al. 2016).

Robinson's (2003) description of the interactional activities observed in US primary care found that the activity of treatment recommendation followed, and was dependent upon, diagnosis delivery. He argued that doctors are accountable for the progression of activities in consultation. There was a notable difference in the progression of activities in the consultation presented from the present data; an agreement about treatment was reached following the doctor's enquiry about the patient's wishes for the doctor's intervention. The doctor had not yet delivered a diagnosis. The patient initially skipped this activity and used the doctor's enquiry as a slot for talk about medicines.

Following the doctor's agreement to provide a prescription for antibiotics, the patient changed topic and returned talk to diagnosis. The doctor participated, with sharing of his expert opinion, and explanation about his conclusions. Later in the consultation, the doctor changed topic and made a further treatment recommendation for analgesic treatment. Although the participants initially detoured from Robinson's described progression of activities, they both oriented to a shared understanding of the ways in which the medical consultation proceeds (Robinson 2013), returning to follow the normatively ordered sequence of activities (Heritage and Maynard 2006a; Robinson 2003; Robinson 2013).

4.4 Summary

During the consultation, the placement and design of turns at talk by both participants was context-shaped and context-renewing (Heritage 1984). Turns at talk played in sequence, some of which included conversation about, or made reference to, medicines. Each activity within consultation had its own interactional structure, with co-constructed opportunities and constraints on what was admissible to the conversation (Robinson 2003). For example, social niceties were exchanged light-heartedly at the start and at the end of the consultation, but both parties took a more serious stance on conversation at other times. Potential and actual slots for conversation about medicines varied according to the activity at hand, and in accordance with the doctor-led and patient-led questioning that shaped the talk that followed (Gill 1998; Robinson 2003; ten Have 1991).

The patient's sharing of her lifeworld experience, concerns and preference provided the doctor with the opportunity to understand the impact of her illness from a biopsychosocial perspective, and to reach common ground with respect to the decision about medicines treatment (Haynes, Devereaux and Guyatt 2002; Mishler 1984; Todres, Galvin and Dahlberg 2007). This exploration required an empathetic stance, to realise the patients' ideas, concerns, expectations, and feelings as part of information captured in the medical interview (Kurtz et al. 2003).

This Chapter has presented the talk that occurred during a single consultation, alongside screen shots from the video recording. Through analysis of the conversation, the placement and design of talk about medicines was presented and analysed in context of relevant literature. In the Chapter that follows, two practices used by doctors to accommodate patient lifeworld experience, concerns and considerations during talk about medicines are presented.

Chapter 5: The lifeworld in conversation about medicines

5.1 Introduction

As shown in the literature review, if addressing what might be important to patients in their medicines treatments is seen to go beyond biomedical considerations, doctors need to use conversations with patients to explore *what is important to them*, from their lifeworld perspective. The literature review found a single piece of research specifically reporting the ways in which lifeworld was dealt with during talk about medicines between patients and doctors (Barry et al. 2001). Barry et al. argued that "the only legitimate way for the lifeworld to enter the consultation was where there were psychological problems" (pg. 497). The present data were reviewed with the aim to identify instances of doctors accommodating lifeworld context during talk about medicines.

5.2 Accommodating lifeworld context in decision talk

Patients were noted to share lifeworld experience, concerns and considerations in 29 of the 78 consultations from the present data. They talked about their illness experience in the contexts of family and social life, employment, relationships and activities of personal care. Doctors addressed some part of the patients' shared lifeworld experiences in 25 of the consultations. Conversation about the patients' lifeworld was observed to occur across a spectrum, from brief glimpses of lifeworld experiences not pursued by either participant, to more substantial contributions to the talk that took place.

In four of the recorded consultations, patients directly intertwined talk about medicines with talk about their lifeworld, and the GPs used lifeworld context as part of their decision talk. This helped them to address the patient's concerns through attention to the patient's narrative. Extracts from these consultations are shown in section 5.2.1. In contrast, two consultations from the current data stood out as examples where patients made repeated reference to their lifeworld concerns during decision talk about medicines, but these were blocked and ignored by the doctor. Extracts from these are shown in section 5.2.2.

5.2.1 Exploring lifeworld context during talk about medicines

The following consultation extracts show four different patients and doctors discussing medicines. The patients describe features of their lifeworld in their turns at talk. The doctors respond by using patient lifeworld contexts to shape their talk that follows. The doctors attend to, and are responsive to, the patients' concerns and perspectives.

Work considerations and a friend's experience

In the consultation extracts below, the doctor and patient talk about analgesia to help relieve pain the patient is suffering with in his shoulder. The doctor and patient have talked about physiotherapy as a potential treatment (not shown). The extracts are taken from a later activity in the consultation, as the participants talk about medicines as treatment for the patient's condition. The patient includes his lifeworld experiences with previous analgesia. The doctor's assessment uses the patient's lifeworld context in the design of her recommendation. We join the consultation as the doctor moves talk on to this topic.

Extract 1a (2.2.15C4)

```
1
   D:
         .hh So (.) when you came in you were saying you were
2
        thinking about painkillers and th-
        Have you been taking anything for [it (already)?
3
   D:
                                            [I don't really <u>like</u>
   P:
5
        taking painkillers (.) because I had some codamol,
6
   D:
        >And I've had codamol for my knee operation.=
   P:
        =I got [some codamol for my back,=
   P:
9
   D:
                [mm,
```

The doctor provides a slot for the patient to talk about analgesics, raised during the consultation opening. She does this through "So" as a signal for topic change and then, after a brief pause, a recount of the patient's previous talk "when you came in you were saying you were thinking about painkillers and th-". She repairs and refocuses her turn as an inquiry about the patient's current use of analgesics at line 3, "Have you been taking anything for [it (already)?".

The patient answers in overlap, with an expression of his dislike of analgesics based on his previous experience in using them. He shares information about significant events when he has

had to use "codamol", a mispronunciation of co-codamol. Co-codamol is a commonly prescribed analysesic of moderate potency, containing paracetamol and codeine.

Extract 1b (2.2.15C4)

```
=I got [some codamol for my back,=
   D:
               [mm,
10 P:
        =And once they get into your system,
11
           (0.7)
          Y- you're (just like) you feel like really heavily limbed
12 P:=>
        [and a bit-
13
14 D:
        [Yeah.
15
           (0.7)
16 P:=> [Li:ke (.) weighed down and a bit mon- mongy and I-
17 D:
        [Yeah.
16 P:=> [You know I climb ladders and I do-
17 D:
        [Yeah
18 P:=> You know I dri- drive a lot and-
19 D:=> So it's pretty important [not to feel like that isn't it?
20 P:
                                  [It's pretty important not to
21
        feel like that.
```

The doctor's continuers leave space for the patient to provide further expansion. In doing so, he shares some important context about his occupation at lines 16 and 18. The doctor affiliates the importance of this context at line 19, validating the patient's concern as being relevant and making a general statement which serves to emphasise the point the patient is making (Stivers 2008). The patient responds positively to the doctor's empathy with echoes of the doctor's comments in overlap. The doctor's affiliation provides the patient with her recognition and inclusion of his lifeworld view in their talk about medicines. The conversation continues in the extract below.

Extract 1c (2.2.15C4)

```
20 P:
                                  [It's pretty important not to
21
        feel like that.
22 D:
        [And so-
23 P:
        [Erm,
24 D:=> Y- y- you- I think your words were (.) a sort of
23
        mild painkiller when [you came in.
25 P:
                              [Yeah (.) yeah.
        So (0.3) it tends to be the codeine (.) in
26 D:
        [the cocodamol that does that and th-
27
28 P:
        [Yeah.
```

The doctor's turn at line 24 references back to earlier in conversation with the patient before his sharing of his lifeworld experiences and concerns (I think your words were (.) a sort of mild painkiller when [you came in.). The doctor's referencing of the patient's words used by him at the consultation opening demonstrates her active listening. The patient agrees in overlap. After

providing the patient with an explanation as to the possible cause of his drowsiness on using opioid-based analgesia, the doctor asks the patient about paracetamol in the conversation below.

Extract 1d (2.2.15C4)

```
27
        [the cocodamol that does that and th-
28 P:
29 D:
        Have you thought about just taking paracetamol for [it?
30 P:
                                                              [I have
31
        tried taking-
32 D:
        mm.
33 P:
        Paracetamol but it doesn't-
34 D:
        It doesn't [make much [(u.c.)
35 P:=>
                    [Yeah it's if there's something between
36
        codeine and parace:tamol?
37 D:
        mm.
38 P:=> Like my friend who (0.4) has (0.3) had severe back pain he
39
        got something \underline{dec}la- (0.4)
40 D:
        Was it maybe diclofenac?
41 P:=> He had [diclofenac and he was raving about-
                [Yeah (.) mmhm.
```

The doctor's inquiry about paracetamol at line 29 is inviting and friendly, asking the patient to share his opinion, termed by Barry et al. (2001) as a 'natural conversational strategy'. The doctor's turn provides a slot for the patient to share his perspective on her suggested consideration. The patient answers affirmatively in overlap, and with information that he has in fact both considered and tried paracetamol for his pain. The doctor uses a continuer token at line 32. The patient begins to tell the doctor that the paracetamol was ineffective, before cutting short on turn completion at line 34. The doctor uses repetition of the patient's last two words in her response at line 34, and returns speakership to the patient. He continues talk in overlap.

The patient's request, beginning at line 35, is met with a continuer from the doctor. This provides him with a slot for expansion. He does so through report of a friend's favourable experience with an alternative analgesic. His turn provides further lifeworld context to the reasoning for his request. The conversation continues below.

Extract 1e (2.2.15C4)

```
He had [diclofenac and he was raving about-
41 P:
               [Yeah (.) mmhm.
42 D:
43 P:
        I don't know (.) cos obviously it cn-
44 P:=> You're (0.4) tied to your medical history whether I'd
45
        qualify fer- .hh
46 D:
        Yeah,
47 P:
        Maybe somethin like [that cos he-
48 D:
                             [So-
49 P:=> It really helped him when he was able to [work and stuff.
50 D:
                                                  [Yeah,
51 D:
        Well it's cer- certainly something to think about,
```

In response to the patient's proposal that they should consider diclofenac, he vocalises uncertainty regarding contingencies around his request: "you're (.) tied to your medical history whether I'd qualify fer-" (lines 44-45). He follows this with further report on how the medicine helped his friend from a lifeworld perspective at line 49, "It really helped him when he was able to [work and stuff." In her response to his proposal, the doctor agrees that this treatment is worthy of consideration, but defers her stance in whether to grant or refuse diclofenac at line 51 (Nielsen 2011). Instead, she outlines the need for further information, and tells the patient about the potential risks and benefits of NSAIDs (not shown).

Chronic pain and returning to work

The extracts below are from a consultation where the doctor reviews a patient troubled by chronic pain in his foot. The patient works in healthcare, and is struggling to manage his pain. We join the consultation as the doctor begins a new topic of talk, following the doctor seeking confirmation with the patient with regard to the analgesia he is currently prescribed, listed on the electronic record (not shown).

Extract 2a (12.1.15C2)

```
D:=> And wh- and did you:- >what did you want to do about the
        pain<? =
3
   D:=> =Er did you have some idea to think well I'll take more
        of this or less of that or-
4
5
          (0.3)
        .hh Well erm (0.6) yeah I'm still in pai:n like it hasn't-
6
   P:
7
        Even though I'm on s- s- three separate painkillers it-
        it hasn't fully relieved it but if I don't take them
8
        I'm in worse pai:n.
10 P:
        [So-
        [Yes.
11 D:
12
           (1.0)
13 D:=> And how- how able do you feel to sort of get- get along
        sort of- coping with it?
15 P:=> Er::m it does affect my m- l- my mobility on the war:d.
16 D:=> Yes.
```

The doctor begins the first sequence in this activity with a q-word question (>what did you want to do about the pain<?). This is followed with a suggestion as a rush through (=Er did you have some idea to think well I'll take more of this or less of that or-). The design of the doctor's inquiries offer control to the patient with regard to the plans for his treatment and following the doctor's acknowledgement of the difficulties the patient shares with him (lines 6-11), there is a pause in talk. This is followed with another q-word question at line 13, again opening the floor for

the patient to share his experiences from his lifeworld perspective. The patient uses this slot to begin description of the impact his pain has on his work at the hospital (line 15). The doctor uses "Yes" as a continuer at line 16. The conversation that follows is shown below.

Extract 2b (12.1.15C2)

```
15 P:
        Er::m it does affect my m- l- my mobility on the war:d.
16 D:
17 P:
        Erm it's obvious that I have- (0.3) like I'm limping now
        basically so it's obvious I have a limp.
18
19 D:
        Yeah.
        .hh Are you back at- you [back at work?
20 D:
21 P:
                                  [Yeah since the first of
22
        erm November.
23 P:=> .hh I had to- [just had to go back.
22 D:
                       [C-
23 D:
        Yeah.
```

As the patient shares his narrative, the doctor seeks confirmation that the patient has actually returned to work (line 20). Following his confirmation in overlap, the patient makes an important observation at line 23, describing his return as an obligation for him to return. The doctor cuts off his own talk as he hears this, and then uses "Yeah yeah" as an acknowledgement token for this news. The conversation is continued below.

Extract 2c (12.1.15C2)

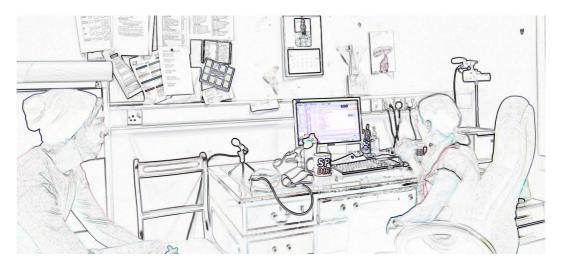
```
A- and do you think the fact you've had to go back has
24 D:
25
        that been a good thing or a-
26
           (1.0)
27 P:=> Er::m (0.7) .hh it's forced me ter:: (0.3) reconci:le
        (0.5) with the pai:n that it's going to be constant
28
29
        [and it's (.) you know-
30 D:
        [Yes.
31
  P:
        I'll have to live with it (0.2) basically,
        And er: even in the working environment,
32 P:
33 P:=> Like the work has been very good about it but .hh tha:t
34
        kind of (1.0) ki:ndness only lasts so long I suppose.
35 D:
        Yeah yeah.
36
           (0.5)
```

The doctor makes more inquiry in to the patient's experience from a biopsychosocial perspective at lines 24 and 25. There is a one second pause as the patient considers the doctor's question. In his answer, the patient uses further observations that offer the doctor insight into the patient's view of the future; his descriptions of reconciliation to constant pain (lines 27 & 28), and it being something he will have to live with, even in the working environment (lines 31 & 32). His further reflections on the limits to his employer's support, current and future, reveal another facet to his worries.

Relationship breakdown and difficulties at work

In this consultation, the doctor and patient are considering treatment for the patient's abdominal pain. The patient tells the doctor that he has been suffering with pain in his abdomen, and that this pain has been causing him concern. During their exchange of greetings at the start of the consultation, it is clear that the patient and doctor are well acquainted; although the patient comments that they have not met for more than a year (not shown). We join the consultation after their exchange of greetings.

Extract 3a (12.8.14C13)



Picture 3: "O::kay." (line 24)

```
1
   D:
        How's things? ((patient sits down))
2
   P:
        Ah not great.
3
   P:
        Me stomach's been absolutely horrendous recently so (.)
4
        °(got quite)° worried about it.
        Righ:t, what's been going on with it?
5
   D:
6
        erm I'm not entirely su:re it's- (0.3) a lot of
   P:
7
        indigestion,
8
   D:
        [Yeah.
9
   P:
        [Erm so I get- I was here a few weeks ago,
10
        erm because it was just in so much pain.
11
   P:
         .hh >it was the< same thing- i- i- it started with
12
        the same thing about a few years a[go.
13 D:
                                             [Yeah.
        But >it was< just like acid reflux.
14 P:
15 D:
        Right.
        Erm and that'll settle with- with er the omeprazole,
16 P:
17
   D:
        Mmm.
18
   P:
        (>Quite easily<) but I've been on omeprazole for like
19
        two weeks now.=
20
   P:
        It's- it's not got <u>any</u> ([place).
21
   D:
                                  [ mm
22
   P:
        It only seems to have got worse [really.
23
   D:
                                          [Right.
24 D:
        O::kay. ((doctor turns to face computer))
```

The patient has set the scene for the consultation, with his abdominal troubles despite him taking some commonly prescribed treatment used to reduce gastric acid production (omeprazole). The doctor responds with acknowledgement tokens as the patient describes his symptoms and failed attempt to manage them (lines 3-23). The doctor attempts to close the sequence at line 24, with "O::kay" as a signal to the patient that she has responded to her initial enquiry (Beach 2009). The doctor does this in concert with a turn away from the patient, towards the patient's electronic record, visible on the computer screen.

The patient continues his account at lines 25-27, but the doctor does not respond to these turns. The doctor begins a new activity with biomedically focused information gathering at line 29. The patient tells the doctor that his bowels have been 'terrible', and the doctor follows up this response with further biomedically focused questioning (not shown). The doctor begins to explore lifeworld context in the talk that follows (see extract 3b below).

Extract 3b (12.8.14C13)

9 lines omitted (doctor asks about symptoms affecting patient's bowels)

```
39 D:=> What's- what's going on in general though? =
40 D:=> =W- Are you wor:king [or&
41 P:
                              [Yeah erm-
42 P:
        I'm <working> for the NHS in (0.3) in erm (0.4)
43
        Newtown.
44 D:
        Yeah.
45 P:
        At the moment just doing some (u.c.) like admin.
46 D:
47 P:
        Erm so I've been there for about eight months,
48 D:
49 P:
        Erm sh- Apart from that not much b[ut-
50 D:=>
                                           [Right so with
51
        Xxx:xxx ord
52 P:=> No we broke up ab(h)out a month ago [so.
53 D:
54 D:
        [Okay.
55 P:=> [It wouldn't surprise me if it was linked but
        [it's-
56
57 D:
        [Right.
58 P:
        It did start slightly before that r[eally.
59 D:=>
                                            [Right has
60
        it changed since then?
61 P:
        It seems to have got worse since then.
62 D:=> And is that a permanent break up do you think?
63 P: Er it's likely to be.
```

```
64 P: Yeah.
65 D:=> And how are you (.) about that?
66 P: Erm It's- as- relatively decent about it.
```

It is the doctor who first seeks more information about the lifeworld context for the patient's symptoms at line 39. She does this through a 'general' enquiry, and then maintaining speakership with a rush-through to her next turn at line 40. The doctor focuses and specifies her request, asking about the patient's current employment status (Are you wor:king [or¿).

The doctor uses 'right' as closing of this sequence at line 50, and switches topic to ask about the patient's relationship status. The patient's revelation about his recent break-up is made with a laughter particle (line 52), which may denote some emotion (Haakana 2001). The doctor's enquiry therefore provided opportunity for the patient to bring information about his lifeworld to the conversation. His expansion, starting at line 55, shares his considerations of the breakdown of his relationship as a potential contributor to his symptoms. Again, the doctor follows up with further exploration of his changing symptoms in view of his relationship troubles (line 60). The doctor asks the patient to talk more about the break up and how it has affected him (lines 62 and 65).

The doctor follows this talk with further questions about the patient's current alcohol use, appetite and diet, and then presents two treatment options to the patient (not shown). The options she has outlined are for the patient to increase his omeprazole dose, or to stop the treatment and undergo a test for a possible bacterial cause for his symptoms. The doctor has told the patient that if the test was carried out and found to be negative, he would be offered further investigations at the hospital. We rejoin the consultation as the doctor asks the patient to make a choice.

Extract 3c (12.8.14C13)

98 lines omitted

```
165 D: But .hh its up to you whether or not you want to maybe try
166 the higher dose of omeprazole or:, ((patient nods))
167 D:=> .hh tch Y know go straight ter coming off it an:d so we can
168 get the (0.3) the aitch pylori test done.=
169 D: Up to you.
```

The options are presented to the patient at lines 165-168. The latter option of stopping the omeprazole and having the test (aitch pylori) is presented as a more drastic step: "y know go

str<u>aight</u> ter coming off it". The doctor's completion of the sequence at line 169 is made with "Up to vou". She uses this turn to pass speakership to the patient.

Extract 3d (12.8.14C13)

```
169 D:
        Up to you.
170 P:=> (Well) the other problem is cos I've been (0.5) erm (u.c.)
        I (was having a lot of) migraine from earlier in the year
172
        cos (0.3) (probably in front of) the computer.
173 D:
        So I had a bit of time off so they're not (0.3) incredibly
174 P:
175
        pleased with me at the mome[nt.
176 D:
                                    [Right.
177 P:=> So I really need to avoid any time off.
        [Yeah,
178 D:
179 P:=> [So (0.4) probably better going with the safer option.
180 D:
        [Okay.
181 P:=> [Doubling up the omeprazole (really).
182 D:
        [(For now.)
```

The patient's narrative at line 170 provides lifeworld context to the decision he faces: avoidance of conflict with his employer. His justification of choice is shared with the doctor. In doing so, he couples the "need to avoid any time off" (line 177) with this being the "safer option" (line 179). The doctor endorses his choice at line 180 in overlap, and then the patient confirms what he means in his description of the "safer option" at line 181 (Doubling up the omeprazole).

Extract 3e (12.8.14C13)

```
[(For now.)
183 D:=> [.hhh Well shall we try doubling the dose then and seeing if
184
        that (.) helps?
185 P:=> Yeah.
186 D:
        Y[eah
        [I- di- di- did last time so:
187 P:
188 D:
        O:k.
189 P:
        So maybe something similar.
190 D:
        tch .hh but I'd say-
        Give it four weeks on the higher dos:e,
191 D:
        An then (0.5) I think >we shoul- maybe then- maybe try
192 D:
        dropping down to one a day (.) again.
193
        .hh And seeing how it goes.
194 D:
195 P:
        Mmm.
196 D:
        Is that alright?
197 P:
        Yeah.
```

In the patient's turn at line 187, he follows his confirmation of the planned dosage increase with his previous experience of the benefit afforded through this change. The sequence finishes with the doctor offering the patient a timeframe over which he should take the increased dose.

A partner's reported concerns

In the consultation extracts below, the patient was making her first visit to the doctor to discuss her cough. Alongside her own concerns about her cough, the patient repeatedly presented those reported to be of her boyfriend (not present in the consultation). In exploring her symptoms and treatment options, the patient referred to her boyfriend frequently throughout the conversation she has with the doctor. We join talk after an exchange of greetings, as the patient tells the doctor why she has decided to attend.

Extract 4a (26.1.15AMC1)

The patient's description of her cough sanctions the doctorability of her complaint in a number of ways (Heritage and Robinson 2006). Her turn design uses 'just' as a particle to add emphasis to the persistent nature of her symptom (Lee 1987). Emphasis is also made by repetition (Norrick 1987), as she uses the words 'on and on and on' in her description of her cough. A hint at lifeworld context relating to her decision to consult is added as she invokes her boyfriend as third party, displaying her choice to attend as sanctioned and shared with him (Heritage and Robinson 2006). The additional context includes the boyfriend's annoyance (an emotion), and her experience of the impact her cough (attribution of at least some of the ownership of the annoyance her cough is causing to her boyfriend).

When the patient makes this first reference to her boyfriend during her turn at line 3: "it's really really getting on my boyfriend's nerves=", she uses repetition once again to add emphasis (Norrick 1987). In sharing her boyfriend's advice to "go to the doctor's" at line 4, she lowers the tone of her voice and raised the volume of her speech, jutting out her chin as she speaks. Her parody of his talk brings him into the conversation. In sharing her narrative, she avoids lone ownership of her concern (Gill 1998). The doctor begins to respond in overlap, as shown in the continuation of the extract below.

Extract 4b (26.1.15AMC1)

```
5 P: So: yeah [that's it.
6 D: [is it getting on your nerves?
```

```
7  P:=> erm (0.5) ↑I ↑guess it has bee:n (0.6) but >I just haven't
8     been noticing it as much as him< =
9  P: = >But it's like I can feel like when I go to the gym and
10     stuff and I'm exercising< like I can feel like there's
11     like <mucusy:ness (0.3) >on my chest,=
```

As the patient offers closure to her problem presentation at line 5 (So: yeah [that's it.), the doctor places a question in overlap, moving the focus of conversation away from the patient's boyfriend's opinion and back to the patient's own, and requesting expansion (line 6). The doctor uses the same phraseology in design of her question, "[is it getting on your nerves?". This practice of 'refocus' was used by the doctor across the conversation she had with the patient.

In replying to the doctor, the patient makes a comparison of her awareness of the cough with that of her boyfriends in her initial turn (lines 7 and 8). The patient follows this turn with an expansion as a rush-through (Schegloff 1982), bridging a possible juncture between turn completion units at lines 8 and 9. The doctor's question therefore provides a space for further elaboration from the patient, with reflection on the impact her cough has had on her, rather than the concerns of her boyfriend. However, the patient's narrative once again includes description of her boyfriend's annoyance.

Extract 4c (26.1.15AMC1)

11 lines omitted. (Patient talks about her experiences of her symptoms)

```
P: er:m (0.5) Becau:se (0.5) we went to my mum's sixtieth (0.3)
which was at the beginning of November (0.7) tch an:d I was
definitely coughing a lot then (1.0) and then it's just been
yeah like definitely like evening times and like I say when
I'm >exercising< I notice (0.4) like the chestiness,
P:=> (sniff) And then (0.6) Dave was like you're always hacking
away "you're always hacking away (U.C.) okay .hh haha
so yeah (.)[like-
```

The patient's reflection on symptoms continues with use of words to convey the ongoing and prevalent nature of her cough. In her description of when she notices her cough, she adds weight to the continuing nature of it: "yeah like <u>definitely like evening times</u>". She returns to her previous description of symptoms in her chest whilst exercising (lines 26-27). Dave's opinion is provided again at lines 28-29, conveying and bolstering the continuous and chronic nature of her cough, and reintroducing his frustration. Throughout the patient's turns at talk, she voiced her boyfriend's opinions again and again, sharing his frustrations with the doctor. Each time, the

doctor focused talk back to the patient and her opinions and experiences of her symptoms, and did not enter in to dialogue about the opinions and frustrations held by 'Dave'.

The history taking continues, with the patient making further a reference to her partner as this activity progresses ("well Dave just says it's like I'm hacking,"). Following an examination of the patient's chest, and some more enquiries about the patient's general health, the doctor changes topic and begins to talk about the patient's candidate diagnosis and also treatment. We rejoin the conversation as the doctor provides her opinion with regard to the patient treating her condition with antibiotics. In designing this talk, the doctor takes a biomedical perspective, describing the absence of specific clinical features that would warrant treatment with antibiotics.

Extract 4d (26.1.15AMC1)

```
192 D:=> Erm hhh Whether you'd get any benefit from antibiotics? =
193 D:=> = I dou:bt it [in all honesty=
                       [<u>N</u>yeah.
194 P:=>
195 D:
        =[because you've not got any temperatures,
196 P:
        [>Okay<. ((patient nods))</pre>
        You're not short of breath,=
197 D:
        =You've still got the mucus.
198 D:
        erm Your chest sounds perfectly cle:ar.
199 D:
        [There's no crackles.
                                ((patient nods))
200 D:
201 P:
        [↑Okay.
        [There's good a[ir entry.
202 D:
203 P:
        [Okay good.
                        [Yeah yeah. ((patient nods))
```

The doctor's treatment recommending action is designed as an assertion (Stivers et al. 2017). The patient's response at line 194 is made in overlap, but with a particle at the beginning of her turn that introduces some ambivalence into her agreement with the doctor's assessment. The doctor offers more biomedical context as post expansion, with acceptance in overlap from the patient. She offers the patient mitigations in her post assertion expansion, projecting declination of antibiotic supply. Her mitigations fit with practice observed in US paediatric clinic data:

"Although the named treatment is potentially relevant, treatment is being oriented to as relevant, the parent is not offered a solution but rather is told which solution is not an option." (Stivers 2006)

The doctor shares more biomedical context (negative clinical details and negative indications for a chest x-ray). The extract below shows the patient's response following on from this sequence.

Extract 4e (26.1.15AMC1)

10 lines omitted (doctor providing negative clinical details to rule out chest x-ray requirement).

```
214 P:
        Yeah no that's what I- er that's what I thought it could've
215
        been was I- a- a chest infection and it had just been there
216
        and there and there and carried on.
217 P:=> But I mean (.) I think it's just annoying more than
218
        anyone- anything else. ((gaze turned away from doctor))
219 D:
        Yeah.
        But mmm maybe- maybe I just carry on with the=
220 P:
221 D:
                                 [How-
        =honey and lemon. ((patient rolls her eyes)
222 P:
        How bad is it?
223 D:
224 P:=> Tch well- (.) it er fobv(h)ious(h)ly has p(h)issed o(h)ff
225
        Dave [(u.c.)
             [fIrrespective of it annoying him,
226 D:
227 D:
        fHow bad is it?
```

In response to the doctor's diagnosis, the patient reflects on her thoughts about her cough, and makes an interesting self repair at line 217: "but I mean (.) I think it's just annoying more than anyone- anything else.". The patient looks away from the doctor as she says this. Dave's frustrations are voiced again at lines 224-225. The consultation continues, with further voicing of Dave's opinions and of the patient's experiences of her symptoms. The doctor responds to these concerns through re-focusing talk on the patient's own opinions, through her repetition at line 227 (How bad is it). The patient returns talk to antibiotics later in the consultation (see below).

Extract 4f (26.1.15AMC1)

57 lines omitted (doctor and patient discuss the patient's cough)

```
285 P:=> I mean I don't wanna take antibiotics unless it's (.) you
        know (2.0) "necessary" really necessary.
286
        ((patient gazes away from doctor))
287
288 D:
        Okay.
289 P:
        Yeah.
290 D:
        Okay.
        Well I guess just keep an eye on it then?
291 P:
292 D:
        Are you happy to-
293 P:
        Yeah.
294 P:
        And be more actually aware of it, ((Raises her eyebrows))
295 P:=> And when it is annoying and if there is other things that
        are making it happen.
297 D:
        Yeah yeah.
298 P:=> And just carry on doing honey and lemon [and t-
299 D:
                                                  [I think (0.2) yeah.
300 P:
        [And things like that.
301 D:
        [I think you're doing really good (0.2) [stuff-
302 P:
                                                  [Yeah.
304 D:
        You're keeping hydrated,
305 P:
        mm.
306 D:
        You're aware that you've got a job that talks a lot
307
        [and that your mouth will get dry=
308 P:
        [mm.
        =and it'll irritate it a bit.
309 D:
310 D:
        Erm,
311
        (1.5)
```

The patient shifts talk back to discussion about antibiotics, and her thoughts regarding their necessity. Her turn is delivered with an emphatic pause, and in a measured fashion. She turns her gaze away from the doctor as she speaks. The doctor's inquiry at line 292 is designed as a polar interrogative and cut short by an agreement token from the patient, followed by a continuation of her prior turn (keep an eye on it ... and be more actually aware of it). In responding to this, the patient's agreement is qualified at line 303 with the raising of her eyebrows. Her turn design expresses some sense making (lines 294-5), as she talks of her awareness of her symptoms, and mentions annoyance again at line 295, already described as belonging in part to her boyfriend. She uses "just carry on" in her turn design at line 298, reexpressing the proposal she made at line 222 with a notable rolling of her eyes as she did so: to continue her approach to treating her cough with honey and lemon. In answering this proposal, the doctor congratulates the efforts the patient has made, her insights into the ways her symptoms will affect her from one biopsychosocial perspective: her job and the talking it requires from her (lines 306-307). On completion of these sequences, there is a marked pause at line 311. The extract continues below.

Extract 4g (26.1.15AMC1)



312 D:=> I \underline{am} happy to give you the prescription so that if you want

313 to it will save you coming back=

7 lines omitted ((doctor advising return if no better in 2 weeks))

321 D: So then at least you've got a plan=

322 D: =So you're not [having to keep coming back,

323 P: [Yeah.

```
324 P:=> Yeah that sounds sensible doesn't it?
325 D:
        And then-
326 P:
        [Yeah,
327 D:
        [Yeah just [keep it in your wallet=
328 P:
                    [Okay.
329 D:
        Keep the actual prescription in your wallet.
330 D:
        Don't cash it.
331 P:
        >Yeah yeah [yeah.
332 D:
                   [erm (.) Are you allergic to anything?
333 P:
        mm Don't- no [not that I'm aware.
334 D:
                      [Are you on the pill or anything?
335 P:
        I'm on (.) yeah microgynon (.) pill.
        (1.5) ((doctor typing))
336
337 P:=> Yeah that sounds sensible. ((gazes away from doctor))
338
           (2.0)
339 P:=> .hhh Ay ay ay.
```

At this point, the doctor makes a further offer for "the prescription" (line 312). This option was first alluded to at line 192 (Whether you'd get any benefit from antibiotics?). This is followed with further justification for the reasoning behind the offer: convenience. The doctor describes a further safety net if the patient uses the prescribed medicine but it is not effective, (not shown). The doctor's proposal is met with agreement in overlap from the patient at line 322. Further, at line 324, she makes a positive assessment of the plan in her reply with a tag question "yeah that sounds sensible doesn't it?". The doctor reinforces her advice that treatment should not be started immediately, and again the patient agrees. The sequence ends with a repeat from the patient; her assessment that the plan "sounds sensible" is repeated (line 337). This time, she shifts her gaze significantly away from the doctor and towards the chair beside her, as if talking to another conversation participant (picture 4). The two second pause in talk is followed by an expression of relief from the patient at line 339.

5.2.2 Lifeworld context is shared by the patient but not addressed by the doctor.

In the extracts from the two consultations in this section, the patients share their lifeworld views during talk about medicines, but the doctors do not address these. Instead, they pursue a biomedical agenda. Of note, both consultations were made by the patients for pre-planned activities. In the first consultation, the patient is returning to receive an intra-articular steroid injection to treat her shoulder pain, following her assessment at an earlier consultation. In the second consultation, the patient attends after being told by the practice staff that he must come to the surgery for a medication review.

Self-care: Expressing difficulties with activities of daily living

The patient has attended the surgery for a follow up appointment, regarding pain affecting her arm. It is apparent from the conversation that the patient and doctor have already discussed the option of the doctor providing the patient with an intra-articular steroid injection into her shoulder to help her symptoms. We join the conversation at the beginning of the consultation.

Extract 5a (12.8.14C11)



```
1
   D:
         ↑Hi: [how are you?
2
   P:
               [(Hi)
3
   P:
        Not too bad.
4
         (0.7) ((door closes))
5
   D:
        Good.=
6
   D:
        =Come in, take a seat.
7
   D:
        Right you've come about your shoulder haven't you:?
8
   P:
        Yes.
               ((patient standing))
9
   D:
        Yeah.
10
   D:
        Okay how's it been since I last [saw you?
                                           [Well I'm not-
11
   P:
         (0.7) ((patient trying to take off cardigan))
12
13 P:=> See I struggle like (.) say getting [me cardi off first.
14 D:
                                               [ | mmm.
```

Following their exchange of greetings (lines 1 to 4), the doctor asks the patient to sit down (line

6). The doctor sets the agenda for the consultation; an arranged follow-up consultation with a

pre-defined activity articulated to the patient by her at line 7 (Right you've come about your shoulder haven't you:?). The patient agrees to the doctor's suggested activity at line 8.

The doctor makes enquiry into the patient's symptoms since the last consultation as the patient is still stood next to her chair (line 10). The patient stays standing as she tries to remove her cardigan (line 12, picture 1). Her difficulties prompt her to highlight her difficulties with dressing to the doctor at line 13, and this is met with an acknowledgement from the doctor token in overlap. The patient's account has provided biopsychosocial context to the presentation of her symptoms, and presents this as a form of rationale to legitimize her concern. The conversation continues below.

Extract 5b (12.8.14C11)

```
=erm I've not took any (.) painkillers yesterday today
     =>be:cause I th- thought well if I'm having the injection
        (0.4) you know it migh:t,
17
        (1.0) ((patient waves her hand))
18
19 P:=> But it's like I say I don't think it's (0.6) >it's not
        the< (0.4) a- a ↑bit the shoul, ((holds her shoulder))
21 P:=> [But it's mainly he:re. ((slaps her deltoid))
        [It's the (main prob-
        .hh I mean cos we- yeah. ((patient sits down))
24 P:=> It is mainly (.) say- though it's me muscle.
25 D:
        Yeah.
26 D:=> I mean though- (.) we discussed it last time.
27 P:
28 D:
        That those symptoms in the upper arm are quite
29
        [suggestive=
30 P:
        [Yeah.
31 D:
        =of tendoni[tis in the shoulder.
32 P:
                   [mm.
```

The patient's further talk is oriented to the consultation as a plan for her to receive an injection in to her shoulder, shown by her physical action of cardigan removal in the prior sequence and by her reference to the procedure at line 16. However, at line 19 she raises her doubts about the location (line 21) and cause of her symptoms (line 24). The doctor frames her response with reference to discussion at the previous consultation (line 26). In doing so, her turns that follow are presented as a 'revisit' of diagnostic information with the patient. We rejoin the consultation as the doctor moves to close talk related to diagnosis and begins a new sequence, focusing on the pre-planned treatment.

Extract 5c (12.8.14C11)

14 lines omitted (patient telling doctor about her shoulder pain symptoms)

```
47 P: >And like say when it's in my sh-< I \underline{\text{kno:w}} because (0.3) get a bit of p-
```

```
49 D:
50 P:
        In me \underline{c}ollar bone (0.4) you know when it's-
51
         (0.7)
52 P:
        But this is er like [I say,
53 D:=>
                              [Okay.
54 D:
        If (.) erm I do the injection today,
55
           (0.6)
56 D:
        tch Will you be able to rest it for a couple of days?
57
58 P:=> Yeah [cos I'm off work this-
59 D:
              [Okay.
60 D:
        It's a very safe procedure,
61 P:
        >And what I'll do is< I'll make the area-
62 D:
63 D:
        I'll clean the area,=
        =Make sure it's sterile,
64 D:
65 P:
```

As shown in lines 47 to 52, the patient continues to question the doctor's diagnosis. The doctor's "Okay" at line 53 is used as a device to constrain the patient's talk, close down this topic and move discussion to consideration of the procedure she has planned (Beach 2009). As the patient starts to add more biopsychosocial context to her agreement to rest her shoulder at line 58 (with, "cos I'm off work this"), the doctor's 'yeah' comes in overlap with 'cos I'm off' and is responsive in the first place to the patient's 'Yeah'. The doctor uses "Okay" again to attempt to constrain further talk. The doctor describes the procedure to the patient, telling her how she plans to perform this, the potential risks following the injection and how to identify them, and instructions for rest and pain control after the injection has been done (not shown). We rejoin the consultation as the doctor finishes this activity with a sequence outlining the need to sometimes repeat the injection.

Extract 5d (12.8.14C11)

34 lines omitted (doctor talks to patient about the planned procedure)

```
100 D:
        The other thing is the- these injections don't always
101
        work (0.9) so sometimes they need to be repeated.
102
           (0.9)
103 D:
        After about six weeks or so- eight weeks.
104
           (0.6)
105 P:
        Righ:t.
106 D:=> But we'll give one a go and [see.
                                      [.hh Well (1.0) I mean i-it-
107 P:=>
108
           (1.2)
109 P:
        I suppose it has come gradual but like I say (.) you just
110
        carry on and carry on=
111 P:
        =But [it's getting that way-
112 D:
              [ mm
113 P:=> .hh I'm finding it hard- [
                                          ] to get dressed.
                                   [Right.
114 D:
115 D:=> .hh Do you want to give it a go and see how it goes or-
116 P:
        Well as I say I don't-
117 P:=> I can't really go on like this,=
118 P:
        =[it's getting (.) like I say that- that- that is it.
119 D:
         [Okay (.) alright
120
         ((patient stands and moves her arm behind her back))
121 D:
        That's a restriction yeah.
```

The doctor's turn at line 106 signals closure of talk about the injection, and her desire to get on with the procedure. However, the patient is not ready for this yet. Instead, she tries to return talk to consideration of the impact her symptoms are having on her activities of daily living (line 107). Whilst the doctor provides an acknowledgement token (line 112) in overlap with the patient's turn at line 111, she is not willing to discuss these issues further. The doctor's turns at 112 ('mm') and the 'right' in line 114 are a little hasty, working as preemptory acknowledgement tokens and thus closing.

The doctor asks the patient to make a choice about having the steroid injection (line 115). In making her choice, the patient sees no other option than to have the injection (lines 116-120), showing the doctor her difficulties with movement. The conversation continues below.

Extract 5e (12.8.14C11)

```
122 P:=> I mean I- I mean today I was telling me husband, er,

123 I was on the: (0.3) running machine and I got an itch.

124 .hh And I couldn't get me ar:m [across.

125 D: [Yeah yeah.

126 P: It's hurting there now: [ ] you know.

127 D: [Okay.]

128 D:=> Why don't you pop yourself on the bed then,

129 D: Just sit on the edge of it okay? ((patient stands))
```

The patient's further description of the ways in which her shoulder symptoms have impacted her activities recount conversation she has had with her husband, again offering opportunity for the doctor to explore lifeworld context (lines 122-124). However, the doctor makes no specific receipt of the patient's story; she uses "Okay" as topic closure and asks the patient to move to the bed in the consultation room to have the injection. The patient obliges, standing up in preparation to move to the bed in the consultation room. Following the talk in the extracts above, the doctor prepared the injection and administered it into the patient's shoulder. In talk that followed, the doctor provided information about aftercare. No further lifeworld context for the patient's condition was raised by the patient.

Setting the agenda for a review of medicines

In the consultation extracts below, the patient's lifeworld concerns are ignored and blocked, as the doctor pursues talk belonging to her own biomedical agenda related to a review to 'optimise' the patient's medicine. Throughout the consultation, the patient and doctor agendas are quite

separate, and a common ground for talk about the new medicine is not established by the participants.

During the patient's account for his visit, he tells the doctor that he has been asked by the surgery to attend for a review of his medicines used in the treatment of his diabetes. He also tells the doctor that he has been suffering with a number of symptoms. In the interests of focus for this Chapter, these sequences are not shown. To summarise, he tells the doctor that he has been experiencing pain in his foot. He has also told the doctor that he has been suffering with feelings of tremor and faintness (normally associated with hypoglycaemia), despite his blood sugar measurements being normal or high (not shown). As part of the plan for future management of his condition, doctor recommends a further review with the practice nurse to discuss his insulin treatment, and the patient agrees. We join the consultation as this agreement is reached.

Extract 6a (26.1.15PMC1)

```
1
   D:
        Can you come and see her \tomorrow?
2
   P:
        Yeah,
3
        [One thirty?
   D:
4
        [Yes (0.4) no problem.
   P:
5
   D:
        Okay >you can< have a chat with her abou: t it.
6
           (5.0) ((doctor using computer mouse))
7
        So- ((doctor glances at patient))
   D:
8
        Besides that everything's okay,
   P:
        Just like the little pains here and there an \mbox{.}\mbox{hhh}
9
   P:
10
        especially that- with that s- (0.5) foot in the morning,
11
           (0.4) ((doctor looks at computer))
```

At the end of their agreement (line 5), the doctor is heard to be using the computer mouse, presumably making arrangement for patient's appointment on the following day. At line 7, she glances at the patient and begins a turn (with 'So" projecting an upshot from what is on the computer). This is cut short by the patient, as he begins a new sequence of talk, again about his painful foot. He makes a temporal reference as to when it affects him most (line 10). This turn is not addressed by the doctor. Instead, she looks at the computer briefly (line 11). In her turn that follows, she begins talk about a new treatment. This sequence begins at line 12 in the extract below.

Extract 6b (26.1.15PMC1)

```
D:=> .hh Cos ↑what I wanted to speak to you as well in <u>general</u>
was about erm (0.8) the erm- (0.4) your cholesterol level,
(0.4) and it- that's sort of above (0.3) target range,=

D:=> =And it's usually recommended that you go on a stat↑in=

D:=> =A cholesterol lowering tablet,

D: .hh erm (0.5) Cos you're diabetic.

D:=> =Now I don't know- have you bee:n on one before?=
```

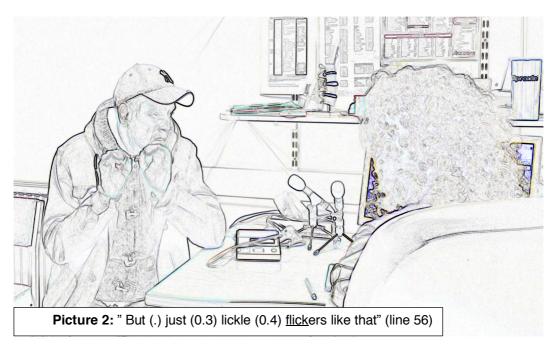
```
19 D:=> =Can you remember?
20 P:
        No. ºneverº.
21
        (0.9)
22 P:=> Well my diet's well- (0.3) I eat how- how my body wants
        it's like in the mor:ning I'll have a- s:omething to eat,
23
24 D:
25 P:
        And through the day (0.2) maybe snack on the s:mallest
26
        amount of thing [but I-
27 D:
                         [mmhm
28
           (0.3)
29 P:
        Mainly eat (0.3) in the evening.
30 D:
        mmhm,
        And sometimes it might knock me out and send me to
31 P:
32
        sleep.=
33 P:= next thing it's the mor:ning but sometimes I do eat late.
34 P:
        I don't eat big meals through the day.
35 D:
        Do you think that's maybe why you're feeling a little bit
36
        shaky?
37 P:
        I don't know,
38
           (0.2)
39 P:
        I don't know.
40 D:
        Maybe (0.7) .hh erm,
           (1.5)
41
42 D:
        Okay (.) erm,
43
           (1.9)
```

In the first sequence in Extract 6b, the doctor situates her upcoming talk about a medicine in biomedical terms: the patient's cholesterol level. In doing so, she frames this as talk as "in general" at line 12, setting the scene for the talk that follows as a less specific to the patient's concerns he has raised, and more about treatment for his diabetes as a condition. The doctor initially situates the cholesterol as something separate to the patient, before self-repairing at line 13 and giving the patient ownership of this (the erm- (0.4) your cholesterol level). Her justification for her to talk with the patient about cholesterol to is again vague at line 14, in terms of his ownership and its import (and it- that's sort of above (0.3) target range).

The doctor's turns at lines 14 and 15 are rushed through, without space for the patient to talk, as she raises the suggestion of a new treatment (And it's usually recommended that you go on a statin). She rushes through again as she adds her clarification as to what she means by "a statin" at line 16 (A cholesterol lowering tablet). She maintains speakership with an indrawn breath at line 17, using a further rush-through between her turns which are latched together at lines 18 and 19. Her inquiries at lines 18 (have you been on one before) and 19 (can you remember?) provide an opportunity for the patient to speak on their completion. He answers both questions with his emphatic, negative response at line 20 (No. oneverone).

In the next sequence, the patient follows the doctor's talk about cholesterol with his talk about his diet. Although cholesterol is related to dietary consumption, the patient's turns are also a continuation of previous talk. Prior to their agreement for him to see the nurse, he was telling the doctor the ways in which he dealt with faintness and tremor through consumption of sugary foods and lucozade (not shown). The doctor briefly rejoins in talk about this topic at 35, before abandoning this and using "okay" as topic closure at line 42. She returns to talk about statin treatment in the continuation of the talk below.

Extract 6c (26.1.15PMC1)



```
44 D:=> So- w- the \uparrowusual recommendation is that you go on a
        cholesterol low:ering tablet called a statin if your
45
46
        cholesterol is above f- five and you're diabetic,
47 P:
        mmhm.
        .hh erm (0.3) but that's because >obviously the<- the-
48 D:
49
        they're trying to re- reduce your risk.=
50 D:
        =Your cardiovascular risk >you know< of having a heart
51
        attack or stroke and .hh erm (0.4) also the <u>risks</u> with
52
        regards to [.hh
53 P:
                    [I have been having little tinglings there in
54
        the morning, ((points to chest))
55 D:
        [mmhm
56 P:
        [But (.) just (0.3) lickle (0.4) flickers like that and
57
        little jus- ((flicks fingers))
58 P:
        Not ba:d [but-
59 D:
                  [(But just on-)
```

The doctor's talk about statins begins again at line 44. In sharing her recommendation, the doctor presents it as third-party guidance, something 'usual' for patients with diabetes. In completing her sharing of the recommendation, she uses more biomedical context, providing the

patient with a numerical justification "above f- five" and a contextual justification that is 'disease' related: "and you're diabetic". It is met with a continuer from the patient at line 47. The doctor's description of the benefits this treatment prompts another interjection by the patient as the doctor takes an indrawn breath at line 53. The patient begins to describe 'tinglings' and 'flickers', gesturing his hands in front of chest as he does so (picture 2). His sharing of these symptoms initiates a new sequence of talk, as the doctor enquires about them.

Extract 6d (26.1.15PMC1)

```
56 P:
        [But (.) just (0.3) lickle (0.4) flickers like that and
57
        little jus- ((flicks fingers))
58 P:
        Not ba:d [but-
59 D:
                 [(But just on-)
60 D: => On what?=
        =Superficially on your chest?
61 D:
62 P:
        Erm, (0.6) it's (.) a little bit (.) but [it's not-
63 D:
        Doesn't last long.=
64 P:
65 P:
        =It's like en erm (0.9) little prod kind of thing
66
        [(I mean.)
                     ((prodding gesture with hand))
67 D:
        [Right.
68 D:
        Okay.
```

The doctor's question at line 60 is immediately followed by an expansion, seeking agreement with her description of 'superficial' pain as preferred. The patient delays his response, and then responds partially (it's a little bit), before repairing and answering an alternative question about the temporal nature of his symptoms. His description of his chest symptoms is made with prodding gesture of his hand at lines 65 and 66, communicating the fleeting and localized nature of the pain. The doctor says "Right" in overlap at line 67, followed by "Okay" at line 68, signaling sequence closure (Beach 2009). In the conversation that follows, the patient shares more lifeworld perspective of his illness experience.

Extract 6e (26.1.15PMC1)

```
69 P:
        And [it lasts for a second or something.
70 D:
            [Is it not when you're sort of-
71 D:
        You're exerting yourself?
72 P:
        Er:: no.
73 P:
        It's just [mainly just like erm the same thing when that
74 D:
                   [No.
75 P:
        starts in the morning. ((points to foot))
76 D:
        [Okay.
77 P:
        [It's just- (0.3) just like (.) one after another really.
78 P:
        °so.°
```

The patient continues his description at line 69, but the doctor moves to start a new sequence about the pain and its relationship to his exertion. Her question is designed with a negative

response as a preferred answer (Is it not when you're sort of- you're exerting yourself?). The patient's response is considered and in line with question preference (Er:: no.). In the patient's turn that follows, he shifts his talk back to his foot pain, gesturing to his foot as he speaks. His description of his pain is temporal at lines 73-75 (when that starts in the morning). The doctor tries to close the sequence again with "No" in overlap at line 74, echoing the patient's initial response, and "Okay" as closure at line 76. The patient's comment at line 77 provides insight into his illness experience. The patient's use of "So" at line 78 is quiet and made with falling intonation, signaling the end of his sharing of lifeworld experience, and passing speakership back to the doctor. The doctor resumes talk below, with 'So...', but rather than using her turn to address the patient's narrative about his foot pain, she returns to talk about statins.

Extract 6f (26.1.15PMC1)

```
79 D:=> So- so- it- to sort of- to reduce that risk and to
80
        improve your circulation,
81 P:=> mm?
82 D:
        Erm (0.3) .hh but w- w- but not j- just th- >you know<
        i- i- it's also to help with i- y- sort of avoiding
83
        .hh problems with what we call end organ damage.=
84
        =So sort of erm .hh it reduces your risk of- of problems
85 D:
        erm (0.4) to do with erm your kidneys?=
86
87 D:
        =Your [kidney and your kidney function,
88 P:
              [Yeah.
89 D:
        .hh Erm (0.3) also obviously the knock-on effect is that
90
        erm .hh if your cholesterol is lower then it may
91
        potentially sort of reduce .hhh your risk of coronary
92
        artery disease as well?
93 P:
        Y[eah.
94 D:
         [You know (.) sort of the blood vessels around the heart
        flaring up,
95
96 D:
        Or: problems with the back of the blood vessels.
97 D:
        The back of the eye as well.
98 D:=> .hh so I don't know how you feel about (0.5) maybe
99
        starting on a cholesterol tablet?
100 P:=> I don't know how to s::ort this stuff out cos like I- I
        went for the at erm a couple of years [with me eyes,
101
102 D:
                                               [mmhm,
103 P:
        [And like (.) I thought they were fine.
104 D:
        [Yeah,
```

The doctor's further descriptions of the benefits a statin treatment may provide the patient are met with slight surprise at line 81, and then continuers in overlap (lines 88 and 93). At the end of her description of the benefit that the statin might provide to protect the patient's sight, the doctor places her question at line 98, asking the patient to consider starting this treatment. The design of her question is made following a noticeable intake of breath, and is oriented to the patient's 'feelings' about the treatment (.hh so I don't know how you feel about). Before completing her turn, she pauses, and follows the pause with the inclusion of 'maybe' starting on a cholesterol tablet. Her turn is thus oriented to contingencies that the patient may express in his answer.

The patient does not answer her question; instead he begins talk about his previous diabetic assessments of his eyes. They discuss his eyesight and previous investigations (not shown). We rejoin the consultation at the end of these sequences, as the doctor brings talk back to statin treatment once more.

Extract 6g (26.1.15PMC1)

15 lines omitted (participants discuss previous investigations of the patient's eyesight)

```
120 P:
        P: I have to wear glasses for that
121
        [sometimes in the morning,
122 D:
        [Okay,
123 P:
       But sometimes [(at night.)
124 D:=>
                       [You've skirted around the issue of the
125
        statin [£ha
126 P:
                [↑<u>Yeah</u>
127 D:
        [The cholesterol (don't y- i-)
128 P:
        [Yeah.
129 D:=> Is that something you're [not keen on [trying?
                                   [er:m I don't know?
130 P:=
131 P:=> I'm not too sure what- what effect it'll have on me or
        what will it do?
```

The doctor's turn regarding the patient's avoidance of talk about statin treatment at line 124 is delivered with a loud laughter particle on its completion. She asks the patient once more about his willingness to try this treatment. Her question, at line 129, is designed with a negative answer as preferred (Is that something you're [not keen on [trying?). Instead the patient delays his response as he answers in overlap. His turns at lines 131 and 132 are telling, as he expresses his uncertainty as to how this treatment works or provides benefit. The conversation continues below.

Extract 6h (26.1.15PMC1)

```
133 D:
        Well the prob- the problem is that er-
        Well I say the problem i- i- (0.6) <u>it</u> will reduce your
134 D:
135
        cholesterol,
136 P:
        [mmhm
137 D:
        [So reduce the risk .hh erm,
138 D:
        There are potential (0.4) side effects to the medication,
        We monitor your liver function (.) very clea- closely.
139 D:
        Erm (0.5) the vast majority of patients don't >sort of<
140 D:
        have any problems.=
142 D:=> Main side effects?=
143 D:=> Sometimes tiredness,
144 P:
145 D:=> Sometimes muscle aches and pains,
146 D:
        .hh There are [lots and lots (.)
147 P:=>
                       [Well I've got that anyway haha
148 P:=> Don't n(h)eed [any(h)more of th(h)at.
149 D:
                       [There are thousands of-
150 D:
        There are thousands and thousands of patients on .hh
```

```
cholesterol lowering tablet and the <u>vast</u> majority of patients don't have any <u>pr</u>oblems or side effects but they're [the-
154 P: [But what <u>cau</u>ses cholesterol though?
155 P: Obviously it's something to do with food but like you know [I'm a heavy eater so?
```

The doctor's further attempts to get agreement from the patient for him to take a statin are brief, with repairs and a biomedical focus (lines 133-135). The benefits of treatment are quickly left as the doctor begins a new sequence at line 138, outlining potential side effects and monitoring requirements. The doctor's warnings of tiredness, muscle aches and pains are met with some reflection and laughter, from the patient. He expresses his lifeworld experience at 147 (Well I've got that anyway haha) and 148 (Don't n(h)eed [any(h)more of th(h)at.).

The doctor does not explore the patient's comments, or provide a slot for him to expand on them. Instead, she begins a new sequence in overlap. The doctor uses population statistics related to tolerability of the treatment to back her position for the benefits of him taking a statin. The patient responds to ask for further clarity at line 154 (But what <u>causes cholesterol though?</u>). In his further expansion, he includes talk about his diet and describing himself as a "heavy eater", again bringing biopsychosocial context to the conversation.

5.3 Discussion

Throughout the consultations selected for this Chapter, all the doctors have addressed disease process and biological factors related to the patient condition in their talk about medicines: i.e. the biomedical perspective. The aim of this Chapter was to show how lifeworld context may be interwoven with talk about medicines by patients, and how this talk may or may not be accommodated by doctors in the conversation that followed.

Patients talk of their own lifeworld experience, consideration or concern offered opportunities for talk from doctors that was patient centred and 'whole person' focused. These opportunities were placed during various sequences across a variety of conversational activities; during patient accounts at the initiation of their consultation, in the review of symptoms and clinical

investigations, and in the planning and review of medicines treatment. Section 5.2.1 showed doctors accommodating the patients' lifeworld in talk about medicines.

In the first consultation, the doctor was empathetic, incorporating lifeworld concerns that the patient shared with her. The doctor maintained her professional responsibility in the provision of safe treatment for the patient, but presented this as a joint venture, and provided 'whole patient' care (RCGP 2013b). The doctor used a biomedical and biopsychosocial approach in her information gathering. Her inquiries provided slots for the patient to share biopsychosocial context in which his decision to request medicine was made, in his previous experience of analgesia and in his lifeworld considerations affecting his choices. The doctor's inquiry into the patient's own experience of his shoulder pain prompted report of his past experiences of using opioid containing analgesia, and the impacts this treatment type would have on his ability to work safely. The doctor acknowledged this as useful information, and the participants found common ground about medicine choices.

In the second consultation, the doctor initiated a review of the patient's plans with regard to his analgesia. This talk prompted the patient to share his difficulties he had experienced on returning to work. Rather than sidelining this issue, the doctor promoted it and explored the patient's lifeworld experience.

In the extracts from the third consultation, the doctor's enquiries provided a slot for the patient to share information about his recent split from his girlfriend. This lifeworld context provided the participants with an opportunity to consider relationship breakdown as a possibly contributing to the patient's symptoms. When conversation proceeded to decision making about future care, the patient shared his preference on the basis of his employment, a lifeworld consideration. The doctor endorsed his choice.

In the extracts from the final consultation in section 4.2.1, the patient made repeated reference to her boyfriend, reporting his opinions and frustrations, and parodying his voice as part of her account for her visit. In the doctor's sharing of her reasoning for the unlikely benefit that a prescription for antibiotics would provide, the doctor took a biomedical perspective (lines 195-

202). This was met with qualified agreement. The patient voiced continuing concerns about her partner's annoyance in her turns that followed (e.g. lines 217, 224-225,295), as the doctor worked to reach a shared decision for no new treatment or investigations. The proposal for a delayed prescription for antibiotics dispelled these concerns. It was met with agreement and a positive assessment of this plan by the patient. The doctor addressed cues about the patient's decision to consult and recognized the benefits a delayed prescription might provide to the patient, from a lifeworld rather than biomedical perspective.

During choice, options and decision talk related to medicines, treatments were weighed up and played out alongside the patients' illness experiences. Patient contributions revealed elements that were high on their agenda, stemming from their lifeworld experience. Doctors accommodated these sharings and were more fully informed about what was important to their patient as part of their decisions. The doctors' understanding of the patients' lifeworld was important in maintaining and building their relationship, and in providing treatment that was holistically optimised for the patient (Barry et al. 2001; Borrell-Carrió, Suchman and Epstein 2004; RCGP 2013b).

In the extracts from the two consultations presented in section 5.2.2, the patients' lifeworld perspective was sidelined in preference for talk as determined by the doctor. Both of the consultations from the present data involved patients with chronic conditions (osteoarthritis and diabetes mellitus). They were also consultations subject to pre-defined biomedical agendas, a planned injection in the first consultation and a review of the patient's prescription medicines in the second. The doctors adhered to these agendas despite the dysfluencies this approach introduced in to talk.

In the first consultation, the patient's lifeworld concerns were not addressed by the doctor, despite the patient voicing these repeatedly throughout the consultation prior to her planned injection.

Instead, the doctor recast the patient's concern about her diagnosis as "going over old ground".

The doctor treated permissible talk in this consultation as only that which was relevant to consenting for the pre-planned procedure; of the patient being able to recognise risks and benefits of an intra-articular injection, and understanding the self-care she would need to adhere

to following the procedure. When asked to verbally consent to the injection, the patient presented herself as having no choice to accept this treatment, through sharing of lifeworld experiences of the impact of her symptoms. The doctor did not explore these reports. Instead, she simply acknowledged them and asked the patient to position herself in readiness for the procedure.

In the extracts from the second consultation, the doctor's attempts to introduce discussion about a new medicine were at odds with the patient's agenda. His sharings of his lifeworld experiences and concerns were constrained by the doctor's talk. The doctor's explanations about the statin treatment were not successful in terms of patient acceptance of this medicine; her talk addressed only a biomedical agenda, and her turns at conversation were not patient-centric in design.

The consultation extracts in section 5.2.2 showed doctors pursuing agendas that were predefined for the consultation. Despite the patients' sharing of lifeworld experience and concerns, the doctors blocked these contributions by moving on to other topics and focusing their talk on their biomedical perspective. Their focus remained fixed on patient acceptance of medicines. These were presented as 'biomedical' solutions to disease. The patients' illness experiences were ignored. The conversation that resulted was prolonged, introduced tensions into talk and left contexts raised by the patient unexplored. The participants failed to find common ground. The extracts showed similarity with those from Barry et al. (2001), who argued that their data showed that "patients repeatedly returned to the concerns of the lifeworld and doctors repeatedly ignored them." (page 503).

5.4 Summary

Some talk about medicines in primary care consultations may include patient sharing of their lifeworld experiences, concerns and considerations. Contributions from the patients' lifeworld paint a broader and personalised landscape of the factors affecting patient choices and experiences as part of discussion about medicines treatment.

The present data showed that doctors may use patient lifeworld perspectives to shape their talk that follows. The accommodation of the patient lifeworld offered opportunities for consultation

participants to find common ground in their conversations about medicines (Brown, Weston and Stewart 2003). The present data also showed two prominent examples of doctors sidelining the patient lifeworld during talk about medicines. The patient and doctor followed different agendas. In the first, the doctor pursued gaining of consent for a procedure. In the second, the doctor pursued talk about statin treatment to lower the patient's cholesterol. The blocking or ignoring of patient lifeworld context introduced dysfunction and redundancy into consultation talk.

Chapter 6: Requests for medicines

6.1 Introduction

Existing CA research concerning the requests of medicines was presented in section 2.6.2. The literature offers limited insight into the ways in which requests may be placed and designed. Much of the literature has focused on requests for medicines to treat acute conditions such as infections or new pain. In the consultation selected for Chapter 4, the request was made for such treatment: a prescription for a course of antibiotic medicine. However, patients are regularly provided with prescriptions for medicines in primary care settings for a much wider variety of reasons (see section 2.2.1).

This Chapter presents examples from the present data to show where patient requests for medicines were positioned within sequence and across consultation activities. Requests were made for new treatments, and for established treatments, already used by patients and documented in their case notes. Requests for medicines were made by 23 patients across the dataset. Analysis revealed a variety of important features in request placement and design, some mirroring those reported in CA literature, and others new. Exploring the ways in which patients and doctors go about this talk is informative for building understanding of where patients might find slots to make requests, and how doctors manage their responses to requests through conversation.

To begin the presentation of findings, this Chapter reports on observations with regard to the sequential environment in which requests were placed (section 6.2). A variety of request designs used by patients in the dataset are presented in section 6.3.

6.2 Positioning of requests

Positioning of requests is analysed across the dataset, first in terms of sequential position (section 6.2.1). The packaging of requests for medicines alongside other primary care services is presented in section 6.2.2. Request placement in terms of consultation phase and associated activity is presented in section 6.2.3.

6.2.1 Sequential position of requests

Requests may occur as a first pair part of an adjacency pair in conversation (Schegloff 2007b) or second pair part as shown by Kendrick and Drew (2014:101). Both of these designs of requests for medicines were observed in the present data: 21 requests were placed as first pair parts; two requests were placed as second pair parts, in response an offer from the doctor.

In the extracts below, the patient makes a request for a medicine in first pair part position. We join the consultation prior to her medicine request, as the patient asks the doctor to authorise some blood tests. The extract details the sequences of talk that took place during this activity.

Extract 1a (12.8.14C8)

```
P:
        The other issue is that I think my blood test is due for
2
        th- the thyroxine (.) but I wondered if I could just have
3
        a test er- for one or two other things like diabetes (.)
4
        cos my brother's [got type two,
5
   D:
                          [Yes sure.
6
        [And erm (.) my renal function as well?
   P:
7
   D:
        [Yeah.
8
        no [problem
   D:
9
   P:
           [(u.c.)
10 D:
        Do you want us to do your \cholesterol and things like that
11
        as [well?
12 P:
           [Yes yeah I [don't mind.
                        [So let's do your <u>fas</u>ting blood test.
13 D:
14 P:
        Okay.
15 D:
        Yep.
16 D:
        Er::m and your thyroid function.=
17
   D:
        =Yeah I think it's due next month isn't it?
18 P:
        Yes that's [right.
19 D:
                    [Yeah we can do your lipid (.) er glucose (.) er
20
        can do a profile.
21 P:
        Yes thanks.
22 D:
        And full blood count any[thing else
23 P:
                                 [yeah (.) no that's fine that's it
24
        [hahaha
25 D:
        [Okay.
26
           (3.5)
                   ((doctor typing and viewing computer))
27 D:
        Yeah so if you just book in for that.
28 P:
        [Right.
29 D:
        [erm It's all on the screen.
```

The patient initiates the sequence of talk about the need for her to have a blood tests as an additional concern at line 1 (The other issue is that I think my blood test is due for th- the thyroxine). Levothyroxine is a commonly prescribed treatment for patients with hypothyroidism, and appropriate dosage of this treatment is determined through blood analysis. She follows this with a further request for a test for diabetes, using her family history of the condition as a

justification. The doctor agrees in overlap, and does so similarly to the patient's further request for a blood test to assess her renal function, placed at line 6. The doctor suggests a further blood test at line 10 to assess the patient's cholesterol level (do you want us to do your ↑cholesterol and things like that as [well?), and then summarises the blood tests she is authorising. At line 27, doctor uses "Yeah so if you just book in for that.", and follows this with "erm It's all on the screen." Robinson (2001b) observed pre-closure of consultations may occur through participants engaging in 'future arrangement' sequences of talk. This may include plans for investigations, treatments, and/or agreements for further consultation. The request for a medicine is placed in the talk that follows the future arrangement sequence, terminated by the doctor at line 29.

Extract 1b (12.8.14C8)

```
29 D:
        [erm It's all on the screen.
30 P:=> Okay is it possible for me to get a prescription [today?
31 D:
                                                           [ | Yeah
32
        (of course.)
33 P:=> [For the Angelique=
34 D:
        [J-
35 P:=> =[And the thyroxine.
36 D:
        [Yep do you want me to send that through?
37 P:=> And the Gaviscon please.
38 D:
        Right.
        Is- if >you can just send it< through to the chemist I'd be
39 P:
40
        grate[ful.
41 D:
             [Ye::s,
```

The termination of 'future arrangement' conversation provides an environment for the patient to initiate a new topic, beginning her request for a prescription at line 29. The request is made in first pair part position. It is met with agreement from the doctor in overlap, shown through the doctor's lexical choice (Yeah of course, lines 31-32), her rising intonation and the positioning of her response without delay (Sacks 1987; Schegloff 2007b). The patient's request for a prescription is followed with post second pair part expansion, defining medicines she requires on the prescription at lines 33 and 35 (Angelique[™] and thyroxine). Again, the doctor responds in overlap with agreement.

The doctor's turn at line 36 is formulated both as an agreement and as an offer to send the prescription (through to the pharmacy), thus demonstrating recognition of the prior turns as requests for particular medicines on the patient's repeat prescription. However, the patient's turn at line 39 shows that her request is not yet finished. The sequence of turns is phrased to itemize each medicine, linking each with "And" and ending her turn at line 39 with 'please', casting this as

a request completion. The doctor responds with emphasis and uses "Right" as a sequence closure in third position at line 40 (Filipi and Wales 2003; Schegloff 2007b).

Extract 2 shows a second pair part request for domperidone (a medicine used for gastrooesophageal reflux). Placement of requests for medicines as second pair parts was not noted in
the review of CA literature. The participants have been discussing an upcoming review for the
patient under his specialist at the hospital. This activity finishes, and the extract below shows the
talk that immediately follows. The request below is made in response to an offer from the doctor
(line 1):

Extract 2a (1.10.14C1)

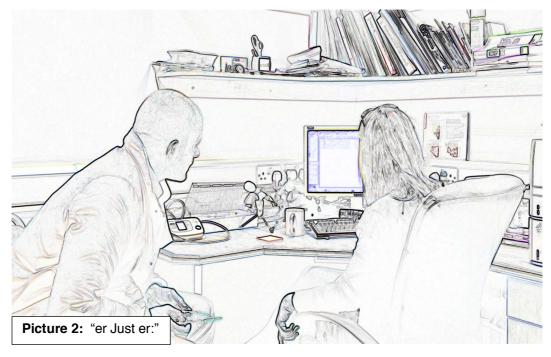


- 1 D: tch Do you need any of your medication?
 2 (0.5)
 3 D:=> Do you need a script [(0.6) printing?
- 3 D:=> Do you need a script [(0.6) printing?
 4 P:

At this point in the consultation, the doctor and patient are both looking at the computer screen (picture 1). The doctor is able to access information about the dates of last supply of patient medications via the electronic clinical record. The doctor begins with an offer of more medicine, but this is not met with a response from the patient. The doctor reformulates her offer with further detail of what she means by her action (do you need a script...). The patient begins with a

marked inhalation at line 4 that indicates the start of his turn and delays turn completion by the doctor. This is followed by the patient's request, in response to the reformulated offer at line 5.

Extract 2b(1.10.14C1)



The patient moves forward towards the computer (picture 2), making his request with some hesitation as he does so. The completion of the patient's request is made with "please." at line 6, and the doctor's response is made in overlap, granting the request placed by the patient.

In summary, the sequential position of requests was evident as first pair part and second pair part turns. This was observed for both single medicines and lists of medicines. The next section shows that some requests for medicines were placed alongside requests for other services.

6.2.2 Packaging requests for medicines among other matters of concern

Some patients requested medicines alone, while other patients placed them along with requests for attention to other concerns. How requests for medicines might be placed alongside other matters of concern were not noted to be featured in current CA literature. In the following extract, a patient places his request for his established prescription medicines at the opening of the

consultation, in response to the doctor's solicitation of the patient's reason(s) for attending. The patient's request for his medication is made alongside other items for discussion, as shown below. We join the consultation as talk begins.

Extract 3a (12.1.15C1)

```
Hi (u.c.) hi (.) (u.c.) ((door closes))
   D:
        Take a seat err-
           (1.0) ((doctor and patient sit down))
   D:
        er Happy new year [err-
5
   P:
                           [Yeah.
          (1.0)
   D:=> What can we do for you?
8
   P:=> Right erm basically: errm I tri- tried to ring up (.) f- for
9
        an appointment to see Doctor XXXX.=
10 P:
        =I normally< see Doctor [XXX
11 D:
                                 [Oh yeah yeah.
        .hh Errm but I couldn't get an appointment,
12 P:
13 P:
        But erm my sick note's run out,
14 D:
        Right.
15 P:=> I need- I need tha:t and I need my medication as well,
        But also I feel really depressed at the moment .hh and erm,
16 P:
          (0.8)
17
18 P:
        I'm not sleeping at all,
19 P:
        I >didn't< have any sleep last night.
20
                   ((Doctor nodding, looking at computer))
           (2.5)
```

Following an exchange of greetings (lines 1-5), the doctor opens the floor to the patient inviting him to tell the reason(s) for coming to the surgery (line 7). The patient projects a story with his turn at line 8, "Right erm basically: errm", suggesting that he has a lot to be told. He describes events leading up to the consultation; he begins with his exclamation "I tri- tried to ring up (.) f- for an appointment to see Doctor XXXX", following this turn with a rush through to his next turn expansion on his prior, providing more reasoning: "I normally< see Doctor [XXX". The doctor's news marker (oh) and response tokens (yeah yeah) are made in overlap, maintaining speakership with the patient in the turns that follow.

The patient makes comment about his fitness for work statement ("sick note" at line 13). This is followed with his first request, for a continuation of this. His request for medication follows immediately at line 15. It is for established treatment, and is made as a further request tagged on to the first. He adds a report of sleeping difficulties after making his requests, seeking help from the doctor but not taking a position on how the doctor should do so (Ruusuvuori 2000). By expanding his request for medicine through the subsequent reference to sleeping problems and mood, he makes public his current state of health and creates an opportunity for the doctor to

offer help (Drew 1985; Robinson 2001a). It is met with a noticeable silence (line 10), alongside vigorous head nodding from the doctor.

This pause and gesturing provides the patient with an opportunity to continue to speak. Nodding acts as a visual representation of the recipient's affiliation with the teller's narrative, that the doctor has "some measure of access to and understanding of the teller's stance" (Kendrick and Drew 2016). After the marked pause at line 20, the doctor takes speakership with a response to the patient's recent loss of a relative:

Extract 3b (12.1.15C1)



Picture 3: "Yeah I was sorry to hear that you'd er- y- y- your nana had died y-" (lines 21 & 22)

```
20
                   ((Doctor nodding, looking at computer))
           (2.5)
21 D:
        Yeah I was sorry to hear that you'd er- y- y- your nana had
22
        [died y-
23
   P:
        [Yeah.
24 D:
        You know recently (.) err (.) and- (1.0) are you- and you-
25
        you- you'd lost y- job as [well so-
26 P:
                                   [Yeah.
```

Up to this point in talk, the doctor has deferred his stance with regard to the patient's requests. The doctor changes focus to talk about the patient's recent loss of his grandmother (line 21). In making his observation and passing on his condolences, the doctor orients his gaze to the computer and gestures with his hand to the screen (picture 3). The doctor's turn at line 24-25 leads the patient to address psychiatric treatment that was in the process of being organised for the patient's depression:

Extract 3c (12.1.15C1)

```
24 D:
        You know recently (.) err (.) and- (1.0) are you- and you-
25
        you- you'd lost y- job as [well so-
26 P:
                                   [Yeah.
27 P:
        But it was (0.3) due to all the sickness that I'd been
        having off with me depression.
28
29 D:
        Yeah.
30 P:
        Now I was supposed to go to the erm (1.5) .hh the psychiat-
31
        er:m psychiatrist at the::-
32 D:
        The [(u.c.)
33 P:
            [(u.c.) building.
34 D:
        Yeah.
35 P:
        But-
        >I was supposed to go< there tomorrow but they've (.) sent
36 P:
37
        me a letter and cancelled it,
38 P:
        So it's gonna be the twenty-fourth.
39 D:
        Oh right >so I mean at least< it's not-
40 D:
        [A rea: lly long time.
41 P:
        [No too far away.
42 D:
        But it's a bit [frustrating
43 P:=>
                       [Because I stopped taking the medication
44
        cos I didn't think it was working.
45
          (1.5) ((doctor slowly nods, looks at computer screen))
46 P:
        So Doctor XXX said wait until your appointment and then (.)
47
        we'll see about that.
48 D:
        Oh right okay.
49
          (2.5)
50 D:
        Yeah it's difficult one cos it's like (.) it's kind of two
51
        weeks.
52 D:
        It's a bit soon for stuff to- (1.0) A lot of the
53
        anti-depressants to be working in that time.
```

The patient brings talk back to his medicines at line 43, combining his report about his troubles with his psychiatry appointment with his sharing of his cessation of his medicines (line 43- 47). His expansion at lines 45-47 is met with a news token from the doctor at line 48, and "right okay.", signalling an aligned transition to talk about the patient's medicines once again. In this consultation, both participants interweaved talk about medicines with the other matters raised by the patient during the opening of the consultation.

In the next consultation extract, the patient places a request for a repeat prescription of his antidepressant medicine, in tandem with his need for a statement of fitness for work, again at the opening of the consultation. We join the consultation as the patient summarises the discussions he has had with social services.

Extract 4a (21.10.14C6)

```
P: Now bin in an:' I said >well this that and the other,<
P: >They said< well (.) yeah we're in the wrong for that,
You should've- you always need a valid sick note to be pai:d,
P: .hh Bu:t we've had the conversation and we've hear:d from the person that (.) you spoke to: and that was correct what</pre>
```

```
7
         they said.
8
   P:
         They were wrong.
9
           (0.8)
10 P:=> .hh so I'm he:re (0.2) A to get some more tablets (0.2)
         and \underline{B} (0.4) to: get a \underline{sick} note from the last time I should
11
12
         have ↑had it.
13
           (1.2) ((doctor viewing computer screen))
14 D:=> pt not a problem an:d not a problem.
         hhhh ha ha. ((Patient nods head forwards))
```

The patient's outline of the discussions he has had with social services regarding their financial support is shared as pre-request talk (lines 1 to 8). The patient's request design at line 10 places it as a part of the reason why he has to see the doctor, orientating to the gatekeeper role the doctor holds for prescription medicines. The other justification the patient offers in accounting for his visit is his request for the fitness for work statement (line 11); the doctor is also gatekeeper for provision of these. Both requests are met with the doctor's emphatic agreement (line 14), and followed with an expression of relief from the patient through exhalation, laughter and head gesturing (line 15). In the talk that follows, both participants keep the request for medicine separate from talk about the fitness for work statement:

Extract 4b (21.10.14C6)

```
14 D:
        pt not a problem an:d not a problem.
        hhhh ha ha. ((Patient nods head forwards
15 P:
        I was just thinking with it being two weeks and me being
16 P:
        told to lea:ve it and everything but-
17
18 P:
        You think you're doing the right thing going to these
        pe:ople (.) and then [(.) the next thing
19
20 D:
                              [And they- and they- they don't know
21
        themselves.
22 P:
        [Yeah.
23 D:
        [Yeah.
24 P:
        †Yeah
```

Both participants oriented to patient requests raised at the consultation opening as separate items for the agenda of talk. The extract below shows how, through the final turns in a sequence about the patient's fitness for work statement, the medicine request is revisited as a separate topic of talk.

Extract 4c (21.10.14C6)



- 44 lines omitted (participants discuss fitness for work statement)
- 69 D: I've included that so I've given you a final sickness day.
- 70 P: Brilliant.
- 71 D:=> Erm, (2.0) tch right.
- 72 D:=> The citalogram.
- 73 D: You've not had a script for two months.
- 74 P: No be cau:se (0.3) I started them a month late.

The topic shift is signalled by the doctor at line 71, with "Erm, (2.0) tch right." Following this marker, the doctor starts talk about the citalopram tablets requested by the patient during consultation openings (so I'm he:re (0.2) A to get some more tablets). The doctor's gaze is faced towards the electronic record as he speaks at line 72 (see picture 4).

The above examples show medicine requests included with, and separated from, other consultation activities. The positioning of requests across activities in the consultation is reported below.

6.2.3 Positioning of requests across activities

The present data showed three activities in which patient requests for medicines were made: as part of patient accounts for their visit, as additional concerns touched off through later consultation conversation, and as new concerns following pre-closure talk from doctors.

Requests placed during accounts made by patients for their visit

The largest number of requests was made during patient accounts for their visit: thirteen across the seventy-five recordings. Six were for new treatments previously prescribed by the practice; the remainder were made for medicines received previously and documented in the patients' electronic record. Extracts 3 and 4 above showed patients making requests for medicines as part of their accounting for their visit during consultation opening. Both of these medicines requests were made alongside requests for other services.

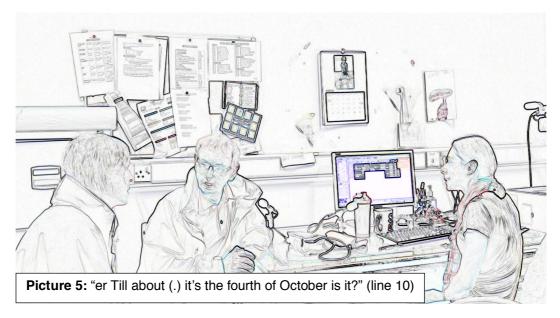
One of the requests in the present data, placed during the patients' account for the visit, had a unique feature: it was made by a patient on behalf of himself and his wife, who was also present and took part in the consultation. No other joint requests of this nature were seen in the present data, and no CA research on joint requests for medicines was found in the review of the literature.

In Extract 5 below, the talk is taken from the beginning of the consultation. The doctor has exchanged greetings with the couple (not shown). The first extract begins with talk that immediately followed this. The doctor starts the sequence with an open-ended offer, designing her solicitation with orientation to her addressing a new problem (Robinson 2006).

Extract 5a (12.8.14C7)

```
D: How can I help?
P1: We: (2.0) >gonna< Africa in September.
Lovely [yep,
P1:=>. [And er (0.3) it's (.) malaria prophylaxis.
No:: problem at all.
```

The husband (P1) places the request for treatment to prevent malaria following his pre-request at line 2. In the extract above, the initial request is made with a minimal pre-request, and then the turn is passed back to the doctor. His request is met with immediate agreement from the doctor. However, the doctor has some work to do. She requires more information to help her select appropriate treatment. In ascertaining this, her questions are met with responses from both patients, and with conversation between them.



```
5
   D:
        No:: problem at all.
6
   D:
        So when are- when abouts in September are you: going?
7
   P2: Eigh[teenth-
8
   Р1
            [Eighteenth of September.
9
   D:
        How long are you going for?
10 P1:
        er Till about (.) it's the fourth of October is it?
11
   P2:
        Yes [yeah,
            [So how-let's see.
12
   D:
13
   D:
        How long is that all together?
14
   P1:
        It's um-
15
   D:
        So the eigh[teenth of September.
16 P2:
                   [Sixteen-
17 D:
        So one two-
18 D:
        To the fourth of-
        [>Eighteenth< September to the fourth of Oc-
19 D:
        [Of October.
20 P2:
21
        (0.3)
22 P1:
        >So-
23 P2:
        Yeah.
24 D:
        [About two and a half weeks.
25 P2:
        [About sixteen-
26 P2: Yeah.
27 P2: Sixteen days.
28 D:
        Sixteen [days.
29 P2:
                [Yeah.
30 D:
        0:kay.
31 D:
        Right and where about in Africa are you going?
```

In response to the doctor's first request for further information (So when are- when abouts in September are you: going? at line 6), the wife joins the conversation at line 7, with overlapping talk from the husband at line 8. The doctor's second question about the length of their trip is answered initially by the husband (er Till about (.) it's the fourth of October is it?), but his answer is designed as a question seeking confirmation of the time from his wife (P2). He does this through his rising orientation on completion of his turn and movement of his gaze from looking at

the doctor to looking towards his wife (picture 5). The wife confirms the information he has provided to her husband and to the doctor at line 11 (Yes [yeah,).

In the talk that follows, all three take part in the conversation as the consultation unfolds, introducing further responses to the doctor's questions made collaboratively between both patients (lines 14,16,). The wife (P2) takes over as primary participant in conversation with the doctor from lines 20 to 29. On reaching agreement of the length of their trip at line 29, the doctor follows with "O:kay." and "Right" as sequence closure, and begins a new sequence regarding the couple's planned destinations in Africa at line 31. This sequence, and the majority of others that followed, were undertaken through collaborative talk between all participants in the consultation.

Requests made as additional concerns touched off by later consultation conversation

In three of the consultations, requests for medicines were not placed at consultation openings, but were triggered later in the consultation at moments locally relevant for the patient to make a request. These new narratives were begun as a consequence of prior talk. As Jefferson (1972); Jefferson (1978) noted, storytelling and side sequences may be triggered during the course of turn-by-turn talk, through the speaker being reminded of it or prompted in some way. A similar feature was evident in the present data: requests were made before any pre-closure talk from either participant, and were touched off by conversation that followed opening accounts for visits from the patients, as side sequences stemming from the patient's narrative of events.

In the following extract, the patient outlines the difficulties that she has been experiencing with chronic pain following a fall, six months prior to this consultation. She talks about the investigations and diagnoses she has subsequently been offered by the various specialists she has seen (not shown). We join the consultation during her account for her visit in the extract below. The sequence ends with a question to the GP regarding her uncertain diagnosis, related to the mixed messages the patient says has received.

Extract 6a (12.8.14C4)

1 P: I was diagnosed with sciatica (0.5) erm an:d they've s- told 2 me at the: M S K place that it could be some nerve damage.

```
3
   P:
        So rea(h)lly Doctor XXX I'm now- this was February,
   P:
        We're now [August,
5
   D:
                  [So this is six months in yeah.
6
   P:
        The osteopath said it's now becoming chronic (.) and I just
7
        really want to know (1.0) I don't know who's telling me,
   D:
8
9
   P:
        Wh-what it actually is?
10 D:
        Right.
```

Through this narrative, the patient sets the scene for conversation about the nature of her back pain, and unpacks the confusion she has experienced with regard to the various diagnoses she has been offered by different specialists (lines 1,2,6,7).

The patient's account for her visit is followed by a new activity during a later consultation phase: information-gathering through history-taking, with doctor-led questioning. The doctor and patient spend time discussing her investigations in detail, with the doctor referring to information within the patient's computer record and asking the patient to clarify points in her recent medical history. The end of a sequence is shown below, where the patient has been describing the impact of her symptoms on her activity. In the extract, a new sequence begins at line 99, as the patient returns to talk about her diagnosis and treatment.

Extract 6b (12.8.14C4)

84 lines omitted

```
95 P:
        I can't be as active as I used to be.
        mmhm.
96 D:
97 P:
        It's just a bit grim really.
98 D:
        tch R[ight
99 P:
             [And I want to know [whe:re (.) and how I proceed.
100 D:
                                  [Okay.
101 P:=> [And I don't want keep pain- to keep taking painkillers.
102 D:
        [Right right and how- right.
103 D:=> O:kay what painkillers are you taking at the moment [then?
104 P:=>
        well I'm really stuck on- I need- in fact I need some ib- em
105
106
        some more ibuprofen please,
107 P:
        erm (.) I've had- er they've tried >me on< n- naproxen,
108 P:
        That didn't seem to help m[e very much actually,
109 D:
                                   [Yes.
110 D:
        So the ibuprofen helped [more than the:-
111 P:
                                 [It helps more than the naproxen
112
        yes.
```

The patient's mention of "painkillers" at line 101 prompts the doctor to request clarification from the patient about her analgesia. The doctor's turn provides a sequential environment for the placement of a request for more ibuprofen by the patient, following her repair at line 105. In

making her initial request, her initial design introduces suggestion of dependency on her medicine ("I'm really stuck on"), before this is redesigned as a 'need'.

Her request is for an established treatment already documented in her notes, and is made directly. This extract illustrates how requests touched off like this were, by the nature of their sequential placement, surrounded by other talk as the patients shared their narratives and responded to doctors' questions. See extract 8, in section 6.3.1, for a further example of a request touched off by consultation talk. Narrativized requests are considered in more detail in section 6.3.2.

Requests made as additional concerns following pre-closure talk from the doctor

The placement of requests for medicines following pre-closure talk from the doctor was not noted to be reported in review of CA literature. Seven requests were made by patients in the present data in this position. Six out of the seven requests made in the present data were granted. An example is shown below.

Extract 7 begins at completion of topic talk for a third item of discussion raised by the patient during her account for her visit. During her initial response to the doctor's solicitation of the matter(s) she wanted him to address at the opening of the consultation, the patient told the doctor that she has been "saving up a few problems". Preceding the talk presented in the extract below, the patient and doctor have already discussed her worries about developing diabetes, and persistent pain affecting her knee and back (not shown). As part of this talk, the patient (prior to this extract) has told the doctor that there are "four things" she wishes to talk with him about.

We join this consultation at the point where the doctor closes conversation in relation to the patient's concerns about diabetes, knee and back pain with an agreement that he will order some blood tests to address investigation all of these issues (line 1).

Extract 7a (30.09.14C5)

```
1 D: So I'm going to change the form to do something \circ(blood
```

2 tests) (u.c.)

3 D:=> And you said there was-

4 D: What was the fourth [thing you to-

```
5
   P:
                              [The fourth thing is .hh I think I'm
6
         going through the cha:nge as well.
7
   D:
        Right.
        Because (.) I've not had a period since January.
8
   P:
   D:
         <sup>o</sup>Since January<sup>o</sup>,
10 P:
        And since- I've never had any problems with me skin
11
         [(.) at all.
12 D:
         [Yeah.
13 D:
         Yeah.
14 P:
        But since sort of February,
15 D:
        Yeah,
        There. ((patient points to her forehead))
16 P:
17 D:
         Yeah,
        And there. ((patient points to her nose))
18 P:
19 D:
        Yeah,
20 P:
        And there. ((patient points to her cheeks))
21 D:
         Yeah.
```

The GP opens a new sequence of talk with an invitation for the patient to expand on a forth topic at line 3, asking the patient to elaborate on her final medical problem. The patient begins her response at line 6 with her diagnostic claim that she is menopausal (Jefferson 1978). She provides the doctor with further justification regarding this claim at line 8. The doctor repeats the last two words of the patient's turn as a continuer at line 9, with his words spoken softly and a rise in intonation on his turn completion (°Since January, 2). The patient continues her narrative with a further concern about her skin. This concern is presented as a consequence of her candidate diagnosis she made at line 6, linking her skin as a new problem "never" experienced before. This expansion works to add further detail in her justifications of her diagnostic claim. She shows the areas of skin to the doctor that she is concerned about (lines 15-19).

The doctor asks the patient more questions about her skin symptoms, and then the doctor tells the patient that he will organise additional blood tests to investigate for evidence of menopausal changes (not shown). This is followed by a complaint from the patient that her knee pain is preventing her exercising, and a recommendation from the doctor for the patient to see a physiotherapist for help (not shown). This recommendation is accepted and the doctor organises an appointment for the patient in collaboration with the patient as they discuss her preferred location, date and time for this, using the computer (not shown). We re-join this consultation as the doctor moves to pre-closure talk at line 213, with description of future arrangements for investigation of the patient's symptoms (Heritage and Maynard 2006a). This talk provides a sequential environment for the patient to place a request for treatment (lines 219, 220, 222).

Extract 7b (30.09.14C5)

191 lines omitted

```
213 D:
        So come and have your bloods done tomorra (.) when we'll
214
        be checking for causes of (.) thirst and making sure
215
        there's no inflammation in the back or anything like
216
        that=
217 D: = [I'll be checking for a few different things,
218 P:
        [Yeah (.) and-
219 P:=> What about the spot-
220 P:=> [Is there anything that when they flare up that=
221 D:
        [Yeah the spots.
        =[I could put on them?
222 P:
         [Yeah I'll tell you what you can do for the spots yeah?
223 D:
```

The patient's request is placed in overlap with the doctor's pre-closure talk, forestalling consultation closure. It is not made for a specific treatment, but is made with specification for a topical treatment, for use in a specific circumstance of worsening of her spots. The doctor's responses are made in overlap, with agreement first to consider the topic change at line 221, and then how to treat her condition at line 223.

In summary, this section has shown that requests were placed at consultation openings, during patient accounts as they established reason(s) for their visits, but also during later activities. Post pre-closure requests opened up new dialogue, postponing cessation of conversation and providing a sequential environment for placement of a request for medicines. Talk during doctor-led history taking also produced conversation that prompted requests for medicines.

6.3 Variations in design of requests

Following on from the placement of request within sequence and activity, the next section will present analysis of the variations in design observed to be used in the formulation of requests. In terms of turn design, patients were observed to vary the ways in which their requests oriented to contingencies around their granting (section 6.3.1). In the following section (6.3.2), the ways in which narrative was used by patients to contextualise requests is analysed.

6.3.1 Request design and orientation to contingencies

Patients were observed to make their requests simply and directly (see extract 8 below). Other requests for medicines were made with designs that made reference to the control doctors hold

over granting or refusing them. They did this through orienting them to contingencies and through provision of patients' reasoning as part of the narrative that accompanied them.

Prefacing alludes to contingencies that may surround the granting of their requests. This design of request has been observed elsewhere in CA literature, during patient and carer out-of-hours calls to the doctor (Curl and Drew 2008). Ten of the requests within the present data were prefaced. Eight of these requests were for fulfillment of new treatments, not previously prescribed by the doctors undertaking the consultation with the patient.

In Extract 8, a 'simple and direct' request is defined below. The patient designs their turn without orientation to contingencies. The request is placed as the doctor leads questioning in the review of medicines listed on the patient's repeat prescription, displayed on the computer. The patient makes a request for her repeat prescription medicine at line 5.

Extract 8 (20.10.14C4)

```
D: You're on atorvastatin forty,
D: No you're [atorvastat- eighty aren't you.
P: [Eighty.
D: So let's just (.)°take this one off the prescription.°
P:=> Can I have my repeat prescription (.)
[while I'm here please?
D: [You can indee:d.
(4.0) ((doctor typing))
```

The patient's request is designed as a polar interrogative and is not prefaced in any way (Curl and Drew 2008; Stivers 2010; Weber 1993). Her request is made sequentially relevant through the preceding talk concerning the review of her medicines. The request is presented as 'routine' by the patient; it is for her established treatment, and her treatment is already the subject of conversation. It is met with the doctor's immediate agreement in overlap at line 7.

Four patients displayed orientation to contingencies associated with the doctor's ability to grant the request by using "wonder" in their preface to their request. The selection of this design was observed by Curl and Drew (2008) in out-of-hours calls to the doctor. Curl and Drew argue that through the prefacing of requests in this way, callers "construct themselves as potentially lacking entitlement" (page 148).

Three of the requests in the present data were prefaced with "I was wondering" and one with "I just wondered". Other requests were made with different prefacing. For example, "whether you could give me them or what." and "is there any chance I could have (.) try it." were used by patients in two of the requests, again orientating the request to anticipated contingencies. A summary table and two extracts of requests made with prefacing are presented below.

Prefaced request	Number of requests featuring this design
I was wondering / just	4
wondered	
Is it possible/ can I just	2
possibly ask	
Whether you could	1
Any chance I could have	1
Dunno if can	1
So there's no point in	1
getting	

Table 3: Requests oriented to contingencies

In extract 9, a request is touched off by consultation talk during information gathering activities.

The patient prefaces her request with an expression of uncertainty with regard to the likelihood that a medicine treatment may be prescribed.

Extract 9 (1.10.14C2)

```
1
   D:
        How is your flu getting on your-
   P:
        Oh not good.
   P:=> erm (1.5) I dunno if can pr-prescribe me anything for
        this flu?
5
   P:
        errrm (2.0) err (.) I can feel (0.2) like- I need to
        cough.
7
   D:
        mmhm
        I can feel it like- ((moves hand to neck))
   P:
9
   D:
        Like phlegm,
10 P:
        Yeah (.) but it's not coming out.
```

The patient's request is prefaced with "I dunno if you can", showing that she is not finding it straightforward to make a request to the doctor. As well as prefacing, there is some hesitation in

her request design. She holds speakership at line 5, providing a post first pair part insertion to specify her cough as the symptom she is requesting treatment for. The doctor responds with a continuer token at line 7. The patient continues her post first pair part insertion with talk and gesture. Her turn is not completed as she pauses and moves her hand up to neck, as if searching for a word or way of expressing the symptom. The doctor makes a candidate description for the symptom, "like phlegm", at line 9. The patient agrees with the doctor's candidate description immediately at line 10, followed by a micropause and some qualification of her agreement.

In extract 10, the doctor provides space for the patient's account to unfold, and the patient presents his concerns as part of this. The patient begins with narrative about his shoulder problem. Before he makes his request, he outlines the dilemmas he faces with regards to its treatment.

Extract 10 (2.2.15C4)

```
1
   D:
        What are we doing this morning?
   P:
        erm I came-
3
        Last time I came in erm (.) I had some physio-
   P:
   P:
        Well I got an appointment for physio on my shoulder.
5
   D:
6
   P:
        erm When I went to saw the physio (1.0) he was basically
7
        saying to leave (any) problem permanently (he'd involve)
8
        was surgery.
9
   P:
        But I don't want to have surgery.
10 P:
        [erm
11 D:
        [Okay.
12 P:
        But it's kind of started again to hurt. [It's-
13 D:
                        [Oh okay.
14 P:
        It's quite consistent.
15 D:
        Right.
16 P:=> I was wondering if there was like a light painkiller
17
        option (.) [maybe could have.
18 D:
                   [Right okay.
```

The patient's request design is made with prefacing that is oriented to contingencies, using "wondering" and the adverb "maybe" at line 17 (Curl and Drew 2008). The patient designs his question with the selection of his description of need for a "light painkiller". Robinson (2001a) described patients designing their requests in a manner that affords a 'pro-grant position' to help advocate and support it. In the above extract, the patient's request for a "light painkiller" reflects orientation to the array of problems 'potent' analgesia may cause (for example, addiction, adverse side effects, impacts on ability to work).

Extract 11 is taken from a consultation initially focusing on treatment for repetitive strain injury affecting the patient's hand (not shown). The doctor's pre-closure offer prompts a post pre-closure request for a prescription medicine. When the request is made, it is done so with prefacing. The final turns in the pre-closure sequence are shown in the extract below.

Extract 11 (1.10.14C3)

```
1
        Let me just find the referral for:m and do erm you take
        this with you I think- we send one off and you take one
2
3
        with you.
4
           (0.5)
5
   P:
        Cool.
6
           (6.0) ((doctor typing))
7
   D:=> Is there anything else you wanted to ask about apart
8
        from-
9
   P:
        The only other thing is I've been on some is it
10
        terbinafine tablets fer (.) like a fungal nail infection?
11 D:
        Oh yeah?
12 P:
        erm I think I've taken four: months supply (.) > from what
13
        I can remember<,
14 D:
        Uhuh?
15 P:=> And I just wondered if I could get the last month or two
16
        months?
        >Couple of months< yeah=
17 D:
```

Lines 1 to 5 show the end of a sequence used during discussion with regard to organising physiotherapy treatment for the patient's symptoms. A six second interval in the talk follows, during which the doctor attends to the computer. The doctor uses her turn at line 7 as preclosure.

The doctor's pre-closure turn is responded to by the patient's pre-request turns at lines 9-10 and 12-13. The patient prefaces this with "the only other thing" (line 9). His preface works as a minimiser, portraying the topic as the final matter for discussion. The patient has introduced a new topic of discussion, oriented to by the doctor through her use of "Oh yeah?" as a change of state at line 11 (Schegloff and Sacks 1973; West 2006). The doctor adds continuers, providing him with space to expand and add further information. In making his request at line 15, the patient prefaces it with "just wondering". In this extract, the patient orients his request design to his uncertainty with regard to the appropriate length of further treatment for his condition.

This section has shown that in the present data, some patients made simple, direct requests.

Other requests were made with prefacing, orienting them to contingencies that may lead to their qualified granting or refusal. Patients used request design in keeping with prefacing with

"wonder", as observed elsewhere in analysis of telephone calls to the out-of-hours doctor (Curl and Drew 2008). Other preface designs were also observed in the present data, not previously described in the literature reviewed for this thesis. See section 6.4 for analyses of doctors' dealings with requests. The section that follows presents an analysis of the ways in which patient used narratives to build context as pre-request talk.

6.3.2 Narrativized requests for medicines

Requests for medicines in the present data were provided across a continuum, with some made with little narrative before they were placed, and others with a great deal of narrative leading up to the them. These narratives provided the doctor with temporal, circumstantial and contextual information related to the patients' request. Requests within the data were placed within a spectrum of other pre- and post-request talk.

In extract 12, the patient provides the doctor with narrative as part of her pre-request talk. The request is placed during the patient's accounting for her visit in the opening of the consultation. The extract below is taken from the beginning of the consultation.

Extract 12a (2.2.15C5)

```
1
   D:
        ↑Come in.
2
           (1.5)
3
   D:
        [Hi↓ya:.
4
   P:
        [Hi haha
5
   D:
        Come in.
6
   D:
        >Come and have a seat.< ((patient enters room))</pre>
5
   D:
        I'm sorry to have kept you [waiting.
6
   P:
                                    [That's fine.
   D:
        Have we met before? ((patient sits down))
           (0.3)
   P:
        I don't know [I've got a twin so you might have-
10 D:
                      [I'm Doctor XXX
        I might [well have met you before but I just thought=
11 D:
12 P:
                 [Met my sister haha
13 D:
        =I better introduce [myself.
14 P:
                             [Haha
15 D:=> So (.) what we doing?
```

The patient and doctor begin by exchanging greetings (lines 1-14), and then at line 15, the doctor solicits the reason(s) for the patient's visit (Robinson 2006). This provides a slot for the patient to talk. Rather than making her request at this point, the patient elects to begin to build her narrative, outlining her reasoning for her upcoming request. A continuation of talk is shown in the extract below.

Extract 12b (2.2.15C5)

```
15 D:
        So (.) what we doing?
16 P:
        erm (0.4) I don't know if you've looked at my records
17
        already?
18 D:
        I've had a quick [glance as you've come in (.) yeah.
19 P:
                          [haha
20 P:
        erm (0.3) I'm on antidepressants,
21 D:
        mm. ((doctor nods))
22 P:
        And- >well I was< (.) and erm (0.8) I ra:n out,
23
        (0.4) ((doctor nods))
24 P:
        So for three weeks I haven't flad any, ((sniff))
        Okay, ((doctor nods))
25 D:
        And I thought I could handle it,
26 P:
27
           (0.3)
28 P:
        erm
29
           (1.1)
```

The patient responds to the doctor's solicitation with "erm (0.4) I don't know if you've looked at my records already?" (lines 16-17). The patient's turn shows that she orients to the possibility that the doctor may have already learned something about her through pre-consultation review of her clinical record. On hearing the doctor's response (I've had a quick [glance as you've come in (.) yeah.), the patient elaborates. The patient's request is placed following a narrative, as shown in 12b (and see extract 12c).

The patient's turns offer the doctor a variety of information as part of her narrative. A context for the narrative is shared at line 20 (I'm on antidepressants). Further circumstantial details are shared at lines 22 and 26 (>well I was<, I ra:n out, And I thought I could handle it). Temporal detail is shared at line 24 (So for three weeks I haven't £had any,). The doctor answers the patient's turns with continuer tokens at lines 21 and 25. The doctor does this with head nodding as gestural display for continuation of the narrative. The doctor uses "Okay" with rising intonation at line 25, again encouraging progression of the patient's story (Beach 2009). The consultation continues in the extract below.

Extract 12c (2.2.15C5)

```
30 P:
        >Cos I had< an a- appointment with- (0.4) >I can't
31
        remember his name?
32 D:
        Is it doctor XXX that you sa[w last time yeah yeah.
                                     [Yeah haha
33 P:
        erm (0.3) I think I had that about a week ago and I said
34 P:
        to him (0.4) I think #I'll# see how it goes: without them
35
36
        for a [while=
              [Yeah.
37 D:
        =but I don't think I'm ready to do that yet. ((Patient
38 P:
39
          shakes head))
        Ok\ay ((Doctor nods and smiles))
40 D:
41 P:=> So I've come (0.2) to you to renew my ↑prescription
```

The patient pauses, and then begins to recount more recent events after the GP helps her clarify the doctor she saw at the last visit. This is in line with Heritage & Robinson's (2006) observation that a patient's problem presentation may include description of discussions patients have shared with third parties in reaching decisions; their choice can no longer be viewed as solely their own. In this extract, the narrative has provided an opportunity for the patient to describe discussion with another medic at the practice, lending epistemic authority to the decision she made. In doing so, she reports the talk that she has had with the other medic, locating the sequence of events leading to her self-assessment at line 38. Her decision to stop her antidepressant treatment is described at lines 34-39, before finally making her request at line 41. In designing this turn, she prefaces it with "So" (line 41), marking her request as the upshot of her prior talk (Ruusuvuori 2000). Although the patient has had a break from her treatment, it is established and recorded in her record, and her request is direct.

In extract 13, a female patient attends her GP after a recent review by her gynaecologist regarding her endometriosis. Her request comes in the consultation opening and is placed following narrative. Choices about medicine treatments are initially strongly portrayed as belonging to her specialist.

Extract 13 (26.1.15AMC4)

```
D : Hello?
2
           (2.0)
3
   P:
        Hello: [hiya.
4
   D:
                [Hi.
5
   P:
        Hiya.
6
   D:
        How ya doing?
7
           (0.6)
8
   P:
        \uparrower (0.4) I'm ok:ay,
9
         I- (0.7) had a bit of \underline{a} .hh >stressful (u.c.)
   P:
10
        appointment< <las\underline{t} week> or the week befor:e erm .hh
11 P:
        And they just sai: d you will be in pai:n (0.4) for quite
         a bit lo-
12
13 P:
         .hh He said up to six mon:ths (.) so at the moment
         they're still say:ing .hh wait with the pain, and I'm
14
15
        kind of like I don't want to wait .hh anymore cos I'm so:
         fed up.
16
        Okay.
17 D:
        errm tch So there's one thing he-
18 P:
   P:=> I saw a registrar there he's put me onto ne- naproxen,
19
20 D:
        Yeah.
21 P:=> erm So he said to come in to get a prescription for that.
```

```
23 P: .hh erm He did also suggest taking a mini pill.
24 P: .hh >I think< but I'm not (0.2) sure about taking that
25 really cos I've already got the coil,
26 D: Yeah.
```

Here, the request is made through invoking a third party: her hospital doctor (registrar) "put me onto ne- naproxen" (line 19) and "erm so he said to come in to get a prescription for that" (line 21). During her further account for her visit, she contrasts her need to obtain a prescription for a further supply against her thoughts regarding another medicine suggested by the gynaecologist (the "mini pill", an oral progesterone-only contraceptive- line 23).

In summary, narrative talk was used pre-request or as an insertion from the patient following the first pair part of the request. It expanded upon information available to the doctor through provision of temporal, circumstantial and contextual detail. The narrative provided an opportunity for patients to present themselves as balanced and reasoned: as having made appropriate appraisal of their situation prior to placing their request. The narratives used by patients had some similarities with some of the features described by Stivers (2002a). Her US-based analysis of requests made by parents for their children to receive antibiotics from the doctor. Her data showed examples of patients using narrative in the run up to their requests made through a 'statements of desire' for such treatment, or through 'mentions of past experiences' with this treatment. Placement of requests within surrounding narrative, in both Stivers' and the present data, orients to epistemic authorities held by doctors in their granting.

6.4 Responding to requests

The ways in which doctors dealt with the requests that patients made for medicines is considered in this section. Requests for medicines in the dataset were usually successful; the doctors only turned down four of the 23 instances observed. Transcribed extracts have demonstrated doctors meeting requests with immediate agreement. The request below is taken from extract 8:

Extract 8 (20.10.14C4)

```
5  P: Can I have my repeat prescription (.)
6      [while I'm here please?
7  D:=> [You can indee:d.
```

In the consultation extract above, the patient's request for her repeat medicine was made relevant by prior talk, a favourable review of her blood results in the context of her established treatment. In other consultations, patient requests were met with a deferral of stance in order to gather more information or evidence. The request below is taken from extract 12, detailed earlier in section 6.3.2:

Extract 12 (2.2.15C5)

```
41 P:=> So I've come (0.2) to you to renew my \( \text{prescription} \)
42 \quad \text{fplease?} \\
43 \quad \text{D:} \quad \text{[That sounds reasonable.} \\
44 \quad \text{P:} \quad \text{[haha} \\
45 \quad \text{D:} \quad \text{Tell me a bit more about it.} \\
46 \quad \text{D:} \quad \text{How- how [long have you been on them and things?} \\
47 \quad \text{P:} \quad \text{[erm}
```

In the consultation extract above, the patient had already shared narrative and her reasoning as pre-request talk. The doctor met her request with reassurance (line 43) but deferred her decision and sought more information before reaching agreement with the patient for a prescription.

The table below shows the types and frequency of ways in which doctors met the 23 requests for medicines:

Immediate granting of	Deferral of stance	Qualified disagreement
request		
7	12	4

Table 4: Doctors responses to requests

Whilst the majority of the requests were either granted immediately or following a deferral of stance, four were refused (see section 6.4.1). Two requests were granted by the doctor, but with qualifications oriented to contingencies (see section 6.4.2). The practices used by doctors in refusing requests, or granting them with orientation to contingencies are presented below.

6.4.1 Request refusal

In extract 14, the patient's medication request is refused. The patient makes his request following pre-closure talk from the doctor. The patient has been suffering with earache, and following

doctor-led history taking and the patient having his ear examined, the doctor recommends oral antibiotics to treat an ear infection.

Extract 14 (21.10.14C8)

```
1
        The antibiotic should deal with the infection but it
2
        might ta:ke-
3
   P:
        mm
4
          (2.1)
5
   D:
        phh Week or two for it all to clea:r so that the
6
        [hearing comes back,
7
   P:
        [Yeah.
8
          (0.5)
9
   P:
        Yeah.
10 D:
        Perfectly spot on.
11 P:
12 D:
        If there's any doubt in your own mind please come back in
13
        about (0.2) you know in a few weeks and we'll have a
14
        another look.
15 P:
        Yeah (0.5) that's fine (0.2) .hh thank you very much.
16 D:
        You're welcome. ((patient picks up prescription))
17 P:
        18
          (0.8)
19 P:=> So there's no point in getting any drops or putting
20
        anything like [that in it (or)-
                      [No I think it- I think it's gotta work
21 D:
        from the inside.
22
23 P:
        From the inside yeah?
24 P:
        Thank you very much.
25 D:
        Ok(h)ay
        (Take care)
26 P:
27 D:
        [Bye.
28 P:
        [Bye bye.
```

The doctor's turn, beginning at line 12, is the first part of an "arrangement-related" businesspreclosing sequence (Robinson 2001b). The patient agrees with the arrangement at line 15. In
contrast to Robinson's (ibid.) observations, the doctor does not seek confirmation of acceptance
from the patient. The patient holds the turn and confirms his acceptance with "that's fine",
followed by an exhalation of breath and thanking the doctor.

As the doctor signals closure at line 16 with "You're welcome.", the patient aligns with this trajectory as he picks up his prescription from the desk, in preparation for his leaving the consultation room. The patient thanks the doctor at line 17 and the consultation appears to be moving to an exchange of farewells as part of closure. There is a 0.8 second pause, following which the patient enquires about topical treatment for his ear. The request is placed at line 19, after a recommendation from the doctor regarding likely time needed for the antibiotics to work, and advice about what to do if the patient's symptoms do not get better.

The patient's turn at talk is orientated to the medical authority held by the doctor. It is framed as an inquiry about the suitability of an alternative course of treatment. It is made after a notable pause, noted by Robinson (ibid) in his data, where requests were placed in competition with the activity of closing. It is designed with a negative polarity and so a preference for "no" as the response from the doctor (Stivers 2008). Whilst this turn at talk is designed as an inquiry, it nevertheless performs the social action of making a request for the doctor to consider an alternative treatment (Sacks 1987). Rather than simply responding with "no", the doctor offers his clinical reasoning, qualifying his decision alongside his declination (line 21). The patient repeats part of the doctor's turn in reply, and then thanks the doctor. Consultation closure follows.

In extract 15, the request is placed during the patient's account for his visit (lines 19-22, see below). It is for a further supply of diazepam, a medicine well known to be associated with misuse, dependence and addiction. The conversation begins following an exchange of greetings, and a turn from the doctor with regard to this being a follow-up appointment, to which the patient agrees is the case (not shown).

Extract 15a (12.8.14C9)

```
1
   P:
        Ah can't get rid of this backache.
2
   D:
        Right.
3
           (0.5)
4
   P:
        erm Been taking me stronger pain killers that's helped,
5
   D:
        An' the other lady doctor she give me some of these.
6
   P:
7
        Some (0.5) er: diaze(.)[pam. ((passes doctor a box))
   P:
                                [Yes.
```

Diazepam is a benzodiazepine, well recognised by medical practitioners and the general public to cause problems with drug dependence. The patient begins with pre-request talk (lines 4, 6 & 7), providing the doctor with a context for his request. His pre-request talk also informs her of a previously sanctioned supply by another doctor at the practice (line 6).

Extract 15b (12.8.14C9)

```
9
   P:
        =I've only got one le[ft. ((doctor looking at computer))
10 D:
                              [Right has it helped at all?
11
        ((doctor looks at patient))
12 P:
        I've only been using them at night time and I've (0.2)
13
        been (0.3) waking up in the mor:ning,
14 D:
        ↓mm↑ ((doctor turns back to computer))
15 P:
        And I've (0.3) e- (0.2) I want to get out of bed.
        [Cos I've had a good nights sleep.
16 P:
        [Right.
17 D:
           (0.2)
18
```

The patient continues to offer the doctor more information, with "only" to emphasise his current predicament at line 9. This in met with an enquiry from the doctor as to whether he has found the diazepam helpful for his backache (line 10). The patient does not answer this enquiry directly. Instead he tells the doctor about when he has been using the diazepam, saying "only" again at line 12. The recipient design of his turn at talk promotes him as a sensible and rational patient, using the medicine in a reasoned and careful manner. The doctor responds with continuer tokens at lines 14 and 17, as the patient tells her about his good quality sleep. The request is begun at line 19, prefaced with "just wondering". He adds an insertion to the end of his request "the same or something". His request design is oriented to the potential contingencies regarding his request. It is quickly followed with post request insertions from the patient, emphasising his quality sleep and his limited use of the medicine.

Extract 15c (12.8.14C9)

```
25 D:
        Mkay <the \problem with thes:e is> they are effective,
26
          ((doctor turns to face patient))
27 P:
        I know,
28 D:
        But they're addictive.
29 P:
        I know.
30 D:
        an I- (0.7) I really don't think- I think if we were to
31
        give you another prescription [for them,
32 P:
                                      [Yeah.
33 D:
        We're getting to that time where:
34 P:
        No that- that's [fine that yeah
35 D:
                        [Yeah and the last thing I want- y' know-
        We're just gonna create a problem.
36 D:
```

The doctor turns to face the patient and provides her response to the patient's request (from line 25). She shares her clinical reasoning with the patient, justifying her refusal to supply a further prescription. The patient affiliaties the doctor's clinical reasoning and agrees with the decision at line 34 (Stivers 2008). The consultation concluded with an agreement for the doctor to refer the patient for some physiotherapy to help treat his back pain as shown below.

Extract 15d (12.8.14C9)

```
46 lines omitted (doctor examines patient)
83 D: I think some physiotherapy will be of benefit
84 [cos I think a lot of it is posture.
85 P: [Yeah.
```

```
86 P:
        Yeah.
87 D:
        And I think you've probably got (.) under-developed-
88
        the muscles aren't strong enough.
89 P:
        [Yeah.
90 D:
        [Cos you're a big man you know to- to- to sort of hold
91
        your back stable.
92 P:
        Sometimes- when my hips were always sore (0.4) an I got-
93 P:
        I always used to get the back pain (0.6) and once I had
94
        me hips done [because you was walking different.
95 D:
                     [Yeah.
        How are your hips at the moment?
96 D:
97 P:
        They are still [sore.
98 D:
                       [Right okay.
99 P:
        I don't think it- I didn't think it worked [as-
100 D:
                                                    [Right it
101
        didn't work.
102 P:
        It didn't get the spot [I don't think.
103 D:
                                [Right okay.
104 \; D:=> Do \ you \ want me to refer you for physio first of all?
105 P:=> Yes [(.) please.
106 D:
            [Let's do that now.
107
        (9.0) ((doctor using computer))
```

The doctor makes a suggestion for physiotherapy as an alternative approach to help the patient's back pain at line 83. Her suggestion is followed with sharing of her clinical reasoning, met with agreements. The patient changes topic at line 92, focusing talk on pain affecting his hips as a contributor to his problems. The doctor closes the sequences that follow at line 103, and reformulates her suggestion at line 83 as an offer at line 104. The patient accepts and the doctor attends to this task, using her computer (line 107).

Two further requests were refused. One was a request for treatment for "flu symptoms" (extract 9), and the other request was for a medicine used to promote weight loss. Both of these refusals were made with qualifications from the doctor, sharing this information as they responded with their decisions. This design of qualified refusal of medicines by doctors has not been described elsewhere in CA literature.

In the analysis up to this point, extracts from the present data have shown the positioning of requests and the varieties in their design. Responses from the doctors have shown that requests were met with immediate agreement, with a deferral of stance, and with qualified refusal. The ways in which doctors used conversation to qualify their refusals for medicines was not found elsewhere in the literature review.

6.4.2 Orienting request granting to contingencies

Two doctors were observed to defer their stance to a request for medicine, and in subsequent turns, qualify their granting of these requests through orienting to contingencies. In extract 16, the patient and doctor discuss the patient's problem of urine infections and urinary frequency. Talk earlier within the consultation outlined a previous agreement between the doctor and the patient that attendance for a pelvic examination was required as a follow-up. After the pelvic examination, the doctor shares her diagnosis with the patient: a vaginal prolapse. The doctor recommends an ultrasound scan for further investigation. She spends some time typing information into the computer (line 1).

Extract 16a (12.8.14C5)

The doctor makes a pre-closure turn at line 2, with a closing 'right' initiating a future arrangement sequence by outlining the action that will follow after the consultation. Talk on this topic is ended with "okay." at line 5, signalling a move to conversation closure from the doctor, providing a sequential environment for placement of a new concern. The patient starts to speak in overlap at this point. Her pre-request is begun at line 6, before being repaired (see below). Her pre-request is prefacing with "just possibly", aligning her design as a dispreferred action in request placement position. The repaired request is made in the transcribed conversation below.

Extract 16b (12.8.14C5)

```
[Can I just possibly ask (.) you to-
7
   P:=> Have you got anything that I can t- (.) take for cramp=
8
   P:
        =I've been having terrible cramp in [the night.
9
   D:
                                              [In the night.
10 D:
        [Leg cramps.
11 P:
        [Oh.
12 P:
        Legs and f[eet.
13 D:
                   [0:kay.
14 D:
        Right let me just ch- ((turns to computer screen))
15
        (3.0)
16 D:=> I \uparrow can (.) but I would also like you to come in and just
        have some routine blood tests is that al[right?
17
18 P:
                                                  [Yes you did
        [mention that last time.
19
        [Because we yeah:.
20 D:
        Cos we've not had them for a whi:le have we?
```

At first, her request is made through simply naming the condition for which she would like treatment (cramp, line 7). The patient latches on post first pair part insertions, providing justifications for her request (lines 8,10 and 12). Clayman and Heritage (2014) observed that when requesting in conversation:

"by providing a reason right away, a requester can help render the request intelligible and increase the chances of immediate compliance."

In this instance, the doctor initially defers her stance (lines 13-15), and then offers qualified agreement in response to the patient's request. She inspects the electronic patient record before her offer is made (lines 14 and 15). The doctor's conditional offer of supply some treatment is placed at line 16, made provided the patient is willing to attend for some blood tests.

A further example of request granting oriented to contingencies is shown below. The extract is a continuation of the talk that took place in extract 11. This prefaced request was responded to by doctor with granting oriented to contingencies. We rejoin the consultation as the patient places his request:

Extract 11a (1.10.14C3)

In this extract, the patient has oriented his request design to his uncertainty with regard to the appropriate length of further treatment for his condition. The doctor's response at line 17 reformulates and condenses the time frame used in the patient's request. This turn demonstrates her active listening, whilst deferring her advice about treatment length. A continuation of the extract is shown below.

Extract 11b (1.10.14C3)

```
18 D:=>
          =Is it- ny- on your toes?
          Yeah [right foot about four nails.
19 P:
20 D:
               [°Yeah.°
21 P:
        erm In fact (.) it's down to about three and a half which
        is [great.
22
23 D:=>
           [Getting better,
24 P:
      So it is [getting better.
25 D:
                 [Okay.
26 D:=> How better is it as a comparison to how it was when you
        started on the medication?=
```

```
28 D:=> =Is it sort of a- half (.) as much better >you know<
29     fifty percent better or,
28 P: Well when I started (.) I guess four nails were
29     completely (.) infected.
30 P: erm And I think (0.2) it might even be two and a half now
31     because (.) I think one's good (.) and then half one's
32     better so (.) that's a big [improvement.
33 D: [So you have-</pre>
```

The doctor explores the patient's condition, moving the conversation on to history taking. She does this through seeking confirmation of the nails affected (line 18), and that the condition is improving with the treatment he is using (line 23, 26-27,28-29). The doctor has to work to prompt further report of the patient's symptoms, helping her locating his request within the preceding sequence of events. The doctor's deferral with regard to treatment length concludes below.

Extract 11c (1.10.14C3)

The doctor provides her advice about treatment length at line 33, also using prefacing in designing this turn. Her prefacing with "wondering you might actually" orients to her uncertainty with regard to the exact treatment length required, and is made with sharing of her clinical reasoning as part of her turn. She changes topic to talk about monitoring of the terbinafine treatment at line 39. The extract shows that both the patient and the doctor oriented to contingencies in their discussion about treatment for the patient's condition, and through collaborative talk, reached agreement on a future plan.

This section has highlighted the ways in which doctors went about dealing with requests for medicines. In the majority of cases, they deferred their stance in response to requests for medicines, seeking further information from patients before reaching a decision. Patients co-constructed this deferral through provision of further detail in reply to the doctors' enquiries. Doctors were seen to meet requests with granting oriented to contingencies and with qualified refusals. This practice defended the doctors' epistemic stance, providing patients with clinical reasoning as part of their response.

6.5 Discussion

This Chapter set out to describe placement and design of requests for medicines in the present data. As illustrated by the extracts presented in section 6.2, requests were made in first pair part and second pair part position. They were placed in three activities of the consultation. These were during accounts made by patients for their visit, as additional concerns touched off by later consultation conversation, and following pre-closure talk from the doctor.

Requests were positioned in sequential environments where patients had opportunities to make them. Slots for requests were made available to patients during accounts for their visits. Patients were observed to place requests in response to pre-closure turns from the doctors, and also as side sequence talk touched off through doctors' turns during their information gathering. The organisation and progression of conversation with the doctor made 'mentionables become mentionable' (Schegloff and Sacks 1973), making placement of a request locally relevant at that point.

Requests placed after pre-closure talk from the doctor forestalled consultation closure through initiation of conversation to address a new topic. On two occasions in the present data, concerns were raised by patients during earlier conversation with their doctors, but these were not addressed by the doctors, and the doctors commenced pre-closure talk. The post pre-closure requests were placed to ask the doctor to re-address the unmet need voiced earlier in consultation conversation. The patients used pre-closure talk as an opportunity to avoid consultation closure, and to begin new talk about medicines.

Two pre-closure requests for medicines were made by patients in response to direct prompts from the doctor (see extract 2 and extract 11). Doctors inquired about other business that might need to be considered before consultation closure. Through use of these inquiries as part of pre-closure talk, the doctor orientated to the possibility that patients had not had opportunities to raise all topics that they wished to discuss. This choice of conversation provided a slot to the patient to make their medicine request and reflected good practice on the part of the doctor.

By including a request for a medicine as part of consultation activity, the patients orientated to the power held by doctors for access to many medicines, justifying their decision to seek help from their doctor (Heritage and Robinson 2006; Nielsen 2011). Requests added legitimacy to the patient's decision to attend, asserting candidacy and diffusing potential tensions between lay and professional judgement of that decision. This practice removed some of the potential constraints that might be otherwise introduced in seeking a medical opinion. However, it is important to recognise that for patients, a decision to make an appointment to see the GP is still loaded with financial, social and moral considerations (Dixon-Woods et al. 2006; Fischer and Ereaut 2012; Llanwarne et al. 2017). The anxiety and dilemmas that face patients in their contemplation of whether they are "ill enough", whether they have a "doctorable problem" or whether they might be viewed to be "wasting the doctor's valuable time" are well described (Fischer and Ereaut 2012; Heritage and Robinson 2006; Llanwarne et al. 2017).

There was a spectrum of designs used in making requests for medicines in the present data. Direct requests were made for established medicines already provided on repeat orders, and given this context, this is not surprising. However, two direct requests were made for new medicines in the present data (see Chapter 4 and extract 5, this Chapter). There was a sharp contrast in the degree of narrative pre-request in these two consultations. During the consultation transcribed in Chapter 4, the patient did a lot of conversational work through report of her symptoms, building her case for an offer of assistance. Her request was placed when her reporting was finally met with an offer from the doctor, several minutes into the consultation. The patient's request was for antibiotics to treat her upper respiratory symptoms, an area of controversy, subject to much deterrence through repeated public campaigns (for recent examples, see https://antibiotic.ecdc.europa.eu/en). The direct request in extract 5 was made with minimal narrative or reasoning. This was for treatment to prevent disease rather than combat symptoms. In contrast to requests made for antibiotics in other situations, public information services promote members of the public seeking protection through the acquisition of prescription medicines to prevent malaria (for an example, see https://www.nhs.uk/conditions/malaria/prevention/). In other words, the decision and request in extract 5 was made without the same risks to validity and 'reasonableness'.

Inclusion of reasoning and orienting to contingencies both demonstrated the asymmetries in deontic and epistemic statuses held by patients and doctors (Fischer and Ereaut 2012; Heritage and Robinson 2006; Llanwarne et al. 2017). Orienting request design to potential contingencies was often included in request design for new medicines, not previously prescribed for the patient by the doctor they were consulting with. This practice provided doctors with more speculative requests, and displayed patient uncertainty as to how these requests would be met. Orienting to contingencies during the granting of requests was observed to be used by two of the doctors. In extract 16, the doctor set conditions upon which the granting was made. She used her request grant as an opportunity to seek patient agreement to future blood tests as part of the bargain. In the continuation of extract 11, the doctor's prefacing of her recommendation expressed her uncertainty with regard to exact length of treatment required for the patient's condition.

Sharing of narrative by the patient provided the doctor with background detail and functioned to address tensions that might have otherwise been introduced through under-specification of information (Fischer and Ereaut 2012; Landmark, Gulbrandsen and Svennevig 2015; Llanwarne et al. 2017; Pilnick and Dingwall 2011; Stevanovic and Peräkylä 2012). Reasoning serves to "pursue, strengthen, or help make sense of what is being asked" (Baranova and Dingemanse 2016), a desirable of request design in order to increase the likelihood of the doctor's compliance.

This finding mirrors observation of patient accounts in Finnish primary care. Ruusuvuori (2000) showed that in providing an account for their visit, patients may do so with more or less narrative. She observed that some patients:

"present their problem as a gloss that is grammatically fitted to the question, preserves the temporal frame incorporated in the question and gives a very general description of the problem, after which the turn is passed back to the doctor"

Other patients presented their complaints along with much more narrative. She saw this story telling as "an orientation to expectations attached to applying for the sick role" (ibid, 136).

Patients worked to present a balanced view of himself or herself to the doctor: as a responsible and competent patient who had made appropriate efforts to get better by themselves, but reached a point where professional help was now necessary. Narratives accompanying medicine

requests functioned in a similar fashion, adding context and presenting the patient's decision to request as considered and justified.

Although doctors most usually deferred their stance when medication requests were made, most were finally granted. Two requests were granted but with qualification. These qualifications oriented to contingencies, providing conditional reference to the agreement, and renewing context for conversation that followed. These qualifications were used in two ways: to bargain for patient engagement with other follow up (extract 16), and to express uncertainty related to likely length of treatment required (extract 12).

For the four requests that were refused, these refusals were all made with qualifications and sharing of the doctor's clinical reasoning through their talk that followed. The doctors used qualifications to maintain their relationships with their patients, presenting their decision as one made in the best interests of the patient making the request.

6.6 Summary

The present data showed that requests for medicines took various forms. Requests were usually accompanied with narrative that shared patient reasoning, and sometimes with talk that oriented to anticipated contingencies. They were placed across a range of consultation activities, during the opening accounts from patients regarding the reason(s) for their visit, as talk 'touched off' by other conversation, and as talk placed following pre-closure turns from doctors. Doctors were seen to grant requests immediately, to defer their stance, and to refuse them. Doctors oriented to contingencies through sharing of their reasoning and through qualifications following on from their decisions. The present data showed the ways in which doctors used their turns at talk to do this.

Chapter 7: Reviewing medication

7.1 Introduction

In this Chapter, the focus of analysis will be on the ways in which patients and doctors converse about prescription medicines that are on their prescription record. These are medicines that have previously been documented in the patients' electronic clinical notes. It is argued that doctors must always seek a complete and accurate record of the medicines taken by patients when prescribing (FitzGerald 2009). Ill-informed or insufficient attention to current and historical medication use by patients causes harmful prescribing (Kanjanarat et al. 2003; Lau et al. 2000). Given that the ways in which medicines are taken may differ from the ways in which they are prescribed (Chapter 2), and that ill-informed prescribing practice is dangerous, this Chapter explores the opportunities conversation provides for patients and doctors to exchange information about the ways in which medicines are used.

As outlined in Chapter 2, many medicines are supplied to patients via a repeat prescription service. Patients are able to re-order treatments regularly without the need to see their GP. This freedom relieves patients and doctors of unnecessary work to obtain and maintain long-term treatments, but also introduces the need for some sort of review between patients and doctors.

The review provides an opportunity for the doctor and patient to discuss how medicines are used.

Discrepancies in the ways in which medicines are actually used and the ways in which their use is recorded are well recognised by the healthcare profession (see chapter one, also Bedell et al. 2000; Coletti et al. 2015; Collins, Nickless and Green 2004; Hulka et al. 1975; Orrico 2008; Schmiemann et al. 2012). Current medical opinion about tackling this issue calls for doctors to engage with patients, discussing their medicines taking and exploring their perspectives (Coulter 2005; Davis, Schoenbaum and Audet 2005; Epstein and Street 2011; Richards, Coulter and Wicks 2015).

National guidance has positioned medication reviews as a professional priority for doctors (NICE 2015). This guidance asks for doctors to take a person-centred approach in their exploration of medicines use, 'optimise' actual medicine use, and if necessary, remedy discrepancies in the recording of medicines. The goal is to provide treatment that has been tailored for patients and by patients, sharing decisions and promoting patient self-management:

'medicines optimisation requires... a person-centred approach to safe and effective medicines use, to ensure people obtain the best possible outcomes from their medicines. Medicines optimisation applies to people who may or may not take their medicines effectively. Shared decision-making is an essential part of evidence-based medicine, seeking to use the best available evidence to guide decisions about the care of the individual patient, taking into account their needs, preferences and values.' (NICE 2015)

In pursuit of reconciling differences between recorded medicines and the ways in which these are actually taken, NICE (2015) guidance requests the involvement of patients (and sometimes their carers) in medicines reconciliation:

'Involve patients and their family members or carers, where appropriate, in the medicines reconciliation process.' (Recommendation 1.3.6)

It is clear, then, that policy and opinion see the process of medication review as key to the provision of optimised, personalised treatment. To address safety concerns, there are calls for greater attention from doctors in their collection of information about medicine use, past and present (Duerden, Avery and Payne 2013; NICE 2009; NICE 2015). To facilitate patient autonomy and adherence, the need for better engagement between doctors and patients is advocated (Elwyn et al. 2012; Elwyn et al. 2010; Hoffmann et al. 2014; Joseph-Williams et al. 2017; NHS England 2016). But how might these aspirations translate into the talk that takes place during medical consultation? What happens in talk between doctor and patient when medication is reviewed? How do doctors and patients work to 'optimise' treatment?

Findings presented in this Chapter will begin to address gaps in the literature through analysis of conversation collected for this thesis. Across the dataset, GPs and patients talked about medicines documented in the clinical notes. Consultation extracts from data collected for this

thesis will be used to examine this talk. Section 7.2 will begin with an analysis of how talk to review medicines was initiated by the participants in consultation, followed by examples of these activities, with reference to the consultation phase and sequential environment within which they occurred.

The analysis will consider how talk to review medication progressed, as the participants reconciled differences between what was recorded about medicines taking, and the way(s) in which they were actually taken (section 7.3). Alongside talk, the interplay of non-verbal and gestural communication during the review of medicines is presented. This facet of communication helped to explore the ways in which clinical notes were used as a resource during the review of medicines. The data will be used to begin to 'map out' a picture of what currently happens during conversation used to review medicines.

Video still shots help to describe the bodily conduct of participants during these conversations.

These features of non-verbal communication include direction of gaze and body position, as talk-in-interaction was combined with recruitment of information about medicines in the clinical notes.

7.2 Initiating talk to review medicines

As a starting point, data was analysed to explore the ways in which a review of medicines came about through talk. Explicit reference to the need for a "medication review" was made in three consultations. Doctors also conducted a review of the patient's prescribed medicines in 16 consultations, without explicitly labelling the activity as such in their conversation. All eight doctors who took part in the research were observed to review patient medicines across the consultations they were filmed. Consultation extracts involving seven of the doctors are shown in this Chapter. Firstly, extracts demonstrating doctors' explicit and implicit reference to a review of medication recorded in the clinical notes are presented below.

7.2.1 Talk about medicines labelled as a "review"

In the first extract provided below, the doctor made explicit reference to the need for a 'medication review'. The extract is taken from the beginning of the consultation. The transcription is provided

with screen shots. Following an exchange of greetings at lines 1- 6, the doctor opens the consultation with a 'new concern' question format (see Robinson 2006), with 'now what can I do for you today' (lines 8-9):.

Extract 1 (30.9.14C8)

```
D:
1
        Come in,
                  ((doctor gaze at computer screen))
2
   D:
        Hello:.
3
   P:
        Hello.
4
           (2.0)
5
        Come in have a seat Mrs XXX.
   D:
6
   D:
        Right have a seat.
7
          (1.0)
8
        Okay (0.5) now what can I do for you tod[ay. ((gazes at
   D:
9
        patient))
10 P:
                                                  [Well it's just that
11
        the-
12 P:
        Er I haven't to have any more (.) er prescriptions until
13
        I've seen a doctor.
14 D:
        Right [so (.) right (.)
15 P:
              [That's all it is.
16 D:
        >No problem< so-
17 D:=> So: that's called the medication review.=
18 D:
        =Right so we'll do that today,
```

The patient's account for her visit (line 12) prompts the doctor to explicitly label the upcoming talk as a "medication review" (line 17). In doing so with this turn, he makes his projection of the need for the upcoming activity clear, and makes explicit to the patient the task at hand. His tag at line 18 is latched on to his previous turn, reinforcing the message that 'medication review' will be completed in this consultation.

Two patients prompted reviews of their medicines directly to the doctor. The second extract below is taken from the beginning of a consultation, following an exchange of greetings and an open solicitation of from the doctor, asking the patient for the purpose of his consultation. In lines 1-2, the patient responds to this solicitation with narrative about his notifications from the practice on collecting his repeat prescription.

Extract 2 (5.8.15C3)

```
1
   P:
        Basically what it is <every time> (.) I come for my
        prescription now cos I'm on: sertraline,
3
   D:
        Oh yeah.
        So: >every time I come now< it's always on (0.2) a
5
        request for:m saying I muss book an
6
        [appointment with a doctor to say-
7
   D:
        [come in an er- ok,
8
        (0.2)
9
   P:=> >They want a like a r- (0.3) re:view sor[t of thing=
10 D:
                                                  [Yeah.
```

```
11 P: =So (>basically what it is.<)
12 D: Okay,</pre>
```

The patient refers to "a request form" at line 4-5. Since this is made relevant to the conversation, it is important to consider what the patient is referring to and the way in which these "request forms" function: They are commonly provided to patients as part of their repeat prescription papers. One side of the prescription can be detached and used to request future supplies for items listed on the repeat prescription. An automatic invitation for a "medication review" is printed on the form, at an interval determined by the doctor. The invitation has been noted by the patient and prompts him to explicitly label upcoming talk as a "review" at line 9. In designing his turn, there is some hesitation and along with his qualifier (sort of thing), he orients his turn to some uncertainty as to what exactly might be required.

7.2.2 Implicit medication reviews

Doctors and patients across the dataset did not always explicitly label upcoming conversational activity as a 'medication review'. Provision of a signal that this activity was necessary was sometimes made in more implicit ways. The conversation within a consultation activity made some reference to medicines that were already recorded in the patient's records. Extract 3 below, taken from the beginning of a consultation, involves a medication review, but is not labelled as such by either participant.

Extract 3 (12.8.14C1)

```
1
   P:
        [Hi.
   D:
        [Hello how are you?
   P:
        Not bad.
   P:=> Erm (2.0) I went back on the: pill.
5
   D : Ye[s.
          [After (having) my son and I don't think it's agreeing
7
        with me.
8
   D:
        Right ok[ay,
                [Erm (.) been having erm (.) really really bad
9
   P:
10
        headaches,
11 P:
        I had a really bad headache for over twenty-four
12
        hours last week,
13 D:
        Mm.
14 P:
        So I just stop- just stopped taking 'em.
15 D:
        Right.
        Erm (.) and it's also been making me feel (1.0) like
16 P:
17
        I'm going a bit [mad-
                         [Okay okay. ((doctor gazes at computer))
18 D:
        Hah (.) you know a bit my mood's been up and [down with it.
19 P:
20 D:=>
                                                       [Right and
21
        you've been o:n mar:velon.
22 P:
        Yeah yeah.
```

Following an exchange of greetings, the patient begins her account for her visit (line 4), providing description of her problems she asserts are due to her contraceptive pill. Her narrative is used in her recruitment of the doctor's assistance (Kendrick and Drew 2016). In beginning her response to the patient's difficulties (line 20), the doctor uses a polar declarative to seek confirmation from the patient, asking her to confirm the brand of contraceptive she has been taking (Right and you've been o:n mar:velon). The activity is not labelled as a 'medication review', but is orientated to as such in conversation by both participants.

As shown in the examples provided above, across the dataset, doctors and patients both oriented to initiation of a review of medicines. This activity was sometimes explicitly labelled as upcoming, and sometimes initiated with more implicit design. Video recordings showed how turns at talk between participants were combined with placement of gaze, gesture and body towards information displayed on the computer screen. Consideration of the ways in which talk, non-verbal and gestural communication were used and coordinated will now be considered, with reference to the sequential environment within which this communication occurred.

7.3 Talk, gaze, body position and gesture during review of medicines

Greatbatch (2006) examined conversation in primary care consultations between doctors and patients, during the doctors' creation of prescriptions. He showed that doctors coordinated their verbal communication with their text-based activities on the computer. The doctors' turns at talk regarding information about medicine name, dosage, formulation and quantity supplied were made in synchrony with the doctors' completion of these details on the screen. Information about medicines that was not required to be entered into the electronic record was shared in a different way. The doctors were seen to suspend use of the computer keyboard when talking of potential medicine side-effects, interactions, and advice about assessing effectiveness of the treatment provided. As doctors entered information about medicines into the electronic record, patients were seen to orientate their talk to this task. They coordinated their questions about medicines with the doctors' typing, placing them at junctures where the doctor paused in the use of the computer keyboard.

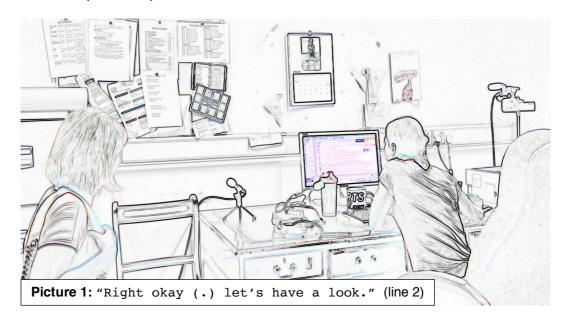
The ways in which conversation and bodily conduct were used during the review of medicines will be analysed in the extracts below. These observations from the present data are important, given Greatbatch's findings above in the related activity of prescription creation, and Robinson's (1998) observations of the ways in which the doctor's gaze at the electronic record and the patient is consequential on the interactions of conversation:

"Patients are present or visible both in their own bodies and in entries in their records. Thus, when doctors shift their gaze to patients and then to the records, they are not simply engaging and then disengaging patients. More accurately they are shifting their engagement from patients embodied to patients inscribed, or from patients in person to patients in bureaucracy." (Robinson 1998)

During some of the medication reviews observed in the present data, doctors sat facing the computer screen and made direct reference in their talk to information in the clinical notes. In others, no explicit reference to the clinical notes was made during talk to review medicines. There were examples of doctors using nuanced and subtle recruitment of information from the clinical notes, with their body position maintained in facing the patient, and their gaze focused towards the patient for the majority of the conversation.

An example of the doctor attending to the electronic record during a medication review is provided below:

Extract 4 (12.8.14C8)



```
1P: Erm just wanted some more HRT?

2D: Right okay (.) let's have a look. ((turns to face computer))

(9.5)

4D: "Which one?" ((doctor gazing at screen))

5D: It's not on repeats is it?

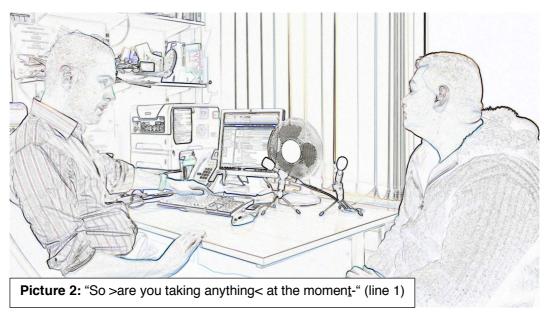
6P: No .hh I c- I came to see you tch a [few months ago,

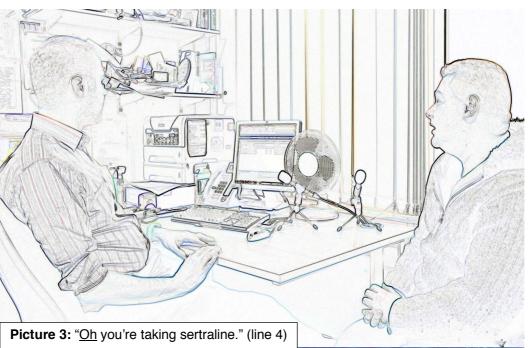
7D: [Yeah (.) yes.
```

In the above extract, the doctor responds to the patient's request for a further supply of her HRT through talk, and non-verbal communication (picture 1). She turns away from the patient to face the computer screen, and spends a prolonged period of time reading information there. She cannot find the information within the record, and eventually asks the patient for more information at line 5.

Contrast the above example with the following extract, where the doctor is attending to the patient during a medication review:

Extract 5 (12.1.15C1)







```
1
   D:
        So >are you taking anything< at the momen\underline{t}-
   D:
        [For- for the- for (that health side-)
        [Errm I'm still taking me sertrali:ne,
3
   P:
        Oh you're taking sertraline. ((glances at screen))
   D:
5
        And I'm still taking er:m (2.0) antenalol (1.5) for my
   P:
6
        anxie[ty,
7
   D:
              [Yeah. er:m,
8
           (0.4)
9
   D:
        And the naproxen an: stuff you just take when- when you
10
        [need it (really?). ((gazes at patient))
11 P:
        [Oh yeah that's when I need it.
12 D:
        [When (you)-
        [When I- my gout flares up,
13 P:
14 D:
        Yeah.
```

In this extract, the doctor is clearly facing the patient as he makes his initial inquiry about the patient's medicines use (picture 2). He is using the electronic record as a point of reference in collaboration with the patient's turns at lines 4, 5 and 6 (picture 3), but only through torque of his neck to shift his gaze briefly towards the screen. He returns to looking towards the patient during his turn at talk (picture 4), as he completes his declarative question about naproxen. This question is answered in overlap by the patient (line 11).

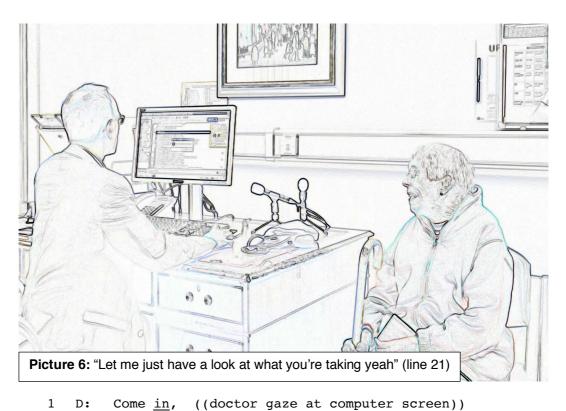
In line with terminology used by Robinson, information about the patient documented on the computer or in paper records is herein termed as the 'patient inscribed'. Information obtained through conversation with the patient in the consultation room is referred to as the 'patient embodied'. The ways in which doctors attended primarily to the 'patient inscribed' during medication reviews are considered in section 7.3.1. Examples of doctors attending to the 'patient embodied' are considered in section 7.3.2.

7.3.1 Attending to 'the patient inscribed' during a medication review

In some of the medication reviews recorded for this thesis, the doctor's design of conversation and non-verbal communication oriented to information available in the clinical notes as a primary point of reference. Features of this orientation are described using transcribed extracts and video screen shots below. In the first example, an extension of an extract shown in section 7.2.1 is presented.

Extract 6a (30.9.14C8)





D: Come in, ((doctor gaze at computer screen))
Hello:
P: Hello.
(2.0)
D: Come in have a seat Mrs XXX.
D: Right have a seat.
(1.0)
D: Okay (0.5) now what can I do for you tod[ay. ((doctor gaze)))

```
at patient))
10 P:
                                                 [Well it's just that
11
        the-
12 P:=> Er I haven't to have any more (.) er prescriptions until
13
        I've seen a doctor.
14 D:
        Right [so (.) right (.)
15 P:
              [That's all it is.
16 D:
        >No problem< so-
17 D:=>
          So: that's called the medication review.=
18 D:
        =Right so we'll do that today,
19 D:
        >No problem, <
20 D:
        >You have a seat<,
21 D:=> Let me just have a look at what you're taking yeah? ((doctor
        gaze at computer screen))
```

At line 1, the doctor is sat facing the computer screen, and he remains in this position during the exchange of greetings at lines 1-6. He swivels his chair towards the patient, moving his gaze and body in her direction as solicits the patient's concern (picture 5). The patient begins a turn in overlap at line 10, before self-repairing and beginning again with an account for her visit at line 12. Her telling alludes to surgery rules concerning the supply of prescriptions (Er I haven't to have any more (.) er prescriptions until I've seen a doctor).

In the doctor's turns that follow, information within the patient inscribed is quickly made relevant through his talk and bodily conduct. His need for recruitment of information about the patient's prescription medicines documented in her clinical notes is displayed non-verbally through his return to positioning himself to face the computer (picture 6), and through talk as he uses a tag question seeking confirmation for this action: He looks at the computer display of her clinical notes: "Let me just have a look at what you're taking yeah?" (line 21). At this point in the consultation, the doctor has oriented himself to the patient's clinical notes to seek further information about the patient's medicines. A continuation of the extract is provided below.

Extract 6b (30.9.14C8)

```
21 D:=> Let me just have a look at what you're taking yeah? ((doctor
22
        gaze at computer screen))
        Yeah I-I've got me (.) er forms here er that I could do
23 P:
24
        with some more (0.4) [erm- ((hands doctor repeat slip))
25 D:
                             [Yeah let me have a look (.) what
        things you need and I just wanna go through so you-
26
27
        ((doctor looks at repeat slip))
28 D:
        I wanna make sure you know what you're-
29 P:
        Yeah.
        What you're taking yeah?
30 D:
31 D:
        So (.) starting at the top we've got a drug called
32
        bisoprolol which is a beta block[er.
33 P:
                                         [Yes.
        Do you know what that's for? ((glances at patient))
34 D:
35 P:
        I have that- it's for heart isn't it?
34 D:
        Of-
```

```
35 D: Yeah yeah.
36 P: Yes.
37 D: Ok: now 'let's just have a look.' ((gazes at computer))
```

The patient draws the doctor's attention to her repeat prescription order slip at line 23, passing him this paper document at the end of her turn. The doctor briefly reads information written on the repeat slip as he talks (lines 25-32). It is important to consider what information the doctor may gain from review of the items requested on the slip: It provides direct information about the items requested, and also tacit information about medication item use. This tacit information may suggest inconsistencies between prescribed and actual medicines use. Items that are requested more frequently than expected on review of quantities supplied suggest medicines may be being used more frequently than expected. Items that are on visible on the repeat prescription slip but not requested suggest otherwise. Possible explanations include adequate supplies meaning the item is not needed, or that the medicine is being used less frequently than expected from review of the prescription directions.

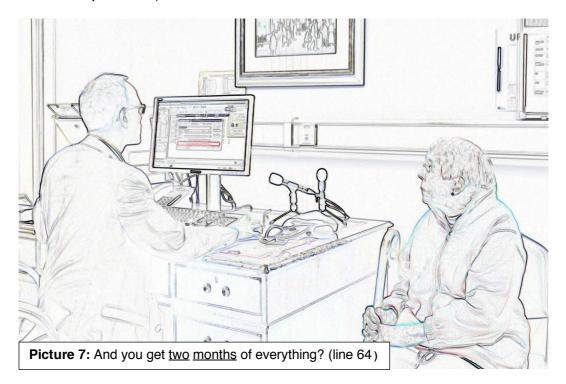
The doctor defines the 'purpose' for the medication review to the patient: His justification is that he needs to "make sure" she knows what she is taking, beginning at line 28, with the patient answering with a preferred response as he briefly pauses. His turn finishes with a tag seeking confirmation from the patient for her willingness to participate in this activity. The doctor conducts this talk through seeking confirmation of medicines from the patient of the information provided in the clinical notes on the computer and the repeat slip, and through asking the patient to tell him what each medicine 'is for'.

The first question is designed with a polar declarative to seek patient confirmation of a medicine called bisoprolol, listed on the repeat slip (lines 31-32). Following the patient's confirmation in overlap at line 33, he follows with a different question design. His polar interrogative is used as a different tool, asking for her to describe the purpose for each medicine (e.g line 35). This practice is repeated outside of these extracts for other drugs in her clinical notes.

At the end of this sequence, the doctor studies information in the clinical record, and as he does so, announces this assessment at line 37. The doctor changes topic and asks the patient about her diagnosis of heart disease and any symptoms that it may cause (not shown). Following

completion of this talk, he returns to consider the patient's medicines again. A further sequence is transcribed in the extract continued below, as this new sequence begins. Again, the doctor's focus of information is the clinical notes on the computer screen: He reads information in the clinical notes as he talks with the patient. The screen shot shows the doctor's positioning during these turns, and the slots his non-verbal communication creates for patient participation.

Extract 6c (30.9.14C8)



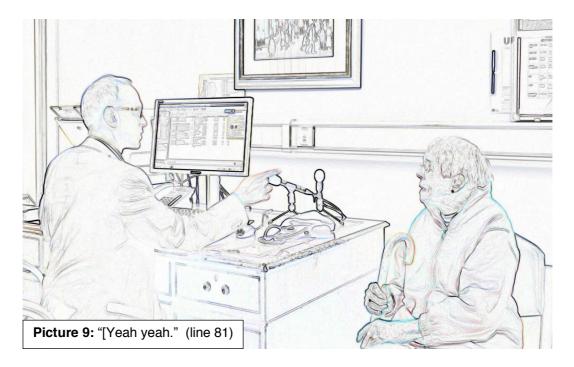


26 lines omitted (doctor and patient discuss heart disease)

64 D:=> And you get two months of everything? ((doctor gaze at

The doctor's enquiry at line 65 is made as a polar declarative, and with his gaze fixed away from the patient (picture 7). The patient does not answer it. The doctor's following turn (line 66) is made as a polar interrogative, with a shift of his gaze from the computer screen to the patient (picture 8), and this polar interrogative is answered (line 68). The doctor continues to inquire about other medicines listed in the clinical notes.

Extract 6d 30.9.14C8



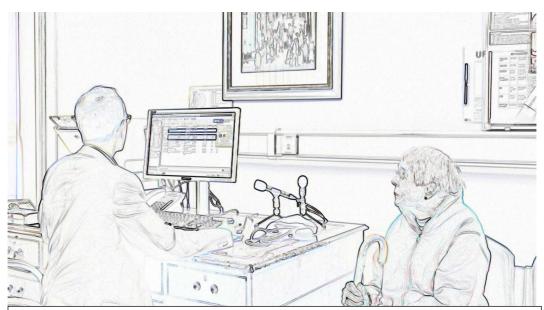
```
70 P:
        Okay. ((doctor gaze at screen))
71 D:
         °Okay so° (.) er (2.0) °okay° >so the bisoprolol< (.) and the
72 D:
73
        candesartan.
        Do you know what \underline{\text{that}}'s for that candesartan? ((glance))
74 D:
75 P:
        Erm (.) er now then I can't re(h)mem(h)ber.
        >Not to worry< (.) that's used for blood pressure.((glance))</pre>
76 D:
77 P:
        That's [right. ((doctor gazing at screen))
78 D:
                [Yeah.
79 P:
        Because I think er (.) Dr XXX said it wor: ked with the: (.)
80
        heart tablet[s.
                      [Yeah yeah. ((doctor glances and points))
81 D:
        Is that right?
82 P:
83 D:
        Yeah it works in a different way yeah.
```

The doctor continues to read information in the clinical notes displayed on the computer screen throughout the talk from lines 71 to 83. His polar declarative at line 73 is not answered, but immediately followed with a polar interrogative to the patient, asking her to name the clinical

indication for the next medicine listed on her repeat prescription. His polar interrogative is accompanied with a very brief glance at the patient as he says "<u>that's</u>" at line 74. It is met with a confession from the patient of her not knowing at line 75. Her talk includes some particles of laughter. He names the clinical condition he was seeking at line 76, again with a brief glance as he says "<u>press</u>ure".

As the talk continues, the doctor is continuing to study the information displayed on the computer screen. He glances briefly at the patient during his turns at lines 74 and 76, then returns his gaze to the computer screen as the patient expresses her remembering at line 77. His turn in overlap is offered as a continuer, but his attention is drawn to the patient inscribed. His gaze is directed to the screen as the patient expands on her agreement with further justification of her remembering, provides a description of another doctor who had offered an explanation for the reason she should take candersartan (lines 79-80). As the doctor confirms in overlap, he glances at the patient briefly and points towards her (picture 9). She seeks confirmation of her explanation at line 82 (Is that right?). Her turn is met with a very brief explanation, and then the doctor changes topic to talk about a different medicine (see extract below).

Extract 6e 30.9.14C8



Picture 10: "And then you've got some painkillers there (.) paracetamol that you take." (line 84-85)

88 patient))

⁸³ D: Yeah it works in a different way yeah.

⁸⁴ D:=> And then you've got some painkillers there (.) paracetamol

⁸⁵ that you take. ((doctor gazes at screen at nods))

³⁶ P: Yes.

⁸⁷ D:=> And is that for ar:th<u>ritis</u> owhat's it [for?o ((glances at

```
89 P: [It's for arthritis.
90 D: >Yeah.<
91 P: Yes it is.
92 D: \( \text{90kay.}\text{\text{\text{9}}} \)
93 D:=> And then I think you've got one aspirin a day haven't you yeah? ((doctor gaze at screen and nods))
95 P: \( \text{Yes} \) er- yes. ((patient nodding))
```

The doctor's declarative at line 84 is made with falling intonation at the end of the turn, and nodding of his head. His gaze is clearly directed at the computer screen (picture 10). The patient interprets this turn as requiring confirmation (line 86). At line 87, the doctor's polar interrogative question is 'rushed through' (Schegloff 1998) and repaired as a 'q-word' question (Stivers 2010). As described in Chapter 3, a 'Q-word' question uses a range of so called 'Q-words': who, what, where, when, why and how. In delivering the second part of his turn as a q-word question, he does so much more quietly. The doctor glances at the patient as he begins his polar interrogative. His polar interrogative is answered in overlap; the doctor has already provided the answer he is looking for as his first part of his turn, and the patient obliges at line 89, with further confirmation at line 91. The doctor's declarative at line 93 adds a tag, and also a nod of his head as he finishes his turn. It is met with confirmation from the patient.

The above extracts (6a-e) have provided an example of a doctor using polar declarative questions, seeking confirmations of information available in the electronic record (the patient inscribed) from the patient in the room (the patient embodied). Following polar declaratives, the doctor used polar interrogatives to test the patient, asking her to name the clinical condition that her medicine was prescribed for. The patient resisted the doctor's access to her clinical notes on the computer at the beginning of the medical review, passing him her repeat medicine slip as an alternative source of information for him to read. She answered some of the questions spoken by the doctor, but not all of them. For example, the question at line 64, "And you get two months of everything?", was made as the doctor was clearly facing the computer screen. This polar declarative was not met with a response from the patient. The question that followed, "Do you get two months of your medications?", was made with a brief shift of the doctor's gaze to look at the patient. The patient responded to this question. Where questions were answered, the patient contributions to the conversations were constrained: The doctor's question design and bodily conduct restricted the responses that could be made by the patient without their resistance.

The attention to the electronic record during medication review was an observed practice used by other doctors in the dataset. In the extract below, the patient and doctor are discussion of some recent blood test results, including cholesterol levels. The doctor has told the patient that these have improved. Following this discussion (not shown), the doctor attends to the patient inscribed as he begins to review her cholesterol treatment.

Extract 7a (20.10.14C4)



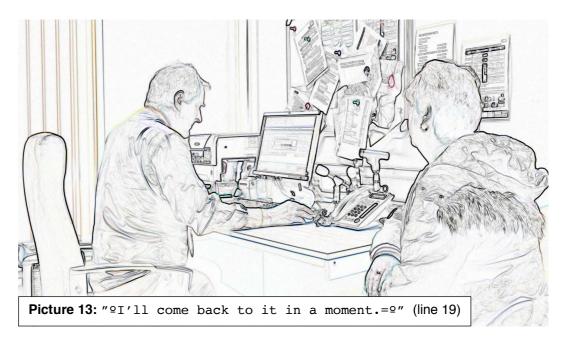
1 D:=> You're on atorvastatin forty, ((doctor gaze at screen))
In beginning his review of the patient's treatment, the doctor is clearly attending to the patient inscribed. He is sitting opposite the computer and his gaze is fixed away from the patient (picture 11). He uses a polar declarative, with a rise in intonation at the end of his turn.

Extract 7b (20.10.14C4)



```
No you're [atorvastat- eighty aren't you.
3
         ((glances towards patient))
4
   P:=>.
                   [Eighty.
5
        So let's just (.) take this one off the prescription.°
6
        Can I have my repeat prescription (.)
   P:
         [while I'm here please?
7
8
        [You can indee:d.
   D:
           (4.0) ((doctor typing))
```

As the doctor realises an inconsistency in the clinical notes at line 2, he moves his gaze slightly away from the screen and towards the patient (picture 12). The shift of gaze towards the patient provides a slot for her to take part in the conversation, as she confirms the strength of her cholesterol treatment at line 4. The doctor's gaze returns to focus on the computer screen at line 5. His mentioning of her prescription prompts the patient to place a request for one at line 6. The doctor agrees in overlap, his body and gaze still facing the computer screen. The extract continues below.



```
(4.0)
                  ((doctor typing))
10
  P:
        So everything's all good.
           (7.5) ((doctor typing))
11
        It's possible that the triglyceride is (3.5) partly
12 D:
        reflecting your blood sugar.
13
14
           (1.0)
15 P:
        What does [that mean?
                   [Well,
16 D:
        Your blood sugar is goo: d.
17
18
           (2.0)
                 ((doctor gazing at screen))
19 D:
        ºI'll come back to it in a moment.=º ((move towards screen))
20 D:
        =9Hang on.9
21
   D:
        >ºLet me just-º
                            ((patient sniffs))
22
           (1.0)
```

The doctor does not attend to the patient's turn at line 10. He continues to type. He then makes further comment about the patient's results, as he continues to direct his gaze towards the patient inscribed (lines 12 and 13). The patient does not talk immediately, but after a one second pause, asks for an explanation of the doctor's comment at line 15. Following a diagnosis delivery at line 17, the doctor changes topic and focuses closely on information in the patient's electronic record (picture 13).

In the conversation that follows, the doctor considers the patient's prescription medicines, detailed in her notes. At line 18, the doctor's body is facing the computer screen, and as he speaks, his gaze fixes closely on the electronic record. He moves his head forward and he follows with comments orientated to his consideration of data in the patient's notes (lines 20 and

21). The doctor's posture and speech show that he is closely attending to the clinical notes. The patient moves her shoulders away from the doctor in concert with his comments, in unison with the doctor's close attention to the computer.

Extract 7d (20.10.14C4)

```
23 D: Er:m,
22 (1.2) ((patient sniffs))
23 D: PRight. ((doctor clicking computer mouse))
24 (4.0)
25 D: Tch (2.0) u:m (1.0) > right let me just run through this. <
26 D: Loperamide? ((doctor glances towards patient))
```

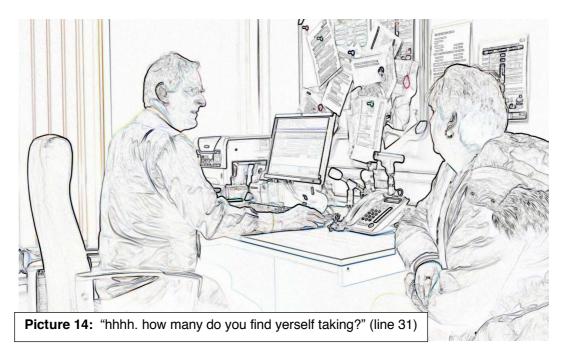
No explicit reference is made to a "medication review". However, there is implicit reference through talk at line 25. The doctor begins to list medicines he reads in the clinical notes. The first of these is loperamide (line 26). The features of this turn place it as a question requiring confirmation, with the marked rise in intonation and the doctor's gaze both working to ask the patient to confirm the information he sees in the electronic record. The doctor moves his gaze from the screen and towards the patient during his turn at line 26, although he does not look directly towards her.

Extract 7e (20.10.14C4)

```
26 D: Loperamide? ((doctor glances towards patient))
27 P: Do y' do them in any \(\frac{1}{2}\)stronger ones than two milligram?
28 ((doctor shaking head and looking at screen))
29 P: How many can I take a day of 'em?
```

The patient responds. Rather than providing a direct confirmation, she places a question in answer to the declarative, seeking more information about her treatment. This question and the one that follows (line 29) provide her with opportunities to ask about the possibility of stronger treatment, and to clarify the number of loperamide capsules she may take each day. These questions make relevant a need for clarification from the doctor. She is seeking guidance about the safe use of this medicine.

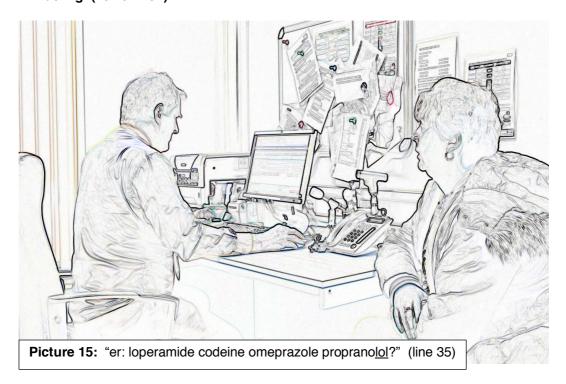
Extract 7f (20.10.14C4)



- 29 P: How many can I take a day of 'em?
- 30 (1.1)
- 31 D: Hhhh. how many do you find yerself taking?
- 32 P: About four.
- 33 D: Yeah eight is the tops.
- 34 P: Oh right I'm alright then. ((patient nods))

There is another pause (line 30). The doctor defers advice about the amount of loperamide that may be safely taken. Instead, he seeks clarification for the amount of this medicine the patient currently uses each day (line 31). This turn is made with shift of his gaze from the computer and towards the patient (picture 14), with a joining of the patient's gaze to look back at the doctor. His gaze is still directed towards the patient as he offers her some education at line 33, which is greeted favourably.

Extract 7g (20.10.14C4)



```
35
         Er: loperamide codeine omeprazole propranolol?
   D:
36
   P:
         Yeah.
37
   D:
         Atorvastatin,
38
           (1.0)
39
         Ariprozole,
   D:
40
           (1.6)
41
   D:
         Tramadol,
42
           (1.8)
```

The doctor returns to the activity of listing medicines recorded for her repeat prescription at line 35. The doctor's talk at this point is made with a marked rise intonation as he finishes his turn. He also shifts his gaze slightly towards the patient and raises his eyebrows as he says "propranolol?". The patient interprets his turn as a declarative question and answers with confirmation at line 36. The doctor's following turns at lines 37, 39 and 41 are made with rising intonation, although less marked than at the end of his turn at line 35. These are not answered, either through speech or through gesture (e.g. patient nods). All of these turns at talk are made with the doctor's gaze clearly directed towards the computer screen.

Extract 7h 20.10.14C4



```
43 D: That's it? ((doctor glances at patient))
```

44 P: Yeah thanks.

45 (34.0) ((prescriptions printing))

46 D: No the H B A one C is very good. ((doctor gazes at screen))

47 P: What's that?

His turn at line 43 is made with a marked rise in intonation at completion, and a turn of gaze to look at the patient. The patient interprets this as a request for confirmation. After the patient's confirmation, there is a prolonged silence. The only noise is that of the printer as it prints out the patient's prescriptions 25 seconds into the 34 seconds of suspension of talk. The doctor spends this time gazing at her electronic record on the computer screen. The doctor changes topic and returns to talk about the patient's results at line 46. The doctor's gaze is focused on the computer screen as he does so.

This extract showed turns at the start and the end of this sequence that were met with immediate confirmations from the patient. Both of the doctor's turns at lines 35 and 43 were made with a marked rise in their intonation on their completion. Along with the rising intonation, the doctor moved his gaze towards the patient. In answering theses turns contiguously and without delay, the turns were treated by the patient as questions that required, and could be granted, a positive response (pg. 34-38, Weber 1993). The patient did not answer other declaratives. Her contribution to talk was limited by the doctor's turn design, as his polar declaratives worked to seek confirmation about data in the clinical record, but constrained other answer designs. The

patient embodied confirmed a discrepancy in the clinical notes at line 4, when she was provided with a slot to join the conversation through the shift of the doctor's gaze from the patient inscribed. She used her initiative to seek more information about one of her medicines, through placing a question in response to a polar declarative (line 27), rather than simply confirming that the declarative was true.

In the next example, another doctor begins a medication review. This is prompted by the doctor's findings from a measurement of the patient's blood pressure. The activity is not explicitly labelled as such, but it is clear to see that information about medicines taking is assessed. In this instance, attention to the patient inscribed over the patient embodied leads to miscommunication about medicines taking.

In her account for her visit, the patient tells the doctor that she has booked her appointment to review results of recent blood tests, following an increase in one of her treatments for blood pressure. It is clear from their discussion that the patient and doctor are well acquainted, and that the patient is awaiting complex and risky surgery for a pituitary tumour. The tumour secretes a hormone that raises her blood pressure and increases the risks of her condition if not controlled. The extract below is taken from the consultation after the doctor has measured the patient's blood pressure and found it to be high.

Extract 8a (2/2/15C1)

1

16

right.

D:



2 P: Is it? 3 P: [Hahaha fine. 4 D: [Hahaha you've n-5 You've not missed any of your tablets or [anything, D: 6 P: [No no no. 7 D: What time do you normally take your blood pressure ones? P: 8 Err eleven morning eleven er [pm. 9 D: [Right okay okay. 10 D: Perhaps we'll do one in a minute towards the end see if 11 we can get it any lower. 12 P: I guess (.) part of me is thinking: I know you've got 13 D: surgery coming up and the last thing I want is for your 14 15 surgery to be delayed cos we've not got your blood pressure

It was better wasn't $i\underline{t}$ when we did it last time.

17 P: Okay. 18 D: Erm (0.2) but it is <u>tricky</u> (.) balancing this up sometimes. 19 P: Uhuh.

The doctor's turn at line 1 followed a 20 second pause as the doctor considered previous blood pressure readings recorded in the patient's clinical notes. The sequences of talk transcribed above were conducted with the doctor's body and gaze facing the patient. The doctor glanced very briefly at the notes during the talk, but her non-verbal focus remained with the patient embodied. As she begins to review the patient's treatment, her focus shifts to the patient inscribed in the continuation of the extract below.

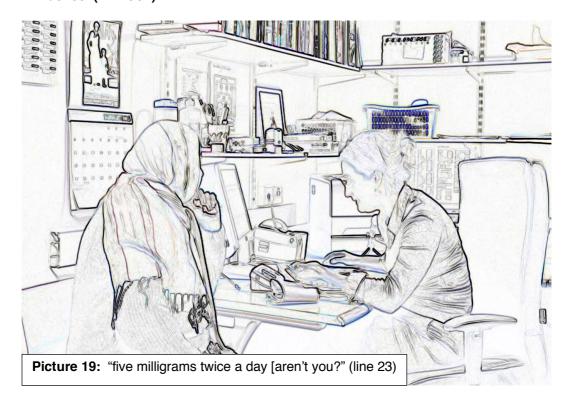
Extract 8b (2/2/15C1)



- 20 D: Cos you are on a lot of stuff aren't you?
- 21 D:=> How many blood pressure tablets are you on now?
- 22 (2.0) ((doctor looking at computer screen))

The doctor uses a tag question (line 20), and then an interrogative, asking about the number of different treatments the patient uses for her blood pressure (line 21). The doctor's gaze is fixed on the computer screen as she does this (picture 18). The patient does not answer the doctor's questions. There is a marked pause of two seconds.

Extract 8c (2/2/15C1)



```
22  (2.0) ((doctor looking at computer screen))
23 D:=> Errm (2.0) tch so your lisinopril (.) you're taking (0.5)
24  five milligrams twice a day [aren't you?
25  ((doctor glances to patient))
26 P: [Twice a day yeah.
```

The doctor uses a declarative question with a tag (lines 23 & 24) to ask about lisinopril. Lisinopril is a medicine used for the treatment of hypertension. The doctor glances at the patient as the patient says "twice a day" in overlap as confirmation to her tag question (line 26). As can be seen in the video still, the preferred response is made just after the doctor shifts her gaze from the computer and towards the patient (picture 19).

Extract 8d (2/2/15C1)



```
26 P: [Twice a day yeah.
27 D:=> And your amlodipine five milligrams [a day, ((doctor looking
28 at computer screen))
29 P:=> [°Yeah.°
```

The doctor returns her gaze to the computer screen, and uses a polar declarative to ask about another antihypertensive listed in the patient's record (line 27). She does not glance at the patient during this turn. Again, the patient answers with a very quiet, preferred response in overlap.

Extract 8e 2/2/15C1



```
30 D:
        0:kay.
31
   D:
        Well there's room if we had to- to do [other things there.
32
   P:=>
                                               [I stopped amlopidine.
        Did you stop it? ((doctor glances at patient))
33
   D:
34
   D:
        [Ah.
35 P:
        [The aml-
36 D:
        The [am- amlodipine.
37 P:
            [(u.cs.) yeah.
        Did you? ((doctor turns to face patient))
38 D:
39 P:
        That's what you said. ((patient points at doctor))
```

The doctor uses "o:kay" as pre-closure for this sequence, and then changes topic at line 30. However, further conversation shows that there is an unresolved discrepancy in the doctor's understanding from the electronic record, and the patient's actual medicines use.

The patient's turn in overlap begins to tell the doctor this at line 32, and prompts the doctor to shift posture. At first, the doctor's gaze moves from the screen as she makes her enquiry at line 33, and then she moves her positioning in her chair, turning to face the patient more directly at line 38. The information from the patient embodied is at odds with the information available to the doctor in the electronic record. The patient's initial response to the doctor's enquiry at line 27 was one of confirmation, but this confirmation was misplaced. The patient's turn at line 32 is greeted as news, with a change of state token at line 34 (Heritage 1985). The discrepancy is realised and this opens up a new sequence of talk, as the patient confirms that she has stopped the medicine,

and then tells the doctor that this is what she had previously been instructed to do by her. The patient's gesturing is made towards the doctor as she speaks (picture 21).

The patient provided responses to some of the doctor's questions, but where the doctor made these with clear visual reference to the computer screen, these were not always answered. When answers were provided, they were confirmations, all in keeping with the preferred response for the doctor's question design. It was the patient who had to interrupt a change of topic and bring the conversation back to the review of her medicines, and iron out a discrepancy in the electronic record. This was a particularly important resolution, as without it, the doctor would hold an erroneous picture of her anti-hypertensive treatment. As the patient's blood pressure was poorly controlled, a plan to increase treatment was on the cards.

7.3.2 Attending to 'the patient embodied' during a medication review

In other medication reviews recorded in the present data, the doctor's design of conversation and non-verbal communication oriented to the patient embodied as primary point of reference.

Features of this orientation are described using transcribed extracts and video screen shots below.

In the first example provided in this section, it is the patient who makes explicit reference for the need to review one of her medicines listed in her clinical notes. She does this through talk and bodily conduct. The consultation has been arranged as follow-up for a chronic concern (endometriosis). The doctor and patient discuss a recent appointment the patient has had with her gynaecologist, and the recommendations the gynaecologist has made for her medicines to treat her condition (not shown). The patient's request for a review of her medication documented in the clinical notes is sequentially placed following her answer to a pre-closure turn from the doctor.

Extract 8a (26/1/15AMC4)



Picture 22: "I wonder if it's worth doing \downarrow the (0.3) clarithromycin review now as well cos I know that's coming up.?" (lines 7 & 8)

```
D:
        And (.) anything else? ((doctor looking at patient))
1
2
   P:
        Just the naproxen.
3
   D:
        The naproxen [yes.
                               ((doctor turns to computer))
   P:
5
                     ((patient looks at computer))
   P:
        Ah-
           (0.3)
7
      => I wonder if it's worth doing |the (0.3) clarithromycin
8
        review now as well cos I know that's coming up.
9
        °Yeah.°
   D:
        While I'm here?
10 P:
```

In responding to the pre-closure turn from the doctor at line 1, the patient reminds the GP that she requires a prescription for naproxen, a new medicine recommended by her gynaecologist (line 2). In agreeing to supply naproxen, the doctor has to add this information to the patient's repeat prescription record held in her clinical notes on the computer. She turns to the computer and accesses the prescription records at line 3. After a short pause, the patient prompts the doctor to consider clarithromycin, a medicine listed on her repeat prescription. The video recording shows that the patient's gaze is directed at her clinical notes as she does so (picture 22).

The patient makes more than a simple request for a further supply of her clarithromycin. She uses the word 'review' and talks about knowing 'that's coming up'. Her request is for completion

of medication review as an activity. The patient designs her request with prefacing: There is an expression of uncertainty with regard to the need for this activity at the moment she places her request. The doctor agrees to a review of this medicine.

Extract 8b (26/1/15AMC4)



- 7 P: I wonder if it's worth doing ↓the (0.3) clarithromycin
- 8 review now as well cos I know that's coming up.
- 9 D: °Yeah.°
- 10 P: While I'm here?
- 11 D:=> How's it going? ((gazes at patient))

The doctor's turn design and shift of gaze focuses attention from the clinical notes and back to the patient (picture 23). Her inquiry at line 11 provides the patient with a slot to share an account of her experiences of using her clarithromycin. It contrasts with the observations of doctor practice in the first example, where the doctor directed conversation to explore patient understanding of the indications for her medicines. This doctor uses a more general, open inquiry (How's it going?). The question provides an opportunity for the patient to speak about her medicines on her own terms and to initiate topic related to her medicines as she would like to. The question design and shift of gaze opens the floor to the patient to talk about her medicines and to maintain control of this conversation activity.

Extract 8c (26/1/15AMC4)

11 D: How's it going? ((gazes at patient))

```
12 P: It(h)'s rea(h)lly good today of c(h)ourse erm hahaha
13 P: It's per(h)fect.
14 P: Hahaha .hhh
15 D:=> [fThat's the way it i(h)s.
16 P: [Ha.
17 P: Haha so I might book in to see you every week [hahah
18 D:=> [(fWhen
19 it's bad ha.)
20 P: fJust as a- (.) just [(u.cs.) li(h)ke sorts itself out.
```

It seems that the patient is delighted with the way her skin is looking, and shares this with the doctor. Her laughter is perhaps a sign of both relief at the success of her treatment, and an expression of the emotional delicacy imparted by her previous problems with her skin condition (Haakana 2001). The doctor joins in the laughter, with some light-hearted declaratives lines 15 and 18.

Extract 8d (26/1/15AMC4)

```
21 P:
        Erm,
           (1.0)
22
        I- I dunno s- it seems to be very hormonal,
23 P:
24 D:
        Is it?
25 P:
        So- (1.2) just kind of comes and goes depending on the
21
        cycle.=
22 P:
        =Erm it was bad .hh a couple of weeks ago but now it's
23
        totally cleared up.
24
           (0.8)
```

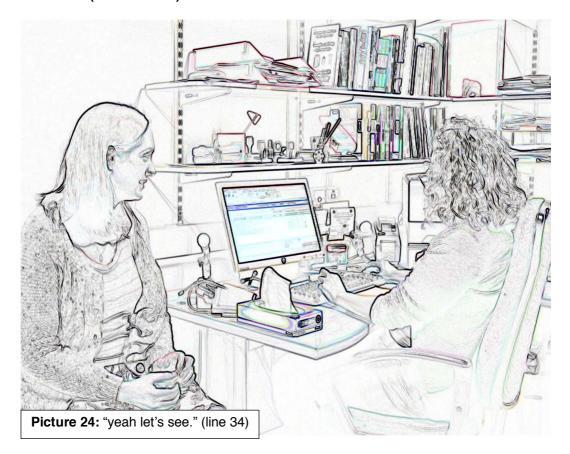
The patient holds speakership at line 21, and after a pause, continues her narrative about fluctuations in her skin condition. She offers the doctor a candidate diagnosis at line 23, and in response to the doctor's continuer at line 24, provides justification for this.

Extract 8e (26/1/15AMC4)

```
25 P:
        So (0.5) I don't know if it's working better than
26
        erythromy[cin.
27 D:=>
                 [(W- what would you like to do?)
28 P:
        .hh I wonder if it's worth carrying on for a (0.2) tiny
29
        bit longer (0.6) [with the clarithromycin and just=
30 D:
                          [Yeah that's absolutely fine.
31 P:
        =seeing how that works.
32 D:
        Yeah.
```

The doctor and patient talk overlap, as the doctor asks the patient about future use of treatment for her skin (line 27). The interrogative is patient-focused; it is directed at the patient's wishes ("what would you like to do?") rather than any expression of the doctor's preference.

Extract 8f (26/1/15AMC4)



```
33 P:
        Cos it's only been a couple of months now.
34 D:
        Yeah let's see. ((doctor looks at computer))
35 D:
        °Hang on.°
           (2.3)
36
37 D:
        Yeah.
           (0.7)
38
        Yeah it's probably not even- it's only just over a month
39 D:
        [now.
40
41 P:
        [Yeah:.
42 D:
        Yeah (0.5) that sounds reasonable.
```

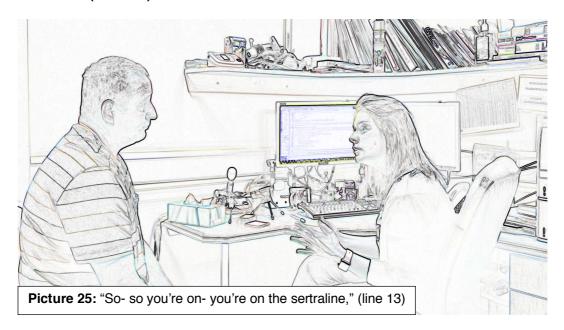
The patient's turn at line 33 prompts the doctor to access information in the electronic record. She shifts her gaze to the information in the clinical notes, displayed on the computer screen (picture 24). The doctor's assessment of information on the computer screen is made as she provides an explanation of this action at line 34 (Yeah let's see). This practice of 'explicit explanation' of visual access to computer records is in keeping with Nielsen's (2016) observations of doctors in Danish primary care. The doctor follows her explanation with a request to the patient to await her assessment, and then confirmation of her location of the information on screen (lines 35-37).

In this consultation, the doctor used a Q-word question in her orientation to the review activity ("how's it going?"), providing the patient with the opportunity to talk about her medicine. This is in contrast to the design of questions used in the earlier examples, where polar declarative and tag questions were used to seek confirmation of information in the notes. In conversation with this doctor, the patient used her opportunity to provide an account of her experiences whilst taking clarithromycin. She also provided the doctor with a candidate diagnosis for the possible cause of her skin troubles. In doing so, the doctor gained insight into the patient's perspective. The doctor's question about future treatment at line 27 (W- what would you like to do?) maintained patient autonomy and shared the decision. The doctor's Q-word question provided a trajectory in conversation for the patient to express her wishes and opinions.

The computer record was used as a point of reference in response to the patient's declarative about duration of clarithromycin use. However, the electronic record did not dominate discussions. The patient's slots for contributions to the review were less constrained than those shown in the earlier examples.

The practice of attention to the patient inscribed was observed during other medication reviews within the dataset. The beginning of the extract below was provided in section 7.2.1. The extract is shown in more detail below, with screen shots to demonstrate non-verbal and gestural communication.

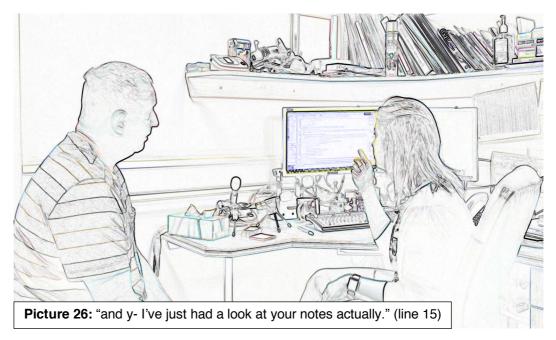
Extract 9a (5.8.15C3)



```
1
   P:
        Basically what it is <every time> (.) I come for my
2
        prescription now cos I'm on: sertraline,
3
   D:
        Oh yeah.
   P:
        So: >every time I come now< it's always on (0.2) a
5
        request for:m saying I muss book an
6
        [appointment with a doctor to say-
7
   D:
        [come in an er- ok,
8
        (0.2)
9
   P:
        >They want a like a r- (0.3) re:view sor[t of thing=
10 D:
        =So (>basically what it is.<)</pre>
11 P:
12 D:
        Okay,
13 D:=> So- so you're on- you're on the sertral[ine,
14 P:
```

The doctor uses a declarative question at line 13 ">so- so you are on- you're on the sertrali[n:e=". In contrast to the review carried out by the doctors in section 7.3.1, her polar declarative is made as she faces the patient (picture 25). He polar declarative is not used to seek confirmation of information in the clinical notes. The patient has already told her that he takes sertraline at line 2. Rather, it is used to summarise the patient's talk, and in doing so it shows that the doctor has listened to his account.

Extract 9b (5/8/15C3)



As the doctor tells the patient that she has reviewed information in his clinical notes (line 15), she gestures towards the patient's electronic patient record on the monitor screen, and both the patient and the doctor's gaze focus on this briefly as they speak (picture 26). After their brief

gaze at the clinical record, the doctor and patient return to look at each other. Whilst the doctor and patient have both made visual and conversational reference to the clinical record as an information resource, it is not the focal point of the consultation. The main focus is the patient embodied, evident from the doctor's turn design, gaze, body position and gesture.

Extract 9c (5/8/15C3)



The doctor uses a polar declarative, seeking confirmation about information she had read *prior to their conversation*, regarding the length of time the patient had used his medicine. The patient provides confirmation in overlap. The doctor's turn at line 23 brings the focus back to the patient as primary point of attention for the consultation. Her gaze and body posture are firmly facing the patient, and there is an opening of her hands as she said "how <u>ar:e</u> you?" (picture 27). The conversation continues in the extract below.

Extract 9d (5/8/15C3)

```
23 D:=> How ar:e you?
24 P: Me: in me:self have never been better.
25 D: tch okay: g[reat.
26 P: [That's why I want to ask and see if I can stay
27 on these.
28 D: Y- do you feel that they really [help?
```

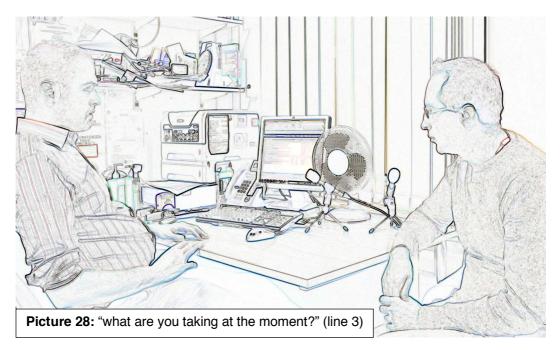
The patient takes the opportunity to do more than provide confirmations about medicines information in his clinical record. He shares his preference to continue taking the sertraline (line 26), and starts to describe his worries about stopping it (line 30). Through use of "again" at line 33, he provides the doctor with a hint into his previous experiences of the impact on his mood when stopping this medicine. The doctor's continuer at line 34 provides an opportunity for him to confirm this past experience.

In the above extracts, the doctor's turns at talk were coupled with facing the patient. The patient was maintained as the primary focus during their talk about medicines taking, and was provided with opportunities to talk about his medicines. The doctor used a polar declarative question to demonstrate active listening to the patient embodied, "So- so you're on- you're on the sertral[ine,". A polar declarative was used to confirm information the doctor had read about the medicine they were talking about, "You've been on it for just over a yea:r=". In contrast to the practice used by doctors in section 7.2.1, this was placed whilst the doctor was facing the patient embodied, and was followed with a Q-word question, "how ar:e you?", and gesturing to bring the focus back to exploration of the patient's perspective. The patient embodied was not only asked for confirmation of data in his clinical record, he was provided with wider opportunities for talk during his medication review,

In the final example, the doctor and patient are talking about medication that the patient has been using to treat chronic foot pain. The extract below is taken from partway into the consultation, during the planning of management for his symptoms. The extract and screen shot below shows the beginning of this sequence. The doctor introduces the topic, and then uses a Q-word question to begin discussion about the patient's analgesia (line 3). Whilst his question design does build in a presumption that the patient is *taking something* at present, there is no reference to information in the patient's clinical record. In placing his question, the doctor and patient are

sitting facing each other (picture 22). The doctor's gaze is focused away from the patient inscribed. Whilst the doctor does look at the screen at points during the conversation, his attention to the clinical notes is fleeting.

Extract 10a (12.1.15C2)



```
D: So er- so with the pain medication (.) er-
(2.0) ((glances to screen))

D:=> What are you taking at the moment? ((gaze at patient))

P: Erm: pregabalin a hundred and fifty milligrams=
P: =naproxen two hundred and fifty milligrams and (1.5)

P: Co-codamol, ((doctor glancing at screen))
```

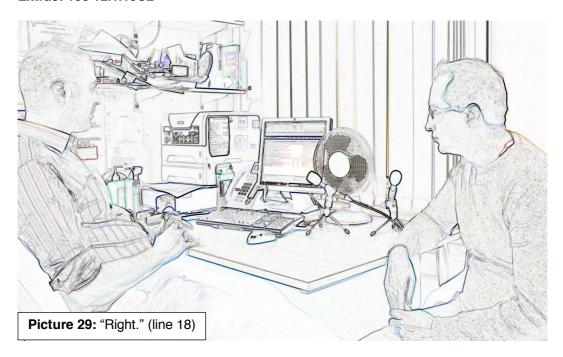
The doctor prefaces the activity as talk about analgesia at line 1. He begins the review with a Q-word question. This provides the patient with an opportunity to give information about the names and doses of medicines that he takes (line 4,5,6). The doctor glances at the screen as the patient finishes his list. The doctor uses the information within the clinical record as a point of comparison, but in such a way as to maintain patient engagement.

Extract 10b (12.1.15C2)

```
7
        I instructed to take me off the codeine just in case,
8
           (1.5)
        Oh [yo-
9
                 ((doctor gaze at patient))
   D:
10 P:
           [Er of addiction or something like that.=
        =I know it's- it's l- it's lame but (.) still,
11 P:
12
          ((doctor glances at screen))
13 D:
        Err (.) have you got any have you- ((gaze at patient))
14 D:
        I mean are you using any at all at the moment of that?
        Which?
15 P:
16 D:
        The co-codamol.
```

The patient reveals a concern about his medicines at line 7. The doctor's response displays this as news to the doctor: there is a marked pause, and the doctor's "oh" serves as a change of state token (Heritage 1985). The patient brings up the delicate topic of addiction to codeine (contained in co-codamol mentioned by the patient at line 6). The doctor begins an inquiry at line 13 regarding possession of this medicine. He self-repairs during this turn and then cuts it short (Err (.) have you got any have you-). The doctor reformulates this question, asking the patient about the use of his medicine rather than possession (line 14). The patient has listed three medicines in earlier turns (lines 4-6), and seeks clarification at line 15.

Extract 10c 12.1.15C2



- 15 P: Which?
- 16 D: The co-codamol.
- 17 P: Er:m (0.2) yeah I have a small amount left.
- 18 D: Right. ((nods and glances at screen))
- 19 (1.5)

The patient answers the initial question about possession at line 17. This prompts another brief glance at the electronic record by the doctor (picture 23). In accessing the data in the record, the doctor is able to make reference to the last date of supply of this medicine, and the quantity prescribed. After the marked pause at line 19, the doctor moves talk back to conversation about patient choice.

Extract 10d (12.1.15C2)

- 20 D: And wh- and did you:- what did you want to do about the
- 21 pain er= ((gaze at patient))
- 22 D: =Did you have some idea to think well I'll take

```
2.3
        more of this or less of that or-
24 P:
        Well: erm (.) yeah I'm still in pain like it hasn't-
25 P:
        Even though I'm on s- three separate painkillers it- it
        hasn't fully relieved it,=
26
27 P:
        =But if I don't take them I'm in worse pain.
28 P:
        [So-
29 D:
        [Yes.
30
           (1.0)
```

He makes a suggestion about the patient's possible deliberations at line 22, and the patient greets this opportunity with some sharing of his difficulties. In the sequence that follows, the doctor changes topic, and focuses on the impact that the patient's pain is having on his everyday activities, and possible avenues aside from medicines that might help with this.

Extract 10e (12.1.15C2)

```
31 D:=> And how- how able do you feel to sort of get- get along
32 sort of- coping with it?
33 P:=> Er::m it does affect my m- l- my mobility on the war:d.
34 D:=> Yes.
35 P: Erm it's obvious that I have- (0.3) like I'm limping now
36 basically so it's obvious I have a limp.
37 D: Yeah.
```

During the review of medicines listed in the electronic record, the doctor provided opportunities for patient engagement and participation, encouraging the patient to 'answer more than the question' (Stivers and Heritage 2001). The design of conversation and non-verbal communication used by the doctor during this talk focused on the patient embodied, rather than the patient inscribed.

7.4 Discussion

In exploration of actual medicines taking captured in the present data, doctors were seen to seek to avoid presumptions on the basis of information in the medical records alone. As doctors recruited information through conversation with their patients, they viewed clinical notes on the computer and paper repeat prescription slips. This information helped to identify, understand and reconcile differences in the ways that medicines were recorded to be taken, and the ways in which actual medicines taking occurred.

The upcoming activity was seen to be sometimes explicitly labelled as a 'medication review' by the doctor or the patient. Patients and doctors were also observed not to explicitly label the activity, but to make more implicit reference to it, through talk, body position and gesture. Doctors were observed to lead medication reviews using two different conversational practices. The

video screen shots helped to show the ways in which authority was provided to the patient inscribed and to the patient embodied by the doctor's gesture and non-verbal communication during these conversations. Variety in the ways these actions were used provided different response slots for patients.

In the first practice observed (section 7.3.1), doctors used polar declaratives and tag questions as they talked to patients about the medicines listed in their electronic records. The questions were used as tools designed to seek a confirmation as a preferred response (Heritage 2010; Stivers 2010; Weber 1993). Polar declaratives used in this fashion were often made with the doctor's gaze and posture orientated to the computer screen. This practice placed the 'patient inscribed' in the clinical record as dominant in proceedings, with the patient embodied acting as a reference source to provide confirmation of data within their electronic notes. These orientations constrained opportunities for the patient to participate in conversation, and for the conversation to be defined by them. It meant that extra conversational work had to be done to move talk to issues patients wanted to address. There was work required on the patients' part to repair and resolve discrepancies in recorded and actual medicines taking.

In other consultations, the 'patient embodied' was the focus of social facts about medicines taking, with the electronic patient record as a peripheral source of reference (section 7.3.2). Here, the doctor used Q-word questions to initiate talk to review medicines. These questions provided an opportunity for the patient to guide talk about their medicines, sharing their perspectives and what mattered to them. The doctors orientated to the patient embodied as the authoritative source of social facts about medicines use, through conversation design and bodily conduct. The doctors favoured a home position facing the patient, placing them as their visual focal point during talk. Polar declaratives and tags were used in a different way: to confirm what doctors heard from the patients, demonstrating active listening and encouraging expansion of patient contributions. Their polar questions were used as tools as part of active listening, encouraging further patient engagement in conversations about their medicines.

These conversations helped doctors to understand the patient's concerns about the medicines

they were prescribed, and facilitated joint review and update of treatment plans.

Through coordination of talk with triangulation of data on the electronic record, the video recordings demonstrated the *inter-dependency* of these tasks. Doctors held greater epistemic authority with regard to access to the information detailed in the patient's electronic record, a finding in keeping with other reports of CA research in primary care (Nielsen 2016; Swinglehurst, Roberts and Greenhalgh 2011). The converse was true for patients: they had primary access to their actual medicines use and their perspective about these treatments, but their access to prescription details in their medical records was limited. The patient held epistemic authority with regard to their own lifeworld experiences and views (Mishler 1984), and primary access to information about actual medicines taking, and to their perspective about medicines they are prescribed.

It could be argued that doctors should not access the clinical notes during their conversations with patients, given the impact the present data shows such reviews may have. However, this is unrealistic and potentially dangerous given the amount of information available in the modern electronic patient record: Doctors need to compare and contrast information displayed in the medical record with that provided by the patient. Without this comparison taking place during the review of medicine, reconciliation of any differences in how medicines are recorded and how they are actually used becomes problematic. The present data shows that during a medication review, attention to the patient embodied as primary source of information is desirable and achievable. It is dependent upon the way in which talk and non-verbal communication is conducted by the doctor.

7.5 Summary

Doctors were observed to lead medication reviews using two different conversational practices.

These contrasts in practice afforded different opportunities for patient participation in the review of their medicines. Non-verbal and gestural communication was shown to influence the progression of talk and the slots created for patients to participate in conversation. The present data suggests that when conducting a medication review, it is important to consider placement of body and gaze, and how recruitment of information from the patient inscribed may encroach upon participation by the patient embodied.

For patients, greater access to their clinical notes outside and within the consultation could aid their participation in conversation. Patients are offered the opportunity to view their clinical records outside consultation settings (NHS Choices 2015), but the recordings collected for this thesis confirm that it is the doctor who has access and control of them during conversation. A patient's review of information offers further safeguarding against discrepancies between actual and recorded medicines use, and to their contribution to information within their clinical notes. Greater access and contribution to clinical notes and to conversation about medicines hold potential to empower patients and build greater patient autonomy. Work in this area is already being piloted in the US (Asan, Tyszka and Crotty 2018; Mafi et al. 2018).

Chapter 8: Implications for medical education and practice

8.1 Introduction

The impetus for this thesis was to find out more about talk about medicines in primary care consultations. As shown in the literature review and the present data, talk about medicines is a key concern for medical educators, the healthcare profession and for patients. Thousands of such conversations about medicines are taking place every day in UK general practices. However, the confidential nature of these encounters usually restricts access to the talk that takes place. This makes it difficult to critique the ways in which talk between the participants works, and to offer evidence-informed guidance on ways to improve it. The findings from this thesis can now be used to guide the promotion of good conversational practices, with the aim to bring about improvements in patient care.

The present data provides new detail about the mechanics of talk between patients and primary care doctors. The analysis adds to the existing, and relatively small amount of international CA research already conducted in this setting (Chapter 2). The literature review and the data collected for this thesis shows that conversation represents the social tool through which we get things done in our interactions (Sidnell 2010b). This understanding offers new avenues to address barriers that patients face during conversations about their medicines, and to find out what works for consultation participants as they talk about medicines.

8.2 Analytical findings

The present data makes several contributions to our understanding of talk about medicines in primary care practice. The thesis findings have implications for doctors in practice, and for augmentation of medical education as students and practitioners learn to talk with patients about their medicines. Each of these applications are clearly worthy of further research. Key findings from the present data are considered in the sections that follow.

8.2.1 Conversation design during slots for talk about medicines

The present data showed how talk about medicines was interwoven into the fabric of the consultation discussion. Medicines talk occurred both as the primary focus of the conversation to be had, and as context during talk addressing other health concerns. The presentation of an entire consultation in Chapter 4 offered a concrete example of how slots for medicines talk occurred across consultation activities. Conversation related to medicines was weaved in to the activities of gathering information, diagnosis delivery, treatment recommendations and during the closing of the consultation. The present data shows that talk about medicines should be seen as an integral part of many consultations, sometimes addressed as primary focus of conversation, and sometimes as more contextual, but still important, talk.

Patients created slots for talk about medicines, through their placement of requests across a variety of activities (section 6.2.3), and through other initiations of sequences of talk, such as requests for reviews of medicines (Chapter 7). These findings support the actuality of greater patient control in healthcare; of determining what is talked about and when. The present data shows that patients are able and willing to direct talk to what matters to them (Chapter 4,5 and 7). Practitioners need to be flexible in their approach to consultation talk, and to engage in conversation that accommodates greater patient agency.

The present data provided new insights into how patient requests for medicines were situated, designed and responded to (Chapter 6). Requests were made directly, and others more indirectly with orientation to contingencies. The present data showed requests made later in talk as additional concerns prompted by patient narrative, and in response to pre-closure talk from the doctor. Patient often provided narrative and this set requests in context. Doctors sometimes used context provided by patients in the making of their requests as part of the design of their responses to them (e.g. extract 1, section 5.2.1 and extract 11, section 6.4.2). This finding represented a good practice to share with the profession. It showed evidence of the expression of active listening through conversation on the part of the doctor; that the patient narrative had been heard and considered.

One notable finding was patients' placement of requests for medicines alongside requests for discussion about other matters of concern. Analysis of the present data considered doctors' responses to requests placed alongside other matters. Doctors were observed to deal with the medicine requests in conjunction with other topics as part of the talk that followed, or as separate items for discussion (section 6.2.2). Both of these approaches had merits and it is hard to draw firm conclusions about which might represent best practice. Future research could further explore doctors' conversational practices when faced with multiple requests packaged together, and how these work for consultation participants.

In terms of granting or denying patient requests for medicines, doctors most commonly deferred their stance initially, in line with the findings from Nielsen (2011). However, the present data showed that despite initial deferral, the majority of requests were granted. When requests were declined by doctors, they did so with qualifications and some sharing of their clinical reasoning. Some requests were granted, but with orientation to contingencies in the design of these responses (section 6.4.2). It is not possible to comment on patient views of these practices on the basis of the present data, but it would be interesting to explore this further (see section 8.5). Were qualified refusals were seen as 'sufficient' by patients that received them? Were these qualified refusals demonstrations of the continuing imbalance of power held by participants in the consultation? Or might patients appreciate doctors sharing of their clinical reasoning, and accept refusals presented in this way?

The analysis of the activity of medicines review, not previously reported in CA literature, showed how this activity could play out (Chapter 7). Slots for this talk were created by participants through explicit labelling of the upcoming activity, and through more implicit reference. The analysis showed how doctors used verbal and non-verbal communication with reference to the patient, and to information within the electronic patient record.

The two practices observed in the data offered different slots for patient responses. The doctor's attention to the electronic record through talk, body position and gesture constrained responses from the patient. Using Q-word questions to initiate talk to review medicines, and maintaining the electronic record as a secondary point of reference through talk, body position and gaze,

provided patients with opportunities to discussing their medicines-taking more freely. Patients were able to share their experiences and decisions with the doctor, were more actively involved in the discussion and were able to talk about what was important to them.

The latter practice helped doctors to provide patients with less constrained slots for talk during the review of medicines, and to find out what matters *to patients* about their treatments. It can now be shared with clinicians as part of guidance for the conduct of reviews of medicines with patients.

8.2.2 Controlling talk about medicines in consultations

There has been much debate about power in medical consultations with regard to control of conversation (Drew and Heritage 1992; Mishler 1984). The literature points to asymmetries in medical knowledge, and to social, professional and legal authorities of held by doctors in the determination of treatments. It is argued that these asymmetries are co-constructed through talk by all parties (Pilnick and Dingwall 2011; Robinson 2001a), favouring the doctor with much greater potential to take control.

The present data showed that doctors used a variety of conversational practices in the design of their talk about medicines, some of which worked to constrain subsequent patients' turns (e.g. Sections 5.2.2, 7.3.1) and others which provided more freedom (e.g. Section 5.2.1, 7.3.2). However, it was also evident that patients could take control of conversation and direct it to, or away from talk about medicines. Reference has already been made to the observation of patients initiating talk about medicines in Section 8.2.1. In doing so, they controlled the topic of conversation that followed.

The sequence of activities in a consultation in the present data (Chapter 4) were shown to progress in a different structural arrangement to that described by Robinson (1998). The patient took control of the progression of activities and how talk about medicines was situated in the structural arrangement of the consultation. In the present study, treatment recommendations were made by the doctor to the patient, before he delivered his diagnosis. Whilst the doctor

agreed to the patient's request for a supply of antibiotics, his work was not yet complete. The patient's relief at the doctor's granting of a prescription was apparent, but so was her expression of a need for the doctor's sharing of his clinical opinion with regard to the cause of her symptoms, and for the doctor's reassurance about her plans for recovery. The patient determined progression of activities through her turns at talk, returning conversation from talk about treatments back to the activity of diagnosis delivery. This finding once again supports the actuality of greater patient control in healthcare; of determining what is talked about and when.

Power and external control was also observed to impact on talk made by doctors in other ways. During the undertaking of professional responsibilities, such as 'gaining informed consent' for treatments with medicines and practising 'evidence-based medicine' (Section 5.2.2), or 'reviewing medication' (Chapter 7), doctors' turns at talk introduced tensions in to the conversation. Doctors tried to accommodate these responsibilities within the conversations in which they arose and were situated. The present data showed that the address of professional responsibilities with regard to medicines could introduce mismatches in to conversation trajectories for patients and doctors (Chapter 5).

Overall, the present data showed that patients, doctors and external authorities such as national guidance and professional responsibilities all played a part in shaping the context of talk about medicines. Anonymised clips and transcripts can now be used as part of the debate with regard to better ways for medicines talk that facilitates patient autonomy, shared decision-making, and provides care that is 'whole-person' focused.

8.2.3 Psychosocial context and the lifeworld view during talk about medicines

As part of talk about medicines, psychosocial concerns were sometimes articulated by patients. In an era of medical practice dominated by aspirations for patient centeredness, greater patient advocacy and control, the spectrum of doctors' practices in dealing with these concerns, observed in the present data, were revealing. Doctors could accommodate patient lifeworld context, broadening their talk about medicines to include psychosocial considerations. These contributions provided opportunities for the participants to explore the patients' lifeworld

perspective, and for doctors to use this context in their turns that followed (e.g. Sections 4.2.2, 4.2.4, 5.2.1). This helped them deliver care that was more 'whole-person' focused, and enabled doctors and patients to find common ground during their talk about medicines.

The doctors' predefining of the agenda to focus talk on biomedical issues, despite patients sharing of lifeworld context, introduced dysfluency and disfunction (Chapter 5). The contrasting approaches observed in the present data provide new and engaging material to support debate and education. What is necessary to deliver 'whole person' care, in the context of talk about medicines? How might doctors and patients best accommodate talk required for 'informed consent' or for 'evidence-based' treatments? Professional responsibilities and requirements shape and focus doctors' talk. In doing so, they may stifle opportunities for participants to share and explore lifeworld concerns (section 5.2.2).

8.2.4 Analysis of body position, gesture and gaze, alongside audio recordings

Visual analysis of participants in conversation facilitates the study of body position, gesture and gaze as part of communication. Presentation of non-verbal analysis alongside transcribed talk added to the conclusions drawn in the thesis. These observations provide evidence of participants attention to one-another and to other sources of information, particularly the electronic patient record (Chapters 4,5,6 and 7).

The inclusion of video screen shots in Chapter 4 demonstrated the importance of studying non-verbal behavior alongside talk. Direct reference to, and display of participant bodily position, facial expression, gaze and gesture made clear the ways in which the participants coordinated their talk with other information in the electronic patient record. By making recordings from more than one angle, it was easier to make analysis of non-verbal communication. The author feels that without the simultaneous analysis of non-verbal communication alongside talk, the mechanics of conversation would sometimes have been uninterpretable, or worse, misinterpreted. The inclusion of non-verbal behavior in this chapter therefore supported attention to this aspect of communication in the chapters that followed.

The video recordings during the analysis of review of medication showed further confirmation of the value of conversation and video analysis in collecting evidence on which to base guidance for better practice (Chapter 7). The present data helped explore ways in which reviews of medicines could be carried out. Capture of bodily conduct and gaze of the doctor provided evidence of the different authorities provided to the electronic record and to the patient. The video recordings demonstrating that the electronic record may help support the doctor in their gathering of information, but also may act as an intrusion to conversation during medicine reviews, and/or be a distractor to participants, particularly for the doctor.

The presence of the electronic patient record raised four interesting features. Firstly, the doctors' design of their turns at conversation demonstrated the credence they gave to the record and the patient as accounts of actual medicines use. Secondly, doctors maintained their access to information about medicines in the record in different ways. They were seen to position themselves in their seat so that their body and gaze was facing the computer screen during the consultation. Others seated themselves so that they were facing the patient, and maintained their gaze towards the patient for the majority of the time. This variation in doctor 'home position' has been observed in CA research (Robinson 1998; Ruusuvuori 2001). Thirdly, doctors were seen to make no comment, implicit or explicit reference to the need to gather information about medicines from the record (cf. Nielsen 2016). Fourthly, since patients were not easily able to see information in the electronic record, they were largely excluded from its recruitment and interpretation.

The findings offer concrete examples of the ways in which doctors' non-verbal communication and conversation designs may be constraining, or may open up patient participation during talk about medicines.

8.3 Recommendations for education related to talk about medicines

As shown in the present data, a major component of the communication required to empower patients, to explore actual medicines use, and to share decisions, rests on the conversational turns at talk taken by participants in the consultation. The prescription of medicines represents a

fundamental tool to improve health and wellbeing of patients seen in primary care. But so are open, well designed and patient-centered conversations. Initiatives to improve the quality of drug treatments for patients must include improvements in the quality of talk about medicines: The present data can be used to highlight good practices.

In approaching communication education relevant to consultation about medicines, educators have used a number of approaches. These include 'in-the-moment' teaching at the bedside with patients, reflection on practice, simulation, role-play and other situational, experiential and interactive learning (Kamarudin et al. 2013; Koponen, Pyörälä and Isotalus 2014; Kurtz, Draper and Silverman 2016; Richir et al. 2008). Educators can use teaching to focus on what is, could or should be discussed with patients, and the ways in which practitioners and patients might go about the design of such conversation.

In the development and augmentation of current and new teaching, findings from the present data and the wider CA research related to medical consultation provides direct examples of what actually happens in practice. Since it is possible to identify places in which talk about medicines might occur in consultations, and ways in which it might be initiated, conducted and concluded, the fine-grained analysis undertaken in CA offers new insights to help guide training. Outcomes from CA that demonstrate examples of real practice can directly inform academics in their planning of teaching in this area, an approach already reported on for the planning of other education (Hepburn, Wilkinson and Butler 2014; Jenkins and Reuber 2014; Penn, Watermeyer and Nattrass 2017; Riou et al. 2018).

Definition of what might be deemed 'best practice' in the conversation about medicines within primary care consultation can be opened to invite a range of opinion amongst academics. The sharing of extracts from the present data will be used to prompt new debate. By distributing anonymised extracts from real clinical encounters, the findings offer opportunities for discussions based on instances of actual practice. Further, the sharing of extracts transcribed with Jefferson notation promotes attention to this level of detail in the design and delivery of teaching. Nonverbal communication findings (positioning of participants in the consultation room, gaze and gesture) are also useful to review. These can help inform ways to approach teaching about room

set-up and body placement, and how practitioners might incorporate information sources other than the patient during talk about medicines, such as the electronic patient record viewable on a computer screen or the patient's repeat prescription order.

The review of actual data collected for CA may be displayed along transcribed talk as part of teaching with students or practitioners. The collaborative and interactive review of anonymized data collected for CA has been successfully undertaken in training elsewhere (for example Kitzinger 2011; Stokoe 2014). Through the students' review of talk during actual clinical encounters, CA-based teaching will help the participants internalise the importance of design of turns at talk, and to see the influences these may have on the progression of conversation about medicines. These data can be used to trigger debate about what 'works' for participants during talk about medicines in consultation settings. This provides a platform for debate about biomedical versus biopsychosocial approaches to talk about medicines. It also provides motivation for reflective practice, helping students and practitioners to see the importance of examining their own designs of conversation whilst talking to patients, and to take note of talk-in-interactions that they observe between others during their experiential learning. This approach to teaching that includes anonymised data from clinical encounters and their CA-based critique is therefore of relevance to both undergraduate and postgraduate training.

In order to measure impact of teaching related to talk about medicines based on findings from CA, an element of assessment will be necessary. Due to the perceived deficiencies in, and actual harms caused by prescribing practice, the current climate in undergraduate medical education is geared for greater teaching and learning in this area (see section 2.4). The professional bodies overseeing the training and assessment of medical undergraduates (General Medical Council, Medical Schools Council) champion education to improve prescribing practice. Assessment is part of this drive nationally at an undergraduate level, with an online examination now a mandatory requirement for all UK medical undergraduates (see prescribingsafetyassessment.ac.uk). Students are not assessed on the ways in which the placement and design of conversations about medicines might impact on the consultation.

Findings from the present data will be used to build and refine assessment in communication skills related to medicines using other approaches, such as Observed Structured Clinical Examinations (OSCEs). OSCE stations related to communication skills often use actors to play the roles of simulated patients. These findings will help in the creation of new OSCE stations, with directions for actors' talk and non-verbal communication based on the transcriptions of real conversation about medicines, captured in the present data.

8.4 Better talk about medicines, better use of technology

The application of CA research to explore consultation activities accommodating talk about medicines has demonstrated that these activities were pursued with a spectrum of designs. During these conversations, patients and doctors both demonstrated asymmetries introduced in the institutional setting of medical consultation through their turns at talk. For the patients, they held epistemic authority in their lifeworld experience, concerns and considerations. This authority was made evident and relevant in the present data, through inclusion of lifeworld talk as part of their turns in conversation about medicines.

Doctors held epistemic authority with regard to clinical knowledge related to medicines treatments. They made evident their gatekeeper role to the access of medicines through their deferral of stance when patients made them, and through their access to further information from the patient and from the electronic record. GPs had to balance the pressured time they had available with each patient alongside attention to other professional responsibilities, such as the creation and review of safe prescriptions for medicines, and the maintenance of the electronic patient record.

Whilst patients have the right to access their records (Access to Health Records Act, UK Government 1990), the present data showed that live access and navigation through the electronic patient record was not in their control during talk about medicines. The present data therefore highlights issues related to asymmetries of power over ownership of data about medicines, and ways in which such data may be handled and incorporated into consultation talk. However, greater live access and patient contributions to the electronic patient record are already

being discussed and piloted (Asan, Tyszka and Crotty 2018; Mafi et al. 2018; Safford 2018). Furthermore, digital wearable technology now offers radical transformations in the ways in which patients and doctors may monitor the patient's responses to medicines, and incorporate this data into the electronic record (Topol, Steinhubl and Torkamani 2015).

In a positive light, developments in access and technology may be seen to offer greater facility for sharing between doctors and patients during their talk about medicines. Patients' access to the information held about them and their active contribution to this information provides an opportunity for greater inter-subjectivity, a facility to help a 'meeting of minds' and a finding of common ground. Technology should not stand in the way of conversation; the patient embodied should remain primary focus, not the patient 'digitised'. For all participants in consultation, this still means creating slots for talk about medicines, and for listening. Within the time constraints of the consultation, the focus has to be efficient and useful talk for all participants, in order that the greatest benefit is gained from a biomedical and a psychosocial perspective.

8.5 Future research

The analysis of the present data was undertaken in the setting of UK primary care, at a small number of practices in the Northwest of England. Conversation analysis of discussions related to medicines in other GP practices would be helpful to grow the dataset, reinforcing understanding of conversational practices observed in the present data, and identifying further ways in which this talk might play out. Similarly, study of the co-constructions of talk about medicines across other clinical settings, involving patients conversing with other healthcare professionals about medicines, (e.g. junior doctors, pharmacists, non-medical prescribers, nurses), would highlight further areas of good practice and obstacles to overcome.

The observations about talk made from the present data raise opportunities for research in to the impact of interventions designed to improve such talk. The development of training could be related to the most effective and useful creation of slots for talk about medicines, for the inclusion of lifeworld during this talk, and for the 'best' ways to incorporate the 'patient embodied', the 'patient embodied' and in the near future, the 'patient digitised' during conversation. All of these

interventions might be tested using further recording of consultations post-training, with CA of the data to analyse for similarities and differences in comparison to the present data.

Greater patient access and control over information in their own electronic record during consultation is of interest. Would UK patients want this, and if they did, how might this be achieved? Since the NHS is scheduled to be paperless by 2023, and the holding of and access to electronic data is ubiquitous via mobile devices, might patients hold their own record as personal property in the future? What bearing might patients' live access and/or contribution to the electronic record have on patient empowerment, and on the progression of talk about medicines during medical consultation?

8.6 Study limitations

There are a number of limitations to this study. First of all, it is important to acknowledge that the present data was obtained from a limited number of consultations, and with exclusion of some patient groups (on-the-day appointments, children, patients requiring interpreters) as described in sections 2.1 and 2.2. Other conversational practices used by participants during talk about medicines may have be exposed through collection of a larger data set, with more participating doctors and patients. The presence of recording equipment, and the fact that some consultations were being recorded were commented on by participants, highlights the intrusion that the collection of data may have had on conversation. In contrast to applied CA research using data that is ordinarily recorded as part of encounter (for example, police interviews with suspects, see Stokoe and Edwards 2008), the recording of medical consultation is situationally, and so contextually, different from the usual experience for participants.

The above points raise concerns that the present data may contain significant gaps; that there are common and/or important designs of conversation about medicines that were not captured. However, as a practicing GP, the author was reassured that these were not evident when data collected was compared with that reported in CA literature, or in his own recollections of day-to-day clinic talk that has taken place in his professional experience.

Turning to criticisms of CA as method, concerns have been raised that through the detailed inspection of talk, it becomes 'bogged down' in minutia and loses the larger picture of the process of talk in social action (Alvesson and Sköldberg 2000: 82-84). These concerns are described by Wooffitt (2005:158):

"that its focus on the 'technical' aspects of the sequential organisation of turn-taking means that it cannot address the wider historical, cultural and political contexts and meanings which are invoked by and reflected in the kinds of words and phrases we use in everyday communication."

Through setting the scene from a sociopolitical and educational perspective in Chapter 1, and through the deliberate focus on elements of talk about medicines made relevant (designs of requests for medicines and the doctors' dealings with them, biopsychosocial contexts in talk about medicines, verbal and non-verbal communication during the review of medicines), the author hopes that the CA has been applied appropriately to address the above.

In summary, like other methodologies, CA has its limitations and controversies. However, it provides an empirical and detached approach to analysis of talk, which at least attempts to discount interpretations beyond those that can be drawn directly from what was said by participants, the places and placement of turns at talk and the structure of sequences produced during talk-in-interaction. However, like other methodologies, it is important to recognise the potential for bias, and the inadequacies that microanalysis and transcription of talk-in-interaction may hold. These can be considered both in terms of the ethnomethodological influences that may taint the interpretation of data, and the loss of report for the wider contexts in which talk takes place.

8.7 Conclusion

In the primary care setting, doctors have recognized that it is the patient (or their carer) who chooses whether or not to take the medicines, and that their choices may differ from the way in which their treatment is prescribed (Brown and Bussell 2011; Horne et al. 2005; Mukhtar, Weinman and Jackson 2014; Unni and Farris 2011; WHO 2003). If the aim is to empower patients (Elwyn et al. 2012; Epstein and Street 2011; Hibbard and Greene 2013; Kramer et al.

2014; NICE 2012; Stewart et al. 2003), there needs to be more recognition and accommodation of their voice in talk about medicines. In order for patients to participate fully in conversations, and for choices that they wish to make to be informed and considered, doctors need to ensure that their turns at talk are designed in ways that facilitate this. It is only through more effective talk that they may provide individual patients with education about their treatments, explore the sharing of decisions with them when confronted with medicines choices, and seek to reach consensus and agreement on medicine treatments they may provide.

Conversation analysis of the present data has demonstrated ways in which such talk about medicines may play out and offered fresh insight into good practices that can be championed. To empower patients and treat them as equals, doctors must ensure that they are properly listened to and that they can trust their GP. As well as supporting and optimising treatment for individual patients, doctors are required by society to act as gatekeepers to treatments, reducing waste and harm that they may otherwise cause. All of these tasks rest upon meaningful conversation between participants in consultation, to find common ground.

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Appendix 1

Dear Dr (insert clinician name),

Conversation analysis: How doctors talk with patients about medication

Understanding what happens, and what works, in clinical encounters between patients and medics, has been a focus of research for many years. Existing research has examined different phases of the medical consultation, such as the problem presentation, history taking, and diagnosis. Within this work, however, there has been relatively little focus on talk about medicine and its prescription. Of course, as doctors we talk with patients about medicines every working day.

We are contacting you with regard to an upcoming study we are overseeing at Manchester University. We want to review the consultation processes GPs undertake when talking to patients about medication. This research should help us to better understand the needs and requirements of patients involved in these discussions and the core communicative practices they use to seek help, information, and support. We also hope to better define the core communicative practices used by doctors in discussion regarding medication.

The research will require analysis of real consultations between GPs and patients, following discussion, agreement and informed consent by all participants. Of course, confidentiality and anonymity will be fully protected. As a practicing GP myself, as well as primary investigator for this research, I am fully aware of the importance of maintaining trust, confidentiality and effective and supportive doctor-patient relationships.

If you would be happy to discuss this research in more detail, I would be delighted to arrange a visit to your practice or a telephone/Skype conversation at any time convenient to you. Please contact me by return email or via my mobile phone, using the number provided below.

I look forward to hearing from you, and many thanks for your time.

Yours sincerely,

Dr Kurt Wilson, BSc, MB ChB, MSc, MRCGP, FHEA (Primary investigator)

Mobile: 079xx xxx xxx

Email: kurt.wilson@manchester.ac.uk

<u>Participant Information Sheet (PIS): Patients</u> <u>Conversation analysis: medication</u>

Dr. Kurt Wilson, Lead investigator

This research is being carried out as part of an MD qualification. Please read the following information about the study carefully, ask me any questions you like and take the time to decide whether or not you wish to take part.

We are hoping to make video/digital recordings of some of the consultations between patients

whom you are seeing today. The videos are used to investigate how doctors and patients talk about medicines. The video/digital recording is ONLY of you and the doctor talking together. Intimate examinations will not be recorded and the camera will be switched off on request.

What is the purpose of the study?

Doctors talk with patients every day. Some of these discussions are about medicines. We would like to review conversations and find out what works well for patients and doctors when they discuss medicines, and what causes problems or misunderstandings between them.

We want to make sure that any good practice or barriers we identify in real conversations about medicines between doctors and patients are shared with medical students. We hope that this will enhance their learning.

Video recordings will be transcribed by a member of the research team, and will be kept on encrypted (password protected) devices and only be accessed by members of the research team. Secure storage of the video recordings will allow the research team to re-access the raw footage for future research, but should we wish to carry out any further research, we will contact you and ask for your permission first.

Where we find examples of useful conversations about medicines, or problems/misunderstanding about medicines, we would like to keep the video clips. Only video clips that have been anonymised will be used for training. This is to protect the identity of you as a patient and your doctor.

To anonymise the clips, we will use a computer program to disguise the audio and the images. An example image that has been anonymised by the computer is shown below. Only the outline of those taking part in the consultation can be seen, and the voices have been altered to protect identities:



Anonymised clips will be used for teaching at the medical school, and as part of online or electronic resources to help medical and other healthcare students learn to talk about medicines with patients. Electronic resources may include electronic books, such as an iBook.

Why have I been invited to take part in this study?

You have been invited to take part because you are currently receiving care from doctors in this clinic.

Do I have to take part?

No, you do not have to take part in the study if you do not want to. You have the right to withdraw from the research at any point. Your decision to participate in this study will not be connected to the care you are receiving now or in the future.

If you decide to take part and sign the consent form but change your mind later, you are free to withdraw at any point during the study without giving a reason and without any consequence to your current or future treatment.

What will participation involve?

If you agree to take part in the study, I will ask you to sign a consent form and *then to attend your clinic appointment as planned.* The consultation will be video recorded using a camera on the wall.

What will I have to do?

Once you have signed the consent form, you should see the doctor as normal. You do not need to do anything else. After seeing the doctor you will be asked whether you are still willing for your videoed consultation to be used for the study and for training. You are free to decline after the consultation and the video will not be used for research and erased.

What are the possible disadvantages and risks of taking part?

Patients and doctors may feel that video recording of their consultation is intrusive. However, if the patient or doctor would like to stop the video recording during a consultation, they are free to do so.

What are the possible benefits of taking part?

Although taking part in the study may not benefit you directly, we wish to better understand how patients and doctors discuss medicines. By helping us to understand this process, we hope to improve training for healthcare students learning about this process. These students will be doctors and other members of the healthcare team in the future, responsible for patient care.

Will my taking part in the study be kept confidential?

Any clips from videoed consultations will only be used for teaching with your consent, and be anonymised as outlined above. All data will be stored securely at the University of Manchester. Direct quotes may be used in the write-up of the study, but will be used in such a way so as not to reveal the identity of individuals. Data from the study will be kept for a minimum of 5 years after the date of any publication that is based upon it, to follow recommended good practice guidelines for research. Study data and material may be looked at by individuals from the University of Manchester, from regulatory authorities or from the NHS trust, for monitoring and auditing purposes, and this may well include access to personal information.

What will happen if I do not want to carry on with the study?

You can withdraw from the study completely at any time without giving a reason and without any consequence to your current or future treatment. No further data will be collected from the moment you withdraw. Any raw footage will be destroyed. Any anonymised data (in which you cannot be identified) that has been taken from raw footage that you are included in can be removed from teaching and presentation if you wish.

What if I have any questions?

If you have any questions or you have a concern about any aspect of the study, you can speak to me. Please contact me via email or telephone. My contact details are outlined below:

Kurt.wilson@manchester.ac.uk

Tel: xxxxx xxx xxx

What if there is a problem?

It is unlikely that anything would go wrong. But, if there is a problem, you may contact me in the first instance or you can contact my supervisor: Dr Sarah Collins. Any complaint you have about the study will be resolved with you promptly; and information will be provided by phone or in writing to inform you of how the complaint has been addressed.

Dr Collins can be contacted on 0161 306 0520 or via email to sarah.collins@manchester.ac.uk

If I and my supervisors are unable to resolve your concern and you remain unhappy, or you do not want to contact us directly and you wish to make a complaint regarding the study, please

contact a University Research Practice and Governance Co-ordinator on 0161 275 7583 / 0161 275 8093 or by email to research.complaints@manchester.ac.uk.

Otherwise, you can contact the National Health Service Patient Advice and Liaison Service (NHS-PALS), details of local PALS offices can be found at www.pals.nhs.uk.

The University of Manchester is providing insurance cover for this research; in the event that something does go wrong as a result of taking part in this research, you may have grounds for claiming compensation.

What will happen to the results of the research study?

Our results will be used to improve healthcare student and postgraduate training in discussion about medicines with patients. We will report our findings in medical journals and at conferences for those involved in medical education. This will help share our insights with other educators in healthcare.

Who is organising and funding the research?

Manchester medical school (University of Manchester) is funding and organising the research.

Who has reviewed the study?

The study has been reviewed by The University of Manchester. In addition, all research including clinical patients has been reviewed by the National Health Service Research Ethics Committee.

Who can I contact for further information?

If you have any questions or require any additional information, please do not hesitate to contact me at:

Dr Kurt Wilson

Clinical Teaching Fellow Tel: 0161 306 1927 Manchester Medical School Mobile: xxxxx xxx

Rm 1.301 Email: <u>kurt.wilson@manchester.ac.uk</u>

Stopford building Oxford road Manchester M13 9PL

Participant Information Sheet (PIS): Doctors

Conversation analysis: medication

Dr. Kurt Wilson, Lead investigator

This research is being carried out as part of an MD qualification. Please read the following information about the study carefully, ask me any questions you like and take the time to decide whether or not you wish to take part.

We are hoping to make video/digital recordings of some of the consultations between you and your patients whom you are seeing today. The videos are used to investigate how doctors and patients talk about medicines. The video/digital recording is ONLY of you and your patients talking together. Intimate examinations should not be recorded and the camera should be switched off.

You do not have to agree to any of your surgery consultations being recorded, or may find that some consultations are not appropriate to record. If you want the camera turned off, please go ahead and stop filming. However, if you would like to begin surgery with consultations being recorded, please sign the consent form below. You will need to sign this form again at the end of your surgery to confirm that you are still happy to take part in the study.

What is the purpose of the study?

Doctors talk with patients every day. Some of these discussions are about medicines. This might be medicine that a patient is taking, or about a medicine that the doctor would like a patient to take. Whilst many conversations regarding medicines go well for patients and doctors, some end in misunderstanding or confusion. We would like to look at real conversations and find out what works well for patients and doctors when they discuss medicines, and what causes problems or misunderstandings between them.

As part of their training, medical students and other healthcare students at the University of Manchester learn to talk about medicines with patients. Some of this training is at the medical school with actors playing the role of patients. Our analysis of real conversations regarding medicines between patients and doctors will be used to help improve student training. We want to make sure that any good practice or barriers we identify in real conversations about medicines between doctors and patients are shared with students. We hope that this will enhance their learning.

Video recordings will be transcribed by a member of the research team, and will be kept on encrypted (password protected) devices and only be accessed by members of the research team. Secure storage of the video recordings will allow the research team to re-access the raw footage for future research, but should we wish to carry out any further research, we will contact you and ask for your permission first.

Where we find examples of useful conversations about medicines, or problems and misunderstanding about medicines, we would like to use the video clips. Provided you agree, we would like to anonymise these clips, and use them during presentation of our research and for training or learning resources. Only video clips

that have been anonymised will be used for training. This is to protect the identity of you as a doctor and your patients.

To anonymise the clips, we will use a computer program to disguise the audio and the images. An example image that has been anonymised by the computer is shown below. Only the outline of those taking part in the consultation can be seen, and the voices have been altered to protect identities:



Anonymised clips will be used for teaching at the medical school, and as part of online or electronic resources to help medical and other healthcare students learn to talk about medicines with patients. Electronic resources may include electronic books, such as an iBook.

Why have I been invited to take part in this study?

You have been invited to take part because you are currently providing care to patients in this clinic. We would like to video record the consultations that you have with the patients that you see. We can then watch this video and review any conversation you have about medicines.

Do I have to take part?

No, you do not have to take part in the study if you do not want to. Taking part in the research is voluntary; this means it is completely up to you to decide whether or not to join the study.

If you are happy for video recording of your consultations, you will also be asked whether we can anonymise clips (as above) from your video recording, if we identify useful learning points for medical students. You can agree to video recording and use of anonymised clips for teaching and presentation of research, video recording alone (no clips will be used for teaching or presentation), or not take part in the study at all.

If you decide to take part and sign the consent form but change your mind later, you are free to withdraw at any point during the study without giving a reason.

What will participation involve?

If you agree to take part in the study, I will ask you to sign a consent form and *then to conduct your clinic as planned.* The consultations will be video recorded using a camera on the wall. The video recording will be reviewed by the researcher at a later date. If you have consented to use of video clips for teaching, the video will be anonymised as outlined above. Clips will then be used for University students as part of their teaching and learning.

What will I have to do?

Once you have signed the consent form, you should undertake your clinic as normal. You do not need to do anything else. After completing your clinic, you will be asked whether you are still willing for your videoed consultation to be used for the above purposes. You are free to decline after the clinic and the video will not be used for research and erased.

You do not need to do anything else.

What are the possible disadvantages and risks of taking part?

Patients and doctors may feel that video recording of their consultation is intrusive. However, if the patient or doctor would like to stop the video recording during a consultation, they are free to do so.

What are the possible benefits of taking part?

Although taking part in the study may not benefit you directly, we wish to better understand how patients and doctors discuss medicines. By helping us to understand this process, we hope to improve training for healthcare students.

Will my taking part in the study be kept confidential?

Any clips from videoed consultations will only be used for teaching with your consent, and be anonymised as outlined above. All data will be stored securely at the University of Manchester. Direct quotes may be used in the write-up of the study, but will be used in such a way so as not to reveal the identity of individuals. Data from the study will be kept for a minimum of 5 years after the date of any publication that is based upon it, to follow recommended good practice guidelines for research. Study data and material may be looked at by individuals from the University of Manchester, from regulatory authorities or from the NHS trust, for monitoring and auditing purposes, and this may well include access to personal information.

What will happen if I do not want to carry on with the study?

You can withdraw from the study completely at any time without giving a reason and without any consequence to your current or future treatment. No further data will be collected from the moment you withdraw. Any raw footage will be destroyed. Any anonymised data (in which you cannot be identified) that has been taken from raw

footage that you are included in can be removed from teaching and presentation if you wish.

What if I have any questions?

If you have any questions or you have a concern about any aspect of the study, you can speak to me. Please contact me via email or telephone. My contact details are outlined below:

Kurt.wilson@manchester.ac.uk

Tel: 07xxx xxx xxx

What if there is a problem?

It is unlikely that anything would go wrong. But, if there is a problem, you may contact me in the first instance or you can contact my supervisor: Dr Sarah Collins. Any complaint you have about the study will be resolved with you promptly; and information will be provided by phone or in writing to inform you of how the complaint has been addressed.

Dr Collins can be contacted on 0161 306 0520 or via email to sarah.collins@manchester.ac.uk

If I and my supervisors are unable to resolve your concern and you remain unhappy, or you do not want to contact us directly and you wish to make a complaint regarding the study, please contact a University Research Practice and Governance Co-ordinator on 0161 275 7583 / 0161 275 8093 or by email to $\frac{1}{1} \frac{1}{1} \frac{1}{1}$

Otherwise, you can contact the National Health Service Patient Advice and Liaison Service (NHS-PALS), details of local PALS offices can be found at www.pals.nhs.uk.

The University of Manchester is providing insurance cover for this research; in the event that something does go wrong as a result of taking part in this research, you may have grounds for claiming compensation.

What will happen to the results of the research study?

Our results will be used to improve healthcare student training in discussion about medicines with patients. We will report our findings in medical journals and at conferences for those involved in medical education. This will help share our insights with other educators in healthcare.

Who is organising and funding the research?

Manchester medical school (University of Manchester) is funding and organising the research.

Who has reviewed the study?

The study has been reviewed by The University of Manchester. In addition, all research including clinical patients has been reviewed by the National Health Service Research Ethics Committee.

Who can I contact for further information?

If you have any questions or require any additional information, please do not hesitate to contact me at:

Dr Kurt Wilson Clinical Teaching Fellow Manchester Medical School Rm 1.301 Stopford building Oxford road Manchester M13 9PL Tel: 0161 306 1927 Mobile: 07xxx xxx xxx

Email: <u>kurt.wilson@manchester.ac.uk</u>

The University of Manchester, Oxford Road, Manchester, M13 9PL

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CONSENT FORM

Study Title: Conversation analysis: How doctors talk with patients about medication, and how undergraduates in medical training undertake this.

Principle Investigator: Kurt Wilson

Please INITIAL: TO BE COMPLETED BY PATIENT I confirm that I have read and understand the Participant Information Sheet dated Y N January 2014, (version 1) for the above study and have had the opportunity to consider the information. I confirm that I have had the opportunity to ask questions about the study and that Y N these questions have been answered satisfactorily. I understand that my participation is completely voluntary and that I am free to Y N withdraw at any time, without giving a reason. I understand that as part of this project, video recordings of me will be made whilst Y N participating in the research. I understand that the data will be stored securely under password-protection. Y I agree that short video clips of my interview may be used in meetings with other Y N members of the research team. I understand that clips and transcripts from the video recordings of my consultation Y N will be anonynmised prior to presentation outside of the research team. I agree that the anonymised transcripts in which I cannot be identified can be used Y N in academic papers and presentations. I agree that the anonymised videos in which I cannot be identified can be used in Y N training for healthcare student and postgraduate training. I agree that identifiable video recordings of my consultation may be stored securely Y N and that this data may be used for future research, provided that I am contacted first and give my permission. I understand that relevant sections of data collected during the study may be Y N looked at by responsible individuals from the University of Manchester, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in the research. I give permission for these individuals to have access to this data.

I have read and understood the above information and give my permission for my consultation to be video recorded.

Signature of patient before consultation:

J	•	
		 Date

After completing the	he consult	ation, I ar	n still	willing	for i	t to	be	used	for	the	above
purposes.											

Date	
Signature of researcher taking consent (Dr Kurt Wilson):	
Date	
Patient's name:	

Signature of patient AFTER consultation:

Appendix 4

Transcription Symbols

D:/P:	Speaker identifications are for doctor (D) and patient (P).
[overlap]	Square brackets indicate onset and offset of overlapping talk.
=	Equal signs indicate utterances are run together with no gap of silence.
-	Hyphens indicate a preceding sound is cut off or self-interrupted.
°word°	<u>Degree signs</u> indicate decreased volume relative to surrounding talk.
(8.0)	Numbers in parentheses measure silences in seconds, tenths of a second.
(.)	Parenthesis with period indicates a micropause" less than 2/10 s of a second.
wo:rd	Colons represent prolongation or stretching of the preceding sound.
word.	Periods represent falling or turn-final intonation contours.
word,	Commas represent continuing or turn-continuative intonation contours.
word¿	Inverted question marks represent intonation rising higher than comma.
word?	Question marks represent rising intonation contours.
<u>wo</u> rd	<u>Underlining</u> represents emphasis relative to surrounding talk.
<slow></slow>	Less than-greater than symbols indicate decreased pace.
>fast<	Greater than-less than symbols indicate increased pace.
£	Pound sign indicates smiling whilst speaking
#	Hash sign indicates speech with a croaky voice
.hh	Period followed by h's indicate in-breaths; the more h's, the longer.
hh	H's alone indicate out-breaths or laughter; the more h's, the longer.
wo(h)rd	Single parenthesis filled with h's indicate breathy delivery of talk.
(word)	Single parenthesis filled indicates transcriptionist doubt.
((word))	<u>Double parenthesis filled</u> indicates transcriber's description or characterization
	of some event.
(u.c.)	Vocal noise that was audible but unclear and not transcribable