Family Practice 2011; **28**:202–209
doi:10.1093/fampra/cmq088
Advance Access published on 26 October 2010

Does the doctor or the patient control sick leave certification? A qualitative study interpreting patients' interview dialogue

Wendy Wrapson[a,*] and Avril J Mewse[b]

[a]Centre of Methods and Policy Application in the Social Sciences. The University of Auckland, Auckland 1142, New Zealand and [b]Psychology, College of Life and Environmental Sciences, The University of Exeter, Exeter EX4 4QG, UK.
*Correspondence to Wendy Wrapson, Centre of Methods and Policy Application in the Social Sciences, The University of Auckland, Auckland 1142, New Zealand; E-mail: w.wrapson@auckland.ac.nz

Received 22 June 2010; Revised 13 September 2010; Accepted 28 September 2010.

Background. Sickness certification poses challenges and problems for the GP. Patient factors may influence the sick leave period.

Objective. To explore how sickness certification occurred based on patients' reports of medical consultations for a new episode of low back pain.

Methods. A qualitative study using semi-structured interviews with 16 employees who were currently or had recently been off work with an episode of low back pain.

Results. We present a preliminary typology of sickness certification responses by medical practitioners comprising four response types: 'process', 'cued', 'consultative' and 'laissez-faire'. All but the process response allows the patient some influence in the sickness certification decision. It is possible that certain types of response may occur at specific stages of recovery.

Conclusions. Doctors may allow patients input into the sickness certification process for a number of reasons. As yet, we do not know if this helps or hinders the return to work process.

Keywords. Doctor–patient relationship, occupational health, patient involvement, qualitative research, rehabilitation.

Introduction

In most Western health care systems, a doctor is presumed to have considerable influence over an employee's period of sick leave because sickness certification by a medical practitioner is required to sanction the employee's time off work. Determining an appropriate amount of time off work with a new episode of low back pain requires a doctor to achieve a balance between ensuring the patient's well-being and adhering to recommended clinical practice, which promotes activity as an important factor in prompt recovery.[1]

Clinical guidelines on the management of low back pain have been designed to assist the GP to make objective decisions concerning sickness certification. Nevertheless, studies which have investigated sicklisting practices reveal that doctors often have dilemmas in determining the extent of work ability and the duration of sick leave to be given[2–5] and a review of studies found large differences in how long different physicians sicklisted similar patients.[6]

In one study, the factors identified by doctors as most important to take into account when writing sickness certificates were the doctor's ability to certify the patient's medical condition, knowledge of the patient, the timing of the request in relation to the illness/recovery period, the number of previous sickness certificates issued for the patient and the personality of the patient.[7] Doctors have also acknowledged that they are often influenced by patient demands in their management of low back pain,[8] and patient assessment of work ability has been found to be associated with a longer duration of certified sickness absence.[9] It appears that GPs are more likely to issue a medical certificate if the patient seeks this than if the patient is reluctant to take time off work.[10,11] Although there has been some research investigating sickness certification from the patient's perspective,[12,13] these studies did not attempt to analyse the different types of sickness certification response by doctors.

The data described here were collected as part of a larger project investigating factors impacting on the duration of time taken off work following a new episode of low back pain. In this article, we focus on interactions between doctors and their patients. An analysis of patients' dialogue concerning the medical consultation provided an opportunity to categorize doctors' sickness certification responses and to reflect

on the potential implications of particular responses for rehabilitation outcomes.

Methods

Recruitment strategy

New Zealand has a 'no fault' workers compensation system administered by a statutory body, the Accident Compensation Corporation (ACC). As is common elsewhere, a medical consultation is required to obtain sick leave certification; some treatments, such as physiotherapy, may be obtained at a subsidized cost without consulting a medical practitioner.

The current data were collected in 2003, as part of the first author's doctoral research. Two recruitment strategies were adopted. Participants were initially recruited through ACC. As ACC could not release the details of injured employees to third parties, injury insurance claimants who fitted the inclusion criteria (Box 1) were sent a letter on ACC letterhead inviting participation. Recruitment also took place through physiotherapists in private practice. Eight physiotherapy practices from a range of socio-economic areas and encompassing both city and smaller urban centres agreed to participate although ultimately only six of these recruited any participants. Physiotherapists were requested to hand the participant information letter to clients meeting the eligibility criteria when they attended for physiotherapy treatment.

Of 136 claimants contacted through ACC, 11 (8%) responded to the letter of invitation. Twenty-three letters were handed to physiotherapy clients and 15 (65%) responded; this substantially higher response rate was, in part, most likely due to the more personal recruitment approach.

Of the 26 responders in total, 10 were excluded for the following reasons: being over the age limit, having a history of back problems, having already been off work for >8 weeks, being unable to attend an interview at an appropriate location/time due to work commitments, not having a regular employer or they were unable to be contacted. Accordingly, 16 participants were interviewed, of which 5 were recruited through ACC and 11 through physiotherapy practices. Characteristics of the participants are shown in Table 1. Recruitment of participants was ongoing and ended with data saturation, in other words when additional interviews did not add substantial new knowledge to the purpose of the investigation.[14]

BOX 1 *Participant inclusion criteria*

- A diagnosis of low back pain/strain/sprain, with or without pain radiating down the leg
- In regular employment
- At least 1 week but <8 weeks sickness absence from work
- Residing in the Auckland area to facilitate a face to face interview
- Under 65 years of age

Ultimately, the criteria were extended to include participants who had returned to work within the last 3 months. This enabled a perspective to be gained on the return to work course from people who had completed the process and subsequently maintained their work status.

Excluded was anyone with

- Additional medical conditions that could impact on time off work
- More than two previous back pain episodes requiring time off work which might suggest an ongoing pain condition

Interviews

A semi-structured interview guide was constructed focussing on the event causing the low back pain episode, treatment sought, the recovery process and interactions with treatment professionals and employers/work colleagues. The interview guide was developed from existing literature on returning to work following an episode of low back pain. Interviews were conducted in a private interview room at the University of Auckland or at one of the participating physiotherapy clinics; they lasted from 1 hour to an hour and a half and were audio taped.

Participants were asked to describe their experience of being off work with an episode of low back pain, including consultations with treatment providers, from the time of their first incidence of pain to the current time, and were encouraged to detail events in chronological order. The researcher made occasional brief reminder notes to go back and pursue a particular relevant topic if it had been mentioned briefly but had

TABLE 1 *Characteristics of participants*

Gender	
Male	9
Female	7
Age range (years)	24–63
Current episode a work injury?	
Yes	10
No	6
Previous episodes requiring time off work	
Yes	6[a]
No	10
Type of job tasks	
Manual	12
Non-manual	4
Elapsed time since initial onset of pain	
Up to 1 month	11
1–2 months	2
2–3 months	3
Work status at interview	
Off work	5
Light duties/reduced hours	4
Normal duties/hours	7

[a]In all but one case (where the previous episode had resolved 5 months previously), past episodes had occurred and been resolved at least 2 years prior to the current occurrence.

not been appropriate to pursue at that point. As the onset of pain had occurred within the last month for the majority of interviewees (Table 1), the medical consultations which they described had, for the most part, taken place very recently, in some cases, within the last few days.

Data analysis

The collection of data, transcribing and preliminary analysis were carried out simultaneously. General principles of grounded theory were used for data analysis.[15] The interviews were thematically coded by WW and the codes categorized and re-categorized as the theory emerged. NVivo software (version 7) was used to facilitate data analysis and data management and to document the progression of the coding process. Consultations with medical practitioners and other health professionals accounted for approximately half of the interview time (the other half being concerned with interactions with employers). Participants were free to discuss any aspect of the medical consultation but typically, as one of the reasons for patients visiting a doctor was to obtain a sickness certificate, much of this time was related to this aspect of the consultation. For this paper, we have relied solely on the data relating to participants' contact with the doctor(s) providing sickness certification. Each statement or comment relating to participants' perceptions of the sickness certification process was independently read and coded by AJM. Inter-coder agreement on initial coding was 94%. When a coding discrepancy occurred, the discrepancy was discussed and consensus as to the category that best described it was obtained.

Each participant was given a code letter relating to whether they were currently off work at the time of interview (O), back at work on accommodation (A) or back at work on normal duties (N). Within these categories, they were given sequential numbers. These codes are included at the end of each illustrative quote.

Results

Two participants' initial consultation was with a doctor at a hospital accident and emergency department; one of these participants returned to the same department for further consultations and the other had follow-up consultations with her own GP. All other participants consulted their usual GP throughout their episode of low back pain.

Medical consultations varied from a very brief discussion restricted to the examination and treatment of the current health issue, to a dialogue where the doctor and patient interacted on a more informal level. All participants were prescribed medication of painkillers and anti-inflammatories. The other principal treatment suggested by medical practitioners was physiotherapy, which all but one participant undertook. This latter participant specifically requested osteopathy due to this type of treatment being recommended by a friend. Some participants noted that they primarily went to the doctor to obtain medication for the early stages of the episode and for a medical certificate, otherwise they would have been content with physiotherapy visits alone.

Participants were asked if, at their first medical consultation, the doctor had enquired if there were light duties available at their workplace. Most of the participants could not recall the doctor initiating this question, although some noted that it would have been obvious to the doctor that they could not work because of their lack of mobility at this stage.

Doctors' sickness certification response

All participants were issued with a sickness certificate, certifying that the participant was not fit for any work duties, at the first medical consultation. The period of time given off work ranged from 3 to 42 calendar days (median 7 days). The participant receiving 42 days had been made redundant and had not yet found alternative employment. Notably, only six participants were given a certificate for <1 week at this initial visit; having a non-manual job did not appear to shorten the duration of the initial medical certificate.

At the time of interview, 13 of the 16 participants had obtained at least one sickness certificate renewal for further time off work or for light duties, 2 participants had returned to work with no further certification and 1 participant had yet to visit his doctor again.

Data were obtained from 15 participants concerning the sicklisting process, which had occurred during their medical consultations for their current episode of low back pain ('the sickness certification response'). These participants described 37 consultations in total: 15 consultations relating to initial medical certificates, 13 for second medical certificates and 9 for third or subsequent medical certificates. The participant who had been made redundant recalled very little of the consultation with his doctor about sickness certification and that participant's data were omitted from the analysis.

Analysis of the data suggests that the sickness certification response can be divided into four response types or decision-making practice: the 'process' response, the 'cued' response, the 'consultative' response and the 'laissez-faire' response. These are described below.

Process response. The process response occurred without the doctor specifically consulting with the patient as to what the patient felt was appropriate or expected in terms of sick leave. This could be described as a response according to the doctor's own beliefs

about appropriate sickness certification for an episode of low back pain and presumably interpretation of ACC's clinical guidelines for the management of low back pain.

> Yeah, it [the pain] had lessened but yeah, he sent me back to work. There was no driving. Well I've got to drive to get here for a start, there was no using hand tools, well, that's what we do. There was no repetitive movements, well anything you do is repetitive … he just wrote it [the certificate] out and I said ''Well, what am I meant to do?'' And he goes, ''Well that's up to your boss. I think you're fit to go to work for three hours a day.'' (N6)

> And he [Accident & Emergency Department doctor] checked me out and he said ''Four days of no duties, two weeks of light duties''. And I said ''Oh, what if I can't do it?'' ''Well you go back to your doctor and ask for a medical certificate.'' (O5)

Participants sometimes gave explanations as to why they thought the doctor had decided on a particular duration for the medical certificate. These included the doctor's experience of the patient's particular medical history or the patient's understanding of ACC guidelines.

> He said it would probably take 10 days, so it must have been 10 days last time because he was going on the previous episode. (N1)

> Well, he gave me six days off . . . because that's all they're allowed to write on the initial one [medical certificate]. (O3)

Cued response. A cued response occurred when the patient guided the doctor into providing what it appears the patient thought was appropriate in relation to sickness certification. This influence could be used to negotiate a particular period of time off work. Commonly, however, it was used to suggest that light duties were unavailable and time off work was the best option for the employee's recovery.

> 4 days originally [length of certificate]. He asked me what I do in my job and I told him that basically the only easy thing that I … that I don't have to lift or anything is just starting the key [to the vehicle] in the morning … I think he was fairly clear that I wasn't going to be able to do much at work. (O1)

> But this time she actually wrote down a lot more and asked how I really felt about going back to work and I says well, not at this stage because I said the pain was moving from side to side and I can't stand on my feet too long and I can't sit down too long and then that's when she said no, she wasn't going to send me back to work. (A3)

Cued responses were also used to guide the doctor into suggesting a return to work was now appropriate or lessening the restrictions noted on the next medical certificate.

> I went back to the doctor because it [my back] still wasn't right … he was going to give me four weeks off but I said no, I want two. Because I thought my back was going to be okay with physio and stuff. (O3)

> So I said to her [the doctor] that I was ready to go and work and I need to go to work, and get back to light duties. (A1)

Consultative response. A consultative response occurred when the response was made in conjunction with the patient. This response involved discussion between the doctor and patient as to the patient's own perceptions of his or her recovery and involved negotiation to come to a decision that suited both the doctor's clinical judgement and the patient's beliefs about current physical capabilities. It was not sufficient for the patient to merely indicate agreement with the doctor's response for it to be categorized as a 'consultative' response; there had to be an element of shared decision making.

> I was ready to go back that week but we [the GP and participant] left it until after the Tuesday or Wednesday or whatever it was because I had this appointment with the occupational physician so … we knew that she'd be poking and prodding and bending me and all the rest of it, rather than go back that afternoon we'll leave it till the next day or the day after. (A4)

> When I went to the doctor that Monday and we talked about it, I felt myself yeah, I'm ready [to go back to work on light duties] and, you know, he would suggest things and he goes ''are you happy with this?'' and yeah, I was. (A2)

Laissez-faire response. A laissez-faire response released much of the control over the timing of a return to work to the patient. Generally, the patient was given a broad expectation, and it was up to the patient to tailor that to his or her own perceptions of recovery. There appeared to be an element of trust inherent in this approach and an assumption that the patient would 'do the right thing' and return to work as soon as they felt able to do so.

> Two weeks [length of medical certificate] and it was up to me whether I went back early. (N4)

> Well she basically just left that [length of time on light duties] really up to me, she didn't really give a date or anything. (A3)

One consultation was mentioned with insufficient detail to enable categorization. Of the 36 responses categorized, approximately half were process responses, a quarter were cued responses and the remainder were split equally between consultative and laissez-faire responses. As can be seen from Table 2, there could be different responses with the same doctor–patient relationship at different times during the course of treatment. Process responses were particularly common at the initial consultation. By the third consultation, the doctor appeared to rely more heavily on feedback and input from the patient to determine the appropriate sickness certification course of action.

The differing responses determine who is in control of the sickness certification decision making (Table 3). Although both the cued and the laissez-faire responses gave the patient some control over the decision-making process, in fact, there was a significant difference between these two responses. In the cued response, the patient may indicate, either subtly or quite directly, the conditions of medical certification with which they are comfortable. The patient takes the initiative in directing the doctor and thus takes control. In the laissez-faire response, the patient does not attempt to influence the doctor towards a particular course of action. It is the doctor who allows the patient some leeway in the return to work process. The doctor thus gives the patient control over how the process is undertaken.

The type of sickness certification response did not appear to materially affect participants' satisfaction with the medical consultation, although those who received the process response were more likely to query the doctor's assessment of their pain and his or her knowledge of their work environment. None of the participants were aware of any contact between treatment providers and their workplace and thus, as far as they were aware, the sickness certification decision was made without reference to the employer or work supervisor; nor had any of the participants consulted other doctors to seek a different sickness certification response.

TABLE 2 *Sickness certification responses for each participant*

ID	Gender	Consultation number				
		1	2	3	4	5
1	Female	C	C	C	—	—
2	Male	P	P	—	—	—
3	Male	P	P	CS	—	—
4	Male	LF	LF	—	—	—
5	Male	CS	P	—	—	—
6	Male	P	P	—	—	—
7	Female	P	C	C	—	—
8	Female	C	P	—	—	—
9	Female	P	P	LF	—	—
10	Male	P	—	—	—	—
11	Female	P	—	—	—	—
12	Male	P	C	C	—	—
13	Male	P	[a]	P	—	—
14	Female	P	C	LF	CS	CS
15	Female	P	P	—	—	—

P, process; C, cued; CS, consultative; LF, laissez-faire.
[a]Insufficient information available to categorize response.

TABLE 3 *Party controlling decision making for each sickness certification response type*

Doctor's response	Party in control
Process	Doctor in control
Cued	Patient in control
Consultative	Doctor and patient sharing control
Laissez-faire	Patient in control

Discussion

We analysed data containing patient perspectives of doctor–patient consultations and identified a number of different sickness certification responses from medical practitioners. Our data suggest that in many medical consultations, which potentially involve sickness certification for a new episode of low back pain, the patient has considerable input into the return to work decision making. While the process response was a decision seemingly made without direct influence by the patient, the consultative, cued and laissez-faire responses indicate varying degrees of influence by the patient over the provision of a sickness certificate and the length of time for which one is issued.

Our findings support those of other studies investigating sicklisting practices. Sickness certification often involves a process of negotiation between the doctor and patient and when GPs are in any doubt as to work ability, it seems they may adopt a 'compassionate approach' and write a medical certificate if this seems to be the patient's expectation.[16] However, our findings also suggest that, initially at least, doctors are less likely to be influenced by the patient and more likely to follow their own decision-making practice, presumably borne of their knowledge of clinical guidelines and their experience in such cases. Nevertheless, doctors did not strictly follow ACC's treatment guidelines[17] which recommend certification of '1–2 days preferably, at least <1 week'. It is possible that, in some cases, the doctor was aware of the patient's expectations from previous consultations on other medical matters and may have written the certificate in accordance with his or her familiarity with the patient.

Most of the participants in this study noted that they did not have to ask for a medical certificate in the first medical consultation because it would have been obvious from an examination by their doctor that they lacked the functional capacity required to do their jobs. If they knowingly or unknowingly portrayed this expectation, their treating doctor may well have been influenced by their anticipation of time off work. Although some negotiation may be required to obtain subsequent certificates, this did not appear to be a difficult task for the majority of our participants.

There are a number of reasons why doctors may allow patients to 'drive' sickness certification practice. While doctors provide their medical knowledge in a consultation, this is complemented by the personal expertise of the patient, such as past experience, and the patient's own health beliefs; the patient therefore often has a good idea of his or her own physical capabilities in the context of a back pain episode.[18] Doctors find it difficult to make work ability judgements when there are few objective signs of a person's medical condition and their fitness to resume work tasks, particularly if characteristics of the employee's work and workplace are not known by the treating doctor. In such cases, the doctor is reliant on the employee providing accurate and sufficient information to enable an appropriate sickness certification decision to be made,[19,20] which potentially leaves some of the decision-making power in the employee's hands. Doctors have indicated that they prefer the role of patient advocate rather than as a gatekeeper when assessing work ability,[16] and they have also reported sicklisting patients because they believe that the patient–doctor relationship would otherwise deteriorate.[16,21,22] This is necessary not only from the financial viability of a medical practice but also is important so that the patient will not be deterred from seeking medical help for other symptoms, which may be more health threatening.[23] The ongoing nature of the relationship does, however, make it difficult for a GP to ignore patient treatment expectations; a good previous knowledge of a patient has been shown to greatly increase the chance that a patient will be provided with a sickness certificate.[24] Finally, doctors are increasingly involving patients in the decision-making aspects of treatment and the sickness certification decision is simply another aspect which can involve shared decision making.[25,26]

In another qualitative study, the participants felt that the doctor determined the length of time inserted on the sickness certificate.[13] That study dealt with a variety of physical and psychological conditions, and the majority of participants had already received >8 weeks sick leave at the time of the study. Our findings would suggest that, by this stage, the patient would have some influence over the sicklisting process. It may be, however, that the doctor was simply providing the patient with what he or she believed that they were expecting, and it should be noted that a number of participants in that study said that they felt 'uncomfortable' if the doctor asked for their input into how much time they needed off work, suggesting that they did, in fact, have the opportunity to participate in the sickness certificate decision making. Most of the participants in the current study had experienced their present episode of back pain for less than a month when interviewed. As time passes, it is possible that the doctor may once again take over control of sickness certification, if it appears the patient is in danger of a delayed return to work.

Even when patients appear to have some influence over the sickness certification outcome, we cannot be sure that this alters the doctor's sickness certificate decision making. Substantial agreement has been found to occur between patients and doctors in assessing work ability although they tend to base their opinions on different factors: the judgements of the patients relate to work demands and those of doctors stem from clinical findings.[27] While shared decision making may be appropriate in the medical consultation, we know little about the impact this has on return to work. The typology presented in Table 3 is another step towards greater understanding of the sickness decision-making process. Further investigation is warranted to: (i) clarify whether similar response types can be found in other clinical settings and (ii) determine the impact different sickness certification responses may have on rehabilitation outcomes. Additional research could include interviewing doctors to gain their perceptions on sickness certification decision making and recording medical consultations to obtain an objective view of the sickness certification decision-making process. Finally, there is a need to investigate whether the proposed typology has relevance to other medical conditions.

Strengths and limitations

This is one of the few studies that have gleaned some insight into how the interaction between the patient and the doctor may impact on sick leave certification. It has added to the qualitative body of work on sickness certification practices that has traditionally been dominated by quantitative methods and has previously focused on the doctor's perspective.[6] Although the current data were collected towards the beginning of a larger project, we are not aware of any significant change in medical practice that would make these findings less relevant to the GP now. Nevertheless, our participants all actively sought physiotherapy or osteopathy treatment in addition to consulting with medical practitioners. It may be that active treatment seekers differ in some way to more passive treatment seekers and that this difference is reflected in sickness certification responses. Although the majority of

medical consultations had occurred within the past month, in some cases, participants were recalling events that had happened several weeks earlier and it is possible their memory of events was inaccurate. Their own beliefs and attitudes towards their doctor may have influenced their report of the medical consultation. The response rate was low for the ACC-recruited sample, and we do not have any information about the non-responders, to assess whether they had different characteristics from the responders. Our participants were, however, demographically diverse, they came from a variety of occupational settings and there was a sufficient number of interviewees to reach data saturation on the sickness certificate responses. There was also excellent agreement between the two authors who undertook independent coding of participants' interview transcripts.

Summary and clinical implications

The reported interactions between doctors and patients in this study reveal an influential role can be played by the employee in the timing of a return to work, exposing a weakness in the current rehabilitation standpoint which recommends an early resumption of work duties. Although the study was conducted in New Zealand, ACC's clinical guidelines for the management of low back pain are similar to those published elsewhere.[28]

It is important that patients have the opportunity to be involved in medical decision making, but the problem with a patient's consultation behaviour influencing sickness certification is that a correlation does not exist between pain and the ability to accomplish physical activities.[29] Patients may have beliefs about low back pain that suggest a return to work should be delayed until symptoms have ceased or they may perceive their employer prefers a return when they are fully fit for normal duties. The doctor, rather than the patient, has the medical expertise to identify the risks attached to patient-driven sickness certification and it is important that they do not relinquish total control over this aspect of the consultation, which could result in adverse rehabilitation outcomes for the patient in the long term.

Acknowledgements

We are grateful to the participants who shared their experiences and enabled this research to be undertaken. We are also indebted to Denise Sandford from ACC who identified claimants fitting the inclusion criteria and to the physiotherapists who assisted with participant recruitment. Prof. Peter Davis, Dr Jennifer Hand and Roy Lay-Yee are thanked for their helpful comments on an earlier draft of this paper.

Declaration

Funding: University of Auckland and Accident Compensation Corporation doctoral scholarships.
Ethical approval: Auckland Ethics Committee (AKX/02/00/349).
Conflicts of interest: none.

References

[1] Accident Compensation Corporation and the National Health Committee. *New Zealand Acute Low Back Pain Guide.* Wellington, New Zealand: ACC, 1997.
[2] Arrelöv B, Alexanderson K, Hagberg J *et al*. Dealing with sickness certification—a survey of problems and strategies among general practitioners and orthopaedic surgeons. *BMC Public Health* 2007; **7:** 273.
[3] Löfgren A, Hagberg J, Arrelöv B, Ponzer S, Alexanderson K. Frequency and nature of problems associated with sickness certification tasks: a cross-sectional questionnaire study of 5455 physicians. *Scand J Prim Health Care* 2007; **25:** 178–85.
[4] Timpka T, Hensing G, Alexanderson K. Dilemmas in sickness certification among Swedish physicians. *Eur J Public Health* 1995; **5:** 215–9.
[5] von Knorring M, Sundberg L, Löfgren A, Alexanderson K. Problems in sickness certification of patients: a qualitative study on views of 26 physicians in Sweden. *Scand J Prim Health Care* 2008; **26:** 22–8.
[6] Söderberg E, Alexanderson K. Sickness certification practices of physicians: a review of the literature. *Scand J Public Health* 2003; **31:** 460–74.
[7] Mayhew HE, Nordlund DJ. Absenteeism certification: the physician's role. *J Fam Pract* 1988; **26:** 651–3.
[8] Schers H, Wensing M, Huijsmans Z, van Tulder MW, Grol R. Implementation barriers for general practice guidelines on low back pain: a qualitative study. *Spine* 2001; **26:** E348–53.
[9] Reiso H, Nygard JF, Brage S, Gulbrandsen P, Tellnes G. Work ability and duration of certified sickness absence. *Scand J Public Health* 2001; **29:** 218–25.
[10] Englund L, Svärdsudd K. Sick-listing habits among general practitioners in a Swedish county. *Scand J Prim Health Care* 2000; **18:** 81–6.
[11] Englund L, Tibblin G, Svärdsudd K. Variations in sick-listing practice among male and female physicians of different specialities based on case vignettes. *Scand J Prim Health Care* 2000; **18:** 48–52.
[12] Hansson M, Boström C, Harms-Ringdahl K. Sickness absence and sickness attendance—what people with neck or back pain think. *Soc Sci Med* 2006; **62:** 2183–95.
[13] O'Brien K, Cadbury N, Rollnick S, Wood F. Sickness certification in the general practice consultation: the patients' perspective, a qualitative study. *Fam Pract* 2008; **25:** 20–6.
[14] Morse JM, Field PA. *Qualitative Research Methods for Health Professionals.* 2nd edn. Thousand Oaks, CA: Sage, 1995.
[15] Glaser BG, Strauss AL. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* 11th edn. New York, NY: Aldine Publishing, 1967.
[16] Hussey S, Hoddinott P, Wilson P, Dowell J, Barbour R. Sickness certification system in the United Kingdom: qualitative study of views of general practitioners in Scotland. BMJ 2004; **328:** 88–91.
[17] Accident Compensation Corporation. *Treatment Profiles 2001.* Wellington, New Zealand: ACC, 2000.
[18] Rogers WA. Beneficence in general practice: an empirical investigation. *J Med Ethics* 1999; **25:** 388–93.
[19] Pransky G, Katz JN, Benjamin K, Himmelstein J. Improving the physician role in evaluating work ability and managing

disability: a survey of primary care practitioners. *Disabil Rehabil* 2002; **24:** 867–74.

[20] Sawney P. Current issues in fitness for work certification. *Br J Gen Pract* 2002; **52:** 217–22.

[21] Chew-Graham C, May C. Chronic low back pain in general practice: the challenge of the consultation. *Fam Pract* 1999; **16:** 46–9.

[22] Zinn W, Furutani N. Physician perspective on the ethical aspects of disability determination. *J Gen Intern Med* 1996; **11:** 525–32.

[23] Chew CA, May CR. The benefits of back pain. *Fam Pract* 1997; **14:** 461–5.

[24] Hjortdahl P, Borchgrevink CF. Continuity of care: influence of general practitioners' knowledge about their patients on use of resources in consultations. *BMJ* 1991; **303:** 1181–4.

[25] May C, Dowrick C, Richardson M. The confidential patient: the social construction of therapeutic relationships in general medical practice. *Sociol Rev* 1996; **44:** 187–203.

[26] Rogers WA. Whose autonomy? Which choice? A study of GPs' attitudes towards patient autonomy in the management of low back pain. *Fam Pract* 2002; **19:** 140–5.

[27] Reiso H, Nygard JF, Brage S, Gulbrandsen P, Tellnes G. Work ability assessed by patients and their GPs in new episodes of sickness certification. *Fam Pract* 2000; **17:** 139–44.

[28] Koes BW, van Tulder MW, Ostelo R, Burton AK, Waddell G. Clinical guidelines for the management of low back pain in primary care. *Spine* 2001; **26:** 2504–14.

[29] Rainville J, Ahern DK, Phalen L, Childs LA, Sutherland R. The association of pain with physical activities in chronic low back pain. *Spine* 1992; **17:** 1060–4.