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The compatibility of prescribing guidelines and the doctor–patient partnership:

a primary care mixed-methods study

Abstract

Background
UK policy expects health professionals to involve patients in decisions about their care (including medicines use) and, at the same time, to follow prescribing guidelines. The compatibility of these approaches is unclear.

Aim
To explore the relationship between prescribing guidelines and patient-partnership by exploring the attitudes of patients, GPs and primary care trust (PCT) prescribing advisors.

Design and setting
A mixed-methods study using qualitative, semi-structured interviews followed by a quantitative, questionnaire survey in primary care in Northern England.

Method
Interviews were conducted with 14 patients taking a statin or a proton pump inhibitor, eight GPs and two prescribing advisors. A multi-variate sampling strategy was used. Qualitative findings were analysed using framework analysis. Questionnaires based on themes derived from the interviews were distributed to 533 patients and 305 GPs of whom 286 (54%) and 142 (43%) responded.

Results
Areas of tension between guidelines and patient partnership were identified, including potential damage to trust in the doctor and reduced patient choice, through the introduction of the policy maker as a third stakeholder in prescribing decisions. Other areas of tension related to applying single condition guidelines to patients with multiple illnesses, competition for doctors' time and the perception of cost containment. Many GPs coped with these tensions by adopting a flexible approach or prioritising the doctor–patient relationship over guidelines.

Conclusion
Rigidly applied guidelines can limit patient choice and may damage the doctor–patient relationship. GPs need flexibility in order to optimise the implementation of prescribing guidelines, while responding to individuals' needs and preferences.

Keywords
decision making; evidence-based practice; patient compliance; physician-patient relations; professional practice.

INTRODUCTION

Underpinning the UK government's white paper *Equity and Excellence* are two themes:

- putting patients and public first; and
- improving healthcare outcomes.[1]

In relation to the former theme, the white paper states that 'shared decision making will become the norm' and that patients will be given information to allow them to make choices about their care.[1] However, the second theme suggests that 'the NHS will be held to account against clinically credible and evidence-based outcome measures'. This creates a scenario in which patients are enabled to take a full part in decisions about their care, including their medicines, but prescribers are held to account for consequent outcome measures.

In relation to prescribing guidelines, there is a distinction between process measures (prescribing indicators) and outcome measures (clinical targets).[2] Although it may be possible to exert control on the processes leading to the act of prescribing (the process measures), control over actual clinical outcomes lies in the hands of patients and in the choices they make about taking medicine.

Both shared decision making and concordance in medicine taking address the complexities of patients' health beliefs that influence adherence,[3,4] and encourage negotiation between the patient and the prescriber about treatment options. As such, there is a link between shared decision making and achieving clinical targets, but patient adherence is a vital step. In this article, the term 'patient partnership' is used to cover patient-centred approaches in general; 'prescribing guidelines' is used as a generic term to cover all policy initiatives intended to influence prescribing (including clinical guideline recommendations, outcome measures, and pay-for-performance targets).

Although there is an interdependence between prescribing guidelines and patient partnership, there have been suggestions of theoretical conflict between these approaches.[5–9] In addition, one empirical study that was set in secondary care, looked at the priorities given to evidence-based medicine and patient choice in the treatment of heart failure; it found that cardiologists always gave evidence-based medicine priority over patient choice.[10] To date, however, relatively little empirical work has been done to explore the compatibility of patient partnership and prescribing approaches, particularly in primary care. Although pay-for-performance targets (such as the Quality and Outcomes Framework [QOF]) have been shown to be effective,[11,12] their patient-centeredness has been questioned and it has been recognised that research needs to look at the reasoning behind not following

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How this fits in

Current UK health policy promotes both evidence-based prescribing guidelines and patient partnership, but study of the potential conflict between the two approaches has mostly been based on theoretical debate rather than empirical evidence. This study identified specific areas of tension between prescribing guidelines and patient partnership. As a result of these tensions, many GPs adopted a pragmatic approach, interpreting guidelines flexibly in the context of individual patients and giving priority to maintaining the doctor–patient relationship. GPs, therefore, need to be given sufficient flexibility, time, and autonomy in the implementation of evidence-based guidelines to accommodate the requirements of shared decision making and patient partnership more generally.

guidelines in order to understand 'the real-world applicability of clinical rules.'[13] This issue was explored in this study by looking at one scenario: when a drug is prescribed, is it possible to follow evidence-based prescribing guidelines and engage in effective patient partnership?

METHOD

A mixed-methods study was conducted in primary care in northern England during 2004–2005, at a time when the QOF was first introduced. The first phase, which was qualitative, was conducted in two primary care trusts (PCTs) in different cities. The later, quantitative, phase required an increased population size so an additional three PCTs across the two cities were recruited to the study. The qualitative phase explored and identified attitudes towards prescribing guidelines and patient partnership through interviews. Using questionnaires, these attitudes were then tested for generalisability and comparative ranking in the quantitative phase.

Two groups of medicines were selected as the focus: statins and proton pump inhibitors (PPIs). Both were priority areas for prescribing policy. Research ethics and research governance approval was obtained. Semi-structured, face-to-face interviews were conducted with 24 participants (14 patients, eight GPs, and two PCT prescribing advisers). The GPs were selected using maximum variation sampling to get a balance of location, sex, and single or group practice.[14] Each GP then recruited two patients using purposive sampling; one was prescribed a statin and one a PPI. A topic guide was devised from the literature review; it used an interactionist perspective, looking for the interpretations and meanings that each participant gave to prescribing or medicine-taking decisions.[15] Interviews were recorded and transcribed. The resulting data were analysed in four stages:

- stage one: identification of themes and sub-themes, which were then used to develop an analytical framework;
- stage two: comparisons were made across, and within, participant groups, using framework analysis;[16]
- stage three: comparisons were made within, and across, participant clusters (two patients and one GP per cluster, with four clusters per PCT); and
- stage four: the themes and sub-themes from the previous stages were synthesised to identify connections between the themes.

The quantitative phase used Likert scales to measure agreement with statements that had been derived from themes in the qualitative phase.[17] There were three questionnaires: one for GPs (n = 142); one for patients prescribed a statin (n = 154); and one for patients prescribed a PPI (n = 132). Statements were linked across questionnaires to allow for cross-comparison. All GP partners in the five PCTs were selected (n = 305). Questionnaires were distributed to patients, in collaboration with the PCTs, by sampling all those issued with prescriptions for statins or PPIs on a given day in each selected health centre (n = 533). The data were analysed using SPSS (version 14.0) to compare responses within, and across, the participant groups. Data analysis was conducted by the principal investigator and overseen by the co-authors.

RESULTS

Questionnaire response rates are given in Table 1. The qualitative analysis identified attitudes towards prescribing guidelines and patient partnership; these are detailed in Table 2.

Patients' attitudes

Patients, in the qualitative phase, experienced the implementation of guidelines as rules about treatment, with no flexibility or choice. This involved not being allowed soluble analgesics or prescription

Table 1. Questionnaire response rates

Participant	Distributed *(n)*	Returned *(n)*	Response rate (%)
Patients taking PPIs	257	132	51
Patients taking statins	276	154	56
GPs	305	142	47

PPI = proton pump inhibitor.

quantities, and rules about 'correct' cholesterol levels. From a financial perspective, many patients felt entitled to medicines because of their tax and/or prescription charge payments.

Patients were unaware of the concept of patient partnership but, when it was explained, some reacted in a way that suggested it was unrealistic. Some thought it would take too much time, which would, in turn, increase waiting times for appointments; others had experiences of some doctors being unwilling to engage in partnership:

'What sort of a stupid idea is this? When you need advice they say you must discuss it with your doctor, but [what] *if* [a] *doctor is not willing to discuss with you?'* Patient 17

Although the majority of patients (55%, 156/286) disagreed with the statement 'My doctor expects me to accept his/her advice without question', a reasonable proportion (21%, 60/286) believed that was, in fact, the case.

Table 2. Summary of participants' thoughts on prescribing guidelines and patient-partnership approaches

	Prescribing guidelines	Patient–doctor partnership (shared decision making or partnership in medicine taking)
Patients	Perceived guidelines as rules with no flexibility Only aware of guidelines and targets indirectly Felt entitled to have medicines due to payment of tax and prescription charges	Valued effective communication and being listened to Not all patients wanted, or expected, to be involved in shared decision making
Target-driven GPs	Focused on targets and guidelines	Little interest in partnership
Pragmatic GPs	Interpreted guidelines flexibly in the context of individual patients Identified specific areas of tension between guidelines and aspects of concordance Identified need to retain autonomy over prescribing decisions and to be involved in guideline development	Strived to use a partnership approach and identified barriers to it Considered concordance to be information sharing, shared decision making, honesty about non-compliance Pragmatic about the achievability of the approach
Prescribing advisers	No flexibility in the policy	Little interest in partnership Seen as a means of encouraging cooperation with guidelines and preventing non-adherence

All the patients in the qualitative phase, valued good communication and being listened to but, in general, were less interested in shared decision making. There was evidence of shared decision making with one GP and both of his patients in the study; other patients, however, did not wish to engage, despite some GPs wanting to adopt a shared decision-making approach and, consequently, feeling frustrated. Actively taking part in the consultation but then leaving the actual decision making to the GP was echoed by the quantitative results: although 85% (244/286) of patients preferred to take an active role in consultations, 64% (184/286) wanted their doctor to tell them what to do.

GPs' attitudes

All GPs were aware of prescribing guidelines, but varied in how they viewed and followed them. A minority were very target oriented and showed little interest in patient partnership; the remaining GPs were, in general, supportive of both guidelines and partnership. However, as the latter group of GPs thought that neither concept was fully achievable, they adopted a pragmatic approach. As an example, in discussing concordance, GP8 stated:

'It's sort of like happiness, it's what we are striving for but you haven't to be too disappointed if you don't always get there.' (GP8)

Reasons for thinking that partnership was unachievable with some patients included the views that some did not wish to engage, or were hindered by poor education. However, it was also noted that some patients welcomed such involvement:

'It varies with personality and it's dependent on the ongoing relationship and how much power you give people in the relationship, you know. So, some people, if you give them a copy of a letter that's been sent, some people are overfaced by that, they don't like having that information; some people love it.' (GP2)

Barriers to patient partnership were identified as lack of time and the habit of being paternalistic. Discussions about patient partnership revealed several aspects that were important for GPs, such as sharing information, sharing the decision, being honest about non-compliance, and being pragmatic. Many of the GPs who were pragmatic voluntarily discussed the tensions they experienced

between implementing guidelines and engaging patient partnership:

'The targets are going to be difficult because patients actually aren't target driven at all and if ... they have the feeling that you are driving them in a direction because the end point is the target, then you actually break down the confidential and therapeutic relationship that you have got with them. So, it is really quite difficult to say, "Well, I know you feel fine and I know your blood pressure's almost normal but it's not normal so I am going to add in another horrible toxic drug" ... They just feel foul so, I think, for the majority of people, we'll get near but I don't think we will get to target.' (GP7)

Consequently, many GPs felt they needed to be able to interpret guidelines in the context of individual patients and to reach a compromise by following guidelines and accommodating patient factors, such as patient preferences or the patient's ability to tolerate medicines:

'There are more and more guidelines coming in and I haven't got a problem with that, I think it's quite useful, as long as they are guidelines and not a rigid stick with which to beat you ... because people are different and some people will take tablets and some people won't and some people can tolerate them, some people can't ... what is an acceptable risk to one person is not an acceptable risk to another and, as long as you are taking a decision in agreement with the individual, and the guidelines respect that, then I haven't got a problem.' (GP4)

Prescribing advisers' attitudes

Prescribing advisers interpreted their role as ensuring that guidelines were implemented and associated targets achieved. Although they were familiar with the concept of patient partnership, one of them did not consider it to be relevant to the PCT and the other saw it as an important means of promoting adherence, achieving prescribing targets, and minimising the wastage of financial resources from unused medicines. Partnership was interpreted more as encouraging cooperation with policy than as giving patients a choice.

Areas of tension

By comparing participants' attitudes, several areas of tension were identified.

Potential damage to doctor–patient communication. GPs commented that the introduction of the QOF had increased paperwork and their use of computers. They reported that looking at the computer during consultations created a communication barrier with the patient. Some GPs reported that patients became resentful and that trust was damaged if they suspected that the GP was driven by guidelines, rather than what was in their own best interest.

Comorbidity and single-condition guidelines. Prescribing guidelines are generally written for sole conditions, whereas patients commonly have several concurrent conditions. Although patients in the study were initially recruited as either taking statins or PPIs, it became clear that it was artificial to categorise patients in this way — many had been prescribed both and all those in the qualitative phase wanted to discuss all their medicines. GPs found it difficult to apply prescribing guidelines to patients because of comorbidity. Furthermore, there was a perception that real patients differ from those recruited to the trials that inform guidelines, in that they interpret tolerability and risk differently, and they may not be adherent.

Cost containment. Many patients felt entitled to medicines from a financial perspective because they paid prescription charges and/or tax, but prescribing advisers used prescribing guidelines to limit medicines expenditure. There was, therefore, a tension between the financial aspects of guidelines and the patient perspective.

Competition for time. GPs reported that prescribing guidelines had increased demands on their time, due to increased administration and increased demand for appointments, which limited the time available to engage in patient partnership.

Possible solutions to some of these tensions were identified, such as allowing GPs to retain autonomy in their prescribing decisions, and involving them in the development of guidelines.

The number of stakeholders in prescribing decisions

The study identified distinct perspectives, reflecting the diversity of attitudes across the participant groups. Patients and prescribing advisers saw guidelines as inflexible, whereas most GPs valued autonomy and flexibility. In addition, interpretations of patient partnership varied

Table 3. Selected questionnaire statements and responses

Responder	Questionnaire statement	Agreed, *n* (%)	Neutral, *n* (%)	Disagreed, *n* (%)	No response, *n* (%)
Patients, *n* = 286	'My doctor expects me to accept his/her advice without question'	60 (21)	60 (21)	156 (55)	10 (3)
Patients, *n* = 286	'I prefer to take an active role in consultations with my doctor'	244 (85)	31 (11)	3 (1)	8 (3)
Patients, *n* = 286	'I want my doctor to tell me what to do'	184 (64)	46 (16)	41 (14)	17 (6)
Patients, *n* = 286	'I have a right to refuse to take tablets'	221 (77)	29 (10)	23 (8)	13 (5)
GPs, *n* = 142	'If a patient refuses to take a drug after the risks have been explained to them, then I respect their choice'	139 (98)	2 (1)	0 (0)	1 (1)
GPs, *n* = 142	'I feel pressurised when patients insist on a particular treatment, even when I advise them otherwise'	86 (61)	26 (18)	28 (20)	2 (1)
GPs, *n* = 142	'Maintaining a good doctor–patient relationship is more important to me than following guidelines'	76 (54)	43 (30)	20 (14)	3 (2)

across groups. Participants who placed the highest value on guidelines (prescribing advisers and GPs who were target driven) either dismissed the concept of partnership or interpreted it as promoting cooperation with policy. This suggests an inherent tension between prescribing guidelines and patient partnership.

In the partnership model, consultations are generally seen as a negotiation between the patient and the prescriber. However, guidelines bring a third decision maker — the policy maker — into the equation. What appears to be a negotiation between two parties is, in fact, a negotiation between three; this, then, reduces the chances of all three stakeholders being in agreement and the choices available to patients. In simple terms, for a GP prescribing a drug, this gives rise to the following difficulties that must be overcome:

- Patient refusal — what happens if patients refuse guideline-recommended treatment?
- Patient demand — what happens if patients request treatment that is not guideline recommended?
- Priority — what happens when there is a conflict between patient choice and following guidelines?

Questionnaire responses indicated that most GPs thought patients have a right to refuse treatment, felt pressured when patient requests conflicted with guideline recommendations, and tended to prioritise patient preference over guideline recommendations (Table 3).

Although this study identified several areas of tension between guidelines and patient partnership, half of the patient cases in the qualitative phase showed some elements of successful integration of the two approaches, in that they met guideline requirements and showed basic elements of patient partnership. Analysis of these 'successful' cases indicated that they were successful because either the patient trusted the GP and/or the patient took a proactive approach towards their own health.

DISCUSSION

Summary

Guidelines introduce the policy maker as the third decision maker in a consultation. The policy maker becomes something of a silent member in the room, which affects the partnership or shared decision-making process, thereby creating tension and limiting patient preference. Specific areas of tension between prescribing guidelines and patient partnership, such as patient refusal, patient demand, and conflicting priorities, were identified.

Strengths and limitations

A strength of the study was that the mixed-methods design allowed the multi-actor perspective of the research question to be addressed by eliciting and comparing the perspectives of all three participant groups. One limitation to be aware of is that the sampling strategy used for GPs to recruit patients in the qualitative phase may have created a bias towards recruiting patients who had strong, established relationships with their GP.

However, not all patients considered their current GP to be a 'good doctor' and those who did also spoke about other 'bad' doctors. A further limitation of the study is that the use of bespoke questionnaires means it is not possible to compare results directly with other studies.

Comparison with existing literature

This study provides evidence on the compatibility of the two approaches in primary care, in an area in which writing has drawn mostly on theory or opinion, rather than empirical data.[5–9]

The notable exception is a study set in secondary care which found that cardiologists always prioritised evidence-based medicine over patient choice.[10] In contrast, this study identified that many GPs prioritised maintaining the doctor–patient relationship over following guidelines.

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Ethical approval

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Provenance

Freely submitted; externally peer reviewed.

Competing interests

The authors have declared no competing interests. At the time of the study all authors were employed by the University of Leeds.

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Implications for practice and research

These findings raise the question of how much autonomy and time doctors realistically have to implement guidelines flexibly in the context of individual patients. The degree of control that guidelines exert in practice has steadily increased as they have evolved from guidance to national standards, then to QOF performance indicators. This trend of increasing enforcement is likely to inhibit shared decision making and patient choice.

Partnership in medicine taking and shared decision making generally refers to patient preference or choice. However, in this study, patient demand was a distinctive theme and one that implies unacceptable patient choice — that is, a choice that is not in accordance with guidelines. This then poses a challenge to both clinicians and policy makers to understand patients' expectations and ensure that reasonable choice is offered. At the other end of the spectrum from patient demand, this study highlighted a tendency for patient partnership to be interpreted as cooperation. Such an interpretation of patient involvement should be avoided and care taken to ensure that shared decision making is promoted as a genuine option for choice, rather than a tokenistic gesture. Further research should explore the components of consultations that lead to the successful integration of prescribing guidelines and patient partnership.

This study was undertaken during the introduction of the QOF into the UK. As primary care embarks on another organisational change, with the advent of GP commissioning, the question of how GPs will adjust to the dual role of doctor and policy maker is raised, as well as the impact this may have on doctor–patient partnerships.

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