Making research relevant to the primary health care team

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SUMMARY

There is, as yet, no strong culture of research in primary care and much of the existing research is conceived and undertaken by people outside primary care. The poor implementation of research findings may, in part, be owing to the fact that those delivering the service are not involved in asking or answering questions that are relevant to their practice. This paper reports how three practices constructed a research agenda based on the unanswered questions of their primary care teams. The research questions prioritised by the teams tended towards patient behaviour and service organisation rather than clinical issues. This contrasts with national research priorities. The process has contributed towards the development of a culture of enquiry among team members. Other primary care teams may benefit from a similar approach. National research priority setting in primary care should take more account of the unanswered questions of primary care teams.

Keywords: research; primary health care; primary care teams; patients.

Introduction

THE case for supporting research and development (R&D) in **■** primary care has been well made.^{1,2} Over 90% of contacts between the population and the National Health Service (NHS) take place in primary care, with a significant proportion of all episodes of illness being managed wholly in the community.³ Members of primary care teams need ready access to a wide range of relevant information to support their clinical practice, yet current research and the capacity to undertake it within primary care is very limited. At the same time, there is evidence of unacceptable delays in the implementation of many research findings.⁴ It has been suggested that one factor working against the smooth transition from publication of research to clinical practice is the long-standing cultural divide between researchers and practitioners. Research can easily become uncoupled from clinical practice and the needs of health services and be driven by individual and institutional agendas operating in virtual isolation.4 Consequently, researchers increasingly answer research

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questions that are irrelevant or unimportant to practising clinicians. 5.6

The Medical Research Council has examined areas of primary care where new research might help the NHS and has 'uncovered a range of primary care practice that would benefit from new or stepped-up research effort'. Four priority areas were identified: acute illness, help-seeking behaviour, chronic disorders, and health promotion. They also put forward proposals for the development of research capacity in primary care. Similarly, the NHS strategic objectives for developing primary care R&D include increasing the amount of high quality R&D of importance to primary care, increasing the number of clinical staff with R&D expertise, increasing the involvement of non-clinical staff, and achieving an evidence-based culture. I

Howie has stated that '25 000 general practitioners [GPs] and their aggregate of unanswered questions and untested impressions remains one of the most significant sources of research potential available to contemporary medicine'. However, there is little evidence that this source has been accessed in developing R&D priorities. The question remains as to how this research potential can be harnessed and integrated into the primary care research agenda. The aim of this paper is to discuss a process by which this might be achieved.

Method

The setting

All the staff of three newly appointed research practices in one district in the Northern Region were involved, including doctors (n=13), nurses (n=13), and administrative staff (n=28). Practitioners in two of the practices had academic appointments or previous research experience. The practices had worked together previously in audit work and had formed a research group linking the three research practices.

The process

Three stages were planned in order to generate research questions and set priorities for research:

- 1. an educational intervention,
- 2. problem/research question identification, and
- 3. prioritisation of research questions.

An initial 'awayday' (protected time for the team away from the practice environment) for all three practices focused on equipping all members to better understand the processes of research. An overview of research was given, followed by facilitated small groups addressing how to identify a research question. The small groups were encouraged to brainstorm problems in practice that could potentially be addressed by research. Each group adopted one of the topics, worked it up into a research question, and considered how the question might be answered. Handouts on the techniques involved in carrying out research and on carrying out a literature review were also distributed.

The awayday finished with everyone being given a log diary to record problems in their daily work that might be addressed by research. The diary gave room for identification of the problem and also allowed the practice member to propose possible research questions based on the problem and to add additional comments. These were filled in for one month and then returned. All problems were placed on a database and sorted thematically.

The research steering group (comprising three GPs, a practice manager, and an academic GP) separately evaluated these problems and sorted them into one of five categories:

- 1. questions not suitable for research;
- 2. researchable through the resources available in our practices;
- researchable but not our role (because of size, cost, duration, etc.);
- research evidence already available, to the best of our knowledge; and
- 5. researchable but better done by others (e.g. where topic is focused on the behaviour of others).

Topics unanimously allocated to category two were then sorted into major themes and the research questions clarified. Several of the topics were combined into single research questions. Others were excluded as they were already the subject of research activity in one of the practices.

At this stage a second awayday for all three practices was held. Feedback on the process thus far was given and the members were given the opportunity to clarify their understanding of the research questions presented to them. Following this, prioritisation of the research questions by members of staff was undertaken using a scoring system. Each member ranked their top 10 research questions in order of priority, with 10 points for the most important and 1 for the least important. These were summated for the whole group and fed back with opportunity for further discussion.

Results

Out of a possible 54 members of staff, 46 attended the first awayday, 43 returned log diaries, and 48 attended the second awayday. Absences were related to sickness or holidays.

The initial brainstorming session at the first awayday generated 66 topics (20 from doctors, 22 from nurses, and 24 from administrative staff). The log diaries generated 322 topics. A breakdown of these into major themes is given in Table 1. Sorting of the 322 topics by the research steering group led to agreement among all five members that 103 topics (32%) were not suitable for research, whereas 38 of the topics (12%) were appropriate for research within the resources of the practices. The rest of the topics were potentially researchable but deemed by at least one member of the steering group to fall into one of the other categories. Of the 38 topics, 28 were generated by doctors, five by nurses, and five by administrative staff.

The resulting research questions were then prioritised (Table 2). Doctors suggested seven out of the top ten questions, nurses one, and administrative staff four (some questions were suggest-

ed more than once). Four of the ten questions generated through research log diaries had been identified in the initial brainstorming session.

Discussion

This paper describes a process for identifying research priorities in primary care that is problem-based and involves all members of the primary care team. The approach has been reported previously but not in the context of whole primary care teams actively involved in service delivery. It contrasts with the present trend towards centrally commissioned research but could be adapted and used by other interested primary care teams. It raises several discussion points.

What is 'relevant research'?

We would argue that research becomes relevant in primary care when the findings apply to problems in daily practice that are important, frequent or stress-provoking to members of the primary care team or patients. An additional factor must be the likelihood of being able to implement research findings.

The process

The awaydays may not be essential but were thought to be educational, motivational, and teambuilding. It is unlikely that a research culture could be developed without some protected time. This is generally allocated to lead professionals but we were keen to provide an opportunity for the whole team in order to cultivate the ethos of becoming research practices.

The log diaries generated more questions than brainstorming alone and also accounted for the majority of prioritised questions. This suggests that the identification of research questions by group discussion, for example by a committee, may not be the most effective method. We would also argue that keeping research log diaries is likely to promote reflection among team members and encourage curiosity. There is a desire to promote a research culture in primary care but no clear method of achieving it; research log diaries may be useful.

There was discussion of the sorting of the 219 topics generated that were researchable. Our primary motivation was to establish a research agenda for our practices. We therefore chose to look only at those questions that were thought to be within the capabilities of the practices (n = 38). An alternative would have been to prioritise all the researchable questions and then decide which of them could be addressed by the practices. It is worth noting that the inclusion of administrative and nursing staff in the steering group might have led to a different topic list.

Table 1. Major topic areas from log diaries.

		Number of ideas (%) Nurses Admin (n = 10) (n = 22) Total			
	Doctors (n = 11)			Total	
Total ideas	129 (40)	55 (17)	138 (43)	322	
Ideas per member	11.7	5.5	6.3	7.5	
Administrative issues	23 (18)	9 (16)	67 (48)	99 (31)	
Patient information and behaviour	12 (9)	8 (15)	25 (18)	45 (14)	
Consulting behaviour and communication	21 (16)	5 (9)	9 (7)	35 (11)	
Clinical issues and prescribing	58 (45)	31 (56)	33 (24)	122 (38)	
Miscellaneous	15 (12)	2 (4)	4 (3)	21 (6)	

Table 2. Top 10 research questions.

Research questions	Overall	Doctors	Nurses	Admin
What characteristics lead a patient to be labelled 'demanding' by doctors, nurses, and receptionists? Are these perceptions the same? Can an intervention reduce the perception or level of demand from these patients?	1	6	1	2
What is the impact on the physical and psychological wellbeing of patients on waiting lists?	2	1	3	7
Do patients and health professionals vary in their perception of urgent appointments? Would an educational intervention change patients' perception of 'urgent'?	3	3	7	1
Who is affected by what stresses in the primary health care team?	4	4	4	9
What difference does not attending appointments make to patients' health? What are the characteristics of patients who fail to attend appointments in primary care?	5	2	8	6
What should be the frequency of checks in chronic disease management? What are the benefits of regular checks for people with chronic diseases?	6	8	2	5
What factors determine whether a doctor overruns a surgery? What are patient attitudes towards time spent waiting and time consulting?	7	7	10	4
What is the range of tasks receptionists are currently asked to do? Is the training and preparation for these tasks adequate?	8	9	12	3
What are the characteristics of patients who are satisfactorily managed by telephone consultation? What is the outcome of telephone advice?	9	11	6	8
How often is 'reassurance' used as a central intervention in the consultation? Do 'reassured' patients return to consult for the same problem?	10	5	11	12

Involvement of the whole primary care team and patients

We have shown that all members of primary care teams can participate in identifying problems that may be addressed through research. The overwhelming majority had no previous research experience. We believe the involvement of the whole team was important in promoting a spirit of enquiry, ownership, and enthusiasm for research. The collaboration between the three practices enabled a broader view to be taken, particularly when prioritising the research questions. Although patients were not involved on this occasion there is no reason why they could not be and we plan to explore patient involvement in the future using a similar process.

Costs

With such ventures, concerns over the cost in staff time and resources are often raised. Our awaydays were run after shortened morning surgeries and finished in time for an evening surgery. The practices were closed and a doctor was employed to cover emergencies in the middle of the day. Staff costs, locum costs, venue, and lunch amounted to less than £500 for each awayday for the three practices. This was considered to be good value for money.

The process could be adapted or adopted by other primary care teams with an interest in research. We believe it has been useful in developing a research culture and a shared research agenda.

Who is R&D in primary care for?

The research questions prioritised by the teams tended towards patient behaviour and service organisation rather than clinical issues. This contrasts with the exercise of national priority-setting characterised by *Our Healthier Nation*, ¹⁰ which focuses on illnesses. The principal issue for practising clinicians is how to implement research findings in the context of the primary care consultation. The gap between academic research and practising clinicians becomes apparent at this point. This poses an important question about the rationale for R&D in primary care: who is it for?

Much existing research is conceived and undertaken by people outside primary care. If research activity is to develop, the research questions should come from primary care. 5,6,11 GPs are

often used as data gatherers in health services research but are more rarely involved in discussion or analysis of the data and their implications for practice. ¹¹ It has been suggested that the increasing interest in implementing research findings stems from a growing awareness of the gap between the evidence from research and the reality of clinical practice. ⁴ An alternative view would be that poor implementation of research findings is not surprising if the research fails to ask or answer questions relevant to those involved in delivering the service. ¹²

The increase in funding for primary care R&D is welcome and the funding bodies will at least in part determine priorities for research. However, if the extra resources are to lead to a broadly-based, evaluative culture then serious efforts must be made to define and address the issues of everyday importance to primary care staff and the quality of service they provide. Research commissioned against an agenda set by those outside primary care may produce important results but the findings are less likely to be implemented. Equally, research purely on primary care teams' perceived priorities might not address important clinical issues affecting public health.

A literature search has revealed no previous account of a primary care-based exercise in generating, identifying, and prioritising research questions. The research priorities yielded by this process are different from, and need to be linked to, national and regional priorities to produce a research agenda that can be shared by the NHS, other funding bodies, academic institutions, and practising primary care clinicians and their non-clinical colleagues.

The outcome

This process has established a research agenda for three practices; in particular, several projects are now underway that were identified in the process. Furthermore, a literature search has been undertaken to further clarify the number one priority question and a research proposal is being worked up. Of additional interest, one author (DLW) has adapted the process to feed into a national strategic review in the area of diabetes. Fourteen teams in primary care are using log diaries to identify research questions in diabetes. This is being linked with a patient focus group on the same topic.

Although no formal evaluation has been done, we believe that this process has led to better informed and more reflective practice teams. Staff with no previous research experience have seen their thoughts discussed and worked up into research projects. Projects presently in progress involve nurses, health visitors, psychologists, dieticians, practice managers, receptionists, research assistants, and doctors.

Conclusion

Primary care research needs to answer the questions being asked by primary care teams. These questions should be sought out and should inform the national R&D agenda. The implementation of research findings into practice might be speeded up if the findings were more relevant to the practitioners.

References

- NHS Executive. R&D in primary care: National Working Group report. Leeds: Department of Health, 1997.
- Medical Research Council. Primary Health Care. [Topic review.]
- London: MRC, 1997. Secretaries of State for Social Services, Wales, Northern Ireland and Scotland. Primary Health Care: an agenda for discussion. London: HMSO, 1986; 34
- Haines A, Jones R. Implementing findings of research. BMJ 1994; 308: 1488-1492
- Marshall M, Luthra M, Plastow L, Russell D. Research and clinical practice. [Letter.] *Br J Gen Pract* 1998; **48:** 1612. Owen P. Clinical practice and medical research: bridging the divide
- between the two cultures. Br J Gen Pract 1995; 45: 557-560.
- Radda G. Primary care research: the MRC's proposals. [Editorial.] Br J Gen Pract 1998; 48: 872.
- Howie JGR. Research in general practice. London: Croom Helm, 1979: 11.
- Bradley C. How to identify a research question and get started. In: Bradley C, Carter Y, Thomas C (eds). *Research Methods in Primary* Care. [1st edition.] Oxford: Radcliffe Medical Press Ltd, 1997; 9-17.
- Secretary of State for Health. Our healthier nation: a contract for health. London: HMSO, 1998.
- O'Dowd T. Research in general practice: who is calling the tune? *Br J Gen Pract* 1995; **45**: 515-516.
- Lipman T. Discrepancies exist between general practitioners' clinical work and a guidelines implementation programme. [Letter.] BMJ 1998; **317:** 604.

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