

Development:

Evaluating newly commissioned services in primary care: lessons from a force field analysis

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Primary care trusts (PCTs) will play a major role in commissioning and evaluating new services in primary care. Several studies have discussed the problems associated with conducting evaluative research in primary care generally. However, few GP commissioned services have been formally evaluated, so little is known about the feasibility of such research in the PCT setting. This study uses a tool called force field analysis to identify factors that drive and restrain a primary care-based randomized controlled trial (RCT) of a newly commissioned service for patients with psychosocial problems in primary care, and also to suggest strategies for building on positive factors and reducing negative ones. It involves discussion with general practitioners (GPs) and other primary health care team (PHCT) members in practices with access to the service. Several important dynamics emerge from the analysis with regard to the likely success of evaluation of a new service. These are availability of research skills and funding, prior beliefs about the service and participation in primary care, existing evidence of effectiveness and financial accountability, research design and awareness and ownership in primary care. This study provides evidence that force field analysis can serve as a helpful tool for anticipating and identifying barriers to, and partnerships and actions needed for, successful evaluative research in primary care. It can also facilitate the development of practical strategies to aid successful service evaluation. We suggest that the strategies identified by this study could usefully inform plans for future evaluations in the setting of the PCT.

Key words: commissioning; force field analysis; primary care; randomized controlled trial

Introduction

Radical changes are under way in primary care service provision as part of the Government's NHS Plan (Secretary of State for Health, 2000). The development of personal medical services (PMS) schemes, service commissioning by primary care trusts (PCTs)

and walk-in centres will substantially change the way in which primary care is delivered, raising questions of effectiveness and cost-effectiveness. Although the government has been largely silent about their roles and responsibilities in promoting and conducting research, PCTs will play a major role in commissioning services. Like health authorities, they will need to prioritize and understand the quality of services when making commissioning decisions.

To date, few general practitioner (GP)-commissioned services have been formally evaluated. Consequently, little is known about the feasibility of evaluative research in the setting of PCTs. In

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1999, we succeeded in completing an evaluation of a GP-commissioned service by randomized controlled trial (RCT) (Grant *et al.*, 2000). During the trial we collected data from primary health care team (PHCT) members about the factors which both contributed to and detracted from the success of the evaluation.

In this paper we describe the identification of these positive and negative factors using a tool known as ‘force field analysis’ (Lewin, 1947). We also discuss the outcomes of this analysis in terms of a strategy for building on the positive factors that we experienced during the trial and reducing the negative ones, and we suggest that our findings could usefully inform future PCT-led evaluations.

Methods

Data collection

Information on factors that drive and restrain change was collected opportunistically during ongoing discussion with a wide range of PHCT members, and during semistructured face-to-face interviews with seven GPs who had access to the project. These GPs, from seven different practices, were selected for interview to represent a cross-section of all those who were able to refer to the project. Interviews lasted for between 30 minutes and 1 hour. The research team reviewed their findings at team meetings throughout the evaluation, and agreed on action points. The factors were summarized and analysed using force field analysis.

Force field analysis

Force field analysis addresses the psychology of change (Lewin, 1947). It is based on the theory that although organizations resist change, an understanding of the status quo and the real motivations helps to facilitate change. It is frequently used as a tool for change by management in industry and other settings. The analysis consists of two steps. The first step is to identify with all involved and interested stakeholders the forces that drive change and those that restrain change. These forces are set out diagrammatically (see Table 1). The second step is to identify strategies for building on the driving forces and reducing or removing the restraining ones (see Table 2).

Setting

In 1995, GPs in an Avon locality commissioning group (Hine and Bachmann, 1997), which became a primary care group (PCG) during the evaluation, commissioned the Amalthea Project to facilitate contact between patients with psychosocial problems in primary care and the voluntary sector. The GPs identified the need, service design and locality funding for the project. However, perceptions in primary care of the project’s effectiveness were wide-ranging. As a result, Avon Health Authority commissioned its evaluation. A decision was made to conduct an RCT and economic analysis, comparing referral to the project with routine GP care.

Patients with a wide range of psychosocial problems, and whom their GP felt might benefit from referral to the Amalthea Project, were recruited to the RCT. GPs were responsible for both recruitment and randomization of patients, and this took place during everyday surgeries. GPs carried out randomization by sequentially opening numbered sealed opaque envelopes that had been prepared in advance by the research team.

Stakeholders

Stakeholders were identified as GPs and other PHCT members in practices with access to the project, some of whom participated in its evaluation.

Results

Although the research method for the RCT was piloted, a number of restraints emerged. Similarly, a number of factors that drive change were identified that aided progress (see Table 1). Some restraints threatened successful completion of the evaluation, necessitating action by the research team (see Table 2). As a result of these actions, a large enough sample of patients ($n = 161$) was eventually recruited to the evaluation to provide adequate statistical power. However, the various restraining forces meant that the rate of recruitment of patients was slower than expected, and consequently the final results of the evaluation were not available when a funding decision about the project was due.

Several important dynamics emerged from the force field analysis, the most important of which are described below.

Table 1 Factors contributing to and detracting from the success of the evaluation

Factors contributing to the success of the evaluation	Factors detracting from the success of the evaluation
Academic skills and knowledge in planning and running trials	Lack of consensus about effectiveness of service and need for evaluation
Funding for research-officer appointment	GPs felt that they already knew the answer to the research question
Absence of existing information about effectiveness of service	Slow recruitment leading to lack of synchronization between funding decisions and completion of trial
Several committed practices/GPs who prioritized participation within their workload	GP uncertainty as to whether research findings would be acted upon
PHCT 'awareness' of evaluation	Everyday pressures dissuaded GPs from recruiting patients
GP 'ownership' of evaluation	Randomization was felt to be difficult and to compromise the GP-patient relationship
Awareness of financial constraints on primary care and the need for evidence of effectiveness for commissioning decisions	
Local interest in research area	
Access to service conditional on participation in evaluation	

Table 2 Strategies employed to reduce restraint, and to increase the drive towards success

Dynamic	Strategy
Lack of health service research skills in primary care commissioning group	Identification of key academics to work as a project group
Lack of funding for evaluation in primary care commissioning group	Identification of funding by health authority to employ dedicated researcher as part of project group
Lack of existing research evidence	Emphasize need for evidence of effectiveness in order to inform future funding decisions and ensure financial accountability
Variable interest and participation in evaluation by GPs	Identification and encouragement of a group of committed GPs responsible for the majority of patient recruitment
Development of primary care ownership of evaluation	Involvement in research design and implementation, by GP membership of initial steering group and ongoing consultation with participating GPs
Development of awareness of evaluation in primary care	Researcher based in participating practice Communication with PHCT members about progress of evaluation by bimonthly newsletter
Acceptability of research methods to GPs	Minimal form-filling by GPs; instead most data collected from patients
Incentives to GP participation	Service made conditional on participation in the evaluation for practices recruited in its latter stages

Availability of research skills and funding

Although the commissioning GPs were keen for the service to be evaluated, initial difficulty in identifying skilled researchers who were available to steer the evaluation led to delay. A research team was eventually formed via contacts between the local department of public health and local university departments of primary care and health services research. Funding was provided by the health auth-

ority, enabling the research team to employ a dedicated researcher. Nevertheless, scarcity of available health researcher time and expertise will be a significant barrier to PCTs developing research and successfully bidding for funding.

Prior beliefs and participation in primary care

Despite the fact that there was local interest in primary care with regard to service provision for

patients with psychosocial problems, there was no consensus about the need for either the Amalthea Project or its evaluation. At one extreme, GPs held very positive views about the project, considering the case for its continuation to be so clear that evaluation was not warranted. At the other extreme, GPs felt that the project, and therefore its evaluation, were not useful. The majority of GPs' views fell somewhere between these two ends of the spectrum. Consequently, there were varying degrees of commitment to the research. This was illustrated first by the considerable interpractice variation in the annual referral rate to the project during the evaluation (between 1.7 and 42.3 referrals per 10 000 patient population). In addition, the proportion of patients referred to the project who were also recruited to the evaluation varied substantially (from 20% to 80%) in the 26 participating practices.

Among the participating practices, the research team identified a group of seven key practices which were committed to the evaluation and were responsible for recruiting the majority of patients. In order to recruit sufficient patients, in the latter part of the evaluation these practices were eventually targeted, and the evaluation continued in them for an additional 4 months. Although this raised some concern about reducing the generalizability of the study findings, on balance the achievement of a large enough sample was felt to be the greater priority.

Existing evidence and financial accountability

The innovative nature of the Amalthea Project meant that there was an absence of research literature or other information to inform decisions about its funding. It was emphasized that unless a local evaluation was successful, the locality commissioners would have no evidence of effectiveness to draw upon. GPs and managers recognized their responsibility for decision making about the project's future, and realized that any decisions should be based on evidence of effectiveness and cost-effectiveness. This appeared to encourage participation in the evaluation.

Research design

GPs reported both practical and ethical problems with the randomization process, which discouraged them from recruiting patients. Practically, some GPs found randomization time-consuming and

therefore difficult to achieve given the competing time pressures of everyday general practice. This was a criticism voiced about the whole recruitment procedure, but only by a minority of GPs. The research team had made every effort to minimize paperwork by GPs, instead collecting most data from patients.

GPs highlighted two main ethical problems with randomization. First, those GPs who held strong preconceived views that the service provided by the project was beneficial felt that it was unethical to deny that service to some eligible patients, by randomizing them to usual GP care. Secondly, some GPs felt that randomization compromised their relationship with patients, requiring them to present uncertainty about patient management, which felt inconsistent with their usual practice.

Due to slow recruitment of patients to the trial by GPs, the service provided by the project was extended to additional practices part way through the evaluation. In these practices, access to the service was conditional on participation in the evaluation. This acted to improve recruitment.

Awareness and ownership in primary care

The fact that the evaluation had been commissioned by the health authority detracted from the sense of ownership felt by some PHCT members, and made them suspicious that its findings might not be acted upon. In order to increase their awareness and ownership, and potentially improve participation, several strategies were employed, one of which was to involve GPs in the design and implementation of the evaluation throughout its course. In order to maintain the profile of the evaluation, regular written contact was made with the practices in the form of a bimonthly newsletter, which provided details of the progress of the project and its evaluation, and one member of the research team was based in a participating practice.

Discussion

This paper demonstrates that although there are conditions that will encourage participation in evaluative research in primary care, there are also significant practical barriers to overcome. The success of the evaluation was aided by involving PHCT members at all stages, and by the impressive recruitment efforts of a small number of more com-

mitted practices. Making access to the service conditional on participation in its evaluation added to this success, as did external support and funding. Other factors that drove the evaluation included the realization that evidence of effectiveness was necessary for reasons of financial accountability and local interest in the research area. Factors that restrained the evaluation included scepticism about its need and utility, reluctance to take part because of other work pressures, and obstacles to randomization (both practical and ethical).

Role of force field analysis

Developing a force field analysis prospectively with stakeholders would have helped, first by anticipating problems and solutions earlier, and secondly by developing closer links with and feelings of ownership among stakeholders. We recommend this approach when planning research in primary care.

Comparison with previous studies

The problems of conducting research, and more specifically RCTs, in primary care are well documented, and various suggestions have been made for enhancing GP participation (Tognoni *et al.*, 1991; Murphy *et al.*, 1992; Fairhurst and Dowrick, 1996; Ward *et al.*, 1999; Van Der Windt *et al.*, 2000; Wilson *et al.*, 2000). Common themes shared by our findings and those of other researchers are the importance of GP interest in the research area (Tognoni *et al.*, 1991), collective ownership of the research (Murphy *et al.*, 1992) and ongoing communication with participating practices (Ward *et al.*, 1999), as well as the ethical and practical problems experienced with randomization (Fairhurst and Dowrick, 1996). An additional methodological strategy employed by other researchers in primary care to encourage GP recruitment of patients to RCTs is the use of a third party, such as a research assistant, to randomize patients (Friedli *et al.*, 1997; Ward *et al.*, 2000). This was not a viable option in this evaluation for resource reasons, but perhaps in principle it should be considered by others at the design stage.

Methodological issues

One of the main limitations of this force field analysis is that it was based on research of one design. However, although some of the issues raised are pertinent to RCTs alone, most of them

are of generic relevance. The other main limitation is that patients were not included as stakeholders. This was because the problem of nonparticipation in the evaluation involved PHCT members, not patients, almost all of whom when approached agreed to take part. In other situations it might be informative to extend the force field analysis to patients and other relevant stakeholders.

Implications for PCTs

The pace of change in the transition to PCT status means that the role of PCTs in evaluating services has not yet been addressed, yet high-quality evaluative research will be needed more than ever in this setting. The findings of this study could usefully inform plans for service evaluation by PCTs. We make several specific recommendations as follows.

- PCTs will require expertise with regard to health services research, especially in deciding when to pursue local research as opposed to drawing on existing evidence of effectiveness, and in deciding how to develop evaluative research. Such research knowhow will need to come from within PCTs, by employment of suitably skilled personnel, or from outside, by local partnership with organizations that are capable of supporting research, such as primary care research networks and academic departments of general practice. This has possible implications for the training of PHCT members in research skills and methodology.
- PCTs should be encouraged to commission research when developing services not previously subject to evaluation. RCTs will be impractical for many PCT-led evaluations, but should be encouraged and adequately supported when they are feasible and necessary. The main difficulties with an RCT identified by our force field analysis were GP recruitment and randomization of patients. Recruitment was improved by making access to the service conditional on participation in the evaluation. Another potential difficulty with regard to RCTs is that organizational interventions, which many new services are, will frequently require randomization at the level of the practice rather than, as in the evaluation described, at the level of the individual patient. Such cluster randomization necessitates large sample sizes and considerable resources (Kerry and Bland, 1998), with obvious implications for the funding of PCT evaluations.

- Political considerations and the availability of funds drive many newly commissioned services, and their evaluation is frequently an afterthought. However, evaluation should be an integral part of any new service, and should be planned at an early stage, to avoid *post-hoc* evaluation and its associated problems, and to encourage a culture of financial accountability. Accordingly, the funding of newly commissioned services by PCTs should include an appropriate ring-fenced amount for evaluation.
- Time-scales for evaluations must be realistically planned, so that findings can usefully inform decisions on future funding, and sufficient numbers of patients are recruited. This can be difficult because of uncertainty with regard to the likely rate of patient recruitment, first due to the unpredictable nature of GP participation, and secondly due to initial referral patterns to a new service being potentially misleading. Initially, referrals will be from a pool of existing (prevalent) cases, and the subsequent rate of new (incident) cases may be dissimilar.
- A minimum critical mass of primary care staff committed to research is needed to drive an evaluation forward. Wider participation will ensure greater external validity of the research findings. Developing primary care ownership, employing research methods that are feasible within the constraints of primary care, and promoting a culture of evidence-based health care can all encourage PHCT member participation.

In conclusion, force field analysis can help to anticipate and identify barriers to, and partnerships and actions needed for, successful completion of evaluative research in primary care. The recommendations for PCTs that result from our experience of evaluation of a GP-commissioned service necessarily support a broad and flexible approach to research, with RCTs and observational studies having complementary roles. They also emphasize the need to encourage a culture of evidence-based decision making and financial accountability in primary care, through national policy with regard to PCTs' evaluative responsibilities.

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References

- Fairhurst, K. and Dowrick, C. 1996: Problems with recruitment in a randomised controlled trial of counselling in general practice: causes and implications. *Journal of Health Service Research Policy* 1, 77–80.
- Friedli, K., King, M.B., Lloyd, M. and Horder, J. 1997: Randomised controlled assessment of nondirective psychotherapy versus routine general-practitioner care. *Lancet* 350, 1662–65.
- Grant, C.M., Goodenough, T., Harvey, I. and Hine, C.E. 2000: A randomised controlled trial and economic evaluation of a referrals facilitator between primary care and the voluntary sector. *British Medical Journal* 320, 419–23.
- Hine, C.E. and Bachmann, M.O. 1997: What does locality commissioning in Avon offer? Retrospective descriptive evaluation. *British Medical Journal* 314, 1246–50.
- Kerry, S.M. and Bland, J.M. 1998: Sample size in cluster randomisation. *British Medical Journal* 316, 549.
- Lewin, K. 1947: Frontiers in group dynamics. *Human Relations* 1, 5–41.
- Murphy, E., Spiegel, N. and Kinmonth, A.-L. 1992: 'Will you help me with my research?' Gaining access to primary care settings and subjects. *British Journal of General Practice* 42, 162–65.
- Secretary of State for Health 2000: *The NHS Plan*. London: The Stationery Office.
- Tognoni, G., Alli, C., Avanzini, F., Bettelli, G., Colombo, F., Corso, R., Marchioli, R. and Zussino, A. 1991: Randomised clinical trials in general practice: lessons from a failure. *British Medical Journal* 303, 969–71.
- Van Der Windt, D.A.W.M., Koes, B.W., Van Aarst, M., Heemskerck, M.A.M.B. and Bouter, L.M. 2000: Practical aspects of conducting a pragmatic randomised trial in primary care: patient recruitment and outcome assessment. *British Journal of General Practice* 50, 371–74.
- Ward, E., King, M., Lloyd, M., Bower, P. and Friedli, K. 1999: Conducting randomized trials in general practice: methodological and practical issues. *British Journal of General Practice* 49, 919–22.
- Ward, E., King, M., Lloyd, M., Bower, P., Sibbald, B., Farrelly, S., Gabbay, M., TARRIER, N. and Addington-Hall, J. 2000: Randomised controlled trial of non-directive counselling, cognitive behavioural therapy, and usual general practitioner care for patients with depression. I. Clinical effectiveness. *British Medical Journal* 321, 1383–88.
- Wilson, S., Delaney, B., Roalfe, A., Roberts, L., Redman, V., Wearn, A. and Hobbs, R. 2000: Randomised controlled trials in primary care: case study. *British Medical Journal* 321, 24–27.