



# Understanding the challenges of service change – learning from acute pain services in the UK

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## DECLARATIONS

### Competing interests

None declared

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### Ethical approval

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### Guarantor

AEP

### Contributorship

The study was designed by AP and HD with additional

## Summary

**Objectives** To explore organizational difficulties faced when implementing national policy recommendations in local contexts.

**Design** Qualitative case study involving semi-structured interviews with health professionals and managers working in and around acute pain services.

**Setting** Three UK acute hospital organizations.

**Main outcome measures** Identification of the content, context and process factors impacting on the implementation of the national policy recommendations on acute pain services; insights into and deeper understanding of the generic obstacles to change facing service improvements.

**Results** The process of implementing policy recommendations and improving services in each of the three organizations was undermined by multiple factors relating to: doubts and disagreements about the nature of the change; challenging local organizational contexts; and the beliefs, attitudes and responses of health professionals and managers. The impact of these factors was compounded by the interaction between them.

**Conclusions** Local implementation of national policies aimed at service improvement can be undermined by multiple interacting factors. Particularly important are the pre-existing local organizational contexts and histories, and the deeply-ingrained attitudes, beliefs and assumptions of diverse staff groups. Without close attention to all of these underlying issues and how they interact in individual organizations against the background of local and national contexts, more resources or further structural change are unlikely to deliver the intended improvements in patient care.

## Introduction

### Policy may be national but implementation is always local

Health services are littered with half-remembered national policy documents. These respond to an

identified deficit in patient services and offer a broad vision of the shape and direction of future services. Some are accompanied by additional levers in the form of dedicated funding, specific targets with associated incentives (or sanctions) and ongoing monitoring programmes; others

advice from JB and WM; AP collected and analysed the data, which were then discussed and reviewed across the team. All authors contributed to the paper

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are endorsed in successive policy reports but never attract sustained political or managerial attention. All of these visions for change are dependent on implementation in local health service organizations: complex, pluralistic organizations that are characterized by the existence of multiple objectives and diffuse power structures<sup>1</sup> and overlaid by 'the vagaries of changing political ideologies, the instabilities caused by the political economy of resource allocation; the changing interfaces with local government and the voluntary sector; and the ever present difficulties of determining and evaluating ends and means in health care'.<sup>2</sup>

Translating national policy into local practice is therefore a formidable challenge and many potentially useful initiatives founder or are watered down when they meet 'the stubborn reality of effecting change in patient services'.<sup>3</sup> In many cases, implementation is partial and any resulting improvements in patient care may be precarious or patchy.

As a means of understanding some of the challenges that health services face in translating national policy into changes in routine practice, we look here at one example of this widespread phenomenon of faltering or partial implementation: the case of acute pain services (APSs) in the UK.

## Acute pain services in the UK: an example of policy implementation challenges

As in many other countries, the introduction of acute pain services in the UK (Box 1) was intended to address longstanding deficiencies in postoperative pain management. Ten years after the publication of the first key policy document,<sup>4</sup> the majority of UK hospitals had set up an acute pain service.<sup>5</sup> However, these services have continued to struggle to implement necessary improvements in postoperative pain management.<sup>6</sup> Many acute pain services only focus on the care of selected patients, such as those in receipt of specialized forms of pain relief such as epidural or patient-controlled analgesia. Routine pain assessment (the basis of effective pain management) is patchy, and there are problems providing adequate cover at night and at weekends, which means that patients' pain management is often poor at these times. Where improvements have been made, these are heavily dependent on local enthusiasts. Thus postoperative pain management remains inadequate for many surgical patients.<sup>5,6</sup> We set out to understand these local implementation difficulties given the clear recognition of the problem and a national policy impetus for action.

### Box 1

#### Acute pain services in the UK

- The 1990 report *Pain after Surgery*<sup>4</sup> recommended the introduction of an acute pain service to all major surgical hospitals in the UK in order to tackle the long-documented problem of poorly treated postoperative pain by addressing the 'lack of an identifiable individual or group with responsibility for the relief of acute pain'.<sup>4</sup>
- Although the name 'acute pain service' suggests a broader remit than postoperative pain alone, the focus of policy documents and much of the subsequent work done by acute pain services has been around postoperative pain. Thus although some acute pain services have extended their work into other types of acute pain, acute pain services are commonly seen as services dealing with postoperative pain.
- *Pain after Surgery* was followed by a number of government and professional (e.g. Royal College) documents across the decade that endorsed and developed the recommendations.
- By 2002 the majority of hospitals did have an acute pain service in some form<sup>5,6</sup> but many services were struggling to embed the necessary improvements in postoperative pain management in routine practice across their hospitals. Deficits in basic care continued.<sup>5-7</sup>
- Research identified a range of underlying problems including interprofessional difficulties, the low priority given to acute pain by managers and funders, and the limited knowledge and understanding of many health professionals about acute pain management.<sup>6,7</sup>

**Box 2****Factors that undermined service change in postoperative pain management in the three case-study organizations****Issues around the *content* of the change: *what is an APS and why have one here?***

- Lack of agreement that improvement was necessary
- Lack of clarity about the nature of the change and how the proposed new services fitted with existing and related services

**Issues around the *context* of the change: *the idiosyncrasies of the local environment***

- Poor fit with local organizational priorities
- Poor fit with local organizational structures (e.g. directorates)
- Adverse effects of local organizational histories (e.g. service reorganizations, mergers)
- Lack of direct and indirect resources to support the change

**Issues around the *process* of the change: *service change challenges professional roles and identities***

- Divergent views among health professionals about responsibility for this aspect of patient care
- Conflict with longstanding professional boundaries and norms

**Method**

Following a pilot study in a separate hospital site, and after obtaining ethical approval, we conducted in-depth case studies<sup>8</sup> at three broadly typical acute hospitals in the UK. Case-study sites were selected from medium-sized district general hospitals (DGHs) that had established acute pain services that were structurally and functionally separate from the local chronic pain and palliative care services. Seventy-one semi-structured taped interviews about the day-to-day working in and around the acute pain service were conducted by one researcher (AP) with: anaesthetists (19); surgeons (5); nurses (33); other health professionals (5); and managers (9). The interviews, which typically lasted around 45 minutes, were conducted using a topic guide constructed from a review of the existing policy and research literature on acute pain services, and adapted in the light of the pilot work, with local tailoring appropriate to the health professional group and role.<sup>1</sup> Interview data were complemented by local documents (e.g. patient

<sup>1</sup> Further information on the interview topic guide is available from the authors.

information leaflets, guidelines and protocols). Interview data were analysed using the 'framework approach'<sup>9</sup> which combines inductive and deductive analysis. Although the experience of each organization was different in detail and degree, there were strong commonalities between the three organizations, and so the data are presented across all three cases.

**Results**

Analysis of the case-study data showed that there were multiple factors undermining service change around postoperative pain management in the three organizations and that these could be divided into three linked categories: issues around the content of the change; issues around the context of the change; and issues around the process of the change<sup>2</sup> (Box 2).

**Issues around the content of the change**

Service change around postoperative pain management faltered because not all health professionals and managers agreed about the need for change and because the role of the acute pain service was often unclear, sometimes even after it had been set up.

Not all health professionals in the case-study hospitals were convinced of the potential benefits of improving pain management: 'As far as I'm aware, there's no real hard evidence that analgesia improves your outcome' (anaesthetist). Furthermore, many health professionals and managers were unconvinced, despite damning local data in some settings, that there was any problem with the care patients were currently receiving: 'I've been in areas where it's much worse ... I think we're average' (allied health professional); 'I'm having difficulty recalling the last complaint that we got that was about pain management' (manager).

Lacking detailed national models, the role, remit and requirements of the acute pain service were unclear. In particular, there remained ongoing uncertainty as to the balance for the service between an educational role around pain management and the provision of direct services to patients. Those who were ambivalent about the need for change were able to exploit such ambiguity. The efforts of acute pain service members were then diverted into debating and defining

the local role, remit and requirements and there was some duplication between the acute pain service and other related services (e.g. critical care outreach).

Without clear agreement about the need to invest scarce time and resources in improving pain management, and clear specifications about what maintaining an effective acute pain service entailed, there was no strong pressure on managers and health professionals to improve services.

### Issues around the context of the change

Service change around postoperative pain management was further undermined because the local and national contexts were unfavourable. The changes did not fit well with organizational priorities and with local structures; they were adversely affected by other local developments and they suffered from the lack of direct and indirect resources to support the change.

Implementing improvements in postoperative pain management did not fit with the main organizational 'drivers' of 'delivering the service' and meeting national performance targets and mandatory directives. Pain management was not only absent from service specifications and targets, but in some circumstances came into direct competition for scarce resources (e.g. theatre time, high-dependency unit beds, anaesthetists and ward nurses) with other organizational priorities (e.g. surgical throughput). It was difficult for acute pain services to promote the importance of good postoperative pain management when it appeared not to be facilitated, 'rewarded' or even valued in the hospital.

Local organizational structures hindered the communication and teamwork needed to improve postoperative pain management. Firstly, health professionals in perioperative care were spread across different directorates (e.g. surgery, anaesthetics, gynaecology) which tended to have separate budgets, training and audit: 'We've got lots of columns within the Trust, not a lot of communication' (anaesthetist). Secondly, day-to-day working was heavily overshadowed by the history of mergers or other service reorganizations at hospital level and by continuing uncertainties about future changes. Thus health professionals were accustomed to working in separate directorates and separate hospitals rather than across directorates and across the whole organization as im-

proving postoperative pain management entailed. Many were reluctant to invest effort in improving services when these improvements might be lost in the next service reorganization. Resentment of mergers led to some hostility towards health professionals or pain management changes associated with 'the other hospital'.

With a lack of sufficient dedicated resources, aggravated by a directorate-based system of budgets, acute pain services struggled to provide a service across dispersed departments and sites and there were no reserves of money to draw on for running costs or new developments. Time that could have been spent on activities like training, education or audit was spent seeking funds for new initiatives or tracking down equipment in short supply for immediate re-use.

### Issues around the process of the change

Finally, service change around postoperative pain management was undermined by issues around the process of the change, especially the divergent views among health professionals about who was responsible for pain management and the conflict between the pain management changes and longstanding professional boundaries and norms.

Policy documents on acute pain services made clear that a primary aim was that acute pain services would act as a focus for improving postoperative pain management throughout their hospitals.<sup>4</sup> However, postoperative pain management was not wholly seen as a shared responsibility in the case-study organizations. Instead it was seen by some health professionals interviewed as the special interest of a few individuals: 'We have one or two enthusiasts within the department, but to be honest, it's not really something that takes up a lot of time. There is an acute pain team and they seem to deal with most of the issues' (anaesthetist).

Even when health professionals did agree that postoperative pain management was not solely the responsibility of the acute pain service, ensuring effective pain management for all surgical patients was not straightforward. It required effective communication and teamwork between different health professions (in particular, nursing and medical staff), and this was compromised by the longstanding divisions between and within professions. These divisions may constrain or enhance the autonomy of

individual professionals and contribute to dysfunctional working relationships (e.g. 'turf defending' behaviour).<sup>10-13</sup> The strength of interprofessional barriers is illustrated by the nurse interviewees who identified that a key benefit of the acute pain service for them was its advocacy role: support from the acute pain service enabled them to challenge medical staff about ineffective pain management for an individual patient. However, there was also strong evidence of dysfunctional working relationships between members of the same profession. For example, some surgeons and some anaesthetists determined pain management without reference to each other; some ward nurses refused to attend training sessions run by the APS nurse; some junior doctors were left without more senior support at busy times: 'It's your job – get on with it'. Thus the process of providing effective pain management on a daily basis was not merely a question of an individual health professional's competence or commitment: it also depended on individuals having the seniority or personal qualities to command the respect and cooperation of professional peers and colleagues in other professions.

### Interactions across content, context and process

Service change in the three organizations was, therefore, undermined by a range of factors to do with the content of the change, the challenging context and the actions and reactions of health professionals and managers involved. Crucially, these factors did not just impact as single factors, but also worked in combination and impacted on each other in complex, recursive ways. For example, the lack of agreement about the need for service improvement (a content issue) and the absence of pain management from the main organizational priorities of 'delivering the service' and meeting performance targets (a context issue), appeared to legitimize the non-involvement of those health professionals and managers who considered postoperative pain management to be a minor 'special interest' (a process issue).

The acute pain service was not in a strong position to move postoperative pain management into the mainstream: the service was located in a single directorate and in two of the organizations studied, APS members were closely associated with what had previously been a separate (and

rival) hospital. In its comparatively weak position, it was hard for the APS to make a claim for additional resources, particularly when there were no detailed specifications about what resources were required, no national targets and indeed no local agreement about the need for improvement.

In turn, lacking adequate resources, it was harder for the acute pain service to provide the necessary data to demonstrate that improvement was needed or that changes in practice would result in observable benefits. It was also harder to challenge, through education, training and example, the outmoded beliefs about pain management that kept some health professionals on the sidelines and to provide the education and training to enable nurses in particular to overcome traditional professional boundaries and take an active part in improving postoperative pain management. Thus the belief that pain management was not a shared responsibility but instead was something that the acute pain service did, and the belief that there was no real need to improve pain management locally, went largely unchallenged. Acute pain services were left to deal with pain management alone and struggled to realize the vision of cross-organization attention to pain management espoused in policy documents.

### Discussion

Implementing national policy recommendations in the three case-study organizations was severely undermined by a range of organizational factors which interacted with each other. This is the first UK study to research acute pain services in this way. It provides a much richer account of local implementation difficulties than accounts of service change that focus on a lack of time or a lack of resources.<sup>13</sup> Three features of the study underpin the credibility of the data: the selection of three broadly typical organizations, which increases the likelihood that similar processes would be observed elsewhere;<sup>14,15</sup> the participation of all of the professional groups working in and around the acute pain service; and the substantial body of data gained from the large number of in-depth interviews. While the interviews were based on self-report – which means that the possibility of social desirability bias cannot be ruled out – many interviewees were frank and candid about local services, and many had been in post long enough to

be able to describe the historical development of the service over a wide time span.

The findings demonstrate the deeper challenges faced by those wishing to bring about comprehensive and sustained improvements in postoperative care. As seen in this study, even seemingly straightforward service changes – make pain visible, provide expertise for its amelioration – can mask endemic and entrenched obstacles to achieving them. In this sense, the findings have much broader applicability. The generic problems which this study uncovered (e.g. lack of agreement about the need to change local services; conflict between new ways of working and established norms; lack of fit with local context and histories) are not unique to acute pain services but are likely to be manifest in service changes of all types across a wide variety of healthcare settings.

The study draws attention to the ways in which service improvement is undermined by multiple overlapping and interacting factors. This emphasizes the importance of taking a full 'diagnostic inventory'<sup>12,16</sup> prior to launching service innovations at local level: that is, assessing the underlying factors that are contributing to current practice and considering the most appropriate and effective ways to encourage the desired changes. Without such groundwork and a deliberate focus on *local* circumstances, the risk increases that service changes will fail to address specific local contingencies and outcomes will be disappointing.<sup>12,16–19</sup>

More resources or more structural change or more policy directives will not by themselves deliver the desired improvements in patient care, whether in a specific service area like postoperative pain management or in relation to more diffuse objectives like encouraging shared decision-making between patients and health professionals. If the organizational context does not support the aims of the new service (perhaps because the organizational context conveys that efforts should be focused on other targets) then the innovation will founder and is unlikely to lead to lasting changes in the routine practice of busy health professionals:

*'...really to improve the quality of care for patients does depend on changing current organisational settings. Without such effort, health professionals will be left to struggle against the inertia of rigid organisational structures and processes unfit for the task.'*<sup>20</sup>

This study makes clear that there are limits to what individuals and local groups, however enthusiastic, can achieve and sustain. Data from these case studies show that much has been achieved through the hard work and sustained commitment of individuals and teams, a phenomenon evident in other health service settings. However, individuals and single organizations can only have limited influence over the strong and pervasive barriers to service improvement that we have outlined, such as the organizational context (e.g. funding streams, performance measurement, mergers and service reorganizations) and the longstanding professional boundaries and norms (influenced as they are by the education and socialization of health professionals and by wider influences of class, race and gender).<sup>3,21–24</sup> Their impact can be attenuated to some degree at local level, but shifting and removing them requires sustained and concerted effort across multiple organizational levels: the individual; the group or team; the overall organization; and the wider healthcare and political systems.<sup>25</sup> This is not to counsel despair but rather to reiterate the importance for policy-makers, researchers and health professionals of acknowledging the complexities of service change and the importance of local contingencies.<sup>26</sup> Significant cultural changes<sup>2,27,28</sup> will also be needed if the proposed changes require new ways of working that are at odds with traditional professional beliefs, assumptions or roles. Yet how such changes are achieved is an area about which we know relatively little, and progress is likely to be slow, uncertain and painful.<sup>29</sup>

In summary, national policy recommendations about changes in patient care may be helpful in providing a framework or a stimulus to action but they are not enough. The care received by the average patient is unlikely to improve unless we use the growing body of knowledge on health service change,<sup>16,19,26,30</sup> to select and tailor appropriate strategies at each organizational level, recognizing that the combination of factors that enable development and adoption of new working practices in one setting may not apply in exactly that form elsewhere.<sup>12,17–19,30</sup>

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