

Rhetoric and reality on acute pain services in the UK: a national postal questionnaire survey

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Background. The study aimed to explore the extent to which NHS acute pain services (APSs) have been established in accordance with national guidance, and to assess the degree to which clinicians in acute pain management believe that these services are fulfilling their role.

Methods. A postal questionnaire survey addressed to the head of the acute pain service was sent to 403 National Health Service hospitals each carrying out more than 1000 operative procedures a year.

Results. Completed questionnaires were received from 81% (325) of the hospitals, of which 83% (270) had an established acute pain service. Most of these (86%) described their service as Monday–Friday with a reduced service at other times; only 5% described their service as covering 24 hours, 7 days a week. In the majority of hospitals (68%), the on-call anaesthetist was the sole provider of out of hours services. Services were categorized by respondents as thriving (30%), struggling to manage (52%) or non-existent (17%). There was widespread agreement ($\geq 85\%$) on the principles that should underpin acute pain services, and similar agreement on the need for better organizational approaches (95%) rather than new treatments and delivery techniques (19%).

Conclusions. More than a decade since the 1990 report *Pain after Surgery*, national coverage of comprehensive acute pain services is still far from being achieved. Despite wide consensus about the problems, concrete solutions are proving hard to implement. There is strong support for a two-fold response: securing greater political commitment to pain services and using organizational approaches to address current deficits.

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Freedom from postoperative pain is a central concern of surgical patients^{1–3} and alleviation of pain may contribute significantly to improved clinical outcomes.^{4–5} However, despite long-standing recognition, under-treatment of postoperative pain continues to be a major problem both in the UK and internationally.^{6,7}

The main organizational model for managing postoperative pain, in the UK and elsewhere, has been the acute pain service (APS), largely catalysed by developments in the US^{8,9} and gradually introduced in the NHS during the 1990s following the landmark report *Pain after Surgery*.¹⁰ Yet the implementation of acute pain services since 1990 has been piecemeal and haphazard, with successive reports

up to the late 1990s providing evidence of continuing variation within and between hospitals in the structure, function, and remit of APSs, and in the delivery of good practice in postoperative pain management.^{11–13}

More recently, there has been debate about the future direction of acute pain services. Suggested developments include: integration with other pain services (chronic and palliative care), alignment with critical care outreach teams,¹⁴ or the development of comprehensive postoperative rehabilitation programmes.¹⁵ Whilst the debate continues, many patients continue to suffer unnecessarily high levels of unrelieved pain^{6,7} and many health professionals feel a growing sense of frustration.^{16,17}

The most recent comprehensive national assessment of acute pain services dates back to 1997 in studies commissioned by the Audit Commission and the Clinical Standards Advisory Group.^{11 12} This raises the question of whether, since then, APSs have ‘bedded down’ and are now operating to the remit envisaged for them in various expert and governmental reports.^{10 11 18–20} To assess this, we conducted a national postal questionnaire survey of UK acute pain services exploring: (i) the extent to which APSs are set up in alignment with national guidance; and (ii) the degree to which clinicians in acute pain management believe that APSs are fulfilling the role asked of them. We also explored perceptions amongst clinicians about the ways in which APSs should develop in the future.

Methods

We identified all hospitals carrying out significant amounts of surgery in the UK from the *Directory of Operating Theatres and Departments of Surgery*.²¹ Hospitals carrying out fewer than a thousand operations a year were excluded, as were those concerned solely with paediatric, ophthalmic, obstetric or (outpatient) dental services. In March 2002 we sent a postal questionnaire and covering letter addressed to the ‘Head of the Acute Pain Service, Department of Anaesthetics’ to all hospitals so identified ($n=403$). The questionnaire had been piloted for design and content with a small group of anaesthetists and surgeons from five hospitals, and aimed to assess the extent to which APSs were operating according to national guidance. Two follow-up mailings were sent to non-respondents, with a further targeted mailing to a small group of the remainder. Where more than one response was received for the same hospital (e.g. because of cross-site working), factual data were systematically aggregated to create one record per hospital. Quantitative data were coded and entered into SPSS²² for analysis.

This paper reports data on the existence and availability of acute pain services, on opinions about postoperative pain services in the NHS, and on respondents’ assessment of services in their own hospital. Data on key areas of practice: pain scoring, management of postoperative nausea and vomiting (PONV) and pain control after discharge, will be published in a separate analysis.

Results

Respondents

Completed questionnaires were received from 325 out of 403 hospitals (81% response rate). The respondent hospitals carry out around 90% of all NHS surgery. The majority of the responses were from district general hospitals (70%), together with 22% from teaching hospitals and the remainder from other hospitals (e.g. specialist centres and small hospitals). 53% of the replies came from anaesthetists, 28%

came from nurse specialists and most of the remainder were completed by joint respondents (typically a consultant anaesthetist and a nurse specialist). Non-respondent hospitals were mainly limited in size, type of surgery (e.g. day surgery only), and specialty mix.

Availability of acute pain services

Of the 325 respondent hospitals, 83% (270) had an established APS and 17% (55) did not. Although 31% (17) of the non-APS hospitals were small (carrying out fewer than 5000 operations a year), this group also included much larger hospitals: five hospitals which indicated that they had no established APS carried out more than 15 000 operations a year. Descriptions of postoperative pain management arrangements in hospitals without an APS varied from ‘ad hoc’ or ‘there are no formal arrangements for acute pain management outside the HDU’ to arrangements which were broadly similar to those in hospitals with a formal APS (i.e. based on on-call anaesthetists).

Reports over the past decade have highlighted the need for round-the-clock anaesthetic cover for acute pain services, but have not been explicit about whether the APS itself needs to be a 24 hour, 7 day service. The overwhelming majority (86%) of even those hospitals with an established APS described themselves as providing a ‘full service Monday to Friday during the day with a reduced service at other times’. Just 5% described themselves as providing a ‘full service 24 hours 7 days a week’. In the majority of hospitals with an APS (68%), out of hours services were provided solely by the on-call anaesthetist. Just 6% of hospitals described specific additional weekend provision, for example an acute pain nurse specialist working on Saturday and Sunday mornings, or a Saturday morning pain round.

Respondents’ views on postoperative pain services

All respondents were asked to characterize the nature of their own postoperative pain service (see Table 1). Less than one-third (30%) described their service as ‘thriving’; around half (52%) indicated that their service was ‘struggling to manage’, and 17% said it was non-existent or played only a minor role.

Many respondents drew attention to long-standing battles over developing pain services: ‘[we] have put ever more effort over many years into attempts to improve local management of acute pain. We are profoundly disappointed that we have achieved so little’, and ‘despite bids for funding an APS for 5 years we are still without such a service—which is a disgrace.’ Such comments demonstrate that considerable commitment to developing services along the lines of national guidance is often frustrated by local circumstances (see Fig. 1).

A majority of respondents agreed that many patients suffer unacceptable levels of postoperative pain (66%) and

Table 1 How did respondents describe their own service? *The instructions given to respondents were as follows: 'Below are four descriptions of acute pain services. These are broad descriptions and may not match local circumstances perfectly. Nevertheless, which broad description most closely matches your views about the acute pain service in your hospital? Please tick one of the boxes'.*

Short description	Questionnaire description	% (n)
No APS	<i>There is no functioning acute pain service in this hospital.</i> OR <i>We do have an acute pain service here, but it does not play a major role. We tried to implement the national recommendations on acute pain services, but the general consensus is that the model did not work well.</i>	17 (55)
Struggling	<i>The acute pain service in this hospital is well supported by staff but struggling to manage with the available resources. Services are slowly improving, but there is a long way to go. With sufficient resources, we could really develop the acute pain service.</i>	52 (168)
Thriving	<i>The acute pain service in this hospital is thriving. Despite setbacks, we are carrying out regular audits and have introduced changes in our practice as a result. We are actively supported by hospital clinical staff and management and see the team as successful and innovative.</i>	30 (97)

- *'Locally, the idea of an acute pain service is deemed vital, but we have been refused resources for a Clinical Nurse Specialist for 24 months!' (Consultant anaesthetist, DGH)*
- *'We have no support financially to expand the service and everything is a battle and takes so much time. This is frustrating because our acute pain service has huge potential' (Acute pain nurse, DGH)*
- *'Until we have enough well trained motivated staff on the wards who are able to carry through cultural changes, do necessary observations, and not feel constantly overwhelmed, it will be difficult to make further progress' (Consultant anaesthetist, DGH)*
- *'I have been disappointed at the lack of interest shown in acute pain management by primary care providers... the principal purchasers of acute services' (Consultant anaesthetist, DGH)*
- *'Postoperative pain management in this hospital is still in its infancy' (Consultant anaesthetist, teaching hospital)*
- *'In general my post is viewed as a fulfilment of Audit Commission recommendations (i.e. a tick can be put in the relevant box!)' (Acute pain nurse, DGH)*

Fig 1 Evidence of struggle: comments from survey respondents

Table 2 Opinions about postoperative pain services in the NHS

Statements derived from published reports and research papers	% overall agreement (n)
<i>Many patients experience unacceptable levels of pain after surgery</i>	66 (214)
<i>Postoperative pain services in the NHS are often confused and unstructured</i>	59 (190)
<i>Acute pain services should be multi-disciplinary and involve anaesthetists, surgeons, nurses and other staff</i>	97 (316)
<i>Acute pain services should be available 24 hours a day, 7 days a week</i>	85 (277)
<i>Acute pain services should aim to improve pain management for all surgical patients</i>	97 (315)
<i>The way forward is to have comprehensive integrated pain management services which deal with all types of pain in hospital</i>	88 (287)
<i>The solution to the problems of postoperative pain management lies largely in developing new treatments and delivery techniques</i>	19 (60)
<i>The solution to the problems of postoperative pain management lies largely in organizational approaches that make the best use of existing techniques and expertise</i>	95 (310)

that current postoperative pain services are often confused and unstructured (59%; see Table 2). There was also widespread agreement ($\geq 85\%$) on the principles that should underpin acute pain services: multidisciplinary provision, round-the-clock availability and aimed at improving pain

management for all surgical patients (Table 2). A similar large majority (88%) identified comprehensive integrated pain management services as desirable.

In identifying possible solutions to current service inadequacies, few thought the answers lay in new treatments

and delivery techniques (19%), with an overwhelming majority (95%) pointing to a need for better organizational approaches (Table 2). Although the questionnaire did not address this issue directly, gaining dedicated resources appeared to many respondents to be a major requirement for developing acute pain services. Many saw the wider political context as significant here: *'The service is not viewed as important as it does not help the trust to meet government targets. Management are only interested in the service when patients complain'*; *'(I) would like to see greater emphasis on acute pain services in planning at both trust and national level – as it has a low priority unlike cancer/cardiac services it is difficult to obtain funding for increased staffing/equipment etc'*.

Discussion

The acute pain service model has been promoted within the UK and internationally for over a decade. Data from the mid- to late-1990s indicated significant difficulties in realizing the model in practical terms, and our update 5 years on shows ongoing problems. Although the majority of hospitals now do have an established APS, in comparison to the 1995 survey conducted by Harmer and colleagues²³ in which only 44% of responding hospitals did so, and further to the 1997 survey by CSAG¹² in which 88% of trusts surveyed had an acute pain service, there are some surprising areas where services are not yet established—including some hospitals carrying out over 15 000 surgical procedures each year. More worryingly, in this study over 50% of those hospitals that do have an APS self-classified their service as struggling.

In addition, despite the widespread agreement among respondents that pain services should be available around the clock and the evidence that pain management at night is often poor,²⁴ in practice very few were able to provide this level of service. Out of hours cover at night and weekends still largely devolves to the routine on-call anaesthetist, who will have a range of competing demands, and may be a relatively inexperienced trainee.

Central to concerns about out-of-hours care are the debates about whether the key role of the acute pain service is to provide a hands-on direct patient care service or is instead to provide a resource for education and training, and for the promotion of good practice.^{4 7 11 25} Indeed, if an acute pain service is well resourced and able to stimulate the kinds of widespread organizational and attitudinal changes required to overcome barriers to good pain management, then it may not matter if the APS itself is a daytime service, as good practice should continue throughout the 24-hour period. However many comments made in this survey suggest that existing services rely heavily on the commitment, dedication and direct patient care of APS staff, and that there is a long way to go before the principles and practice of good pain management permeate through acute hospitals. Combined with the evidence that many patients

perceive pain at night as more severe,²⁴ the current 'office hours' model of acute pain services which only covers around 50 hours of the 168 hours in a week would seem destined to leave many patients in pain.

Assessing the extent of progress over recent years is difficult: direct comparisons with previous studies are hampered by methodological differences, the absence of a fixed definition of what constitutes an acute pain service, and changes in hospital configurations over time (e.g. trust mergers). Nonetheless it is clear that service provision on the ground falls well short of that envisaged by national policy documents.

Overall, many of those who work in acute pain services recognise the need for improvements, largely agree on some of the underlying principles, and are frustrated at their inability to establish well-functioning services. In particular, the key difficulties in delivering effective postoperative pain management are seen as organizational and resource-based rather than being rooted in inadequate treatment options. A very large majority (88%) agreed with the proposition that the way forward was 'comprehensive integrated pain management services' covering acute and chronic pain and palliative care. However, given the difficulties in delivering on a simpler more restricted service (post-surgical patients only) it remains unclear if these problems would necessarily be solved in the development of a more comprehensive service.

More than a decade since *Pain after Surgery*, understanding and addressing the significant organizational barriers to the development of acute pain services and securing greater political commitment to them remain important goals for those concerned to improve patient care in the NHS.

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