



# PROVISION OF PAIN SERVICES

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The Association of Anaesthetists  
of Great Britain and Ireland  
9 Bedford Square, London WC1B 3RA  
Telephone 0171 631 1650  
Fax 0171 631 4352  
E-mail [aagbi@compuserve.com](mailto:aagbi@compuserve.com)

The Pain Society  
9 Bedford Square  
London WC1B 3RA  
Telephone 0171 636 2750  
Fax 0171 323 2015  
E-mail [painsoc@compuserve.com](mailto:painsoc@compuserve.com)

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More detailed information on equipment, facilities and costings  
for acute, chronic and cancer pain can be obtained from the  
secretariat at Bedford Square



## SECTION 1 - INTRODUCTION

- 1.1 This report concerns pain management services in Great Britain. New services must have the support of health authorities and general practice fundholders. Evidence based medicine has produced a shift in emphasis and support must be backed up with deliverable contracts. The situation in Ireland is dynamic at present since there have been radical changes in the funding of health services in that country. However, the broad principles expressed here also apply to the provision of pain services in Ireland.
- 1.2 The purpose of this document is to give information to purchasers and providers. Good quality pain management will lead to improved health care and quality of life. Pain is a recognised sub-specialty of anaesthesia and departments require to develop services for their clinical value and for training and education within our specialty. Guidelines for pain services have been provided by the Royal College of Anaesthetists Quality of Practice Committee for purchasers through the Department of Health [1]. The College has given advice concerning the curriculum and training facilities appropriate for pain management [2].
- 1.3 The International Association for the Study of Pain (IASP) has provided information on the desirable characteristics for pain services and a detailed core curriculum for professional education in pain [3].
- 1.4 This booklet gives guidance on:
  - components of service provision
  - content of an appropriate business plan
  - financial considerations for such provision
  - research, audit and education

## SECTION 2 - CURRENT SITUATION

- 2.1 Pain management concerns acute and chronic pain and cancer related symptom control. The provision of this service may be shared between consultants with specific interests but differing degrees of responsibility. The ideal structure requires that these services be provided on an integrated basis. In Great Britain and Ireland pain treatment facilities vary in size, structure and activity with no relationship between the size of the hospital and the pain treatment facilities available for acute or chronic pain.
- 2.2 A joint report of the College of Anaesthetists and the Royal College of Surgeons [4] highlighted the need for improving standards of postoperative pain management. This has led to a proliferation of 'acute pain teams' but the extent of medical cover and designated sessions vary.
- 1.1 Surveys have shown that there is a high incidence of chronic pain in the general population [5]. Only a relatively small number of those suffering have access to pain services. Many pain clinics have insufficient designated consultant sessions, support staff and premises. The Clinical Standards Advisory Group (CSAG), commissioned by the Department of Health, has published reports concerning back pain and prevention of progression of symptoms to the chronic state [6, 7]. The next project is to define the role of the pain management approach to treatment of chronic pain, not just affecting the back, and this will create a larger demand for services. The Royal College of General Practitioners has published guidelines for the management of acute low back pain which propose referral to specialist pain management units when conventional treatment is unsuccessful [8].

## SECTION 2 - CURRENT SITUATION

- 2.1 Cancer related pain problems may present to the pain clinician for management in the hospital, hospice or home setting. Specialised techniques and innovative pharmacological manipulation may be required. At present, extensive clinical input is offered on a *pro bono* basis, for which sessional time is not always defined or budgeted.

### SECTION 3 - ACUTE PAIN

- 3.1 Provision of effective good pain relief leads to reduction in complications and morbidity and increases what is an essential element of good quality of care and patient satisfaction [4]. There has been a steady increase in the number of units in Great Britain and Ireland with an acute pain service. The aim should be to implement a strategy for acute pain management which will benefit all patients after every type of operation and provide a service for other types of acute pain.
- 3.2 The service should include:
- co-ordination and responsibility for acute pain management
  - education of staff and patients
  - introduction of new analgesic techniques
  - continuous audit and appraisal of activity
  - research into more effective use of existing analgesic methods
- 3.3 The implications for departments of anaesthesia are:
- cover for the service on a 24 hour basis
  - integration with the partner services (chronic pain management and palliative care)
  - education of the trainee
- 3.4 The cost of providing such a service includes:
- funding staff, ward nursing time, pharmacy input
  - capital equipment and revenue costs
- 3.5 There is no definitive pattern for the structure and funding of an acute pain service. Each unit must consider its individual requirements and constraints. Start-up grants may be sought from local or regional bodies and audit money may be available. The cost effectiveness of an acute pain service can be estimated by assessing changes in length of hospital stay and patient mobility.

## SECTION 4 - CHRONIC PAIN

4.1 This is described as pain following an episode of tissue damage which persists past the time when healing is expected to be complete, usually nominated as three months. Chronic pain is a complex biopsychosocial problem. A single pathophysiological explanation is not available for many chronic non malignant pain states. Up to one third of chronic pain patients will have no objective findings of organic disease and conventional treatment solely aimed at relieving pain is unlikely to be appropriate for such patients. It is a basic humanitarian right that pain requires treatment or management regardless of the cause and the pain arising from organic pathology is indistinguishable from pain arising from other causes.

### 4.2 **Minimum Standards for Pain Treatment Facilities**

A task force of the IASP has defined the desirable characteristics for pain treatment facilities. It recommended that a multidisciplinary approach to treatment is the preferred method of management for patients with chronic pain. However, not every patient will need such a multidisciplinary approach but treatment centres must have these resources available for appropriate patients [9].

### 4.3 **Range of Treatments for Chronic Pain**

- medication/drug therapy
- nerve blocks, including invasive procedures such as neurolysis and radiofrequency lesioning
- stimulation induced analgesia such as transcutaneous electrical nerve stimulation (TENS) and acupuncture
- physiotherapy; with exercise-orientated programmes
- psychotherapy; with behavioural approaches and pain treatment programmes
- surgery; to include specialised neurosurgical techniques such as percutaneous cordotomy and dorsal column stimulation
- rehabilitation programme(s)

- education methods for patients and professional colleagues in prevention and early effective management of conditions which may lead to chronic pain [6]

#### 4.4 **Staffing and Sessions**

- medical personnel should have an appropriate allocation of fixed sessions. Provision of consultant sessions should be based on population and it has been recommended that a minimum of one whole time equivalent consultant dedicated to chronic pain management is necessary for each 100,000 population [5]
- consultants contracts with specialist involvement should include a minimum of three sessions
- specialist nursing personnel and dedicated nursing assistance is required. Some nurse specialists may have an independent role in chronic pain management
- Clinical psychology, physiotherapy and occupational therapy may take a major role together with other personnel and professions allied to medicine
- secretarial and managerial support with appropriate accommodation [5]
- interdepartmental relationships should be encouraged, particularly with colleagues in areas such as neurology, rehabilitation medicine, rheumatology, dentistry, orthopaedic surgery and neurosurgery where there are opportunities for mutual collaboration

#### 4.5 **Resources**

- dedicated accommodation should be available with all staff and facilities in one area. This should include interview, examination and treatment rooms
- access to treatment areas, beds and support facilities
- appropriate equipment for treatment
- larger accommodation and more extensive facilities will be required for pain management programmes. This may include inpatient beds in some units. Desirable characteristics for such programmes have been published [10]

#### 4.6 **Expenditure**

#### SECTION 4 - CHRONIC PAIN

The main cost of a chronic pain service is that of staff salaries. Other costs include:

- accommodation
- purchase/capital cost for major equipment such as a radiofrequency lesion generator
- supply, maintenance and replacement costs of all equipment
- purchase/capital cost for minor equipment such as TENS machines, fax and answering machines
- medication costs
- stationery, printing, photocopying, postage, telephone and fax costs
- computers for data storage and the patient activity records
- radiology and laboratory costs in line with internal trading
- funds for extra contractual referral for specialist services
- teaching and educational materials

## SECTION 5 - CANCER PAIN

- 5.1 Ideally, pain services for cancer should be an integral part of chronic pain services. Palliative care services will deal with the needs of symptom control and treat pain using simple pharmacological techniques that are effective enough for control of symptoms in more than 90% of patients. Where such a service does not exist, a much greater clinical load will fall on the pain service. However, where such services are in existence, the pain service should liaise closely to enable other pain management techniques to be used when required. Such co-operation will facilitate control of the majority of cancer pain problems.
- 5.2 The service should accept referrals from primary care as well as specialist care services and they should be funded with the placement of appropriate contracts. Further funding may be made available from hospice services and charges should be considered *pro rata*.
- 5.3 **Advantages of Cancer Pain Management**
- for the patient, this means improved quality of life and independence with increased carer confidence
  - for the staff, there is greater confidence in dealing with emotionally demanding problems
  - in the hospital and community increased patient independence will reduce demands on costly hospital and community health services
- 5.4 **Requirements**
- resources required are similar to the requirements for a chronic pain service
  - there should be contracts for defined medical sessions
  - appropriately equipped treatment facilities should be available within the hospice or available elsewhere with transfer for short term care from hospice or community
- 5.5 The Calman Report on cancer services states that consultants involved in treating cancer related illness should have close clinical

and operational links with local pain clinics [11]. This has the advantage of increasing the range of clinical skills available to specialists of all disciplines and providing continuous high level cover for staff absences. Pain management and palliative medicine can be integrated on a managerial as well as clinical basis.

## SECTION 6 - FINANCIAL CONSIDERATIONS

- 6.1 A business plan is essential to manage a new or continuing service or to promote its development. Trusts may have their own way of doing this but the basic principles remain the same. The current level of service will need to be established and income from this activity identified. All elements of expenditure required to provide the service must be detailed.
- 6.2 These include
- proportions of salaries of staff members contributing to the service
  - the cost of all revenue items such as drugs, disposable equipment, minor equipment and major items
  - the capital charge element of the building where the service is provided
- 6.3 Methods of pricing the service may also vary and often depend on the sophistication of Trust information systems. Pricing should take into account the cost of similar services from adjacent providers
- an average charge identifies the number of patients treated together with all the costs which, when divided, give the total cost per referral. To this is added a suitable addition for Trust overheads
  - items can be priced separately, thus producing a differential price for a new referral, follow up visits and specific procedures
  - pricing of an acute pain service should be based on similar principles. However costs are ideally contained within the surgical contract price rather than charged separately, the Anaesthesia Department identifying costs appropriate to the quality of service
- 6.4 The fundamental part of the business plan is the achievement of a contract. At the beginning of each year the contract for a specified number of Finished Consultant Episodes has to be agreed between the provider service and the purchasers. Purchasers of pain services will include District Health Authorities (DHAs) and

## SECTION 6 - FINANCIAL CONSIDERATIONS

General Practitioner Fund Holders. There may well be considerable potential for attracting extra contractual referral (ECR) income from DHAs who do not have an existing contract with the Trust. Some ECR activity will probably be built onto the business plan but additional ECR activity above contract can be used to develop the service. Identifiable extra service within a consultant episode may be provided by the pain management service if they are consulted during an admission for another problem. All additional activity carried out by the pain management service should attract additional income.

- 6.5 Service development follows on the production of a business case. This should demonstrate what additional income could be earned and the extra resources required to produce that additional income. If a contribution to the fixed costs of the Trust can be shown convincingly, agreement for the business case to go ahead usually will be given. Examples of this could be the development of a pain management programme or an acute back pain service. An improvement in quality may be a very important criterion when writing a business case.

## SECTION 7 - RESEARCH

- 7.1 Research into acute pain services examines their efficiency and effectiveness in relation to outcome measures such as pain intensity, drug consumption, complications and convalescence.
- 7.2 Research in pain-related topics has been sporadic and unsystematic until recently, there being a few notable exceptions. The opportunity to improve this situation has presented itself with the publication of the Culyer Report proposing the centralisation of research and development funding and resources [12]. At regional level Directors of Research and Development will be the focal point. They will have a significant role in commissioning and managing research and development and will co-ordinate local research interests of both purchasers and providers.
- research does not have to be ‘blockbuster’ in nature and the report recommends that pre-protocol work, curiosity-driven research and similar activities should continue to attract support from the NHS where outside funding is not available
  - funding is to be dependent upon performance with the likelihood that, at least initially, such monies will go to those with a proven track record
- 7.3 Pain management needs to become more organised if research is to be commissioned and funded under the new system. The greatest possible co-operation between centres should be encouraged. All current research should be listed and held in a central database. Areas where research needs to be undertaken should be targeted and brought to the attention of research and development commissioning units. Unless successful research projects in pain management can be instituted, there will be a lack of further funding.
- 7.4 The best prospects for success with funding applications may well be those which are multidisciplinary in nature and involve effective pain management (acute or chronic) whilst reducing costs and demonstrating health care gain.

- 7.5 Research in chronic pain management should concentrate on the following areas:
- selecting research priorities in conjunction with other specialties
  - using systematic reviews and evidence-based techniques to evaluate current treatment methods where evidence for efficacy is not available
  - identifying new areas of changing practice
- 7.6 Topics should include:
- epidemiology and chronic pain in Great Britain and Ireland
  - cost to health and social services of unrelieved chronic pain
  - variable organisation and distribution of pain management services in Great Britain and Ireland
  - regional differences in provision of palliative care and the impact that this has on chronic pain services
  - access to pain services and waiting lists
  - awareness by general practitioners and public concerning matters related to pain and its relief
- 7.7 The IASP has established a Special Interest Group in evidence-based medicine and there is an active group studying pain as part of the Cochrane Collaboration.
- 7.8 The NHS Health Technology Group has published a systematic review of effective and ineffective treatments for chronic pain [13].

## SECTION 8 - AUDIT

- 8.1 An audit programme should be included in the annual business plan. It is a contractual requirement for all consultants and can demonstrate to purchasers the quality of service, clinical outcomes and cost benefit. It involves assessing the effectiveness of what is delivered, the efficiency with which it is done and the quality of its application.
- 8.2 **Effectiveness**  
Audit aims to establish the validity of treatment provided and its reproducibility. Evidence-based medicine and the Cochrane Collaboration of care group 'cells' have given this new impetus. Other than the randomised, blinded controlled study, there is a need for other reliable methods of establishing treatment outcome, eg disease prognosis and return to usefulness such as employment.
- 8.3 **Efficiency**  
Efficiency seeks to establish that 'the right job is performed in the right way'. It examines process and is important in terms of comparing institutions delivering similar health care. Measures of this will assess staffing ratios, case mix, facilities and patient turnover. Costs may be assessed and compared by patient or treatment episode and it may track trends in activities and overall performance.
- 8.4 **Quality**  
Quality establishes how care is delivered and how well those providing such care perform. The incidence of complications, morbidity and litigation are crude measures which can be identified by such methods as critical incident reporting. The Pain Society has instituted a national critical incident reporting scheme for pain management. Other measures of quality might include the level of communication skills, the availability of complementary and support services or the provision of patient information.
- 8.5 **Audit Topics**
- setting and validating of outcome measures

SECTION 8 - AUDIT

- cost effectiveness of pain management services
- guidelines for specialists and general practitioners

## **SECTION 9 - EDUCATION**

- 9.1 Education forms a vital part of a pain service and should be directed at health care professionals both within and outside the hospital and, wherever possible, at the public so that they are able to appreciate health care quality issues.
- 9.2 Recommendations for training medical undergraduates and pre-registration house officers have been made in a joint report of the Association of Anaesthetists of Great Britain and Ireland, Royal College of Anaesthetists and Pain Society [5]. This document also made recommendations for training of anaesthetists in pain management which are being implemented by the Royal College of Anaesthetists. The syllabus for the Fellowship of the Royal College of Anaesthetists has been revised to include a specific section on pain management.
- 9.3 The IASP has published a core curriculum for professional education in pain [3]. The postgraduate training of anaesthetists wishing to take up a career with a major interest in pain management should be broadly based and should lead eventually to a registerable qualification. The Royal College of Anaesthetists has been given responsibility for overseeing the development of additional qualifications in pain management.
- 9.4 Specific continuing medical education and certification in pain management will become mandatory for those with a major interest in pain management and who are accredited teachers in training centres. This may be in addition to other requirements for anaesthesia depending upon the work plan of the individual.
- 9.5 The Pain Society and the Association of Anaesthetists of Great Britain and Ireland are committed to improving and upholding professional standards in pain management.

**APPENDIX A - DESIRABLE CRITERIA FOR  
PAIN MANAGEMENT PROGRAMMES**

A Pain Management Programme [10] is a psychologically-based rehabilitative treatment for people with chronic pain which remains unresolved by currently available medical and other physically-based treatments. It has been used also for patients with semi-acute symptoms to try to change the perception of health care to avert chronicity. For example, the Clinical Standards Advisory Group Report on Back Pain suggests provision of a Back Pain Rehabilitation Programme for patients who have failed to respond to initial intervention. This service could be provided by a Pain Management Programme.

The aim of Pain Management Programmes is to reduce the disability and distress caused by chronic pain by teaching sufferers physical, psychological and practical techniques to improve their quality of life. It differs from other treatment provided in pain clinics in that pain relief is not the primary goal.

A Pain Management Programme aims to enable patients to be as self-reliant as possible in continuing to use the techniques taught. The aims of the programme are negotiated individually for each patient: it is essential that the programme involves guided practice as well as teaching. The Pain Management Programme is facilitated by a range of health care professionals working closely with patients within an inter-disciplinary team to ensure an integrated programme

## **APPENDIX B - JOB DESCRIPTION: ACUTE PAIN NURSING STAFF**

The grade of nurse and therefore job description will vary according to the anticipated roles and responsibilities of the Acute Pain Nursing post. A Grade F nurse should be able to undertake clinical monitoring activities under supervision. However, this grade of post is unlikely to attract applicants with adequate educational, leadership or management skills which are fundamental to the success of an Acute Pain Service. Therefore, at least a Grade G post should be sought as applicants at this level should be expected to be able to demonstrate competence with management or educational activities. If the successful applicant is required to demonstrate advanced educational skills, be innovative and able to lead developments and advances in nursing care, then Grade H is appropriate.

The following job description is appropriate to a Grade H post.

**Job Title:** Clinical Nurse Specialist, Acute Pain Management

**Grade:** H

### **Job Summary**

To provide the lead nursing contribution in establishing and developing a multidisciplinary pain service at Utopia Hospital Trust, with the aim of improving and maintaining the quality of acute pain management through strategic planning, implementation and evaluation of the service.

### **Main Responsibilities**

- To define objectives and plan activities to improve postoperative pain management, in collaboration with members of the pain team and other medical, nursing and managerial staff.
- To develop and maintain effective communication networks and working relationships with key personnel, both within and outside the organisation.
- To act as nurse consultant to nursing, medical and allied health professionals, offering advice and guidance on the management of acute pain standards and policies.

APPENDIX B - JOB DESCRIPTION: ACUTE PAIN NURSING STAFF

- To provide training and education for nursing staff, medical staff (undergraduate and postgraduate), other allied health professionals and patients in the management of acute pain.
- To manage the admission and discharge of patients from own caseload, make referrals to other health care professionals when necessary and maintain accurate records for the purposes of patient review and audit.
- To ensure a knowledge base which reflects contemporary issues in acute pain management and enables appropriate selection and application of treatment modalities.
- To develop audit tools, collect and analyse audit data and respond to identified areas of care deficit by implementing service changes or advising on developments in clinical practice.
- To be actively involved in the initiation, supervision and evaluation of acute pain research projects and to publish significant findings.
- To provide specialist advice on the selection and purchase of pain management equipment.
- To work closely with the Consultant Anaesthetist, Acute Pain Service, and the Business Manager, Anaesthetic Directorate in the preparation and presentation of the annual business plan.
- To monitor monthly expenditure from the Acute Pain Service budget.

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