ANAESTHETISTS
AND NON-ACUTE
PAIN MANAGEMENT

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Summary of Main Findings

1.2 Many patients might benefit from pain management services.

1.8 There are wide variations in the organisation of pain management services and the availability of assistance.

1.10 It is likely that the number of referrals to pain management units will rise.

1.14 There are no reliable data about pain clinic activity available nationally.

2.3 There are Health Districts that do not provide pain management services.

3.1 Consultant posts with an interest in the management of non-acute pain have been, and remain, unfilled.

3.3 The lack of suitably trained applicants may be because of insufficient facilities for training, or lack of opportunity to train in pain management.

3.6 There is insufficient teaching about pain and pain management at undergraduate level.

4.1 Pain treatment and pain management services should be available to all who need them.

4.6 National collection of data about activity in pain management units will ensure adequate provision of facilities and budget.

5.1 It is recommended that each medical school curriculum should include structured training in pain management.

5.3 This training should be integrated with other teaching programmes such as palliative care and symptom control.

5.13 It is recommended that anaesthetic trainees at all levels should have adequate experience in pain relief.
5.14 It is recommended that the extent of such training should be defined clearly and commence in the first year of training.

5.16 It is recommended that those participating in Higher Specialist training in anaesthesia should experience a minimum of one month whole-time or its sessional equivalent in recognised training in the management of non-acute pain.

5.17 It is recommended that this be increased to three months as improved facilities for training become available.

5.21 It is recommended that those intending to take up a post in anaesthesia and pain management should undergo an additional three months recognised training.

5.24 It is recommended that full-time post-accreditation posts in pain management be established.
Anaesthetists and Non-Acute Pain Management

The role of the anaesthetist in the treatment of acute pain has been the subject of a previous report.1 This report suggested improved training in acute pain relief. It is appropriate also to consider the role and training of the anaesthetist in non-acute pain management, and this forms the basis of this report.

Prologue

Development of pain management as a specialty

Clinics for the treatment of chronic pain have existed in Great Britain and elsewhere for over forty years. These pioneer clinics invariably started with an anaesthetist carrying out nerve blocks for pain treatment at the request of colleagues in hospital. As demand increased, a period of time would be set aside for the performance of these duties and regular procedure lists and formal clinics would be held. The site and form of these activities was dependent upon the individual concerned and local circumstances.

In 1967 the Intractable Pain Society of Great Britain and Ireland was founded, at a meeting attended by 17 medical practitioners; virtually every doctor in the country engaged in the relief of pain.

Five years later, in 1972, the annual meeting of the Society was attended by 42 members. By 1977 a questionnaire to the membership elicited 59 responses of whom 54 were anaesthetists, and 43 were working in recognised pain clinics.2

In 1975 the International Association for the Study of Pain (IASP) was founded. This association is multidisciplinary in nature and includes basic scientists, psychologists, nurses and other non-physicians in its membership. Anaesthesia is the largest specialty group amongst members of IASP.

Within the last five years, the Intractable Pain Society has altered its name to the Pain Society, become a Chapter of IASP and altered its constitution to permit non-physician membership. These changes reflect the desire of the Society to promote the
treatment of acute and chronic pain from any cause, and a recognition of the multidisciplinary nature of pain management. Anaesthetists are over 90% of the membership of the Pain Society.

The report of the joint working party of the Royal College of Surgeons of England and the College of Anaesthetists on pain after surgery concluded that the management of pain after surgery in the UK is unsatisfactory. It suggested that improved training and adequate resources were needed and that research into pain relief after surgery be encouraged and intensified.

Development of pain management services has been pragmatic, and as a result personnel and facilities are unevenly distributed. No standards exist for appropriate levels of staffing or facilities. There is no recognised training programme in pain management. Without a formal training programme, pain management will not be recognised by the Department of Health as a speciality for the purposes of data collection. Without this recognition by the Department of Health no data are collected on pain clinic activity and thus no case can be made for future development.

Pain management in Britain is an anaesthesia-led specialty. It is no longer acceptable for training of anaesthetists in pain management to evolve in an unstructured fashion. Thus it is appropriate that standards for training anaesthetists in the management of pain be created by anaesthetists. This has already happened in the United States of America and Australia.
Introduction

Acute pain serves an important biological function. There is increasing evidence that the early, effective recognition and treatment of acute pain will delay or prevent the slide into chronic pain and illness. In contrast pain in chronic form may serve no useful purpose. It may exert profound emotional, physical, economic and social stresses upon the patient, the family and society.

The treatment and control of pain is the main concern of the patient. The effectiveness with which the medical community can act depends upon the level of knowledge and availability of resources to the patient. There is no obvious reason why pain treatment and pain management services should not be available to all who need them.

In 1986 a working party of the Intractable Pain Society produced a report that suggested standards and training requirements for consultants who participate in the treatment of pain. All active members of the Society were invited to give their views and over one hundred replied.

The report of the working party recognised that anaesthesia was the only medical specialty providing an identifiable contribution to the management of chronic pain in terms of formal training and sessional commitment. The authors felt that a multidisciplinary approach to pain management should be considered the ideal, but recognised that this was not possible in the short-term. The report concluded that anaesthesia was the appropriate speciality to guide the continued development of pain management. The report was submitted in 1987 for consideration by the then Board of the Faculty of Anaesthetists of the Royal College of Surgeons of England.

Consequent to this it was agreed to set up a joint working party with representation drawn from the College of Anaesthetists, (now the Royal College of Anaesthetists), the Association of Anaesthetists of Great Britain and Ireland and the Intractable Pain Society of Great Britain and Ireland (now the Pain Society). The working party submitted a draft preliminary report in 1990.
Objectives

1. To identify deficiencies in the current level of services to patients.

2. To make recommendations concerning the provision of adequate pain management services.

3. To make recommendations concerning the duties of a consultant in pain management, and the facilities necessary for the performance of these duties.

4. To consult with other bodies concerning the training of anaesthetists in pain management.

5. To make recommendations for the training of anaesthetists in pain management. These recommendations include General Professional Training (now Basic Specialist Training), Higher Professional Training (now Higher Specialist Training) and further training for those intending to follow a career with an interest in pain management.

6. To prepare a report for consideration by the Royal College of Anaesthetists, Association of Anaesthetists of Great Britain and Ireland and the Pain Society.
Section 1

Deficiencies in current level of service to patients

1.1 The Welsh Office NHS Directorate has published a document which outlines the strategic intent and direction for the National Health Service in Wales. This states that “health care has advanced to the stage where no-one should experience excessive or prolonged pain, discomfort or anxiety as a result of disease or disability. People should be able to live and die in an environment which is supportive and caring, with adequate control of painful symptoms. There are increasing opportunities for reducing pain, discomfort and disability through advances in medical and surgical techniques”.

1.2 An Editorial in *Anaesthesia* suggested that 5 million people, or about 25,000 patients in the average Health District, in the United Kingdom might benefit from pain management services. This estimate was based on a telephone survey of over one thousand households throughout the United Kingdom. This anecdotal evidence suggests that many people have unrelieved pain, but it is not certain how many would benefit from referral to a pain management unit.

1.3 The Office of Population, Censuses and Surveys was commissioned by the Department of Social Security to undertake a survey of disability in Great Britain. Four surveys were carried out and questions on pain and irritation were included in all four surveys. Data from two of these surveys were analysed by the Social Policy Research Unit of York University in 1991 at the request of the Pain Society. Funding for the work of the Social Policy Research Unit was provided through the Quality of Practice Committee of the Royal College of Anaesthetists.

1.4 At present only data relating to disabled adults in private households are available. These data reflect the amount of pain experienced by a nationally representative sample of disabled people not a nationally representative sample of the population of Great Britain. Thus, people with chronic
illness and pain who are not disabled do not appear in this survey.

1.5 Almost half the sample questioned suffered pain, and 85% of those with pain felt their daily activities were limited by it. Nationally this represents over 2 million individuals or 9,600 patients in an average Health District of 200 thousand patients. Two thirds of the sample stated that pain severely affected their ability to lead a normal life. Nationally, this represents 1.7 million patients or approximately 8 thousand patients in an average Health District.

1.6 These data support the suggestion made in the Editorial in *Anaesthesia* that large numbers of patients in Great Britain might benefit from the provision of pain management services.\(^6\)

1.7 There are pain management services in approximately 75% of Health Districts. These services may be provided on an *ad hoc* basis without adequate funding or provision of support facilities. These factors were considered as part of a study of hospital medical staffing published in 1991.\(^8\) This research was commissioned and funded by the Department of Health. Another aim of this study was to investigate the relation between patterns of hospital medical staffing and the services provided.

1.8 The survey noted wide variations in the organisation of pain management services and the availability of assistance. In addition, deficiencies were identified in several hospitals surveyed in levels of secretarial assistance and equipment. These findings are similar to those of an earlier study of pain clinics in Scotland.\(^9\)

1.9 The study also identified difficulties in scheduling procedures and drew attention to the extra duties undertaken by consultant anaesthetists to cope with service demands. Waiting list times for a non-urgent patient to be seen varied from three months to a year. There is no
reason to believe that the clinics studied were in any way atypical.

1.10 A conclusion of the study was that numbers of referrals to pain management units will rise as general practitioners become better informed about recent advances in pain management.

1.11 Support for this conclusion is provided by a survey of general practitioner referrals to a pain clinic. Eighty percent of general practitioners surveyed had referred patients at some time during the past three years. However, many general practitioners were unaware that treatment was available for a wide range of conditions frequently seen in pain management units.

1.12 Almost no pain management services have direct access to in-patient beds for the treatment of chronic pain. In 1988 the King’s Fund provided funding for a pilot in-patient pain management programme at St. Thomas’ Hospital. A final report of this project is expected in the near future. It is anticipated that the report will confirm that programmes of this nature are a cost effective method of treating patients with chronic pain as is the case in other countries such as the United States of America and Sweden (B Sjolund personal communication).

1.13 Anaesthetists make a significant contribution to palliative medicine. Nearly two dozen are hospice directors (full- or part-time) or equivalent. Virtually all clinics treat cancer pain and a majority of anaesthetists specialising in pain management act as advisers to palliative care teams or hospice groups. Invariably this work is an additional, informal commitment.

1.14 Clinical audit is now a legal requirement. The lack of a Körner number to gather data has led to the situation that there are no reliable data concerning pain clinic activity available centrally. Local arrangements for data collection to permit clinical audit have developed piecemeal and there are, as yet, no nationally recommended guidelines for this
process.

1.15 It follows, therefore, that there are no reliable national data concerning the cost of providing pain management services. Thus there can be no reliable provision of resources and most importantly, there is no possibility of auditing costs and benefit to patients.

1.16 To assess the provision of pain management services and the amount of activity carried out, the working party commissioned a survey in four Regional Health Authorities. The survey was carried out over three month period in 1989 in the Northern, North-East Thames, South Western and Yorkshire regions. (See Appendix A).
Section 2

Results of the survey

2.1 All the pain clinics in the Northern, South Western and Yorkshire Regions took part in the survey. Less than half those in North East Thames participated. Activity in those Regions surveyed is estimated to represent about 25% of the pain clinic activity in England.

2.2 The survey took place in 1989 and clinical activity has increased since that time, in many cases, considerably. When the data are extrapolated to national population figures, it can be estimated that at the time of the survey approximately 150 thousand individuals were seen in pain clinics annually. Thirty thousand were new patients. This information should be contrasted with the estimated 2 to 5 million patients who can benefit from the provision of pain management services.

2.3 There was no pain clinic in 13 Health Districts out of 59 in the Regions surveyed. Thus many patients in these Health Districts will have no access to pain management services.

2.4 Few existing pain management services in Great Britain and Ireland achieve the standards desirable by the International Association for the Study of Pain.11

2.5 However, a wide range of treatment options are offered at the majority of clinics surveyed. Further information from the survey about clinical activity, staffing levels, levels of assistance, treatment provided and outcome is provided in Appendix A.

2.6 A national survey of pain clinic activity is being undertaken by the Pain Society in 1992 to provide more up to date information.
Section 3

Other problems

3.1 Approximately 25 consultant anaesthetist posts with an interest in the management of non-acute pain are advertised each year. Many posts have been unfilled, and remain unfilled, because suitable individuals did not apply.

3.2 Even when the appointment of a new consultant with an interest in pain management can be made, it is a common experience that this does not reduce waiting lists. Inevitably, it increases the number of referrals and waiting lists remain the same.

3.3 The lack of suitable applicants may be because there are insufficient centres offering adequate training in pain management. Alternatively, it may reflect a lack of opportunity to train in these techniques, as Senior Registrar rotations are often rigidly structured to provide training in all available sub-specialities. The amount of training in the treatment of non-acute pain is small compared to that offered in other anaesthetic sub-specialities.

3.4 Pain clinics have developed according to local need and resources and do not necessarily have a comprehensive pain management service to serve as a focus for training.

3.5 Developed pain management services offering a range of assessment and treatment methods may be available away from teaching hospitals. These facilities may be available to train postgraduates, but may be inaccessible to undergraduates. Until all hospitals can develop adequate facilities for the conduct and teaching of pain management, rotational training posts should be encouraged.

3.6 The treatment of chronic pain and pain management receives little attention in the formal teaching programmes of the majority of medical schools in Great Britain. A survey of all but one of the 28 medical schools indicated that no teaching in pain or pain control was given in four medical schools. In the remaining schools an average of
only 3.5 hours was spent teaching this subject over the five year course. Questions on pain control were set regularly in formal examinations in ten schools.\textsuperscript{10}

3.7 A comparable study in America of fifteen medical schools revealed that there was no specific unified course covering pain topics in any school. In the first two years of medical school, instruction related to pain in the basic and clinical sciences totalled 17 and 12 hours respectively. In the third and fourth years of clinical training the number of hours devoted to teaching pain management were variable. Four of the institutions test the students’ knowledge of pain diagnosis and therapy.\textsuperscript{12}

3.8 The treatment of chronic pain and pain management do not appear as part of the curriculum for any medical postgraduate body other than the Royal College of Anaesthetists.
Section 4

The provision of pain management services

4.1 Pain treatment and pain management services should be available to all who need them. Good policy is forward-looking and should consider future trends and their influences. Demand for pain relief services has always outstripped supply and it seems reasonable to believe that this will be so for the foreseeable future.

4.2 The need to provide pain relief on humanitarian grounds is absolutely clear. Pain is a common bond that links all humanity. In common with death and addiction, it occurs in relation to every medical discipline and is the commonest reason that patients seek help from medical practitioners.

4.3 Pain management is a leading edge specialty which is primarily concerned with patient care. It is perceived by patients and referring physicians as of proven benefit.

4.4 In the present medical and economic climate, the need for the provision of pain relief and pain management services must be judged in terms of medical and social benefit.

4.5 No figures are available to justify the existence of pain clinics on these grounds and these must be developed. However, there are clear indications from other countries that this is possible, as data indicating the restoration and improvement of health status of patients are available. There is also strong evidence that patients treated in pain management programmes utilise far fewer health care resources after discharge. Pain management programmes represent a method of effective management of resources by containment of the unnecessary utilisation of health care services.

4.6 The collection and audit of reliable data is now mandatory. In the case of pain management, it is surprising that a substantial amount of clinical activity is, to all intents and
purposes unrecorded. A regrettable consequence is that this clinical activity may attract little or no recognition, either in terms of facilities, or more importantly, budget. However, there is nothing to stop effective data collection locally. Pressure at District level and the introduction of Resource Management may remedy deficiencies in data collection.

4.7 This situation may become worse if Health Authorities fail to make provision for the purchase of pain management services under the new patient care arrangements.

4.8 Many treatments are of doubtful value and some carry a significant risk of morbidity or not mortality. Treatments may have their enthusiastic supporters in whom objectivity has long departed. Clinical audit should change this situation.

4.9 Effective management of non-acute pain begins with the education of medical students and medical practitioners in available methods of pain control. Pain management should be presented in a realistic and positive way, emphasising that knowledge of pain management techniques is appropriate for all disciplines and not just anaesthetists.

4.10 Methods of treatment should be based on available knowledge and broadly-based. They should demonstrate the differences between acute and long-term management strategies and emphasise the value of an interdisciplinary approach.

4.11 The working party believes that the concept of interdisciplinary pain management is more suited to the situation in Great Britain and Ireland. The term multidisciplinary is confusing and should be reserved for pain treatment clinics such as those found in North America which require that assessment and treatment is carried out on each patient by a large number of medical and other specialists. The working party believes this approach is inefficient and expensive. An interdisciplinary
approach to pain management is preferable where consultation with other disciplines is sought as needed. The process of assessment is co-ordinated throughout by the pain management service with final treatment plans made when the process is complete. The working party believes that an interdisciplinary approach of this nature, where there is an identifiable method of assessment and treatment, co-ordinated by a single service will be required by the purchasers of pain management services.
Section 5

Training in non-acute pain relief

It is essential that treatment of pain should form a core element of undergraduate and postgraduate training.

Undergraduate

5.1 The working party recommends that each medical school should include structured training in pain management as part of the curriculum.

5.2 Pain is not only a clinical subject but also involves some of the most searching questions in neurobiology. A comprehensive draft curriculum for undergraduates has been prepared by the International Association for the Study of Pain (Appendix B).

5.3 The working party recommends that training in pain management for undergraduates be integrated with other teaching programmes such as palliative care and symptom control.

5.4 Such training should be provided at three stages. Preclinical, early clinical and late clinical. Preclinical training would concentrate upon making the student aware of the problem. Early clinical training would emphasise the basic principles of pain treatment and later training in final year would concentrate upon the practical application of these principles with particularly emphasis upon teaching specific skills for the management of acute pain.

Postgraduate

5.5 Upon graduation, and immediately prior to beginning direct patient care, medical graduates should have a refresher course which includes information about techniques of acute pain relief. Pre-registration House Officer training courses of this nature have proved most valuable in providing information of immediate value to newly qualified doctors.
Topics covered include obtaining consent, pain management, resuscitation and dealing with death and bereavement.

**Basic Specialist Training**

5.6 In 1990 preliminary recommendations from this working party were submitted. These have led to a requirement that individuals undertaking Basic Specialist Training (BST) in anaesthesia should have experience in the assessment, diagnosis and management of pain. BST guidelines are listed in Appendix C.

5.7 The Royal College of Anaesthetists’ Guidelines on BST state that the prime function of an anaesthetist is to prevent or relieve pain. The Guidelines suggest that the acquisition of essential knowledge about the management of pain should form part of an anaesthetist’s training from an early stage. During BST, the trainee should acquire experience in the assessment, diagnosis and management of pain.

5.8 The Guidelines state that a designated consultant should be responsible for the co-ordination of training which must include a range of topics in basic and clinical sciences.

5.9 Current BST guidelines suggest that trainees in anaesthesia should be aware of the work of a pain clinic, the techniques involved and have opportunities to attend treatment sessions. It is felt that extensive practical involvement in the management of non-acute pain is more appropriate to Higher Specialist Training.

5.10 Clinics for the treatment and management of pain are not available in every District General Hospital. Thus, it may be necessary for trainee anaesthetic staff undergoing BST to be part of a rotational training scheme to ensure adequate teaching in pain management.

5.11 A strong initial interest in all forms of pain treatment can be obtained from training in, and practical experience of,
the relief of acute pain. The joint working party of the College of Anaesthetists and the Royal College of Surgeons of England recommended the formation of acute pain services. This working party recognised that anaesthetists have a primary role to play because of their familiarity with the drugs, equipment and techniques necessary for effective pain relief.

5.12 Recruitment and retention of anaesthetists for any subspecialty is dependent upon creating interest and enthusiasm for that sub-specialty. Other sub-specialties of anaesthesia such as intensive care or obstetric anaesthesia and analgesia, have time allocated to them at the level of BST which reflects service needs rather than training needs.

5.13 The working party recommends that anaesthetic trainees at all levels should have adequate experience in pain relief.

5.14 The working party recommends that the extent of training in the current BST guidelines should be defined clearly, and commence in the first year of training.

Higher Specialist Training

5.15 The Royal College of Anaesthetists’ Guidelines for Higher Specialist Training (HST) are in the process of revision.

5.16 The working party recommends that the curriculum for BST should supply the basic level of knowledge required. Further experience during HST will increase the depth of this knowledge and provide a broader range of topics covered, in keeping with the preliminary recommendations of the working party.13

5.17 The working party recommends that those participating in HST in anaesthesia should experience a minimum of one month whole-time or its sessional equivalent in recognised training in the management of non-acute pain.

5.18 The working party recommends that this be increased to a three months whole-time training period as improved
facilities for training become available. This extended training may include experience with associated disciplines such as Palliative Medicine, Oncology or Clinical Psychology. The three month whole-time training period would be similar to that provided in other areas at this stage in a trainee’s career.

Training for those intended to take up a post in anaesthesia and pain management

5.19 The emergence of a new discipline raises problems. It is difficult to estimate the extent of training required and the number of training posts, as a “steady state” has not been achieved. Whilst the process is occurring appointments may be made to career vacancies before training is complete. The number of consultant posts being advertised may vary unpredictably from year to year and will need constant review.

5.20 Based on the figures quoted previously the need for pain treatment is great enough to require the appointment of at least one whole-time equivalent consultant with an interest in pain management in the average health district of 200,000 patients. This figure is likely to be inadequate and a target of 2 whole-time equivalents may be a more realistic, if somewhat conservative, estimate.

5.21 It is accepted that trainee appointments should be related closely to expected consultant vacancies. The Joint Planning Advisory Committee should be aware of the effect of the potential difference between the number of training opportunities and the number of pain management posts required on career opportunities.

5.22 In the first instance it is recommended that trainees should have completed the basic three month training period (see 5.17) and should undergo a minimum period of a further three months recognised training.

5.23 This recommendation may require modification as training programmes in pain management will evolve as the process of inspection and assessment is completed
5.24 During their training period, trainees should have the opportunity to visit other centres and related disciplines. They should take part and develop an interest in pain related-research.

5.25 It is recommended that full-time post-accreditation posts in pain management be established at designated centres as in intensive care.

5.26 These posts will be a vital step in the process of establishing a firm academic base for pain management and anaesthesia.
Section 6

Organisation of pain management services

6.1 The working party believes that an interdisciplinary rather than a multidisciplinary approach to pain treatment and management is preferable. Opinion concerning clinical matters in Great Britain and Ireland traditionally has been achieved by consultation rather than committee.

6.2 Pain management is a specialised service that makes frequent demands upon the services of physiotherapy, clinical psychology and radiology. To a lesser, but nonetheless important extent, there is need for occupational therapy, pharmacy, medical physics and electronic services.

6.3 It is preferable that members of other disciplines supplying support to the pain management service are experienced in dealing with this difficult group of patients and are familiar with the aims and objectives of pain management.

6.4 It is of great importance to develop special links with appropriate medical, dental and other professions allied to medicine.

6.5 A pain management service with one whole-time equivalent consultant will require a full time secretary, clerical support staff and adequate nursing cover. A larger department will require a higher level of these support services. In addition, management support may be necessary.

6.6 The budget for the pain clinic should be identifiable and should be sufficient to provide, maintain and replace equipment, and to cover training for all levels and types of staff. Due provision should be made for the need to acquire and store data for medical and service audit.

6.7 Specialised procedures such as percutaneous cordotomy, radiofrequency lesioning or dorsal column stimulation will be taught at centres where such skills are available.
6.8 All pain management services should have access to beds. These beds should normally be in the same ward areas to permit nursing staff to become familiar with the care of these difficult and challenging cases.
Conclusion

Pain is a problem of major importance. It influences every aspect of life and health care. The impact of pain will be lessened by the creation of training schemes for anaesthetists.

Their creation will result in the orderly and planned development of non-acute pain management.
References


Appendix A

Survey of pain clinic activity

The survey was carried out over a three month period in 1989. The three regions taking part in the Confidential Enquiry into Peri-operative Deaths were selected as being representative (Northern, Southwestern and North East Thames). The Yorkshire Region volunteered to submit data to ensure that an adequate sample was collected. All the pain clinics in the Northern, Southwestern and Yorkshire Regions took part. Only 6 out of 14 pain clinics in the North East Thames Region submitted returns. Overall, this represents the active help of 51 consultants in 38 pain management units. The clinical activity recorded probably represents about one quarter of the work carried out in English pain management units. There is every reason to believe the data are representative of normal pain management unit activity.

Clinical Activity

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Health Districts</th>
<th>Number of Pain Clinics</th>
<th>Number Participating</th>
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<tbody>
<tr>
<td>Northern</td>
<td>16</td>
<td>10</td>
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</tr>
<tr>
<td>South</td>
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<td>Yorkshire</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>Number of patients seen in 3 months</strong></td>
<td></td>
<td>9,544</td>
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<tr>
<td><strong>Extrapolated annually</strong></td>
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<tr>
<td><strong>Extrapolated nationally</strong></td>
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<td>152,704</td>
<td></td>
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<tr>
<td><strong>Total number of new patients seen in 3 months</strong></td>
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<tr>
<td><strong>Extrapolated annually</strong></td>
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<tr>
<td><strong>Extrapolated nationally</strong></td>
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</tbody>
</table>
**Staffing levels**

Number of consultant “sessions” per week 139
Number of consultant “sessions” per week per clinic 3.6
Mean number of patients per clinic 251
Mean number of patients per “session” 13.2

**Levels of Assistance**

Mean number of secretarial hours per clinic per week 12.75
Mean number of nursing hours per session per week 4.65
Number of clinics with a clinical psychologist (9 out of 12 in the South Western Region) 14/38

**Treatment provided**

Virtually every clinic offered a range of treatments including drug therapy, stimulation-produced analgesia such as transcutaneous electrical stimulation and acupuncture, physiotherapy, nerve block and neurolytic techniques. Thus, it is clear that despite a single specialty bias most pain clinics offer a wide variety of therapy.

The emergent status of Clinical Psychology in British pain management is evident in that even though the majority of clinics in the Southwestern region included clinical psychologists, only 2.5% of patients were being managed by psychological methods.

**Outcome**

25% of those attending were reported as being “much better”, and 17% were “helped slightly”. Even though this report may reflect the opinion of the consultant completing the survey form, it still indicates the value of non-acute pain management clinics. Many of the patients referred have been seen and treated in several other clinics and referral to the pain clinics represents the end of the line in the search for relief of their symptoms. That a substantial proportion of patients were helped indicates
that the methods employed in anaesthesia-led pain management clinics are appropriate and effective.

Appendix B

Proposed Curriculum on Pain for Medical Undergraduates

1. Introduction and overview
   Pain as a public health problem
   Epidemiology. Societal consequences
   Economic impact
   Medico-legal and compensation issues

2. Definition of pain
   Relationship between acute and chronic pain
   Philosophical issues
   Historical aspects of the study of pain
   Biological significance of pain (survival value) (should also be interwoven into all appropriate topics)

3. Ethical issues
   Pain research in humans and animals, pain disability and litigation, pain in children, pain and opioid dependence.

4. Basic Sciences
   Neuroanatomy
   Neurophysiology
   Biochemistry
   Pharmacology
   Psychology, sociology, anthropology

Topics
Peripheral receptors, afferent fibres, spinal terminations and spinal processing of nociceptive information, ascending tracts, transmitters (peptides and amino acids), supraspinal sites of termination of ascending tracts, descending control of nociceptive information and pain modulation.

Affective cognitive, behavioural and developmental aspects.
Pain attribution. Self-esteem, self-efficacy and perceived self control.
Interpersonal issues, sick role, illness behaviour (normal and abnormal), the influence of political, governmental and social welfare programmes, the role of the family.

Cultural differences in pain meanings and treatment approaches.

5. **Clinical Sciences**
   - Pathology (somatic and psychosocial)
   - Trauma and injury (the compressed or severed nerve)
   - Deafferentation pain
   - Musculoskeletal, visceral and referred pain
   - Migraine, muscle contraction headache
   - Temporomandibular pain
   - Psychiatric disorders
   - Herpes zoster
   - Pain in neurological disease
   - Pain and cancer

6. **The clinical presentation of pain**
   - Descriptions of major syndromes (acute and chronic)
   - Illness behaviours associated with pain (denial and amplification)
   - Pain as a coded message of psychosocial distress.

7. **Management**
   a. **General principles**
      - The measurement, quantification and recording of pain
      - The multi-perspective approach (multidisciplinary pain clinics)
      - The clinician-patient relationship
   b. **Clinical pharmacology**
      - Non-steroidal anti-inflammatory drugs
      - Systemic and spinal opioids, endorphins
      - Local anaesthetics
      - Other drugs (anticonvulsants, antidepressants, agents influencing 5-HT and endorphins)
   c. **Neurostimulation techniques**
      - (Transcutaneous nerve stimulation, epidural stimulation,
brain and spinal cord stimulation
Acupuncture
d. **Nerve blocks**
   Local anaesthetics
   Neurolytic solutions
e. **Surgical techniques**
   Nerve decompression
   Neurosurgical techniques
   Orthopaedic techniques
f. **Psychotherapeutic and behavioural approaches**
   Individual, family and group psychotherapy
   Cognitive-behavioural therapy
   Relaxation techniques (biofeedback etc.)
   Hypnotherapy, operant approach, stress management
g. **Physical therapy**
   Exercise, massage, heat, hydrotherapy, etc.

8. **Pain in special contexts**
   Post-operative (including prophylaxis)
   Children and infants (signs of pain, evaluation and management, physiology, acute and chronic pain)
   Cancer-related pain (death and dying, palliative care)
   Aged
   Intellectually retarded
   Pregnancy and childbirth
   Occupational issues (e.g. overuse syndromes, post-traumatic stress disorders)

9. **The evaluation of methods for treating pain**
   The measurement of pain, disability, associated distress and suffering
   Choice of outcome measures
   The evaluation of analgesic therapy
   Assessment of pain relief
Clinical Experience

Pain Management Training

The prime function of an anaesthetist is to prevent or relieve pain. The acquisition of essential knowledge about the management of pain should form an integral part of an anaesthetist’s training from an early stage. During BST, the trainee should acquire experience in the assessment, diagnosis and management of pain. A designated consultant should be responsible for the co-ordination of the training which must include:-

Basic sciences

a. Basic knowledge of afferent and efferent pathways, peripheral and central mechanisms of pain generation, transmission, modulation and appreciation.
b. The pathophysiology of pain
c. The assessment of pain
d. Physiological and psychological basis of pain management
e. Pharmacology
   (i) Primary and secondary analgesics
   (ii) Local anaesthetic agents
   (iii) Other drugs used for control of symptoms.

Clinical sciences

a. Application of drug therapy, including methods of delivery
b. The role of neural blockade and knowledge of commonly employed techniques
c. Stimulation-produced analgesia

Chronic pain relief
Although extensive practical involvement in the management of chronic pain is more appropriate to HST, trainees at BST level should be aware of the work of a pain clinic, the techniques involved and have opportunities to attend treatment sessions.