Other

Pain Medicine—A New Credential in Canada

Patricia Morley-Forster, MD, FRCPC* and Jolanta Karpinski, MD, FRCPC†‡§

*Professor, Department of Anesthesiology and Perioperative Medicine, Western University, London, Canada; †Associate Director, Specialties Unit, Office of Specialty Education; ‡Royal College of Physicians and Surgeons of Canada; §Associate Professor, Division of Nephrology, University of Ottawa

Reprint requests to: Patricia Morley-Forster, MD, FRCPC, Medical Director, Pain Management Program, St Joseph’s Health Care, 268 Grosvenor St, London, Ontario, Canada N6A4V2. Tel: 1-519-646-6000 x 65065; Fax: 1-519-646-6376; E-mail: patm@sjhc.london.on.ca.

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Abstract

Objective. In 2010, Pain Medicine was formally recognized as a subspecialty in Canada by the Royal College of Physicians and Surgeons of Canada, a national organization with oversight of the medical education of specialists in Canada. The first trainees began their training at the Western University, London, Canada in July, 2014. This article traces the process of Pain Medicine’s development as a discipline in Canada and outlines its multiple entry routes, 2-year curriculum, and assessment procedures.

Design. The application for specialty status was initiated in 2007 with the understanding that while Anesthesiology would be the parent specialty, the curriculum would train clinicians in a multidisciplinary setting. To receive recognition as a Royal College subspecialty, Pain Medicine had to successfully pass through three phases, each stage requiring formal approval by the Committee on Specialties. The multiple entry routes to this 2-year subspecialty program are described in this article as are the objectives of training, the curriculum, assessment of competency and the practice-eligibility route to certification. The process of accreditation of new training programs across Canada is also discussed.

Conclusions. The new Pain Medicine training program in Canada will train experts in the prevention, diagnosis, treatment and rehabilitation of the spectrum of acute pain, cancer pain and non-cancer pain problems. These physicians will become leaders in education, research, advocacy and administration of this emerging field.

Key Words. Pain Training Programs; Education; Pain Medicine

Introduction

A formal application to recognize Pain Medicine (PM) as a subspecialty was submitted in 2007 to the Royal College of Physicians and Surgeons of Canada. The applicants were a family doctor with an interest in addiction medicine (then president of the Canadian Pain Society [CPS]), a psychiatrist, and three anesthesiologists. In this document, a PM specialist was defined to be an expert in the prevention, evaluation, diagnosis, treatment, and rehabilitation of patients with acute pain and chronic, cancer and non-cancer pain.

Royal College of Physicians and Surgeons of Canada

The Royal College was established in 1929 by a special Act of Parliament to oversee postgraduate medical education in Canada. Its prime objective is to ensure the highest possible standards of specialist training and specialist care for the people of Canada. The Royal College sets the standards for specialty education, accredits residency programs at universities in Canada, assesses the acceptability of residents’ education and conducts certifying examinations. It also assures ongoing high standards of practice through its Maintenance of Certification program. The organization encompasses all medical and surgical disciplines, other than Family Medicine, which is governed separately by the College of Family Physicians of Canada (CFPC).

At its inception, the Royal College offered just two specialty qualifications: a fellowship in general medicine and...
a fellowship in general surgery. The Royal College’s Committee on Specialties (COS) is the body responsible for defining the requirements for the recognition of specialties and subspecialties and evaluating application for new disciplines [1]. The categories of discipline recognition are outlined in the “Criteria for Royal College Recognition of a Specialty and Subspecialty (2010)” [2]. An application for a new subspecialty must delineate its scope of practice, demonstrate a societal need for the discipline, show evidence of adequate infrastructure to sustain the discipline and mark a clear delineation from existing disciplines. The application is initially reviewed by the COS. If provisionally approved, it proceeds to a consultation phase in which all major stakeholders are asked to provide their response to the application. The COS reexamines the application together with the results of the consultation and may request further clarifications, deny, or accept the submission. If accepted, the recommendation of the COS proceeds to the Royal College Education Committee, then to the Executive Committee of Council and finally the Council of the Royal College. The final step for a newly recognized discipline is the dissemination and implementation stage during which the specialty-specific standards are developed by the Specialty Committee, posted on the public Website, and disseminated to postgraduate deans of universities. This final stage outlines the requirements which will allow universities to apply for and establish training programs in the discipline.

The Preliminary PM Application

The preliminary application required demonstration of societal need, indication of support from the parent specialty, evidence that the proposed new discipline had a unique body of knowledge and scope of practice, and proof that there were sufficient practitioners in Canada to establish a national training program. The Royal College also requested information as to how other medical jurisdictions had handled similar requests.

Societal Need for PM

A Task Force for the CPS, chaired by Dr. Mary Lynch, a psychiatrist, published a report in 2005 entitled “Toward establishing evidence-based benchmarks for acceptable waiting times for treatment of pain” [3]. Wait times for multidisciplinary treatment clinics for chronic pain averaged 9–12 months in Canada but could be as long as 42 months. The Task Force published a systematic review of 24 studies examining the relationship between waiting times, health status, and health outcomes for patients on chronic pain clinic wait lists. They found that waits in excess of 6 months were associated with deterioration in quality of life, increased depression and a poorer prognosis [4,5]. Peng et al. further documented the challenges in accessing multidisciplinary chronic pain clinics across Canada in a study funded by the Canadian Institute of Health Research [6].

In 2003, the Canadian Pain Coalition, a national patient advocacy group, formed from the merger of several smaller patient groups was created to promote political awareness concerning the lack of access to multidisciplinary pain clinics. The chair of this patient advocacy group was granted a seat on the Board of Directors of the CPS, thus providing a symbolic voice for patients suffering from chronic pain. A letter of support from this large patient group helped to demonstrate a convincing societal need to the Royal College for the preliminary stage.

In 2004, there were 16 anesthesiology training programs in Canada that offered a 1 year postgraduate fellowship program in Chronic Pain Management (excluding Pediatric Pain). Fourteen of these were supervised by anesthesiologists. Fellows funded their training by doing part-time clinical work in operative anesthesia. There was no standardized curriculum, no definition of competency, and no certifying examination. Only 12 fellow positions were filled in 2004, although more positions were offered. Although the reasons for the lack of interest among Canadian physicians to train in this area were unclear, the perceived lack of support for funding of pain services in Canada was presumed to be a contributor.

Infrastructure to Support Training

Data collected by the CIHR-funded research project StopPain [6] found that in Canada approximately 557 doctors were practicing chronic pain management in 115 multidisciplinary clinic locations, but usually no more than 1 or 2 days per week. A multidisciplinary clinic was defined as one that provided services by at least two medical disciplines. Service in their base specialty occupied the remainder of their week. The 2005 membership list of the Canadian Anesthesia Society showed that 83 anesthesiologists identified their primary practice as pain management while 327 stated this was their secondary affiliation. In the province of Quebec, Veillette et al. documented that 29% of anesthesiologists were treating chronic pain, in some capacity, but only four per cent spent 20 hours per week or more in a Pain Clinic [7]. Thirteen per cent had completed a 1-year fellowship. From this data, a critical mass for training supervisors was deemed to exist within the Anesthesiology workforce in Canada.

Support for the Application

PM was seeking recognition as a subspecialty with a 2-year-training program. The Royal College requires that all subspecialties must have the support of a “parent” specialty. Ever since the first multidisciplinary pain clinic was founded by the anesthesiologist, Dr. John Bonica, in 1947, there has been a historically close relationship between the discipline of Anesthesiology and the treatment of acute and chronic pain problems. Although other specialties, particularly Neurology, Neurosurgery,
Psychiatry and Physical Medicine, and Rehabilitation, have contributed enormously to the treatment of debilitating pain, our data indicated that most Canadian university-affiliated tertiary pain clinics were led by anesthesiologists. For many years, residency training in Anesthesiology has included a mandatory rotation in chronic pain. While all anesthesiologists are expected to have knowledge of techniques for acute pain relief, a significant subgroup has made the treatment of chronic pain an important secondary field of practice. Given the involvement of anesthesiologists in leading chronic pain clinics, and in providing their trainees with basic knowledge, Anesthesiology was the most suitable parent specialty.

The Association for the Canadian University Departments of Anesthesiology is an influential organization affiliated with the Canadian Anesthesiologists’ Society, consisting of all Chairs, residency program directors, research directors of Departments of Anesthesiology and program directors across the country. After a presentation to this group in early 2008, by the Chair of the Working group in PM, support for the subspecialty was unanimously endorsed by all department Chairs of Anesthesiology. There were some reservations expressed that this new subspecialty would draw anesthesiologists away from their core responsibilities in the Operating Room and Intensive Care Unit, but the countervailing feeling was that it would attract more recruits and promote new interest in Anesthesiology.

The Canadian Pain Society, a chapter of the International Association for the Study of Pain was founded in 1982. Its original focus was to provide a multidisciplinary forum for basic science researchers in Canada to disseminate their findings. But in the past 15 years, the CPS has become increasingly active in promoting knowledge translation from research to clinical practice, and in supporting multidisciplinary educational initiatives. In the last 5 years, membership of clinicians in the CPS has been growing rapidly, but in 2007, when the PM application was submitted to the Royal College, only a small proportion of CPS members were physicians. Diverse medical disciplines were represented including Family Medicine, Anesthesiology, Addiction Medicine, Neurology, and Rheumatology. As the Society had played a significant role in advocacy for pain, and was responsible for the initial application to the Royal College, the CPS was designated by the Royal College as a supporting National Specialty Society. As such, it has a representative on the Royal College Specialty Committee in PM.

Pain Medicine in Other Jurisdictions

The three jurisdictions which had the greatest influence on the design of the Canadian program in PM were the United States, Australia and New Zealand (ANZCA), and the United Kingdom (UK). Since 1992, the American Board of Anesthesiology has provided a 1-year program leading to certification in pain management. More recently, the American Board of Psychiatry and Neurology and the American Board of Physical Medicine and Rehabilitation have also provided subspecialty certificates in pain management. Another pathway, open to all medical specialties, is examination and certification via the American Board of Pain Medicine. This certificate has not yet been recognized by the American Board of Medical Specialties [8]. The ABPM examination is rigorous and tests the same knowledge for all candidates, regardless of their primary specialty [9]. Another route is the American Academy of Pain Management which credentials both physicians, and other allied health disciplines, upon receipt of proof of good clinical practice and successful completion of a written examination. This certification has not yet been recognized by the American Board of Medical Specialties, but is accepted as equivalent by multiple payors and several states (California, New York, Florida). There has been active debate for the past decade in the United States as to the optimal length of training program in PM and how best to incorporate more multidisciplinary training when traditional models of care are delivered through isolated disciplines.

In 1999, ANZCA established a separate interdisciplinary Faculty of Pain Medicine within their College of Anaesthetists, although PM was not officially recognized as a medical subspecialty by the federal government of Australia until 2006. [10] In the UK, advanced training in Pain Management has been regulated by the Royal College of Anaesthetists since 1999. The training program for the subspecialty of Pain Management must be housed within a school of Anaesthesia approved by their Royal College, with supervision by a Regional Advisor in Pain Management.

European countries have a wide variety of programs in Pain and Palliative Care but are seeking a more standardized European credentialing in PM that would reflect its economic and political unity. Dissatisfaction with the lack of educational standardization has led the European Association for Palliative Care to call for uniform pan-European standards of training in Palliative Care. [10].

Royal College Recognition of PM

The PM application was first reviewed at the COS in October 2007 and proceeded successfully to submit a full application and move onto stakeholder consultation. Over 2 years, the Working Group in PM developed the required curriculum, objectives of training, standards, and assessment procedures. In 2010, the Royal College introduced the new option of a Diploma program. The purpose of the Diploma program was to stop the “fragmentation of care” that was perceived to be happening with creation of more and more new subspecialties. Our group discussed with the Royal College advisors the pros and cons of PM switching from a 2-year subspecialty with a certifying examination to a 1-year Diploma program as well as the differences in the criteria for the two designations [2]. We also consulted with leading international educators in pain in Australia.
and the United States. The consensus was that, given the broad scope of the discipline, a 2-year program, with certification by examination, would provide the best foundation of knowledge to those entering from diverse disciplines. One argument that carried a great deal of weight in arguing for subspecialty status was the comparison of Pain Medicine to Critical Care; both require broad interdisciplinary training and standardized accreditation. On behalf of the Working Group the lead author presented our proposal to the COS in April 2010. The COS approved PM as a subspecialty at that meeting and the decision was granted final approval by the Council of the Royal College in November 2010.

Dissemination and Implementation

Following recognition of PM as a Royal College discipline, the next steps were to elaborate the standards of training for the subspecialty. The discipline is defined by Royal College training documents, referred to as the “specialty suite.” These documents describe the associated knowledge base and skill set, list the required clinical and academic experiences to obtain those competencies, state the expectations of a resident’s performance at the conclusion of training, and outline the appropriate structure and organization of the training program.

The specialty suite consists of four discrete, but interrelated, documents:

a. The Objectives of Training (OTR) outlines the unique constellation of competencies needed to practice as a specialist in this discipline.

b. Specialty Training Requirements (STR) lists the required duration, content, and sequence of training in the form of a rotation-based road map.

c. The Specific Standards of Accreditation (SSA) describes the requirements that the residency program must meet to achieve Royal College accreditation. It outlines the specific administrative, clinical, academic, and scholarly resources needed to provide adequate experiences for the trainee and identifies any specific content, and/or assessment methods.

d. The Final In-Training Evaluation Report (FITER) is a summative assessment tool used to identify if a resident is qualified to sit the certification examination.

A working group was established by the lead author, under the auspices of the Royal College Specialties Unit. Each member represented a specific discipline making up one of the component experiences of the proposed pain curriculum, or was a medical specialist with experience in the field of education and/or was a representative of a key stakeholder organization. This 18 member multidisciplinary working group was tasked with creating the specialty suite of documents. This committee met for the first time in October, 2011. Over the subsequent 2 years, the foundational documents were elaborated. Once the documents were approved by the Specialty Standards Review Committee, the working group transitioned to an official Specialty Committee in PM in the spring of 2013.

Entry Routes

PM is now a subspecialty residency entered after certification in a primary specialty. The following disciplines have been designated as eligible entry routes to the PM residency: Anesthesiology, Emergency Medicine, Internal Medicine, Neurology, Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, and Rheumatology. Entry from the following Royal College accredited disciplines is also possible, in exceptional cases, with the approval of the Specialty Committee in Pain Medicine: Medical Oncology, Neurosurgery, Orthopedic Surgery, or Palliative Medicine. All candidates must be certified by the Royal College in their primary specialty to be eligible to write the certification examination in PM.

Although the Specialty Committee in Pain Medicine unanimously endorsed 3 years of Family Medicine training (basic 2 years plus a third year of “special competence”) as an eligible entry route, we faced two obstacles in bringing this to fruition. Training and credentialing in Family Medicine in Canada occurs under the auspices of the CFPC. Certification in Family Medicine is not a traditional entry route to Royal College subspecialty programs. The CFPC vision states that the people of Canada must have timely access to quality care provided by family physicians committed to the CFPC’s lifelong learning requirements; as such, the CFPC has traditionally had a focus on the provision of broad primary care rather than supporting training in subspecialized skills. The CFPC is currently working on a curriculum for Chronic Pain Management as a third year of added competence.

Curriculum and Objectives of Training

Accurate diagnosis, essential to the development of a rational treatment plan, requires training in neurological and musculoskeletal exam techniques. Administration of nerve blocks, if recommended, must be incorporated into a comprehensive treatment plan which also draws on pharmacotherapeutic knowledge of opioids, anti-convulsants, and anti-depressants and comprehensive treatment aimed at rehabilitation and behavioral management. In many cases, the physician practicing in this subspecialty would be the medical director of a multidisciplinary team, and hence must be versed in pain management/relief methods used by team members who are physician or nonphysician professionals.

During the anesthesiology residency, the trainee gains experience in a wide variety of presentations of acute (including obstetric) and chronic pain syndromes, a sound knowledge base in pharmacology, and an appreciation of the variety of responses both physical and psychological that patients display when in pain. However, the interview skills, physical examination techniques, and
knowledge base required for treatment of chronic cancer and non-cancer pain require clinical knowledge and skills above and beyond what is learned in an anesthesiology residency program. It is crucial to acquire a working knowledge of psychological and psychiatric factors that affect pain, cognitive-behavioral techniques for pain management, rehabilitation medicine for pain and disability management, addiction medicine as it applies to the use and misuse of opioid analgesics, and both pharmacologic (co-analgesics, botulinum toxin, anticonvulsants, antidepressants, etc.), and nonpharmacologic methods of pain relief (exercise, manual therapies, electrical stimulation techniques etc.).

Regardless of their primary discipline, residents in PM will receive uniform training on the assessment and treatment of complex pain problems. The core learning experience of the program is thirteen 4-week blocks in an ambulatory multidisciplinary pain centre (MDPC). According to the International Association for the Study of Pain, a MDPC must have on staff a variety of health care providers capable of assessing and treating physical, psychosocial, medical, vocational, and social aspects of chronic pain.

The Multidisciplinary Pain Clinic (MDPC) module must offer the following components as an educational experience: ambulatory and inpatient consultations for chronic pain, longitudinal patient care in an outpatient clinic setting, participation in team conferences, exposure to individual, and group cognitive-behavioral therapy sessions and exposure to the breadth of interventional techniques performed in an ambulatory setting.

In addition to the core MDPC experience, there are seven mandatory blocks. Acute Pain Service, Cancer Pain and Symptom Management, Pediatric Pain, Neurology, Musculoskeletal system (Physical Medicine and Rehabilitation plus Rheumatology), Outpatient Psychiatry plus Addiction Services leaving six blocks for Electives. [Sidebar 1]

Blocks may be completed longitudinally throughout an agreed –upon time period, not restricted to the block period.

The Objectives of Training are set out in a 20-page document, which utilized the International Association for the Study of Pain and Australian and New Zealand core curriculum as guides. Each block, including the Multidisciplinary Clinic experience is framed by objectives written according to the standardized CanMEDS 2005 format utilizing the headings of Medical Expert, Communicator, Collaborator, Manager, Health Advocate, Scholar, and Professional. The Royal College provides templates for specialty standards which provides standardized wording applicable to all medical specialties.

As an example of the standardized format, “Medical Expert is the central role of the PM specialist. As Medical Experts, the core skill of the PM physician is to synthesize available information in a manner which places the patient’s clinical presentation in a bio-psycho-social framework, and to then advise as to the best method of pain management for that individual.” One of the key learning objectives under the Medical Expert section in the Psychiatry block is listed in Sidebar 2 as an example.

It is important to note that interventional procedures, and mastery of regional anesthesia, are NOT core components. If a PM resident wishes to become proficient in spinal intervention procedures under fluoroscopy, there is sufficient elective time available to allow him/her to attain that competency. In addition, further interventional experience can be obtained during the MDPC time, as long as the interventions are provided within the context of a multidisciplinary treatment framework, and not just as the only modality available. Every resident is expected to demonstrate knowledge of effective use of the following procedures including their potential risks: peripheral nerve and plexus blocks, neuraxial blocks, sympathetic blocks, neuromodulation and neuroablation procedures, but they do not need to demonstrate mastery of the actual technique.
The rationale for not making performance of interventional procedures a core skills component of the residency was that entry is allowed from eight primary specialties, only one of which is Anesthesiology. Many common chronic pain syndromes are not amenable to interventions. Even procedures that are supported by good evidence such as medial branch ablation for lumbar pain have better outcomes when combined with other multidisciplinary modalities such as physiotherapy, graded exercise, cognitive behavioral therapy etc. [11]

As all accredited training facilities in Canada to date are run by anesthesiologists interested in teaching interventional pain management, the expectation is that anesthesiology-based trainees will finish the 2-year program not only with a high level of procedural skill but also very comfortable operating within a multidisciplinary team model of care. There are excellent international certification examinations available if the trainee wishes to pursue competency in procedural pain management. [12]

**Practice-Eligibility Route to Certification**

No individual will be granted certification without examination. The practice-eligibility route (PER) provides an alternative route to certification for physicians who have had some formal training and have been practicing Pain Management in Canada for at least 5 years previously. This pathway was developed to allow physicians who have practiced in a particular discipline prior to its being accredited, to sit the Royal College certification examinations. The same examination will be written by those who have completed the 2-year-training program and those entering through the PER. Those physicians who have completed a postgraduate fellowship training program in Pain Management within 2 years of the introduction of PM residency in Canada will be allowed to sit the Royal College examination, after only 2 years of independent practice.

The Royal College has standard criteria for the practice-eligibility requirements which are individualized to the needs of each discipline. As well as holding a valid licence to practice in Canada, and being enrolled in the Maintenance of Certification Program, the applicant must be Royal College certified in one of the primary specialties designated as an entry route, have practiced in PM for a minimum of 5 years, at least 2 years of which have been in in Canada, and submit a Comprehensive Competency Report for review by the Specialty Committee. In the transition period, individuals who have completed training equivalent to the standards of an accredited program may submit a PER application after a minimum of 1 year in practice.

**Assessment**

The final three-hour examination will be in written format; the first one being scheduled to take place in the fall of 2016. The examination is created by the Examination Committee in PM; this group has been appointed in consultation with the Specialty Committee in PM.

The formative and summative assessment tools used in training are as important as the examinations. Formative assessment tools include a daily trainee log book of cases managed, a clinical encounter card completed by the assessor who provides daily or weekly feedback on specific competencies, and a trainee-generated portfolio of learning experiences.

**Accreditation of Training Programs**

Each university wishing to offer a residency program in PM must apply to the Royal College for accreditation. Accreditation requires the individual site to demonstrate that it can meet the Royal College General Standards of Accreditation as well as the Specific Standards of Accreditation developed by the Specialty Committee in PM. Applications are submitted by the program, with the approval of the university’s postgraduate medical education office. The Specialty Committee in PM reviews the application and makes its recommendation for accreditation or deferral. The final
decision for accreditation is made by the Accreditation Committee of the Royal College

It is anticipated that 12 to 14 sites across Canada are ultimately capable of gaining accreditation. However, the initial number of training programs will be phased in gradually over a 3-year period, starting with only one program in July, 2014. The plan is that each accredited training centre will offer at least two residency positions.

Funding

One major obstacle to the introduction of the PM residency is that funding for all residency positions flows from each provincial or territorial Ministry of Health (10 provinces and three territories). Although some provinces will create new funding for new specialties, some will not, depending on their budget priorities. For example, the province of Ontario, has capped the total number of residency spots, with no special consideration for newly created programs, such as PM, so that funding must be created by reallocating positions from existing programs. This is decided based on whether current residency programs are filling their positions and also based on perceived societal need.

Conclusions/Future Directions

It is anticipated that graduates of the Royal College-accredited PM programs will be primarily located in teaching centers especially during the first five years after the program has started. Increasingly, pain specialists will find employment in nonteaching centres and establish community clinics. Although certification in PM will not be required initially of Program Directors and teaching faculty, it will be required by 2019.

Whether PM will remain under Anesthesiology as its parent specialty remains to be seen. In Australia, New Zealand, and the UK, PM has become established as an independent college. There are arguments to be made on both sides. [13] Ultimately, the decision should be made based on what is best for patient care not for doctors.

The PM consultant will be expected to be actively involved in the teaching of undergraduate and postgraduate students in medicine, nursing and other allied health disciplines. The need for mechanisms of pain research, outcomes research, and exploration of new technologies such as IMRI, and RCTs which compare therapies is immense and exciting. The culture of interdisciplinary cooperation that exists within the PM community should serve to facilitate the transfer of new knowledge and to foster a new spirit of enquiry broadening the field of anesthesia research.

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