FEDERATION OF NATIONAL SPECIALTY SOCIETIES OF CANADA
FÉDÉRATION NATIONALE DES SOCIÉTÉS DE SPÉCIALISTES DU CANADA

Guide to Continuing Professional Learning

For Specialists in Canada

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Dear FNSSC Members,

In 2008, the Federation of National Specialty Societies of Canada conducted a survey of our member societies; based on your feedback, as well as the strategic planning exercise undertaken by FNSSC's Board of Directors, we have produced this resource, which we hope will be helpful to you in fulfilling your CME/CPD mandate.

This guide is intended as a resource for Board members, committees and staff who have responsibilities for managing CPD and MainCert within their specialty society.

It provides information and tools to support you and your members in the expanding challenges of continuing professional learning for Canadian Specialists, including:

- an overview of the CME/CPD environment in Canada and some selected aspects of the key organizations and trends in the United States
- an overview of the Royal College's Maintenance of Certification program
- practical tips to support your Society's CME/CPD activities
- definitions for the many terms and short forms used within the CME/CPD environment
- key resources and references to support your own professional development in the CPD field of study

The FNSSC gratefully acknowledges the following individuals for their input to this project**:** Dr. Renwick Mann, Ms. Carolyn Pullen, Dr. Gary Sibbald and Dr. Guy Tremblay.

This is the FNSSC's first CPD project; we look forward to your feedback and suggestions for other projects or revisions for this one.

On behalf of the Board of Directors,

Morris Freedman, MD FRCPC

President

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Part 1: The CME/CPD Environment

A. INTRODUCTION

1. Purpose and Scope of Continuing Medical Education /Continuing Professional Development

Medicine is a demanding profession and much more than a job for many practitioners. Central to being a successful physician is the ongoing life-long learning that occurs daily in their practices as well as through more formal learning at presentations and their extensive reading. Phil Manning, a pioneer in CME and his associate Lois Dabakey in 1987 wrote:

"*Those who immerse themselves most deeply in clinical work enjoy the greatest fulfillment. Such engagement includes daily reading and interacting with colleagues about medical problems, continually examining the nature and results of practice and modifying performance accordingly. Physicians who practice such immersion base their continuing education largely on the puzzling problems that arise in their practice and the defects they uncover in their performance. They take prompt remedial steps. The result is improved patient care, gratification and gusto."*[1]

More recently Dr. Manning commented, "Leaders who support physicians' life-long learning need to think beyond the lecture room activity and broaden their activities to include approaches that help physicians improve the care they deliver."[2] Craig Campbell[3], Director of Professional Affairs for the Royal College of Physicians and Surgeons of Canada (RCPSC) recently wrote in response to an editorial in the Canadian Medical Association Journal, "We have come a long way from the old continuing medical education paradigm where experts lectured to passive participants about the latest innovations in medicine at the local "Holiday Inn". This model was based on the belief that knowledge transfer, through such methods would automatically inform and shape physician thinking and behavior. This assumption has been the subject of an expanding and rigorous research agenda into the effectiveness of Continuing Medical Education (CME). The editorial (to which he refers) implies that the majority of the Continuing Professional Development (CPD) events or systems Canadian physicians use to enhance their knowledge, skills and improve their practice are based on group learning events funded by pharmaceutical companies. This is incorrect!"…The shift from CME to CPD has promoted learning linked to multiple dimensions of practice (clinical, administrative, research and education) and across multiple competencies."

National Specialty Societies (NSS) have a clear mandate to provide leadership and support for their members in their life-long learning activities. Those who are accredited providers are particularly committed to this activity as central to their mandate and core business. However, small staff and lack of other resources mean the skills to develop and offer this support are sometimes lacking; fulfilling the mandate can be very challenging.

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[1] Manning P & DeBakey L. *Preserving the passion*. New York: Springer-Verlag, 1987.
[2] Manning. P. Prologue. In Davis D, Barnes B & Fox R (Eds.), *The continuing professional development of physicians*. American Medical Association, 2003.
[3] Campbell, C. Institute of Continuing Health Continuation, Letter to the Editor, *CMAJ* April 8, 2008.

Specialists, other than family physicians, are "certified" to practice in Canada as "Licentiates or Fellows" of the RCPSC,, when they complete their post-graduate training. To maintain this designation, they must participate in the Maintenance of Certification (MainCert) program that is administered by the RCPSC. This program designates six categories of learning activities that can be applied to the program and credits for each section are submitted yearly. More detail is provided in Section C4.

Traditional CME focused on formal learning settings activities, usually in the form of small and large group learning sessions. Modern CME/CPD, strongly supported by the RCPSC MainCert Program, includes all of the activities that physicians do to learn and implement practices for optimal patient care (this includes changes within the clinical environment that support these practices). (See list in Appendix 4)

The Federation of National Specialty Societies of Canada (FNSSC) has commissioned the writing of this syllabus to support member Specialty Societies in building the capacities needed to work in this modern comprehensive approach to life-long learning of specialists in Canada.

Most NSS in Canada provide some of the activities that fall within this modern definition of CPD. Most frequently offered are:

1. Annual Scientific Meetings and Regional Meetings
2. Accredited Section 1 Group Learning and Section 3 Self Assessment Programs co-developed with others
3. On-line resources and programs
4. Scientific Journals for Specialists
5. Guideline Production, Dissemination and Implementation

2. The Movement from "CME" to "CPD"

It is well accepted that formal group learning activities remain an important part of physicians' learning activities. It is clear that changes in knowledge and attitude can occur in these settings and that, **when combined with other activities**, the knowledge can lead to changes in practice.[4] In addition, it is also clear that physicians sometimes come away from these lectures and small group discussions with confirmation that they are up to date and doing the right things with their patients. Change is not always necessary or appropriate. However, a growing body of research indicates that, if the goal is to impact on physician practices, the closer the physician is to the clinical environment and solving clinical problems during a learning activity, the more likely a change in practice will occur.

Optimal continuing education (CE) for physicians has been described by experts in the field as, "highly self directed with content, learning methods, and learning resources selected specifically for the purpose of improving the knowledge, skill, and attitudes that physicians require in their daily professional lives that lead to improved patient outcomes."[5] This definition and many of the accepted principles for activities that will support physician learning have been based on the

[4] Davis D, et al. Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *Journal of the American Medical Association 1*999; 282:867-874.

[5] Bennett NL, Davis DA, Easterling WE, et al. Continuing medical education: A new vision of the professional development of physicians. *Acad Med*. 2000; 75:1167–1172.

work of Malcolm Knowles,[6,7] a professor of adult education, who developed a theory of "andragogy," which emphasizes the following four attributes of adult learners:

- Adults need to be involved in the planning and evaluation of their learning.
- Experience provides the basis for learning.
- Adults are most interested in learning when it has immediate relevance to their job or personal life.
- Adult learning is problem centered rather than content oriented.

These observations are consistent with results from CE research studies. The data demonstrate that exclusively didactic types of CE, such as lectures, do not improve physician performance or patient care, while interactive and sequenced learning has been associated with a positive impact.[8]

The use of the terminology Continuing Professional Development arises out of two key trends:

1. The recognition that physicians need more than clinical continuing learning but also need on-going updates for the many other roles that they play
(See CanMEDS, Appendix 5);
2. Learning and application to practice requires much more than knowledge exchange. Use of office systems, follow-up procedures, interaction with colleagues etc. all work together to determine whether knowledge moves into action. CPD includes attention to these other factors.

Therefore, innovations in practice audits, reminder systems, and easy access to databases are important trends. The focus on the need for electronic medical records, databases and networking capabilities are all leading to better support for physicians within their practice environments. These can enable "point of care" learning which can have immediate impact on patient care. These concepts are explored more in "On-line Resources and Programs" p.20.

3. What is "Knowledge Translation" (KT)?

The Canadian Institutes for Health Research (CIHR) Definition
Knowledge translation is a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to:

- improve the health of Canadians;
- provide more effective health services and products;
- and strengthen the health care system. [9]

Knowledge translation is about:

- Making users aware of knowledge and facilitating their use of it.
- Closing the gap between what we know and what we do.
- Moving knowledge into action.[10]

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[6] Knowles, M. *The adult learner: A neglected species* (3rd ed.). Houston, TX: Gulf Publishing, 1984.
[7] Knowles, M. *Andragogy*. Accesible at http://tip.psychology.org/knowles.html (Access date: March 6, 2007).
[8] Davis D, et al., ibid.
[9] www.cihr-irsc.gc.ca/e/29418.html.
[10] Davis D, Evans M, Jada A et al. The case for knowledge translation : Shortening the journey from evidence to effect. *BMJ* 2003;327:33-5

KT includes a broad spectrum of activities:

Synthesis

- Integration of research findings of individual research studies within the larger body of knowledge on the topic. This provides context.
- Methods are standardized to support replication and transparency.
- Examples: systematic review e.g. Cochrane Collaboration; consensus conferences; practice guidelines

Dissemination

- Activities that tailor the message and medium to target audiences
- Examples: end of grant report to funders; summary/briefings to stakeholders; educational sessions with patients, practitioners and/or policy makers; media engagement; and others.
- Includes conference presentations; peer reviewed (and non-peer reviewed) publications; website postings.

Exchange

- Interaction between the knowledge users and the research resulting in mutual learning.
- Includes collaborative problem-solving between researchers and decision makers.

Integrating KT into National Specialty Society activities: Many NSS go beyond traditional CME and provide alternative KT tools to their members through their scientific journals and consensus conferences or other forms of synthesis. For example, the Canadian Cardiovascular Society has integrated KT into its mission statement and its priority areas: the annual Congress; guidelines for cardiovascular health and care; health policy; membership and professional development.[11]

4. Trend Toward Physician Accountability to Patients, the Profession and Society

Medicine has traditionally been a profession that did not need to track or measure impact of its practices**.** In recent years, this has changed and there are demands to know the answer to questions related to outcomes of clinical practices from health, economic and social perspectives. The RCPSC in Canada and the Accreditation Council for Continuing Medical Education (ACCME) in the US have "inserted 'practice-based learning and improvement' into our vocabulary."[12] This means physicians will increasingly need to assess their own practices, document their efforts to learn and record the changes they make in their practices.

Governments may eventually require more than the present system requires. Professional associations are working toward systems that will continue to allow medicine to regulate itself in this area. Physicians in Canada are licensed to practice by provincial and territorial regulatory bodies. The Federation of Medical Regulatory Agencies of Canada (FMRAC) is the organization that provides a national voice for the provincial and territorial medical regulatory authorities. In 2008, FMRAC produced a position statement regarding revalidation of the license to practice medicine (www.fmrac.ca/policy/revalidation_eng.html). At the present time, several provinces are exploring the implications of revalidation/re-licensure and the processes that are most

[11] Tremblay GJL, Drouin D, Parker, J, Monette C, Cote DF, Reid RD. The Canadian Cardiovascular Society and knowledge translation: Turning best evidence into best practice. *Can J Cardiol* 2004;20(12):1195-1198.

[12] Hager M, Russell S & Fletcher SW (Eds.). Continuing education in the health professions: Proceedings of a conference 2008. A Report for the Josiah Macy Foundation, p. 77.

appropriate to ensure that physicians maintain their ability to practice optimal patient care. The processes under study include innovations such as self-assessment, practice audit, "360 degree" surveys as well as the basic RCPSC MainCert participation.

Since these processes will be of great interest to Canadian physicians, NSS and the FNSSC may wish to develop approaches that will support their physician members in addressing specific provincial requirements

For an overview of important trends in the United States, see Conclusions in Macy Report (Section C5 (c) and Appendix 6). [13]

5. Learning Management Systems

The first principle stated within the Maintenance Of Certification educational principles (See section C4) is: "Fellows are encouraged to design and implement individual continuing professional development plans tailored to their scope of practice, identified professional needs and competencies. As a professional priority, CPD requires an investment of time and effort to ensure that expertise is sustained over a lifetime of practice."[14] (See Appendix 4 for other Principles of the MOC Program). Specialists are looking to their respective National Specialty Societies to support them in this more intentional, planned and evaluated approach to their continuing learning activities.[15] Innovators are developing technology-based approaches that are called Learning Management Systems to help physicians with these new approaches to manage and report their learning activities.

[13] Ibid.

[14] What is Maintenance of Certification? HTTP://RCPSC.MEDICAL.Org

[15] Canadian Ophthalmological Society (COS), Needs Assessment 2007&2008.

B. The Players and their Roles in the CPD Enterprise

There are several types of organizations that play key roles:

- those that provide governance,
- accredited providers,
- third-party businesses, and
- sponsors/funders.

1. Governance

The following organizations create and enforce the standards for CME/CPD in Canada:

- The Royal College of Physicians and Surgeons of Canada (RCPSC),(Appendix 4)
- The College of Family Physicians of Canada (CFPC) (Appendix 11)
- Le College des médecins du Québec: provides accreditation designation to organizations within Québec (Appendix 10)
- Association of Faculties of Medicine of Canada: though the Committee on Accreditation of CME (CACME) provides accreditation designation at l7 Canadian faculties of Medicine (Appendix 7)
- Rx&D Canadian research-based pharmaceutical companies (Section C3.b)

2. Accredited Providers

The organizations to which governing bodies may delegate the privilege of judging whether a program meets specified standards:

- University Departments of CE/CPD (All specialties including family physicians)
- Some National Specialty Societies (programs for specialists)
- Canadian Medical Association (limited application)
- Canadian Medical Protective Association (limited application)
- Provincial Chapters of the CFPC (programs for family physicians)
- Fédération des médecins omnipraticiens du Québec (programs for family physicians in Quebec)
- The Federation of Medical Specialists of Québec (programs for specialists in Quebec)
- Association des médecines de langue française du Canada (representing French-speaking physicians across Canada)

3. Academic Centres and Specialist CME/CPD

In general, the 17 medical schools in Canada have departments of CME/CPD, although the names of the departments differ from one institution to another. For a list of these departments, see Appendix 13. Those who lead these departments are either physicians or individuals with a PhD. They usually hold the title of Assistant or Associate Dean within the medical school.

In some universities, there are also CME/CPD leaders within the specialty departments, as well as within the teaching hospitals. Programs for specialist physicians may be offered by any of these divisions but are guided by the standards of the RCPSC MainCert program. Note the section on self accreditation on the website within the MainCert program. http://rcpsc.medical.org/opd/moc-accreditation/self-accreditation .

4. Providers that are Third-Party Businesses

These providers create and/or deliver programs but are not able to accredit programs.

- There several hundred companies in Canada that work with educational program development committees to carry out various elements of the program development processes. They may help define needs, develop objectives, describe content and educational process, produce print and other communication media, evaluate the programs and assist in the administration of programs.
- Some companies specialize in group learning activities, some in on-line learning opportunities, and some in other technologies such as webcasting (Definitions, Appendix 1).
- Note: in the United States, some of these companies have achieved the role of "accredited provider," a designation provided by the Accreditation Council for Continuing Medical Education (ACCME). They adhere to a rigorous process similar to the accreditation process of the MainCert program. This has meant that a pharmaceutical company that wishes to develop a program may contract with one of these companies to develop their program. The possibility of conflict of interest potentially created by this funding arrangement has recently been addressed in the media and, at least one pharmaceutical company has announced that it will no longer work through this type of arrangement.[16]
- A key difference in Canada is that none of these types of organizations are accredited providers and therefore, the companies interface with both sponsors and with accredited providers.

5. Sponsors of Programs

These sponsors, usually pharmaceutical or medical device companies, pay for the development and implementation of programs. It is believed that over half of the funding for CME/CPD offered to physicians in Canada is provided by pharmaceutical or device companies. The actual number is not known but is based on US information. Therefore, these companies play an important role in the CME/CPD enterprise. There is an ongoing debate occurring in Canada and the US regarding how these relationships should be managed in the future.

See Section C1 and Appendix 3, Canadian Medical Association Guidelines for Physicians in Interaction with Industry.

6. Canadian Association for Continuing Health Education (CACHE)

CACHE is a membership organization. According to its website **cachecanada.org**:

"The Canadian Association for Continuing Health Education (CACHE) was born out of a need to share, promote and support Canadian continuing health education (CHE) initiatives. We seek to support the community of people involved in continuing health education in Canada. CACHE draws together a spectrum of educators, administrators, and representatives from health care, academia and industry -- all of whom contribute to the fabric of Canadian CHE."

CACHE stages an important annual meeting in the fall of the year that provides a forum for all stakeholders in CME/CPD.

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[16] Pfizer to end financial support for commercial doctor classes. July 4, 2008, *Wall Street Journal*. http://online.wsj.com/quotes/main.html?type=djn&symbol=pfe

7. Conseil Québécois de Développement Professional Continu des Médecins

Since 1975, there has been a co-ordinating, consultative organization for CPD in Québec; this group was renamed in 2005. This association is made up of member organizations that have an interest in physicians' continuous professional development. A key aspect of the Conseil's role is to encourage dialogue and foster harmonization of policies and processes for Quebec physicians' CPD. This includes training activities and resources for those who have a mandate in CPD development and delivery eg. faculties of medicine, professional associations and health care organizations. For more information, see website www.cemcq.qc.ca.

C. The Policy and Regulatory Environment

1. CMA Guidelines for Physicians in Interactions with Industry

All stakeholders are affected by the CMA guidelines for physician relationships with industry.

Canadian Medical Association Guidelines

In the late 1990's the Canadian Medical Association first published a paper that described a recommended set of guidelines intended to advise physicians in their relationships with for-profit organizations who sell products related to patient care. These guidelines have been updated regularly (2001) and the most recent version (2007) is found in Appendix 3. The policies suggested in these guidelines govern both the MainCert program as well as the equivalent system for family physicians, MainPro developed, by the CFPC and must be followed by accredited providers.

The CMA GUIDELINES are on its website: look up CMA policy PD08 01
[released on Dec. 1, 2007] SEE http://policybase.cma.ca/dbtw-wpd/Policypdf/PD08-01.pdf

2. National Specialty Societies (NSS) and the CMA Guidelines

For many years, NSS and their members worked with pharmaceutical and device companies to carry out their primary activities such as annual meetings, journals and other educational offerings. With the start up of the Maintenance of Certification (MainCert), in 2000 (See Section C4), came a new set of rules and policies that were sometimes quite different from their traditional practices in relating to industry. In addition, if NSS became "accredited providers" with the MainCert program, there were additional processes that they needed to understand and adopt in order to meet the new requirements. In the early days of the MainCert program, the operationalization of the CMA guidelines within the context of the accreditation of programs, was left to the individual NSS to work out within its own organization. Since many of the new processes and policies were quite unpopular with specialist physicians, this created many challenges for the NSS who depend on their members' support. As the MainCert program evolved, more guidance was provided to the NSS regarding how to interpret the policies; nonetheless, some of the issues continue to be challenging, especially if physician members of the NSS are not supportive of the policies. See section below for practical application of the Guidelines highlighting some of these issues. At the recent meeting for accredited providers at the RCPSC, a three-hour workshop provided explicit guidance for interpreting the 2007 version of the guideline.[17] See Appendix 15 for RCPSC interpretation of the 2007 Guideline.

In theory, NSS and universities are working with the same guidelines and principles and should present a united front to potential program developers. In practice, there is diversity between NSS and universities and amongst universities, regarding the implementation of these policies.

[17] Campbell, C. Ethical guidelines and accredited CME: Implications based on the updated 2007 CMA Guidelines, Workshop at 6th Annual CPD Accredited Providers Conference October 2008.

Practical Issues Related to the CMA Guidelines that Often Challenge National Specialty Societies (NSS)

- When a NSS accredits a Section 1 or 3 program from a non-physician organization, it is responsible for all aspects of the development and implementation of the program. This level of involvement from the NSS or its delegates is labour intensive. This may lead to fewer programs being accredited by NSS or Universities.
- NSS may also be unaware of how programs are marketed, (usually through the sales force of the funder), and how physicians are selected for invitations to attend. This may be an important area to explore with potential sponsors.
- All faculty and planning committee members must disclose all financial relationships with the sponsoring company over the past two years (not just related to the subject being discussed).
- The RCPSC prohibits inclusion of industry representatives (not limited to sales force) as members of scientific planning committees.
- The term "unrestricted" educational grant will become less used and "educational grant" with appropriate criteria will replace this. The implications of this change will affect the NSS but also, very importantly, the internal policies of pharmaceutical companies. There are internal regulatory requirements that may affect whether a company can offer an "educational grant."
- Funding for an accredited group learning event must be provided directly to the physician organization. Can your organization manage the budgets for all of the events that it co-develops i.e. accredits for non-physician organizations?
- Industry may not pay for travel or accommodation for participants, although faculty may be provided honoraria, travel and accommodation
- Physician organizations are responsible for the program budget i.e. pay all conference expenses including travel, accommodation and honoraria for faculty presenters.
- Food served in conjunction with an educational event should be "modest."
- Social events held in association with an educational event must not take precedence over the educational activities.
- Hospitality for personal guests of attendees or faculty must not be subsidized by sponsors.
- No gifts will be provided to physicians in the form of social activities or other tangible items.
- Promotional displays must not be placed in space outside the rooms or in areas where educational activities are being conducted. e.g. advertising for pharmaceutical products in programs for an accredited scientific meeting.
- There may be changes related to satellite symposia at NSS meetings that will affect those who accredit industry sponsored events at their annual meetings. Contact RCPSC to stay up-to-date on this policy development.
- There is increasing attention being paid to "peer selling" and discussion of "off-label" use of products at accredited programs.

3. Pharmaceutical Companies and the Guidelines

In addition to the CMA guidelines and the interpretation of them in the MainCert and MainPro programs, industry has additional regulatory bodies that govern what are acceptable practices. Two of these organizations are:

PAAB – the Pharmaceutical Advertising Advisory Board
Rx&D – Canadian research-based pharmaceutical companies

a. PAAB – The Pharmaceutical Advertising Advisory Board

PAAB is an important player in this discussion because PAAB regulations govern any activity that might be viewed as advertising or promotional of pharmaceutical products[18]. All materials (print or other media) that a pharmaceutical company sponsors or develops that will be shown or given to health care professionals, related to a product (this can also apply to information about the therapeutic condition) must go through internal approval processes as well as the PAAB approval process. PAAB ensures that any information provided about a product is evidence-based and that there is a balance between claims about benefits and possible risks. Up until recently, activities deemed to be "continuing medical education" did not need to be submitted to the PAAB review process (See Section 6.6 of the PAAB code for exemptions). Since the review process at PAAB can sometimes be very slow and is always very rigorous, it is sensible that companies welcome an opportunity to bypass this process through offering "educational" materials and processes to physicians. Within the context of "educational" activities, it is possible to share information that would normally not be approved through the PAAB process such as new scientific findings that are not yet part of a product's approved labeling. This does not imply any misleading information will be conveyed. It is simply that the time between discovery of new findings, and their incorporation into labeling of drugs, usually requires at least one year. Physicians put demands on the companies for timely information and welcome the opportunity to attend a lecture provided by industry to hear about recent breakthroughs.

In recent years, within some companies, even "educational" materials are reviewed by PAAB. Physicians should know that when the PAAB approved designation is assigned to materials, they have been put through a rigorous, evidence-based approval process. This could, at times, replace the submission of a program to an accredited provider for review. However, the physician would not be able to claim Section 1 credits for this program.

To gain a full understanding of the scope of the PAAB process, see the website provided in the footnote.

b. Rx&D – Canada's Research-based Pharmaceutical Companies

Canada's Research-Based Pharmaceutical companies (Rx&D) also play a key role in defining the acceptable practices for CPD activities offered to physicians in Canada. At present, 62 companies participate. The members are responsible for developing in excess of 90% of the medicines available in Canada. This organization was set up to provide self-governance of the Pharmaceutical and Device companies. The policies that they have developed for themselves cover all kinds of communication and interaction with physicians. There are many policies that relate to CPD activities. In Quebec, the Conseil de l'éducation médicale continue du Quebec (CEMCQ) has also built a Code of Ethics that consolidates the CMA and Rx&D policies[19].

[18] PAAB code. http:///www.PAAB.ca
[19] http://www.cmq.org/DocumentLibrary/UploadedContents/CmsDocuments/ethiqueemcang.pdf

Rx&D is governed by the organizations that are members and has established a review committee to assess complaints and assign fines to those found to break the rules. Often complaints are submitted by member companies regarding other member companies. However, anyone can submit a complaint and this is an important avenue for physicians, if they observe inappropriate practices.

In some instances, the Rx&D policies are more stringent than the CMA Guidelines and in addition, some companies have developed their own internal policies that regulate employees and their interaction with physicians.

Defining Education for Rx&D

The Rx and D Guidelines provide policies that regulate how member companies will conduct their communication with physicians including activities that may be called "education". A section of this focuses on Continuing Health Education. If an activity is deemed to be "education" according to the Rx&D criteria, the materials do not need to be submitted to the PAAB review process. The following criteria must be present to call a program "education". You will note that these criteria strongly resemble the requirements of an accreditable program:

- Learning needs assessment must be conducted.
- A member of the target audience must help design and develop the program.
- Clear learning objectives must be identified based on the needs assessment and the objectives must be reflected in the program.
- The program must be interactive.
- A final evaluation which outlines how the learning objectives were achieved must be conducted.

4. RCPSC Maintenance of Certification Program

See website rcpsc.medical.org for MOC Program Guide for full details, Appendix 4 for excerpts.

"The Royal College in its continued commitment to ensuring high standards of excellence in specialty medicine has established a Maintenance of Certification (MOC) program for Fellows.

In September 1998, Council passed a motion that participation in the MOC program would be a requirement for admission to and renewal of Fellowship. In 2000, the Royal College officially established the MOC program.

Promoting excellence in all aspects of professional practice, the MOC program is a nationally validated educational process designed to enhance the continuing professional development of individual specialists. The MOC program reflects the commitment of the Royal College to promoting life-long learning at all stages of specialized practice and being transparent and accountable to society as a profession".[20]

From the MOC Program Guide

"The MOC program, initially introduced in 2000, is a Royal College educational initiative

[20] http://rcpsc.medical.org/opd/index.php

designed to support, enhance and promote the continuing professional development activities of its Fellows. The MOC program is distinct from processes and programs designed to confirm competence or continuing fitness to practice. Working in partnership with the faculties of medicine, the NSS and the Federation of Medical Specialists of Quebec, the goals of the MOC program are to ensure:

- Fellows engage in a planned continuing professional development program based on their identified practice needs, allowing them to build evidence-based practices that enhance the quality of specialty care; and
- Learning outcomes and practice enhancements are documented and validated for purposes such as licensure or privileges to practice.

The MOC program will continue to evolve and adapt to reflect the highest standards for continuing professional development and ensure that the program promotes the following vision, mission and educational principles.

MOC program vision

Pursuing the highest quality specialty care through lifelong learning processes.

MOC program mission

To establish, promote and implement educational standards, strategies and tools that enable Fellows to develop a continuing professional development plan that is effective, efficient and integrated within their practice context.

MOC Educational Principles (See Appendix 4)

The following educational principles provide the philosophical foundation of the MOC program in achieving its vision, mission and goals.

- Personal
- Needs Based
- Scope of Practice
- Reflection
- Continuous Improvement
- Choice
- Inter-professional

MOC Learning Activities – Six Sections – see Description in Appendix 4

MainPort Fellows of the RCPSC submit their MainCert credits through MainPort. This portal has recently been upgraded to include many new features that enable Fellows to easily track their CPD activities. If a Fellow neglects to submit at least 400 credit hours over a 5 year period, their Fellowship status may be affected.

The Office of Professional Development is presently developing a *Guide to Accreditation,* available in 2009*,* that will support providers in their adherence to the standards required of accredited providers.

5. US Environment

Policies and practices in the US related to CME/CPD have a strong influence on Canadian issues. Some have direct effects, in that Canadian physicians attending US programs are directly touched by them. Others are simply trends that can be watched in order to anticipate potential changes that might occur within the Canadian environment.

a. ACCME – The Accreditation Council for CME

The Accreditation Council for CME is responsible for overseeing the accreditation process in the US. The Canadian MainCert program is heavily influenced by the US standards and practices. It is therefore advisable to be acquainted with the trends in the US.

A key difference in the US is that third party businesses who develop CME/CPD programs may be accredited providers. These third party organizations have, for many years, acted as a "firewall" between the pharmaceutical industry and physicians. Unlike the Canadian environment, there have been restrictions for many years in the US on pharmaceutical company employees working directly with physicians to plan programs. Recently the practice of these third party CE providers has come under media scrutiny and potential for conflict of interest has been highlighted. This may mean that companies will want to work directly with professional associations and universities. If this trend occurred in Canada, it could increase the resources available to medical organizations and universities for program development

Canadian physicians receive credits for their MainCert program when attending ACCME accredited programs in the United States. The reverse is not yet the case for programs accredited by National Specialty Societies in Canada. At present, US physicians may count credits for programs accredited by Canadian Universities but not by NSS. According to recent information provided by the RCPSC, the ACCME has approved a new policy to establish reciprocity among selected participating countries. This is likely to mean changes in policies for Canadian physicians in 2009.

b. The Alliance for Continuing Medical Education

The Alliance for CME is a membership organization that provides professional development opportunities for CME professionals, advocates for CME and the profession, and strives to improve health care outcomes. The Alliance provides educational opportunities, professional development, information exchange, and supportive services. These assist members in adapting to the changing health care environment, improving the CME activities offered for physicians, and shaping the future of the CME field.

The aim of the Alliance for CME is to improve the provider skills of CME professionals, which will ultimately improve the quality of healthcare through evidenced-based educational interventions for physicians and other healthcare providers and the systems in which they work.

The Annual Conference for the Alliance is traditionally held during the last week of January in the United States and is attended by many stakeholders in the Canadian CME/CPD enterprise.

The Alliance website provides many professional development, educational opportunities and training products, for example, **Best Practices in CME – 7th Edition CD.** This edition adds a new dimension to the review of best practices in CME by highlighting award winning entries as well as a cross section of providers from all ACCME provider groups that demonstrates the true diversity in the strategies, processes and tactics used by CME professionals in the delivery of timely and valuable education to physicians in all specialties.

c. Continuing Education in the Health Professions: Proceedings of a Conference 2008[21].

A landmark conference held in the US in 2008 has produced a monograph (240 pages) that describes both trends, and how to do state-of-the-art CME/CPD. It can be found within the publications section, at the following site: http://www.josiahmacyfoundation.org. It is important to note that the Canadian perspective on the issues was not part of the agenda and only one official Canadian representative was present at this meeting. There are important differences in how CPD works in the US compared to in Canada; however, this resource provides an important compilation of CPD information that is relevant to the Canadian environment.

Selected Conclusions from the Report of these Proceedings

Responsibilities of the Individuals Professionals, Professional Teams and Health Systems

The individual clinician has been the principal unit of accountability for performance in the healthcare delivery system. Given that the performance of health systems also profoundly affects patient care, CE fails to take into account system of care. Effective patient care increasingly depends on well-functioning teams of healthcare professionals. Therefore CE must address the special learning needs of collaborating teams.

CE Methods

Traditional lecture-based CE has proven to be largely ineffective in changing health professional performance and in improving patient care. Lecture formats are employed excessively relative to their demonstrated value.

Professional conferences play an important role in CE by promoting socialization and collegiality among health professionals. Health professionals have the responsibility to help one another practice the best possible care. Meeting together provides opportunities for cross-disciplinary and cross-generational learning and teaching.

Practice-based learning and improvement is a promising CE approach for improving the quality of patient care. Maintenance of certification programs (in which clinicians review the care they actually deliver in their own practices, compare the results with standards of excellence and create a plan for improvement) and maintenance of licensure programs are moving CE in this direction. Currently, most CE faculty are insufficiently prepared to teach practice-based learning.

Information technology is essential for practice based learning by:

- Providing access to information and answers to questions at the time and place of clinical decision-making (point-of-care learning);
- Providing a database of clinician performance at the individual and/or group practice level, which can be compared to best practices and used to make plans for improvement;
- Providing automated reminder systems.

Accrediting CE

Current accreditation mechanisms for CE are unnecessarily complex yet insufficiently rigorous.

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[21] Hager,M, Russell S,and Fletcher SW. (editors) *Continuing Education in the Health Professions: Proceedings of a Conference. A Report for the Josiah Macy Foundation*. 2008(See Appendix 6 for full list of Conclusions and Recommendations)

Part 2: The Practice of CPD in National Specialty Societies

A. Guide for CME/CPD Programming

Part 2 of this guide provides suggestions regarding theory and practice for the most predominant activities within NSS CPD programs. These include:

1. Annual Scientific Meetings and Regional Meetings
2. Co-developed Section 1 Group Learning and Section 3 Self-Assessment Programs
3. On-line Resources and Programs
4. Scientific Journals as Effective Learning Tools
5. Guideline Production, Dissemination and Implementation

1. Annual Scientific Meetings and Regional Meetings

a. Your Planning Committee

In an ideal world, the members of the program planning committee are the foundation of the program. This committee is responsible for building a program based on real and perceived needs of those who will attend. They set out the learning objectives for the meeting and they are also responsible for ensuring that the program learning activities will support participants in meeting the objectives. Following the program, the planning committee also reflects on the evaluation of the meeting and makes recommendations for maintaining a high quality program or suggestions for improvements.

Traditionally, planning committees for the program at the Annual Meeting are faculty who speak or moderate sessions at the meeting. They are often based in academic settings and know their academic colleagues very well. Sometimes, the committees lack members representing community-based physicians and other segments of the profession, who face different challenges in their day-to-day practices than their academic colleagues. Therefore, if the Annual Meeting is intended to serve all practitioners from the Specialty, it will be important to include them in the planning of the meeting.

Basis for this Approach – The Evidence

Programs that are built on the needs of participants have more measurable impact on participants', knowledge, attitudes and sometimes, clinical practices.[22] If planning committees include representation from all segments of attendees, there is a better chance that the real needs of participants will be understood and addressed in the meeting.

[22] Sibald RG, Tipping J, Taylor-Vaisey A. *Planning Group Continuing Education for Maintenance of Certification: A Handbook for Implementation*. Department of Medicine, University of Toronto, 1999. See www.cme.utoronto.ca/directors

b. Needs Assessment and Developing of Learning Objectives

There is general agreement that it is most effective to use multiple sources of information and different methodologies to identify both the perceived and unperceived the needs for a particular audience. These different types of information should then be put together in a synthesis process that will lead to a clear description of the gap between present and optimal practices.

The learning objectives for the sessions emerge from this clarity. The format suggested by the RCPSC suggests that the objectives be written from the learners' perspective, be as concrete as possible and potentially measurable.

What is an unperceived need? These needs are the gaps between present and optimal care that a learner does not know exist; ie. when learners do not know what they do not know. Presently, identification of participant needs (real and perceived) is a very big challenge for most NSS. The problems include:

- a reluctance of planning committee members to engage in a potentially onerous process;
- lack of resources to hire experts to carry out the data gathering and synthesis;
- universal challenge of motivating targeted physicians to provide information;
- inability to know whether information gathered through scientific literature or systems research applies directly to the audience that will attend a session.

Practical solutions:

- Ensure the data you do have, e.g. evaluations from previous meetings, are provided to the planning committee in a useful format.
- Ask committee members to write down their perception of the need that they can identify for the session they are planning and to identify their sources of information. Put this information in a consolidated report.
- Ask committee members to write learning objectives for their session applying the criteria provided and based on the needs they have highlighted.
- Have support staff work with the planning committee to ensure high quality and consistent construction of objectives.

Basis for this Approach – the Evidence

Identifying real and perceived needs.

The upcoming Accreditation Guide from the RCPSC will provide guidance in this area.

It is well accepted among educational leaders that a learner's perceived needs can be quite accurate, however, it is also clear that real needs that can be observed by others are often not identified by the learner.[23] Examples of recommended methods used to identify perceived and real (observed) needs follow:

Perceived needs:

- Surveys
- Focus groups
- Evaluations of other meetings
- Practice audits

[23] Moore DE & Cordes DL. In Rosof AB & Felch WC (Eds.). *Needs assessment in continuing medical education: A primer* (2nd ed). Westport CT: Praeger, 1992, pp. 42-51.

Real (observable) needs:

- Guideline recommendations
- Practice audits
- Data gathered within systems
- Scientific literature e.g. surveys
- Post graduate training faculty
- Referral letters from the target audience
- Questions asked in electronic discussion groups
- Questions arising in group learning sessions

c. Build the Program

The leadership and process for a particular session should reflect the objectives and demonstrate effective educational strategies. If the objective is to convey new information that is intended to motivate participants to consider a new way of doing something, faculty should:

- be strong communicators;
- come from a similar practice environment as the audience or have a good working knowledge of it;
- have high quality content; and
- be influential in their community;

The design of the session should reflect good learning theory and practice.[24] For example, if the material is controversial, perhaps a debate format with opportunities for breakout discussion groups may be more effective than a lecture/discussion format. Or, if the material is intended to develop new skills, participants will need to have opportunity to try out the new skill and receive feedback.

Practical Approach: Selection of faculty for scientific meetings has often traditionally been motivated by subjective factors. If you help your planners think objectively about what they want to accomplish, they may begin to expand their thinking and their choices of format and faculty.

[24] Moore, DE. How physicians learn and how to design learning experiences for them: An approach based on an interpretive review of evidence. In:Hager, M, Russell S & Fletcher SW (Eds*.). Continuing education in the health professions: Proceedings of a conference. A Report for the Josiah Macy Foundation, 2008*; http://www.josiahmacyfoundation.org/index.

Basis for Selecting Program Activities – The Evidence

- Generally, a didactic presentation can impact on knowledge and attitude but rarely, **by itself,** will impact on practices.[25]
- Interaction with others is a key to improving the application of information to practice.[26]
- The size and complexity of the change implied in the new information will be key determinants of potential uptake up the information.[27]
- The perception of relevance and intuitive acceptability, based on experience, are keys to effective adult learning.[28]
- Usually, multiple educational interventions with different formats, occurring at different times will be needed to support a change in practice.[29]
- If a factor in the physician's office system works against the change, it is unlikely that change can occur.[30]

d. Evaluating your Annual Meeting

Large professional meetings continue to be a very important part of physicians continuing learning and attendance is, at least, stable and in some sectors, growing. Physicians tell us that there are many reasons why these meetings are important. The content is essential but the interaction with colleagues is also equally very important. Although the use of electronic learning tools is growing, there appears to be a continuing essential role of large group learning events.[31]

It is therefore important that, when you design your evaluation plan for the meeting, you include all of the objectives that learners may have for attending.

Perhaps the biggest challenge for a NSS is encouraging participants to complete the survey and return the form. Some groups have linked submission of the form to obtaining credits for attending. This may be very difficult for large meetings and makes anonymous surveys quite difficult. Some groups have entered names in a draw if forms are returned. This does increase participation but may provide questionable quality in the forms. Some groups wait until after the meeting and request a form to be completed electronically. This may be the most effective at the moment, but comfort with electronic media may be a barrier and also makes anonymity an issue.

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[25] Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *Journal of the American Medical Association* 1999; 282:867-874

[26] Knowles MS. *The modern practice of adult education*. New York: Association Press 1970

[27] Fox RD, Mazmanian, PE & Putnam RW (Eds.). *Changing and learning in the lives of physicians*. New York: Praeger, 1989.

[28] Knowles MS. The modern practice of adult education. New York: Association Press 1970

[29] Davis D, Thomson MA, Oxman AD, Haynes RB. Changing physician performance: A systematic review of the effect of continuing medical education strategies. *JAMA* 1995; 274(9):147151

[30] Greenhalgh T, Robert G, Bate P, Macfarlane F, Kyriakidou O. *Diffusion of Innovations in Health Service Organisations: A systematic literature review.* BMJ Books, Blackwell Publishing 2005; Oxford, UK.

[31] Hager,M, Russell S,and Fletcher SW. (editors*) Continuing Education in the Health Professions: Proceedings of a Conference. A Report for the Josiah Macy Foundation. 2008*

Significant practical issues such as time and resources will affect what is feasible when it comes to aggregating information and creating a report. This may take special expertise and hiring of special staff for this function and therefore, has resource implications.

Standard for Evaluation

The evaluation system used to evaluate individual events should assess the degree to which the identified needs and the learning objectives of the event were achieved, as well as the learning outcomes identified by participants.[32]

The new "Guide to Accreditation" presently in development by the RCPSC will provide more guidance for operationalizing this standard.

2. Co-developed Section 1 Group Learning Programs and Section 3 Self-Assessment Programs

Any group that wishes to offer a group learning activity and to offer participants Section 1 credits must abide by the criteria established for the accreditation process. The implications of this process have been described in the section above on planning your annual scientific meeting. (See Appendix 12 for RCPSC Standards.)

New policies, application forms and review forms for **Self-Assessment Programs (SAPs)** are now available at http://rcpsc.medical.org/opd/moc-program/index.php

The MainCert program requires that accredited providers (Universities or NSS), make a distinction between programs developed by "physician organizations" and those developed by "non-physician organizations". For the RCPSC definitions regarding these distinctions see Appendix 14

Implication: A NSS may accredit a physician organization by reviewing the program documentation. **However, if a group of physicians that is not organized as an association wishes to offer a Section 1 program, the group is required to have an accredited provider as a co-developer.**

Non-physician organizations are required to find an accredited provider who will "co-sponsor," now referred to as, "co-develop," the program. The intention of this requirement is to ensure that the standards for a Section 1 or Section 3 programs, that require the application of CMA guidelines, are applied consistently. If programs are developed outside of this process, they are often eligible for Section 2 credits (See Appendix 4 for section definitions).

[32] RCPSC Standard 8 for accredited providers

What does "Co-developed" Mean?

The term "co-developed" implies that the NSS or university is involved in all aspects of the planning and the implementation of a program. It means that the accreditor takes responsibility and is accountable for the content and process surrounding the program.

Practical Implications of this Requirement

1. Accredited providers should ask that a program idea be shared with them prior to any planning committee meetings, to ensure that the provider sees the program as a high priority topic.
2. Planning committees will be representative of the anticipated audience for the program and the NSS will take part in inviting the committee and the chair to be involved.
3. Processes established for needs assessment, objective setting and program design will be shared through representation from the accredited provider.
4. Applications for accreditation require information regarding the budget and other activities surrounding the event. The NSS should feel comfortable that the information provided is aligned with the CMA Guidelines for relationships with industry. (See Appendix 3.)
5. All honoraria paid to faculty for the program must be paid by the accredited provider.
6. Budget management of accredited events may become a big issue for some NSS.
7. NSS are responsible for keeping records of attendees and for receiving the evaluation forms completed at the meeting.
8. The administrative burden on NSS may require increases in accreditation fees. It may be helpful to discuss this issue with the non-physician organizations that come to you for accreditation to understand the implications of fee increases, to them and to you.

3. On-line Resources and Programs

a. Use of Information Technology for Supporting Physician Learning and Optimal Patient Care

Most NSS have websites that serve a very important role in communication with members. These websites can provide a wide range of resources to members and therefore, this could be an area of expansion for member services. If the trend toward practice-based learning and improvement continues to grow, information technologies will become a central and expanding CPD resource accessed by physicians.

In CPD circles, the discussion regarding technology often focuses on use of the internet to deliver on-line educational programs. It does appear that physicians are increasingly looking to the internet to participate in programs that take traditional formats for group learning and move them onto an internet platform.[33] Although important, on-line learning may be a lower priority than other applications of technology to support physicians in their professional learning activities.

[33] 2007 Canadian Physician survey. http://www.nationalphysiciansurvey.ca/nps/

A recent US report on Continuing Education in the Health Professions emphasized key trends in the uses of information technology to support practice-based learning:

- Providing access to information and answers to questions at the time and place of clinical decision-making (point-of-care learning).
- Providing a database of clinician performance at the individual and/or group practice level, which can be compared to best practices and used to make plans for improvement.
- Providing automated reminder systems.[34]

b. Point of Care Learning

The accessibility of internet within clinical settings is a relatively recent phenomenon and still not universally available in clinical settings outside of hospitals. However, the National Physician Survey (2007) reported a substantial jump in this accessibility and this trend is likely to continue to grow.[35] Since we know that clinically based problem-solving is one of the most effective and frequently used methods for physicians to learn, the ability to ask a question, search for an answer, get it quickly and apply it within a clinical encounter is a fundamental process for physician learning. However, it is important to note that, without an opportunity to reflect on this process, the information may not really represent learning because it will not be retained.

Most physicians now carry a hand held data accessory (PDA) that can often provide information at the moment physicians need it. This is an intermediate step to what is likely to become normal practice i.e. accessing internet within the clinical practice to support patient care.

c. Patient Management Systems

The use of Electronic Medical Records (EMR) is growing in Canada. Most practices now use computers for billing and increasingly for scheduling patient visits. The number of practices that use the computer in the context of a patient visit is still small but has grown substantially as government resources have been directed to helping physicians adopt and get set up for this innovation. Ontario and Alberta are among the leaders in use of EMR practices in Canada but other provinces are also investing resources to increase the use of these systems.

When patient care processes and outcomes are documented within computer systems, the possibilities for analysis of real needs and the tracking of outcomes will become possible. With this, enormous possibilities open up for physician learning and ensuring optimal patient care. **NSS may wish to encourage and support adoption of innovations in this area.**

[34] Hager,M, Russell S,and Fletcher SW. (editors) Continuing Education in the Health Professions: Proceedings of a Conference.A Report for the Josiah Macy Foundation. 2008

[35] 2007 National Physician survey. http://www.nationalphysiciansurvey.ca/nps/

Practical Applications

- Courses, offered at annual meetings or on-line, regarding how to implement an EMR system in practice could be a beginning for involvement in this area. Some NSS already offer this.
- The concept of a "mini-credit" is new and one that NSS might like to explore. This involves designing mechanisms for physicians to receive credit for their MainCert portfolio while doing point-of-care learning.
- There are centres in the US working on this concept that you may wish to contact.[36]
- Presently "mini-credits" are available to physicians who access and use resources such as "Info Poems" or "Cardio-Clips." These are brief reviews of key scientific findings received by e-mail that provide advice regarding practical, clinical applications. Contact RCPSC or CFPC for more information.

d. On-line Programs

The **2007 National Physician Survey** indicates that the number of specialist physicians who are trying out on-line learning is growing.[37] However, at the present time, there appear to be insufficient numbers of Canadian developed, high quality programs.

Survey of GP/FP's in Canada 2005[38]

The findings of a study conducted with family physicians provide some insight into what may be needed to increase effectiveness of programs. This research was conducted by AXDEV, a third party business, in 2005/2006 on behalf of CFPC and CMA and was funded by six pharmaceutical companies. It used a combination of qualitative and quantitative methods with a small, carefully selected sample of physicians from across Canada.

Key Findings
Although technology (e-learning, PDAs, computer access, EMR) was appreciated for the access to information that it provides, there was some fear that, through the use of too much technology, physicians will lose the "art of medicine" or the more humanistic side of medical practice.

Physicians were open to considering participating in e-learning programs but they felt that the programs available at that time were not sufficiently tuned to the actual experience of a patient encounter. A patient visit tends to be non-linear – more like a problem-solving process. On-line programs often do not reflect this reality since problem-based learning is more difficult to create in a non-live environment.

There was a sense that E-learning has promised more than it can deliver, tending to be dry, non interactive and impersonal. When actually participating in a program, it is often easy to skip through a program and complete only parts of the content.

[36] The American Academy of Family Physicians (AAFP)
[37] 2007 Canadian Physician survey http://www.nationalphysiciansurvey.ca/nps/
[38] Murray S, Marlow B,Nagpal S, Sidel J, Phaneuf M et al. Innovation in collaboration: The paradigm for the future in research partnership between multiple public and private organizations. Workshop at the CACHE meeting, St-John's Newfoundland &Labrador, Canada. 2006.

The biggest reported barriers for e-learning were:

- Lack of confidence in using technology
- Lack of social/group involvement and pressure to complete
- Little time available and perception of high program costs
- Not knowing about existing on-line programs
- Educational format not intellectually engaging

RCPSC Standards for Accreditation of On-line Learning

The standards for Section 1 credits are the same as for face-to-face meetings. The most challenging aspect of this is the need for 25% interaction between participants and faculty and between participants (See rcpsc.medical.org).

Practical approaches:

- A good starting point for the NSS could be to ensure that selected key presentations from annual meetings are transformed into on-line or CD based programs. It is important to note that a program accredited for a live group-learning program is not accreditable as an on-line program without making provision for interaction.
- Many NSS are expanding the reach of presentations at annual meetings through technology.
- If a lecture is simply transferred into an existing material format, it is very important to encourage the use of this in rounds or small group meetings that can facilitate discussion regarding the material and increase the educational quality of the resource.
- As we know, a lecture is likely to have minimal impact on physician practices when left to stand alone, but there are many creative ways to make the material more interactive, if used in the context of a face-to-face discussion group. A NSS could support this type of application through the contracts it sets up with third parties who do the technical work, as well as through communication with members.
- Many third-party businesses are seeking collaboration with NSS to develop on-line learning opportunities. It is quite challenging to ensure that these programs meet the Section 1 standards and therefore, it is important that each NSS consider the resources they are willing to put into this. One advantage of a co-developed on-line program is that the content is clearly visible and sources of concern regarding bias can be more easily controlled and monitored in an on-line program.

4. Maximizing the Journal as an Effective Learning Tool

Journal reading remains physicians' most frequently reported CME/CPD activity. However, there is little evidence that this reading (usually scanning) actually impacts directly on knowledge or practices. Some physicians report that their journal reading does provide a good source of needs assessment information and can lead to other learning activities that, eventually, do impact on their practices. Journals continue to be the primary dissemination vehicle for new information and could be made even more effective knowledge translation tools.

Some journals have created approaches that provide information in formats that ensure ease of application of information to practice, e.g. Canadian Family Physician or the American Journal of Health Promotion. Since journal reading remains an integral part of physician professional development, there could be many innovative opportunities for NSS to increase the impact on physician learning. For example, when new guidelines or consensus conferences are published, authors could provide tools to support implementation of recommendations.

5. Developing, Disseminating and Implementing Guidelines

The volume of published research makes it almost impossible for most physicians to read and synthesize information by themselves. This has led to a growing number of knowledge synthesis processes that have become very important part of the CPD offerings that support physicians in their practices. Guideline development, dissemination and implementation are the best known forms of syntheses. The Cochrane Collaboration is another well known and respected synthesis process.

Many NSS support the development of clinical practice guidelines and, traditionally, publish these guidelines in their journal. Some NSS are taking particular interest in the implementation of guidelines and are directing resources toward improving the effectiveness of the guidelines they develop

There has been an international movement to create standards for the development, dissemination and implementation of guidelines. When guidelines are not developed according to these standards, they are sometimes called "recommended practices". One of the best known tools for creating and implementing guidelines is the Appraisal of Guidelines Research & Evaluation (AGREE) Instrument.[39] This tool provides a framework for assessing the quality of clinical practice guidelines and also suggests the criteria and processes to produce a high quality product.

For more information regarding the impact of guidelines on physician performance, see key references.[40] [41]

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[39] The AGREE Collaboration. Appraisal of Guidelines Research and Evaluation. Available at: <http://www.agreecollaboration.org>

[40] Grimshaw JM, Thomas RE, MacLennan G, Fraser C, Ramsay CR, Vale L et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technology Assessment* 2004; 8(6).

[41] Grimshaw JM, Santesso N, Cumpston M, Mayhew A McGown J. Knowledge for knowledge translation: the role of the Cochrane collaboration. *JCEHP* 2006; 26(1):55-62