

# **Cochrane Canada**

Standing Committee on Finance 2018 Pre-Budget Consultations

## **Executive summary**

Healthy Canadians and healthy workplaces play a vital role in the productivity of Canada and the accomplishments of Canadian business. The need for relevant and reliable evidence from trusted sources to inform the healthcare decisions made by consumers, healthcare practitioners and policymakers has never been greater. For more than 20 years, Cochrane has been a leader in producing and promoting gold standard evidence, transforming the way Canadians make everyday health decisions.

In order to support a more productive Canadian population, Cochrane Canada is requesting the allocation of:

- \$2.5 million per year to support Cochrane Canada operations to facilitate the health and wellbeing of the population through evidence informed decision making
- \$70,000 per year to support national open access to the Cochrane Library.

#### **Cochrane Canada**

Cochrane is a global independent network of more than 37,000 researchers, professionals, patients, carers, and people interested in health from more than 130 countries. Many of Cochrane's contributors are world leaders in the fields of medicine, health policy, research methodology, consumer advocacy, and are situated in some of the world's most respected academic and medical institutions. Cochrane is considered the international standard for synthesized health information and is an important partner of the World Health Organization.

As the Canadian arm of Cochrane, Cochrane Canada is comprised of 3,909 Canadian members and groups. Members are affiliated with academic, non-governmental and governmental institutions and form a unique Canadian network. The groups and members function together to achieve Cochrane's mission 'to promote evidence-informed health decision-making by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence'.

The Canadian Cochrane Centre, based at McMaster University, provides the leadership for Cochrane Canada. The Centre is directed by Dr. Holger Schünemann and Dr. John Lavis, as associate director.

#### What does Cochrane do?

Traditionally, physicians, nurses and other healthcare providers learned of new and improved tests, medicines, treatments and other advances by reading the latest medical literature. Application of these advances leads to tremendous improvements in life expectancy and quality of life. However, with the explosive growth of the medical research enterprise, it is no longer possible for healthcare providers to remain current on the latest individual studies published in traditional journals. A recent estimate showed that the average family physician would require 29 hours per day to locate, read and assess the scientific validity of new research. Recognizing that this is impossible in practice, the Cochrane Collaboration was formed in 1993 by clinicians and researchers to determine ways of addressing the information overload caused by the growing plethora of new journals and individual studies.

Cochrane also recognized that published research is often questionable or scientifically flawed. The Cochrane Systematic Review was developed to resolve information overload and limit dissemination of scientifically flawed studies. Systematic reviews are the most reliable knowledge synthesis. The Systematic Review process creates a meaningful combination of many individual studies in a single knowledge synthesis by identifying individual research studies on topics of importance to healthcare providers and patients. The scientific validity and relevance of each study is then critically appraised by Cochrane staff. This is accomplished by operating as an enabling platform, with specialized staff and infrastructure, assisting volunteers to conduct systematic reviews and to disseminate the evidence.

Moreover, Cochrane provides essential training, statistical expertise, editorial oversight and specialized software to ensure systematic reviews are timely and adhere to the Cochrane Collaboration standards. These standards are widely recognized as the international 'gold standard'. The model is efficient and cost-effective, allowing any one of Cochrane's many review groups to manage dozens of systematic reviews simultaneously. Cochrane Canada review groups can produce up to five systematic reviews for the same cost that another organization might pay for a single knowledge synthesis. Importantly, Cochrane information is peer reviewed and dynamic, and updated regularly to incorporate new research. This ensures that you can base decisions on the most up-to-date and reliable evidence. All of the information published by Cochrane is available through the Cochrane Library. Patient friendly summaries, which provide an accessible summary of the outcomes of Cochrane reviews, are available to the public free of charge. Access to the full library of reviews does attract a fee.

In addition to providing systematic review evidence, Cochrane supports decision makers through the Cochrane Policy Liaison Office (CPLO). Activities of the CPLO include developing policy resources and tools (e.g. the Health Systems Evidence database, which incorporates all Cochrane systematic reviews related to health-system arrangements and implementation strategies, and is available in English, French and three other languages); profiling Cochrane reviews in rapid syntheses, evidence briefs and citizen briefs prepared to support policy processes; providing education and training for policy-makers and stakeholders (e.g. Health Systems Learning); and creating linkages with relevant governments and organizations. Cochrane Canada is also responsible for informing Canadians about certainty in the reviewed evidence by having pioneered the assessment process and ensuring equity is considered in the reviews through two Canadian Cochrane groups.

## Why is Cochrane evidence important?

Although inherently relevant to clinicians, the value of Cochrane's work has been demonstrated across audiences. Dr. David Naylor, former president of the University of Toronto, was quoted as saying: "The Cochrane Collaboration... rivals the Human Genome Project in its potential implications for modern medicine." The public benefits from having access to information that help them make decisions about their own health, whereas healthcare policy-makers are able to use the extensive Cochrane library to make informed decisions about healthcare at the policy level.

There has never been a more pressing need for Cochrane Canada's evidence. As public access to health evidence increases, especially online, so too does the risk of misinterpreting this often complex and partial content. Cochrane evidence can assist people to sift through the 'noise' to find meaningful information.

Cochrane reviews address an incredibly broad range of topics. There are more than 50 Review Groups, which drive the production of systematic reviews in their area of interest. Canada provides leadership for several of these Review Groups including:

- Back and Neck Group
- Musculoskeletal Group
- Hypertension Group
- IBD Group
- Upper Gastrointestinal and Pancreatic Diseases Group

However, Cochrane authors from across Canada contribute to the activity across the full range of Review Groups, from Drugs and Alcohol and Common Mental Disorders to the Effective Organization of Care and Work Groups.

The use of evidence in decision making reduces the risk of implementing interventions that are not effective. It reduces wasted effort, saves money and improves effectiveness. By reviewing the evidence, Cochrane can make an informed statement about whether a specific intervention will make a difference, or not.

# **Financial support for Cochrane Activities**

Worldwide, there are 53 Cochrane entities working with 17 national centres. There is no international standard for funding to support a national Cochrane enterprise or centre, although most are supported by governments at the regional, national & pan-national levels, non-governmental organizations, universities, hospitals, private foundations, and personal donations. Cochrane entities are not permitted to accept funding from certain commercial organizations such as pharmaceutical companies. This is to ensure that the conclusions of Cochrane Reviews are not influenced by those with a vested interest.

Within Canada, the funding to support Cochrane activities has been uncertain over the last several years. For 12 years Cochrane Canada received dedicated funding from CIHR. This was facilitated through a directed grants mechanism, which awarded \$9.6 million over five years for two funding cycles (2005-2015). In 2015, this directed grant funding mechanism was removed by CIHR. Importantly, this was not due to the performance of Cochrane Canada; in fact, CIHR recognized Cochrane Canada as a "vibrant organization, internationally-recognized for its excellence, and committed to engaging patients in its important work". The result of this decision, however, was that Cochrane was left without an ongoing funding base. In December 2016, a new possibility for funding through the CIHR, via a competitive Operating Grant, became available (\$5 million dollars), and Cochrane is awaiting the outcome of this competition. Even if the grant is awarded, Cochrane remains without consistent, reliable funding within the Canadian context, despite the fact that the Canadian operations are widely respected on a global scale.

# **Supporting the productivity of Canadians**

A productive society is dependent upon the health and wellbeing of its citizens. Healthy cities, workplaces and environments provide the framework to support this, and evidence is required to underpin its development and evolution.

Cochrane Canada contributes directly to this by providing evidence to support:

- the public and patients to make better informed decisions about their health and wellness through
  access to plain language information that helps them to stay healthy, active and engaged,
  and to manage their health conditions;
- healthcare providers to make better decisions at the bedside by providing evidence about best practices, what interventions work, for whom and when; and
- healthcare policy-makers to make informed decisions at the population level by helping to ensure that cost-effective programs, services and drugs get to the Canadians who need them.

In addition to healthy communities, productivity is supported through the delivery and access to effective healthcare systems. The design, structure and execution of these systems is essential to support efficiency and effectiveness. Cochrane information can be used to inform decisions regarding systems issues, reducing the risk of implementing changes that are not effective, and increasing the likelihood that finite resources can be allocated to deliver the best return on investment. For example, the list of Cochrane reviews below demonstrates how Cochrane evidence can be used to inform decisions that impact outcomes:

- <u>Does providing early discharge from hospital and care at home improve patient health outcomes and reduce costs to the health service, compared with in-hospital care?</u>
- <u>Do Interventions to increase the use of electronic health information by healthcare practitioners to improve clinical practice and patient outcomes?</u>
- <u>Discharge planning from hospital</u>
- Pharmaceutical policies: effects of financial incentives for prescribers

# How can Cochrane help business to be more productive?

Evidence to support occupational health and insurance medicine play an important role in the Cochrane library. This information can be used to directly shape the workplace and interventions to support its optimal operations. From reviews that examine how to prevent injury, to those that address how to most effectively return to work, a healthy workforce is supported through evidence. Examples:

- Pre-employment examinations for preventing injury, disease and sick leave in workers
- Economic incentives to enhance safety behaviour in workers for preventing occupational injuries
- Pharmacological interventions for sleepiness and sleep disturbances caused by shift work
- Interventions to prevent occupational noise-induced hearing loss
- Workplace interventions for smoking cessation
- Workplace interventions to prevent work disability in workers on sick leave
- Interventions for prevention of bullying in the workplace
- <u>Conservative interventions for treating work-related complaints of the arm, neck or shoulder in adults</u>

## **Conclusions**

The evidence produced by Cochrane Canada undoubtedly plays a key role in health decision-making from the level of the individual, or consumer, to the planning of health services on a local, national and international scale. However, we are confident our influence and impact could be even greater. Our challenge – and our opportunity – is not just to make our evidence even more accessible and widely used, but to use our profile, reputation and voice to advocate for evidence-informed health decision making. We have recognized that this is essential to fulfilling our mission; and at an operational level, to demonstrating our relevance and usefulness to funders, supporters and current and future collaborators.

### Recommendations

In order to support a more productive Canadian population, Cochrane Canada is requesting the allocation of:

- \$2.5 million per year to support Cochrane Canada operations to facilitate the health and wellbeing of the population through evidence informed decision making.
- \$70,000 per year to support national open access to the Cochrane Library.