A CIHR Perspective on Research Evaluation

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Context: CIHR

INVESTMENTS

$1 billion in annual investments

CIHR partners with over 250 organizations and governments

Close to $200 million secured from partners for research

To provide financing for 13,000 researchers and trainees

70% to support projects proposed by researchers.

30% to support research priorities established by CIHR.

Discoveries for life
Objective

The objective of the CIHR is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system.
Context: In Government

Policy on Results
- New policy emphasis on better aligning PM and Evaluation work
- Refresh of corporate reporting requirements

Deliverology
- Reporting on progress more regularly and in relation to specified mandate priorities

Learning Agenda
- Major opportunity to learn about how to measure impacts of research investments across science-based organizations within and outside of government
Context: Research Impact Assessment

Canadian leadership; International advances
In the past ....

- Monitoring and reporting of performance across CIHR was done in silos
  - Redundancies & replication of efforts
  - Erroneous results stemming from lack of validation
  - Non comparable results

- Lack of consistent grant and award outcome reporting
  - Inconsistency in reporting across investments
  - Lack of “culture”
In the present: Data Sources

INTERNAL
- Reports from grantees
- Funding data
- Financial data

EXTERNAL
- Clarivate
- Derwent Patent
- OST Biblio Online
In the present: What do these data support?

A corporate-wide, integrated performance measurement support for:

**Accountability**
- Allows for the monitoring and reporting of CIHR activities, outputs and outcomes for transparent accountability to stakeholders including Parliament

**Assessment Research Impact**
- Allows for the monitoring and reporting of health research outputs, outcomes and impacts (informed by Canadian Academy of Health Sciences (CAHS) Impact Framework)
## Canadian Academy of Health Sciences

### Making an Impact (2009)

<table>
<thead>
<tr>
<th>Advancing Knowledge</th>
<th>Informing Decision-Making</th>
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<tbody>
<tr>
<td>Capacity Building</td>
<td>Health Impacts</td>
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<td></td>
<td>Social and Economic Impacts</td>
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Implementation – Performance Measurement

**Impacts of HOW we fund**

- Priorities and processes for Initiative design, planning, operations and oversight
- NEW area of measurement; high relevance to program management and oversight

**Impacts of WHAT we fund**

- Research outputs and outcomes in short-, medium-, and long-term in areas like advancing knowledge, capacity building, informing decision-making
- EXISTING areas of measurement from PM Toolbox; often take too long to accrue to inform decisions, but useful for demonstrating funding outcomes

**Impact enabled through ...**

- Program design and delivery with clearly stated and deliberate objectives and impacts for Programs
Linking Design and Delivery to Knowledge Translation Impact

- KT by Design
  - Objectives
  - Team composition
  - Other requirements

- KT Incentives
  - Review Criteria
  - Funding
  - Policies

- KT Assessment
  - Reporting
  - Monitoring
  - Evaluation
End-of-Grant Reporting: Self-Assessment of Impact

To what extent do you feel the research results from this grant contributed to the CIHR mandate?

- Creating new health knowledge
- Translating the knowledge from the research setting into real world applications
- Improving health for Canadians
- Creating more effective health services and products
- Strengthening the Canadian health care system
End-of-Grant Reporting: Self-Assessment of Impact

To what extent and how has your grant had an impact on the following stakeholders?

- Health System/Care Practitioners/Public Health Practitioners
- Patients/Consumer of Health System/Care
- Study Stakeholders (who are formally listed in the grant application)
- Health System/Care Managers
- Health System/Care Professional Organizations
- Federal/Provincial Representatives
- Community/Municipal Organizations
- Consumer Groups/Charitable Organizations
End-of-Grant Reporting: Self-Assessment of Impact

Which of the following have resulted or will result from this grant?

- Research method
- Theory
- Replication of research findings
- Tool, technique, instrument, or procedure
- Professional practice
- Policies, guidelines or programs
- Information or guidance for patients or public
- Patients’ or public behaviour(s)
- Vaccines/Drugs
- Software/Database
- Patent (filled or obtained)
- Product license
- Spin-off company
- Intellectual property claim
- Direct cost savings (individual, organization, system, or population level)
- Findings cited by others (e.g. finding referenced/included in subsequent...
CIHR aims to improve the health of Canadians through research, but … How is that research actually used toward health improvement?

- Research evidence: e.g. Clinical trials, studies, meta-analysis, systematic reviews and research papers.
- Health impacts: e.g. treatments, therapies, health related policy, discourse of science and research in the media.

How does scientific innovation lead to improved health?

- Scientific journals publish and review research evidence.
- New evidence informs guidelines, recommendations, policies, and clinical practices.
- Health policies informed by research contribute to improved efficiency and patient outcomes.

CIHR supports research through grant and award funding opportunities.
In 2011...

• 5 researchers published a study of efficacy of medically supervised injection facilities for drug users

• This paper has been cited 75 times within the Web of Science (as of 04/04/2017).

• Authors acknowledge numerous organizations as sources of support including private industry (19) as well as MSFHR, CIHR, Health Canada and Vancouver Coastal Health.

Since 2011...

• This CIHR-supported article was used to support policy documents by organizations in Canada and Internationally, such as:

  • 2016 City of Ottawa’s technical report on safe injection sites

  • 2015 Canadian Medical Association submission to Senate Standing Committee

  • State of Maryland’s 2016 House Bill 1212
How are these data and performance measures used?

Parliamentary Reporting

- Periodic Impact Assessments
- Public Reporting

Evaluations

- Special Reports (e.g., Naylor; Peer Review Expert Panel)
Questions and Discussion