Health Intelligence





Measuring the Impact of Research

Best, Better and Emerging Practices in Impact Evaluation

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Executive Summary

- ◆ While health research drives innovations in health technology, practice and policy and leads to a wide range of important health, social and economic benefits, it is also resource-intensive and requires financial contributions from a wide range of funders and investors.
- ◆ To ensure accountability and maximize return on investment, funders and other health research organizations have leveraged impact assessments to evaluate progress and performance of their investments and plan for long-term success.
- ◆ There is no one-size-fits-all approach to impact assessments. Strategies to customize assessments that reflect the complexity of health research and innovation and an organization's unique context include:
 - ♦ Developing a purpose-built evaluation framework that prioritizes questions and metrics aligned with the research mission
 - Integrating diverse metrics of impact and success to capture the full value of research
 - ♦ Engaging stakeholders purposefully at different stages of an impact assessment

This report explores the importance of strategic customization to ensure that impact assessments generate relevant evidence, inform decision-making, and help funders and research organizations optimize projects, programs and investments.



Health research drives health technology, practice and policy innovation, leading to a wide range of important health, social and economic benefits.

Types of Health Research



BIOMEDICAL



CLINICAL



HEALTH SERVICES



SOCIAL, CULTURAL, ENVIRONMENTAL AND POPULATION HEALTH

Types of Health Innovations



TECHNOLOGY





PRACTICE



POLICY

Benefits of Research and Innovation

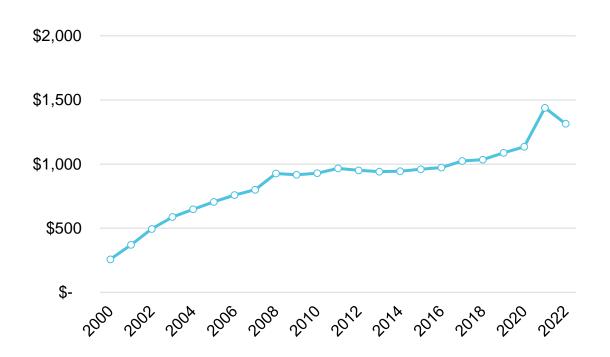
- Greater understanding of diseases, their prevalence and trends
- Novel, safe, effective and accessible treatments and interventions to prevent, treat and cure illness
- Improvement and modernization of health and social policies
- More effective models of care
- Better healthcare utilization and cost-efficiency
- Contribution to GDP and job creation
- Attraction of foreign direct investment



Health research is resource-intensive and requires financial contributions from a wide range of funders and investors.



CIHR Fiscal Year Investments since 2000 (in millions of dollars)



Total Research Investments by Leading Health Charities¹ in Canada since their Inception (in millions of dollars)



>\$6 billion invested by CIHR in Canadian health research since 2017.

\$614 million invested in research by leading health charities since 2017.



Appreciating the significant cost of health research, organizations need to show accountability to patients, shareholders and taxpayers.

Impact assessments allow organizations (including funders) to evaluate progress and performance of research investments, assess the financial and health impact of research projects objectively and plan for long-term success.

Scope of Evaluation

Project or Activity
Assessment

Focuses on a single project, activity or investment.

Organizational or Portfolio Assessment Focuses on the collective projects, activities or investments integral to an organization or portfolio.

Type of Evaluation

Formative Assessment

Conducted before or during a project/activity to assess feasibility and/or progress.

Summative Assessment

Conducted at the conclusion of a project/activity to assess the value and impact of outputs.



Organizations worldwide have developed evaluation frameworks to measure impact and return on investments in health research and innovation.



The UK <u>Payback Framework</u> leverages a logic model of that assesses traditional academic impact (e.g. publications) and broader societal benefits outputs (e.g. improved health, commercial exploitation of innovations) at every stage of the research process.



The <u>Canadian Academy of Health Sciences (CAHS) Framework</u> adapted the Payback Framework to capture broader categories of impact including knowledge advancement, capacity building, decision-making and policy, and health, social and economic impact.



The UK <u>Research Excellence Framework</u> was developed to assess the wider and more varied benefits of academic research—through the use of impact-oriented case studies—on the economy, society, culture, policy, health, environment and quality of life.



While existing frameworks are useful tools, there is no one-size-fits-all approach to assessing performance and impact.

Shift Health takes a customized approach to developing evaluation frameworks that reflects the complexity of health research and innovation and an organization's unique context.

Drivers of Complexity

Implication for the Assessment



Every organization is guided by a distinct mandate and set of objectives

A purpose-built evaluation framework will prioritize questions and metrics that align with an organization's mission or project's interests, thereby generating relevant insights and actionable outcomes.



Research impact can be measured using a wide range of traditional and non-traditional metrics

Integration of diverse metrics of impact and success are needed to capture the full value of research. An informative framework will consider not only traditional metrics of research impact (e.g. publications, patents), but also qualitative and/or non-traditional metrics.



Research involves diverse stakeholders with distinct knowledge, needs & priorities Stakeholder engagement can serve different purposes during an impact assessment. Understanding whom to engage during the design/selection of the evaluation framework, information gathering, analysis and reporting stages can influence relevance, quality and buy-in.



A purpose-built evaluation framework prioritizes questions and metrics that align with an organization's mission or project's interests.

The following questions can help align an evaluation framework with organizational goals:

How does the current research program/project advance organizational goals and direction?

What types of decisions should this impact assessment inform?

(e.g. strategic, scientific, operational, financial)

What does the organization hope to achieve through its research investments?

(e.g. knowledge generation, new interventions, revenue generation, capacity building)?

Achieving clarity on the specific questions to be answered through the impact assessment early on will guide the selection of critical dimensions and metrics to be explored.





Case Study: Prioritizing dimensions of interest to assess the impact of a large government partnership program

A ministry of agriculture wanted to assess knowledge transfer activities in its \$2B cross-governmental partnership program.

Early consultation with the client helped Shift Health focus the evaluation framework on priority dimensions and metrics that reinforced organizational interests.

The evaluation allowed Shift Health to provide strategic and operational recommendations that informed high-impact capacity building, education and training initiatives.

Identified Priority Dimensions of Interest

Effectiveness

Efficiency and Affordability

Needs/Gaps in the Field

Sustainability





Integration of diverse metrics of impact and success are needed to capture the full value of research.

- ◆ Impact assessments often examine traditional academic research metrics (e.g. peer-reviewed publications, impact factor, conference participation, IP generation).
- ◆ To assess the full value of a research project/program, additional metrics should be considered including:

Quantitative Metrics:

Examples: Budget, progress against timelines, tangible outputs, media reach, capacity building, students trained

Qualitative Metrics:

Examples: Stakeholder perspectives on challenges and opportunities, governance, management, patient engagement/stories, partnerships formed across sectors, change in policy/practices

◆ Understanding trends in the research field of interest and best practices or lessons learned by similar projects/programs/organizations provides additional context and means of comparison for a particular investment, project or activity.





Case Study: Leveraging traditional and non-traditional performance metrics to comprehensively assess a patient-oriented research program

A provincial research network sought to evaluate its organizational performance and impact on patientoriented research.

Shift Health developed a comprehensive evaluation framework that leveraged traditional and non-traditional performance metrics. Select examples include:

Research Investments:

- Amount of funding awarded to the project
- # of collaborations established
- # of outputs/outcomes resulting from the project (e.g. publications, patents, conference papers, new technologies, knowledge translation activities)

Education and Training:

- # of stakeholders engaged in developing and delivering training
- Knowledge gained as a result of the training
- Participant satisfaction

The evaluation provided the network with an understanding of progress to date and uncovered considerations to guide future decision-making and position the unit for greater impact.





Stakeholder engagement can serve different purposes during an impact assessment.

Recognizing that evaluations can be worrying for those directly involved in research, early, transparent and regular involvement of key stakeholders can ensure outcomes of the assessment are accurate, accepted and actionable.

Key stakeholders to engage may include:

Research funders in designing an evaluation framework that reflects funder/community priorities and interests

Study participants and collaborators at the data gathering stage to provide valuable feedback on their experience with the research process

Principal investigator(s) and their research teams during the design, data gathering and analysis stages to support accuracy and acceptance of the assessment

External experts and partners in the data gathering stages to provide an external, objective perspective on research progress and ensure the outputs of the research project/program are impactful for the field



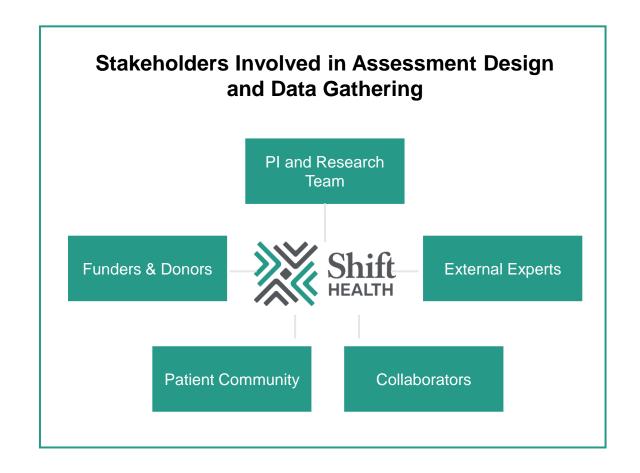


Case Study: Building trust and buy-in among stakeholders when assessing a research study

A large charitable research funder sought to evaluate the progress and impact of a landmark longitudinal study.

Shift Health built trust, comfort and buy-in with both the research funder and the principal investigator by cocreating an evaluation framework that integrated diverse data types and stakeholder perspectives.

The final recommendations were endorsed by the organization's leadership and used to position the study for stronger performance and impact.





Impact assessments have the potential to generate the evidence needed to optimize research projects and investments.

Customized and rigorous impact assessments can help organizations:



Validate and clarify organizational strategic directions



Identify opportunities to improve project/program impact



Reinforce funding priorities and build confidence among investors/donors



Optimize research governance and management processes



Achieve greater satisfaction and engagement of stakeholders



Sharpen communication and articulate impact



Track Record Highlights

Shift Health has extensive experience conducting program evaluations and impact assessments.

Shift Health applies a science mindset to support research funders, health charities, academic leaders and industry clients to:

- ◆ Assess the performance and impact of an organization against its core mandate and translate lessons learned into future efforts
- ◆ Review a portfolio of activities/initiatives to understand what is or is not working well
- ◆ Evaluate a specific research project, activity or investment to understand progress and outputs
- ◆ Communicate performance impacts to stakeholders, funders and the broader public

20 **YEARS** 300+ supporting health **CLIENTS** research and across the health innovation ecosystem globally 50+ \$2B+ R&D RAISED **PARTNERSHIPS** to support health successfully R&D efforts implemented

Shift Health welcomes the opportunity to explore how we can support your organization in evaluating and communicating the *true* impact of your activities or investments.



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