



MINISTRY OF HEALTH AND LONG-TERM CARE

MEASURING HEALTH RESEARCH FUNDING IMPACT IN ONTARIO
The Health System Research Fund (HSRF) Impact Assessment Framework

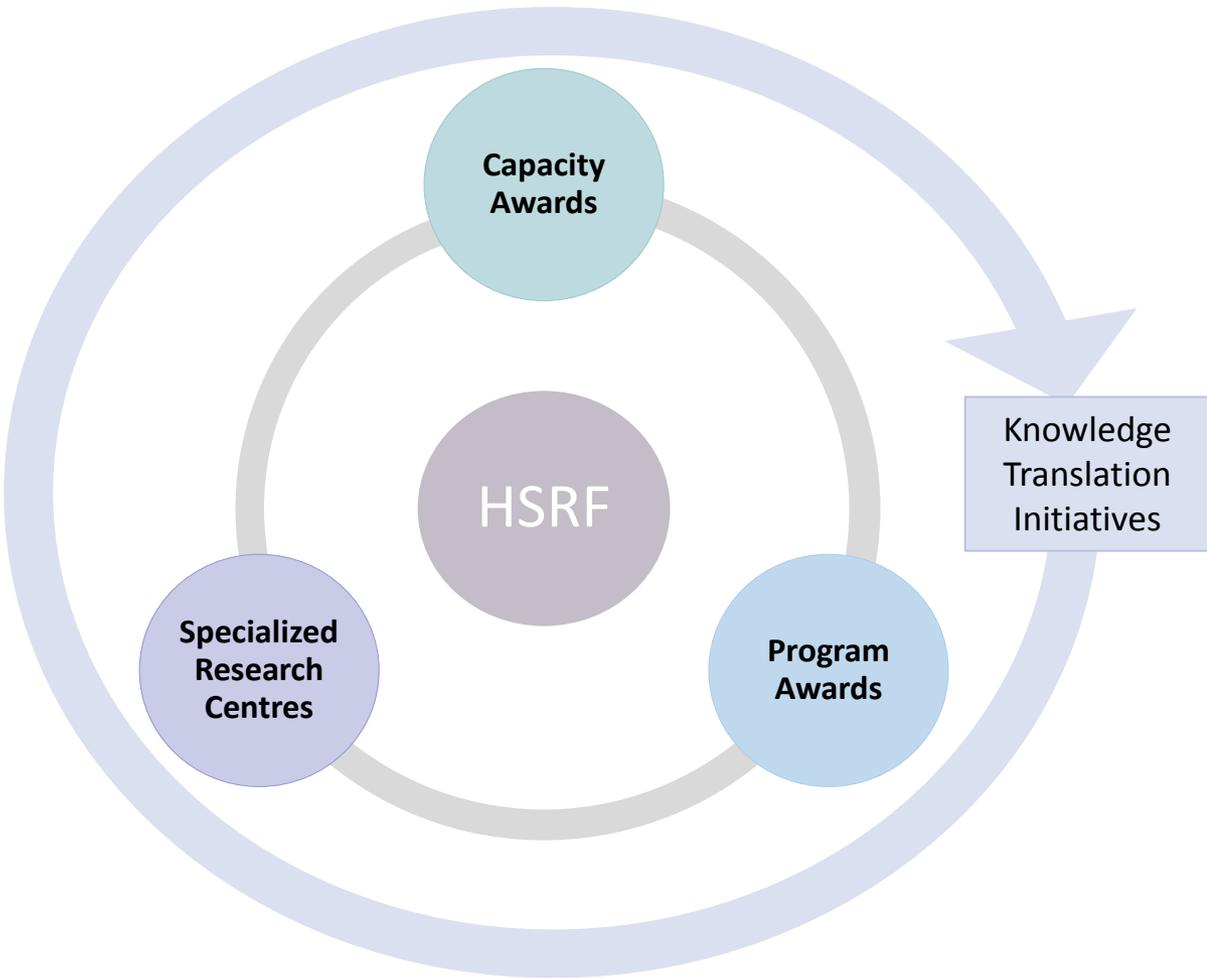
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The Ontario Ministry of Health and Long-Term Care's (MOHLTC) Health System Research Fund (HSRF) provides competitive funding to health system and population health research to:

- Build research capacity in Ontario;
- Strengthen the uptake and use of evidence into policy and decision-making;
- Promote research that supports and informs Ontario's Action Plan for Health Care, *Patients First*, including:
 - Faster access to quality health services;
 - A caring and integrated experience for patients;
 - Support for patients to make the right decisions about their health; and,
 - Sustainability of our universal health care for generations to come.

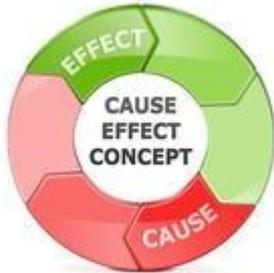
The HSRF supports research and knowledge translation and exchange activities to address important and complex health issues in Ontario. The HSRF is designed to offer a range of opportunities to researchers and teams across the province. Three main streams of support form the foundation of the fund.



Increasingly, it is becoming important to demonstrate the impact of research investments both in Ontario and across provincial jurisdictions. However, it remains challenging to measure outcomes in a research and Knowledge Translation and Exchange (KTE) context. Here are some of the reasons:



- Heterogeneity of evaluation methodologies, data collection techniques and performance measures used.



- Difficulty attributing causality between research/KTE outputs and impacts.



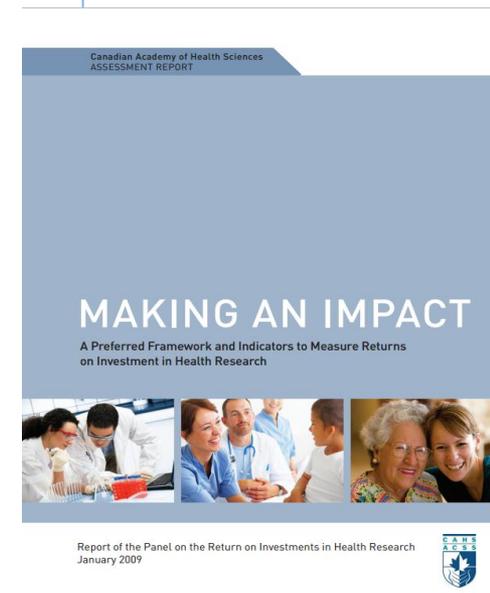
- Delayed impact on policy due to externalities.

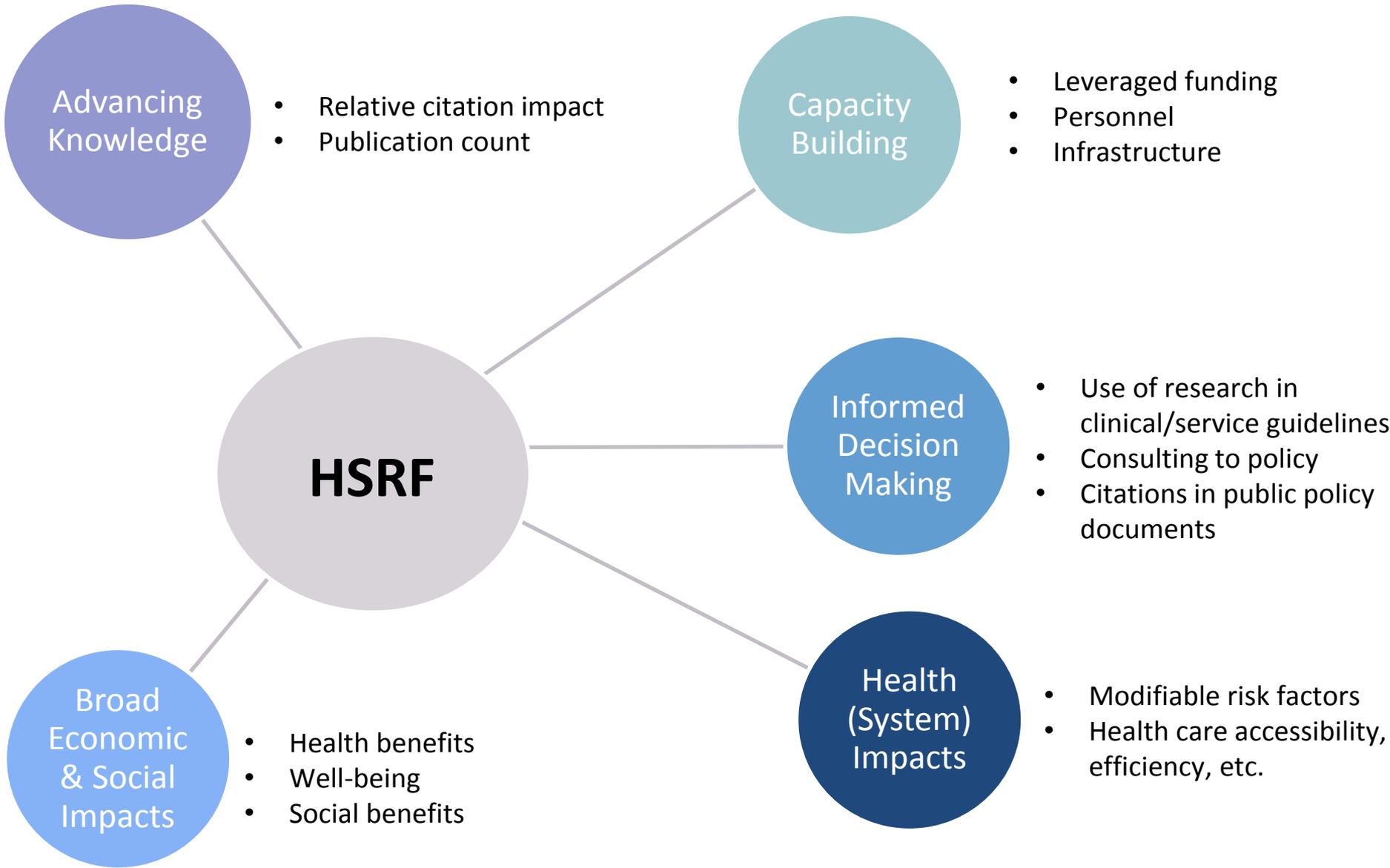
Goals:

1. To document the development of a conceptual framework in measuring different domains of research impact; and,
2. To demonstrate the impact of research projects funded by the HSRF on health policy and practice.

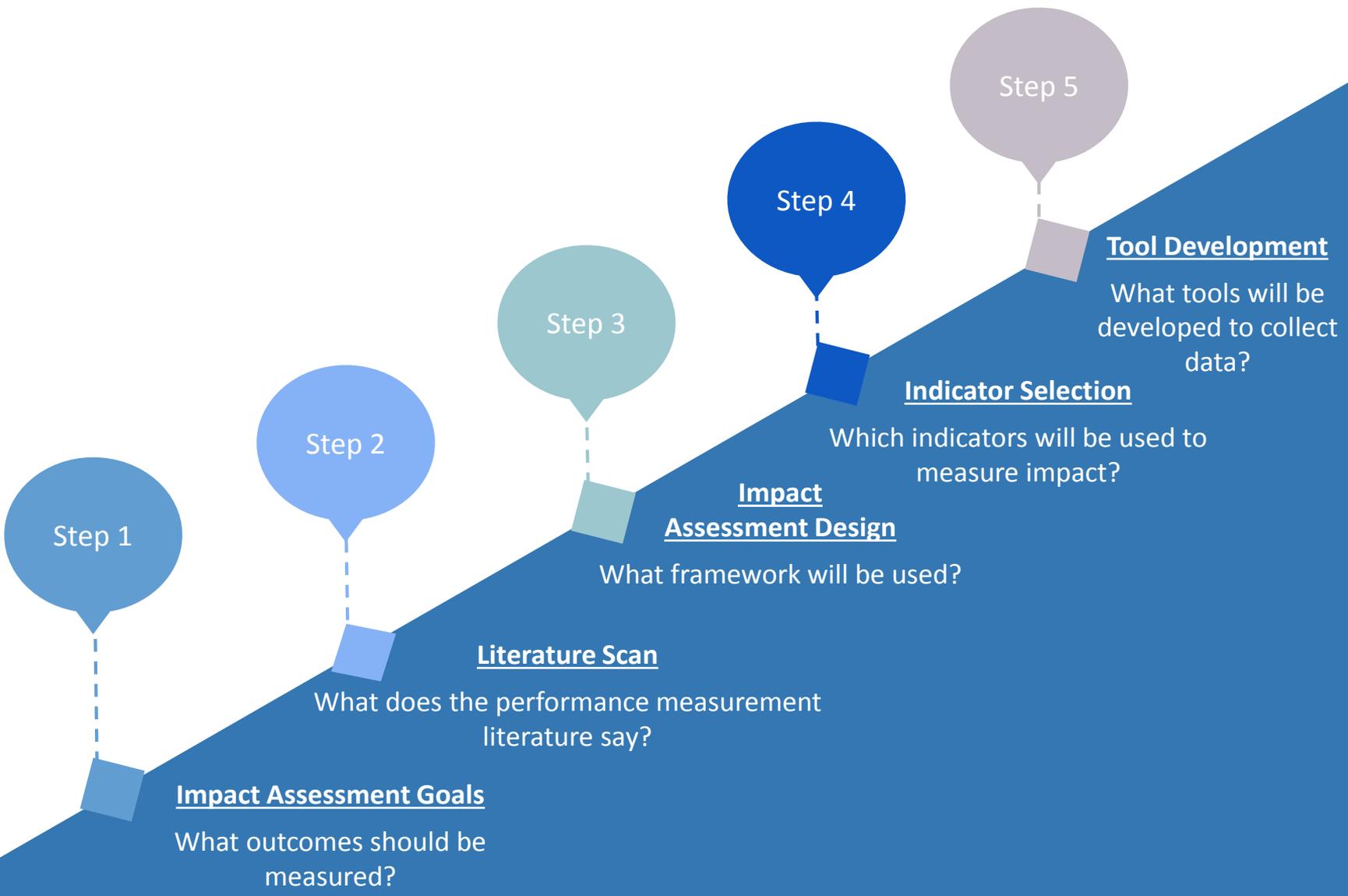
Methods:

- A mixed methods design was used to evaluate the impact of HSRF investments.
- Two performance measurement tools were developed to capture outcomes from the funded recipient and knowledge user perspective.
 - Both tools are survey questionnaires administered annually.
- Two reviewers independently coded qualitative data using Nvivo.
- Quantitative data were analyzed using descriptive analyses.
- The Canadian Academy of Health Sciences (2009) framework provided the foundation for both quantitative and qualitative analyses. Additional frameworks were used to guide qualitative analyses.





*Canadian Academy of Health Sciences (2009). *Making an impact: A preferred framework and indicators to measure returns on investment in health research*. Report of the Panel on the Return on Investments in Health Research.



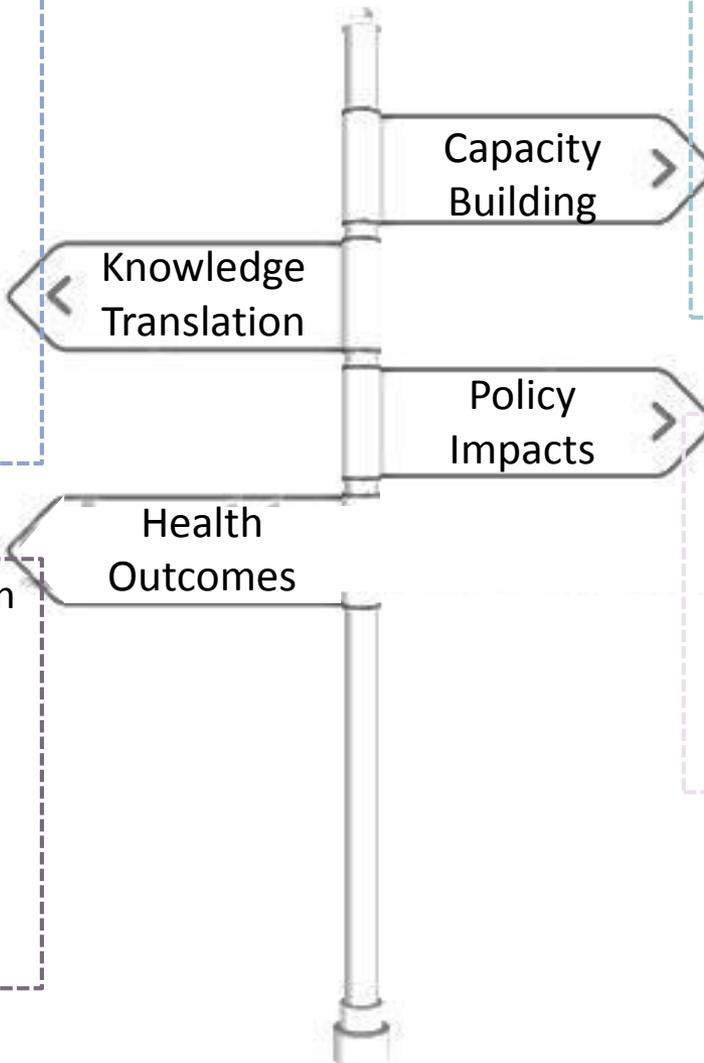
<p>Productivity/ Impact Questionnaire</p>	<p>PERSPECTIVE: FUNDED RECIPIENT</p> <ul style="list-style-type: none">• Four-part questionnaire administered annually to HSRF recipients (n=22 in 2013/14)• Grounded in the CAHS Framework (2009)• Evaluates research impact on policy & Ontarian's health outcomes• Tracks progress towards HSRF target outcomes• Includes a qualitative self-reporting section used as the basis for multiple analyses• Includes quantitative and qualitative indicators
<p>Knowledge User Survey</p>	<p>PERSPECTIVE: KNOWLEDGE USER</p> <ul style="list-style-type: none">• Three-part electronic survey administered annually to knowledge users (n=21 in 2013/14)• Grounded in the knowledge translation & implementation science literature• Evaluates research impact on knowledge users' work• Aims to improve knowledge users' experience in the research/KTE process• Includes quantitative and qualitative indicators

Sample Indicators

- **Citations:** Total # of citations in public policy, peer-reviewed journals, advocacy/consumer publications, and traditional media
- **Knowledge user engagement:** Degree of knowledge user involvement

System-level impacts: Proportion of reported impacts per system-level variable

Population-level impacts: Proportion of reported impacts per health and socio-economic variable

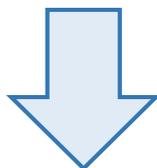


- **Leveraged funding:** total \$CAD leveraged/fiscal year
- **Human resources:** # of trainees who completed primary graduate/post-doctoral work

- **Research uptake:** proportion of reported impacts per type of policy use
- **Collaborations:** Degree of impact on knowledge users' work

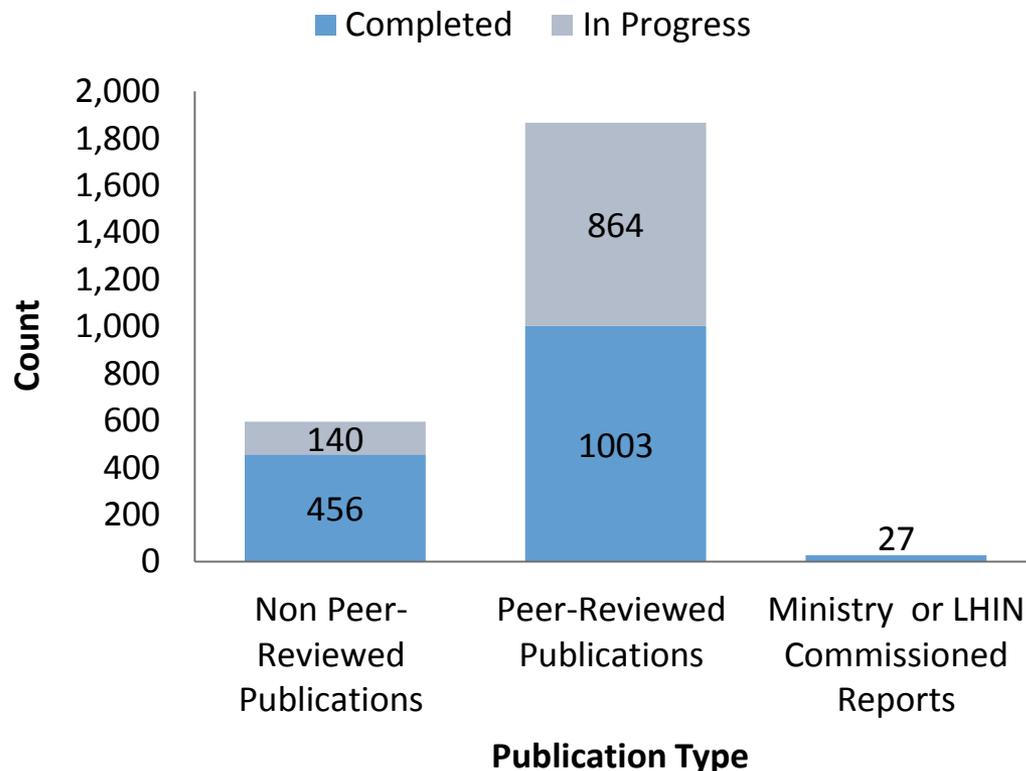
Preliminary Findings

In 2013/14 HSRF-funded researchers were cited over **5000** times. Citation types ranged from peer-reviewed journals to media releases.



Citation Type	Count
Public policy documents	29
Peer-reviewed journals	4,992
Advocacy/consumer group publications	11
Traditional media	224
Total	5,256

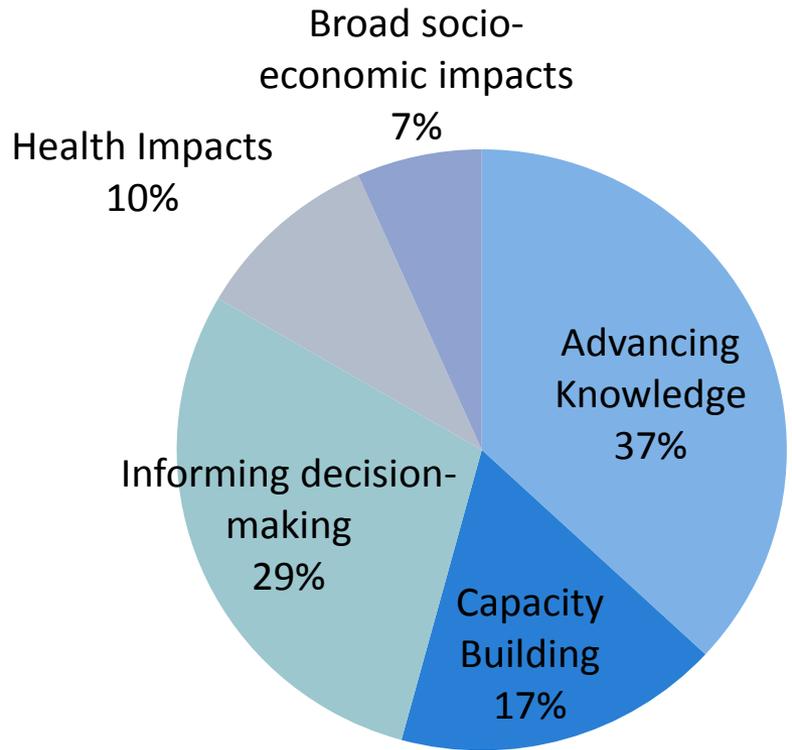
Total Number of Publications Completed and in Progress (FY 2013/14)



In 2013/14, HSRF-funded researchers completed a total of **1486** publications; **1004** publications are currently under development.

In total, 271 self-reported impacts were coded across HSRF recipients and categorized based on the CAHS domains.

Self-Reported Impacts Across CAHS Domains* (FY 2013-14)

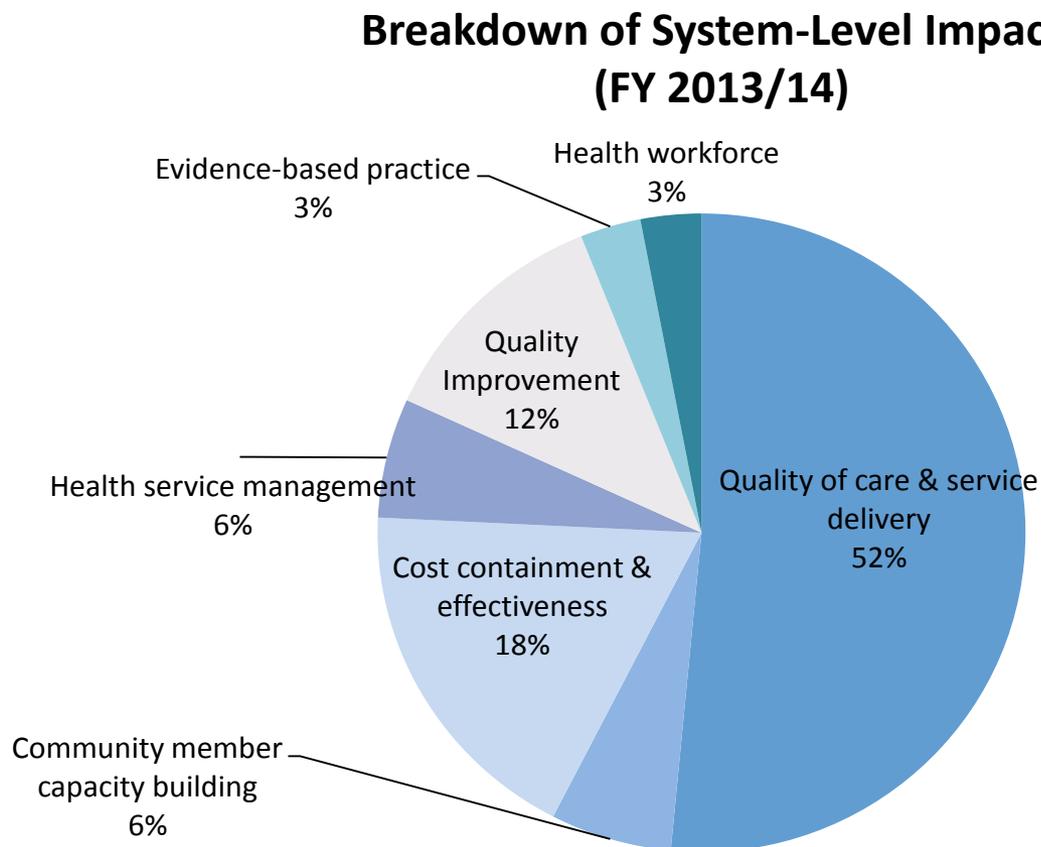


Impacts within each CAHS domain were then further categorized into sub-categories, within each CAHS domain.

*Canadian Academy of Health Sciences (2009). *Making an impact: A preferred framework and indicators to measure returns on investment in health research*. Report of the Panel on the Return on Investments in Health Research.

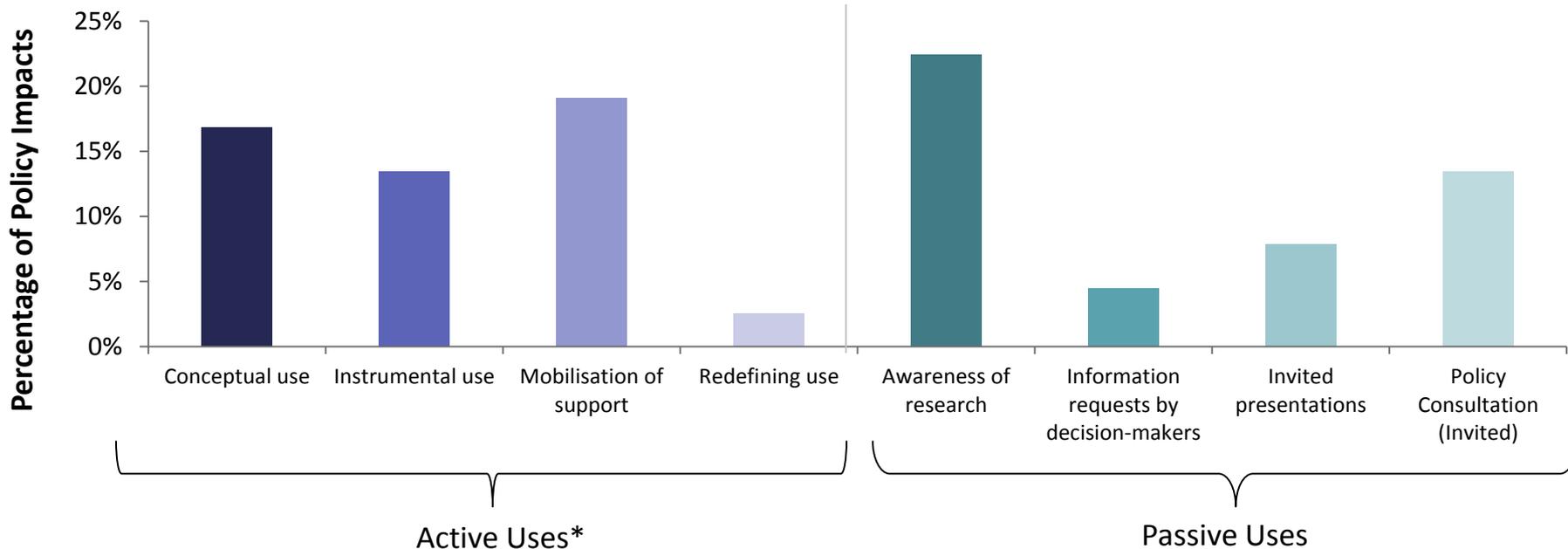


In total, 52 self-reported health impacts were coded and broken down into system-level vs. population-level health impacts. The graph below represents the percentage of **system-level** impacts, coded by sub-category.



*Based on Kuruvilla, S., Mays, N., Pleasant, A., and Walt, G. (2006). Describing the impact of health research: a Research Impact Framework. *BMC Health Services Research*, 6(134), 1-18 and Buykx, P. et al. (2012). 'Making evidence count': A framework to monitor the impact of health services research, *Aust. J. Rural Research*, 20. 51-58.

Level of Research Uptake in Policy (FY 2013/14)



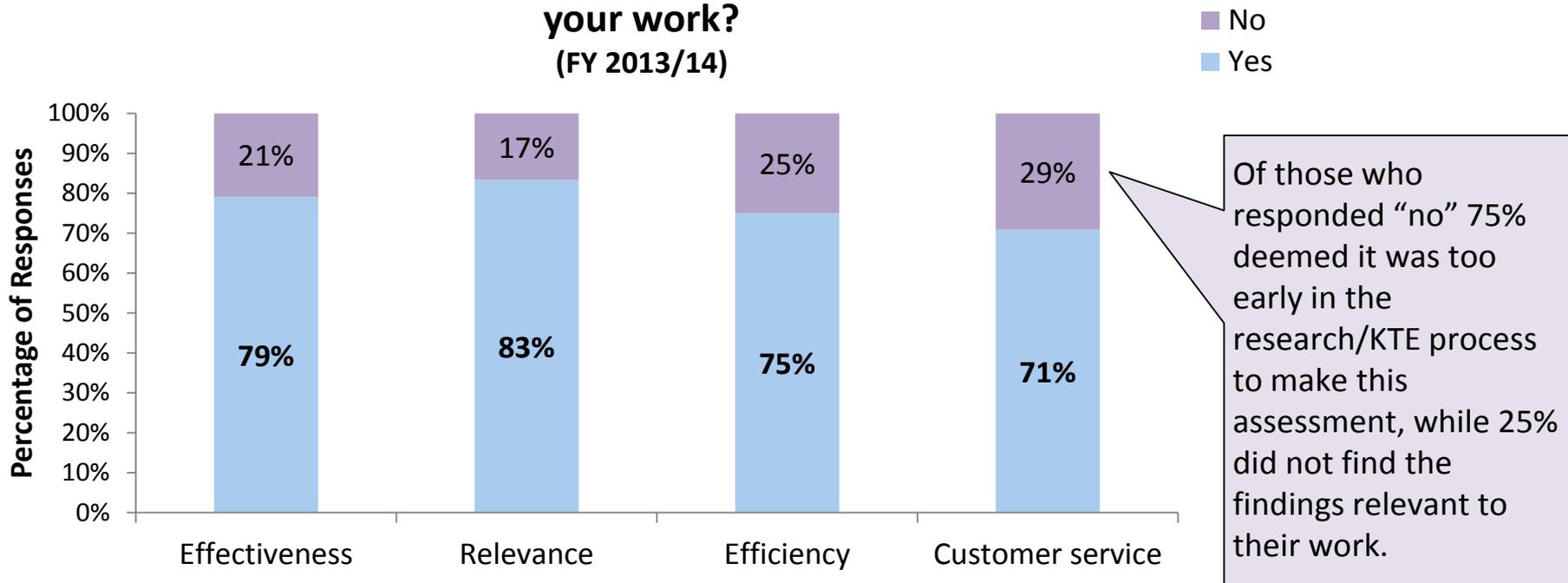
In total, 89 self-reported policy impacts were recorded; **52%** of research/KTE outputs were **actively used to inform policy**.

Research influences policy both through active and passive routes. The former involves the active use or application of research/KTE outputs in policy.

Passive use of research outputs might result in awareness of research results but does not necessarily imply research uptake into policy.

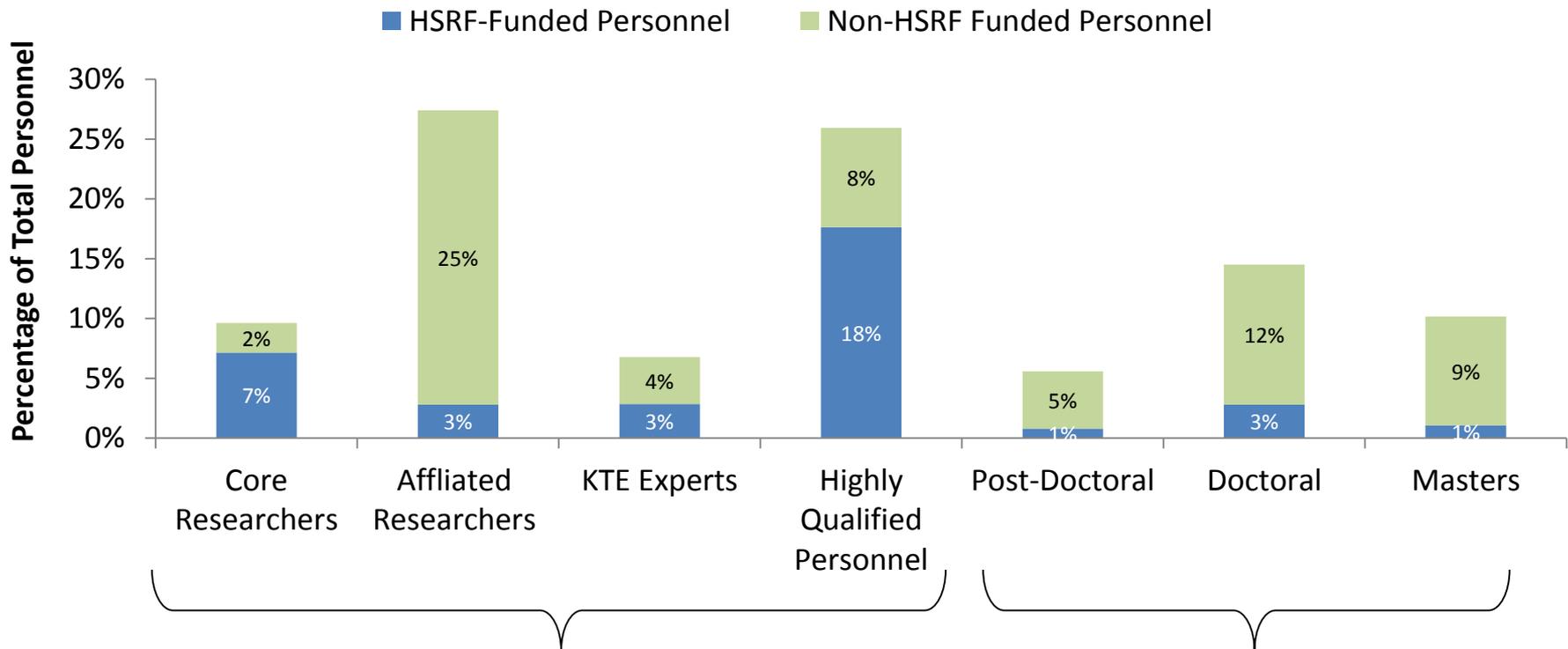
*Based on Kuruvilla, S., Mays, N., Pleasant, A., and Walt, G. (2006). Describing the impact of health research: a Research Impact Framework. *BMC Health Services Research*, 6(134), 1-18.

Has collaboration with your research/KTE partner(s) resulted in notable improvements in any of the following areas of your work? (FY 2013/14)



HSRF projects positively impacted knowledge users’ work, with 77% indicating improvements in effectiveness, relevance, efficiency and/or customer service.

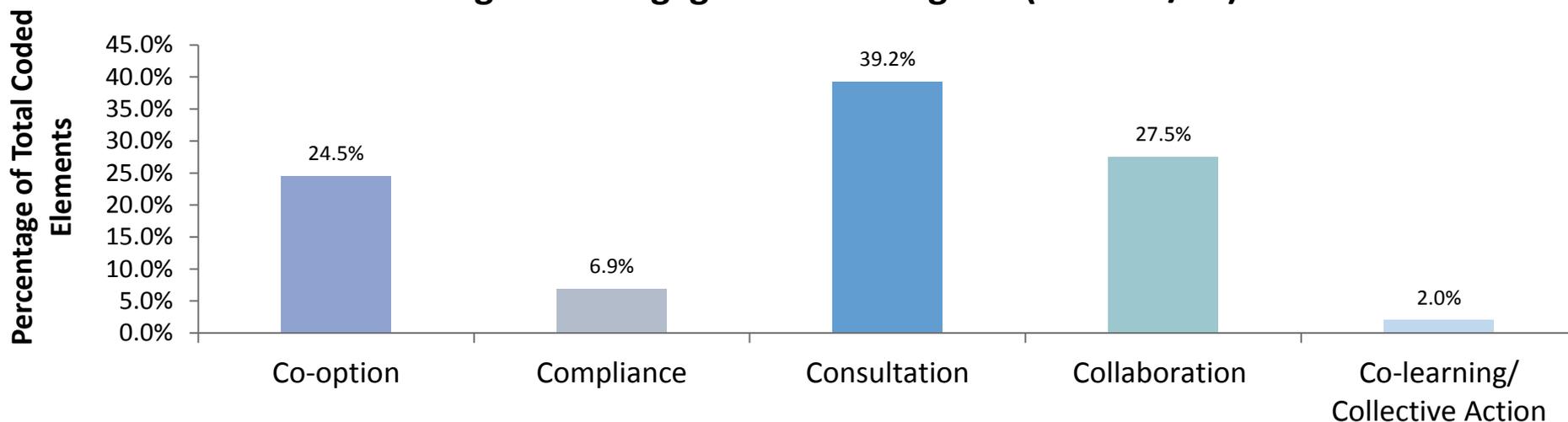
Breakdown of HSRF- and non HSRF-Funded Personnel (FY 2013/14)



The HSRF funds the greatest proportion of Highly Qualified Personnel, followed by Core Researchers. Employing a larger number of Highly Qualified Personnel is a cost-effective way to increase research capacity.

Overall trainees make up 31% of all personnel associated with HSRF funded projects.

Knowledge User Engagement Strategies* (FY 2013/14)



Knowledge user engagement increases

The most common forms of Knowledge User engagement in research are *consultation*, *co-option* and *collaboration*:

- In *co-option*, **Knowledge Users are identified** but not engaged in a meaningful way (i.e. they do not have any control over the research process).
- In *consultation*, **Knowledge Users' opinions are asked** but there is no commitment from the research team to adopt these recommendations.
- In *collaboration*, researchers **partner with Knowledge Users** in an active and ongoing manner over the course of the project, and control is shared.

*Based on Truman, C. & Raine, P. (2001). Involving users in evaluation: the social relations of user participation in health research. *Critical Public Health*, 11(3), 215-29 and Szmukler, G., Staley, K. & Kabir, T. (2011). Service user involvement in research. *Asia-Pacific Psychiatry*, 3, 180-6.

The MOHLTC Impact Assessment Framework provides a systematic means of capturing how research/KTE outputs are used to inform health care policy and practice.

Evaluating impacts from the funded recipients' and knowledge users' perspective helps understand the HSRF's emerging impact on the health of Ontarians and Ontario's health care system.

However, a number of limitations remain, including:

- Difficulty establishing causality between HSRF-funded research/KTE outputs and reported impacts;
- Data collection was limited by the information reported by HSRF-funded recipients & knowledge users;
- Limited number of empirically-based tools to measure research impact on policy and health system outcomes;
- Limited ability to carry out time series analyses due to inconsistent measures in place prior to/following the creation of the HSRF; and,
- Manual data extraction and entry, possibly resulting in omissions or errors.

Ontario Ministry of Health and Long-Term Care

- **Dr. Shannon Fenton**, Manager
- **Christine Cobbler**, Policy Assistant (*on leave*)
- **Alexandra Clemmensen**, Senior Research/Planning Advisor
- **John Ward**, Research/Planning Analyst (*previously*)

Other

- **Dr. Vansanthi Srinivasan**, Founding Executive Director, Ontario Strategy for Patient-Oriented Research (SPOR) SUPPORT Unit
- **Dr. Alison Paprica**, Director, Strategic Partnerships, Institute for Clinical Evaluative Sciences (ICES)

We would also like to thank all HSRF recipients and knowledge users who completed the Productivity/Impact Questionnaire and Knowledge User Survey.

Selected Resources:

- Buykx, P., et al. (2012). 'Making evidence count': A framework to monitor the impact of health services research, *Aust. J. Rural Research*, 20, 51-58.
- Canadian Academy of Health Sciences (2009). *Making an impact: A preferred framework and indicators to measure returns on investment in health research*. Report of the Panel on the Return on Investments in Health Research.
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- Kuruville, S., Mays, N., Pleasant, A., and Walt, G. (2006). Describing the impact of health research: a Research Impact Framework. *BMC Health Services Research*, 6(134), 1-18.
- Kuruville, S., Mays, N., and Walt, G. (2007). Describing the impact of health services and policy research. *Journal of Health Services Research & Policy*, 12(S1), 23-31.
- Mathie, E. et al. Consumer involvement in health research: a UK scoping and survey. (2014). *International Journal of Consumer Studies*, 38, 35-44.
- Szmukler, G., Staley, K. & Kabir, T. (2011). Service user involvement in research. *Asia-Pacific Psychiatry*, 3, 180-6.
- Truman, C. & Raine, P. (2001). Involving users in evaluation: the social relations of user participation in health research. *Critical Public Health*, 11(3), 215-29.

Strategic Priority Research Areas

- Community-based Care
- Innovation, with a focus on drugs
- Healthy Living, with a focus on tobacco control
- Health System Performance and Sustainability
- Mental Health and Addictions
- Nursing Research
- Primary Care Reform
- Problem Gambling
- Quality Improvement and Safety
- Seniors' Care
- Women's Health
- Vulnerable and Special Health Needs Populations

Types of Research Use in Policy*	Definition
<i>Conceptual use</i>	Research concepts and ideas influence and are reflected in policy discourse and debates.
<i>Instrumental use</i>	Research and evaluation findings directly influence or drive policy.
<i>Mobilisation of support</i>	Research findings provide persuasive evidence to support ongoing/proposed policies or raise support for new policies.
<i>Redefining use</i>	Research results in widespread changes in accepted beliefs and practices.

*Kuruville, S., Mays, N., Pleasant, A., and Walt, G. (2006). Describing the impact of health research: a Research Impact Framework. *BMC Health Services Research*, 6(134), 1-18.

Mode of Participation	Definition
Co-option*	Representatives are chosen but no real action
Compliance*	Tasks are assigned, with incentives; researchers decide the agenda and direct the process
Consultation***	Users' opinions are asked, researchers analyse and decide on a course of action. There is no undertaking by the research team to adopt the service user recommendations but the project may be significantly influenced by them.
Cooperation*	Users work together with researchers to determine priorities; responsibility remains with researchers for directing the process (i.e. power sharing is minimal)
Collaboration**	Active, ongoing partnership with service users over the course of the project. There is a commitment from the research team that control over the project will be shared to a greater or lesser extent
Co-learning*	Users and researchers share their knowledge to create new understanding and work together to form action plans with researcher facilitation
Collective Action*/User Control**	Users set their own agenda and mobilize to carry it out, in the absence of outside researchers or facilitators

*Truman, C. & Raine, P. (2001). Involving users in evaluation: the social relations of user participation in health research. *Critical Public Health*, 11(3), 215-29.

**Szmukler, G., Staley, K. & Kabir, T. (2011). Service user involvement in research. *Asia-Pacific Psychiatry*, 3, 180-6.

***Cited in both of the above resources.