

## A Results Chain Typical Indicator and Measurement “Menu” for CCSRI Programs and Initiatives

The following represents a typical indicator and measurement menu based on the results chain model for CCSRI programs and initiatives.

**Notes:**

- The typical indicator and measurement menu can be used retrospectively (for evaluating) and prospectively (for planning and performance management).
- The typical indicator and measurement menu is used in monitoring and evaluating CCSRI programs.
- The typical indicator and measurement menu facilitates consistent program monitoring and evaluations by providing a common framework by which to assess all programs.
- Indicators are selected based on their relevance to the program being monitored / evaluated (i.e. choosing indicators that most closely reflect program activities and objectives).

Chain of Results	Hierarchy of Evaluation Criteria	Typical Indicators	Typical Sources/Methods
7. End Results	Measures of impact on overall problem, ultimate goals, side effects, social and economic consequences	<ul style="list-style-type: none"> <li>• Reduced cancer incidence rates for Canadians</li> <li>• Reduced cancer mortality rates for Canadians</li> <li>• Enhance quality of life for Canadians living with and beyond cancer</li> </ul>	<ul style="list-style-type: none"> <li>• Specialized analyses/ evaluations</li> <li>• Statistical agency data</li> <li>• Canadian cancer statistics</li> <li>• Analytical and policy groups</li> </ul>
6. Practice & Behaviour Change	Measures of adoption of new practices and behaviour over time	<ul style="list-style-type: none"> <li>• Research used (knowledge transfer, practice adoption) by scientists, policy makers, institutions, health care practitioners, program delivery experts, advocates, etc.</li> <li>• Research and advice influences policy, practice and research environments</li> <li>• Research used in training of new researchers (e.g. citation in text books and reading lists)</li> <li>• Research cited in ongoing health professional education material</li> <li>• Research cited in clinical and service guidelines</li> <li>• Research cited in public policy documents</li> <li>• Research cited in advocacy publications</li> </ul>	<ul style="list-style-type: none"> <li>• Physical Observation</li> <li>• Inspections, Reviews</li> <li>• Surveys</li> <li>• Evaluation Studies</li> <li>• Content Analysis</li> <li>• Bibliometrics</li> </ul>

Chain of Results	Hierarchy of Evaluation Criteria	Typical Indicators	Typical Sources/Methods
		<ul style="list-style-type: none"> <li>• Research cited in scientific literature</li> <li>• Research commercialization (e.g. number of patents licensed)</li> <li>• Trainees launch careers in cancer research</li> </ul>	
5. Knowledge, Attitude, Skill and Aspiration Changes	Measures of individual and group changes in knowledge, abilities, skills and aspirations	<ul style="list-style-type: none"> <li>• Commitment to specific areas of science, research, practice protocol or policy change by scientists, policy makers, institutions, health care practitioners, advocates, etc.</li> <li>• Understanding of key related science information generated through research by scientists, policy makers, institutions, health care practitioners, advocates, etc.</li> <li>• Development of new knowledge in cancer research</li> <li>• Development of new methods in cancer research</li> <li>• Dissemination of research findings via peer-reviewed publications in journals with high “impact factors”</li> <li>• Dissemination of research findings via non-peer-reviewed publications, technical reports, videos, etc.</li> <li>• Dissemination of research findings via presentations</li> <li>• Consultations/briefings to policy makers, advocates, industry, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Independent review of target groups</li> <li>• Content Analysis</li> <li>• Survey, group self-assessment</li> <li>• Testing/Certification</li> <li>• Bibliometrics</li> </ul>
4. Reactions	What participants and other stakeholders say about the program; satisfaction; interest, strengths and weaknesses	<ul style="list-style-type: none"> <li>• Program recognition and support (e.g. honours, awards, advisory committee memberships, leadership roles, etc.) from key stakeholders, target groups, participants, etc.</li> <li>• Media coverage (broad or targeted) of research and program activities</li> <li>• Media requests for expert commentary</li> </ul>	<ul style="list-style-type: none"> <li>• Usage/participation tracking</li> <li>• Correspondence content analysis</li> <li>• Surveys</li> <li>• Media content analysis</li> </ul>
3. Engagement & Participation	The characteristics of program participants and	<ul style="list-style-type: none"> <li>• Engagement with other research centres, networks, academic institutions, government agencies, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Web use tracking</li> <li>• Correspondence content</li> </ul>

Chain of Results	Hierarchy of Evaluation Criteria	Typical Indicators	Typical Sources/Methods
	other stakeholders; number, nature of involvement, and background	<ul style="list-style-type: none"> <li>• Engagement by stakeholders, target groups, participants, etc.</li> <li>• Multidisciplinary and/or multisectorial research activities</li> <li>• Recruitment and retention of stakeholders, target groups, participants, etc. (e.g. junior investigators, researchers, review panellists, etc.)</li> <li>• Established external scientific advisory board(s)</li> </ul>	<p>analysis</p> <ul style="list-style-type: none"> <li>• Observation of meetings/events</li> <li>• Meeting attendance records</li> <li>• Stakeholder relationship management/tracking (e.g. contracts and agreements)</li> <li>• Surveys</li> </ul>
2. Activities & Outputs	Implementation data on what the program actually offers	<ul style="list-style-type: none"> <li>• Research conducted as per internal review guidelines</li> <li>• Training / teaching conducted</li> <li>• Significance of research and its appropriateness in the context of CCS Strategic Plan</li> <li>• Plans, strategies, frameworks, etc. are delivered as per expectations (expected timelines, resource usage and quality levels)</li> <li>• Governance structure adheres to internal guidelines</li> <li>• Policy and financial decisions are made according to senior management and/or expert advisory committee(s) accepted guidelines and standards</li> <li>• Internal and external communication strategies adhere to internal standards and protocols, and policies (standard operating procedures)</li> <li>• Effectively monitor and evaluate research programs and activities</li> </ul>	<ul style="list-style-type: none"> <li>• Project/Initiative tracking</li> <li>• Project Reports</li> <li>• Content analysis or records</li> <li>• Peer-review</li> <li>• Operating Reviews</li> <li>• Risk Analysis</li> </ul>
1. Inputs	Resources expended; number and types of staff involved; time expended	<ul style="list-style-type: none"> <li>• Highly Qualified Personnel</li> <li>• Human resources (staffing) at all levels (according to norms, vacancies, expectations, benchmarks)</li> <li>• Financial resources (including leverage funding and in-kind support) at all levels</li> </ul>	<ul style="list-style-type: none"> <li>• Budget Analysis</li> <li>• Time, reporting and budget/plan review</li> <li>• Activity-based costing</li> </ul>