Knowledge Translation Activities in Cancer Surveillance in Canada:

An Environmental Scan

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What did we set out to understand?

Introduction

As the principal cancer advisor to the government of Ontario, Cancer Care Ontario plays an important role in equipping health professionals, organizations and policy makers with the most up-to-date cancer knowledge and tools to prevent cancer, inform cancer control policies and deliver high-quality patient care. Cancer surveillance is a cornerstone of this work. Cancer Care Ontario conducts routine cancer surveillance through the systematic collection, analysis, interpretation and dissemination of information on cancer in Ontario.

It is well recognized that effective knowledge translation (KT) is integral to the uptake of cancer surveillance information.[1, 2] To enhance the utility of Ontario cancer surveillance information, Cancer Care Ontario's Cancer Surveillance program has developed a model to describe and conceptualize their approach to cancer surveillance KT activities. This model is a modified approach of the Canadian Partnership Against Cancer's (CPAC) *Cancer Surveillance KT Action List.*[2] In this model, KT activities are framed as falling into one of three domains, which align with the key processes highlighted in the definition of KT described by the Canadian Institutes of Health Research.[3] These domains are knowledge synthesis, exchange and dissemination.

Objectives

To share learnings and inform recommendations for future KT activities, we set out to identify:

a) Published KT frameworks in the area of cancer surveillance; and
b) KT strategies in cancer surveillance implemented across the domains of knowledge synthesis, exchange and dissemination by cancer agencies across Canada

Methods

This descriptive study was conducted as an environmental scan comprised of three components:

1 Literature Search

- An academic and grey literature search was performed to identify best practices for KT in cancer surveillance
- The areas of focus were knowledge synthesis, exchange and dissemination

2 Focused Internet Scan (provincial agencies)

- A focused Internet scan of provincial cancer agency websites was conducted to identify KT and cancer surveillance activities implemented in Canada
- A data collection tool was developed to categorize these activities according to Cancer Care Ontario's model

3 Key Informant Interviews

- Key informant interviews were conducted with surveillance staff from six provincial cancer agencies to augment the information collected from the Internet scan
- Provincial profiles of KT activities were created from the findings for each province to validate

Data collected from the scan was analyzed via deductive thematic analysis.

What did we find?

Results

The literature review (1) retrieved limited information. No additional KT frameworks specific to cancer surveillance were found in the literature other than CPAC's *A knowledge translation (KT) framework for Canadian cancer surveillance*.[2] Among the provinces, only Ontario specifically applies a modified KT framework specific to cancer surveillance, informed by CPAC's model.[2] Select findings from the focused Internet scan (2) and key informant interviews (3) are shown here.

Knowledge Synthesis

Table 1. Select knowledge products and tools

	AB	MB	BC	NB	NS*	ON
Reports	✓	✓	✓	✓	✓	✓
Aggregate Data	✓	✓	✓	✓	✓	✓
Interactive Tool- Dashboard	✓				✓	✓
Interactive Tool- Report	✓					
Fact Sheets					✓	✓

- All provinces publish a cancer statistics report as a key product
- Ontario, British Columbia and New Brunswick disseminate aggregate data through the SEER*Stat statistical software tool
- Alberta, Nova Scotia and Ontario provide interactive data request tools where knowledge users can access custom data

Knowledge Exchange

Table 2. Knowledge exchange activities

	AB	MB	BC	NB	NS*	ON
Email Mailbox	✓	✓	✓	✓	✓	✓
Toll-free #					✓	
Stakeholder Consultations	✓	✓	✓	✓	✓	✓
Advisory Committee(s)	✓		✓	✓	✓	✓

- Stakeholder consultations are a major exchange activity to strengthen two-way dialogue
- Advisory committee(s) are used by most provinces to build capacity and set priorities

Knowledge Dissemination

Table 3. Key dissemination channels/methods

	AB	MB	BC	NB	NS*	ON
Newsletter		✓	✓		✓	✓
Direct Email	✓	✓	✓	✓		✓
Website	✓	✓	✓	✓	✓	✓
Conferences					✓	✓
Peer-Review Journals		✓	✓	✓	✓	✓
Traditional Media	✓	✓	✓	✓	✓	✓
Social Media		✓				✓
Networks		✓	✓			✓
Opinion Leaders	✓	✓	✓	✓	✓	✓

- Conferences are less popular among provinces; however, most provinces disseminate information via peer-review journals
- Peer-review journals are a key channel for reaching specific target audiences (e.g., healthcare providers)
- Traditional media outlets such as media interviews and news articles are popular
- Opinion leaders and champions are considered essential KT strategies by all provinces

*The information for this province is still undergoing validation by the key informant.

What did we learn?

Discussion

- Five of the six provinces interviewed believe KT is essential to their cancer surveillance program.
- Amongst the provinces included in this study, there are common KT strategies used to increase the uptake and application of cancer surveillance information.
- KT strategies differ between provinces depending on the agency's funding, governance structure, leadership support and capacity.
- Interactive knowledge products and tools should be considered ideal strategies to increase the uptake of cancer surveillance information.[4]
- Few provinces take advantage of social media channels or blog posts; however, these channels offer alternative learning opportunities and can further enrich communications.[5]
- The findings from this research study re-open conversations regarding KT in cancer surveillance among Canadian provinces.

What's next?

Conclusions

Significance	KT plays an integral role in the uptake of cancer surveillance information
Recommendations	A framework specific to cancer surveillance is recommended to guide effective KT practice
Future Directions	KT activities in cancer surveillance should be evaluated to establish best practices

References:

1. Health Canada. *Canadian Strategy for Cancer Control* [Internet]. 1999. **2.** Turner et al. *A knowledge translation (KT) framework for Canadian cancer surveillance* [Internet]. 2009 **3.** Canadian Institutes of Health Research. *Knowledge Translation at CIHR*. [Internet]. 2016 **4.** Field et al. *Implementation Science.* 2014 *23*: 1 **5.** Hawn C. *Health affairs.* 2009 28:361-368.

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