A Tale of Two University-Based Health Technology Assessment Initiatives

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Introduction

Health technology assessment is becoming an increasingly important area of scientific research and policy application in Canada. The national technology agency (CCHTA) is extremely ambitious and growing fast, but its growth is constrained by the quality and quantity of existing research capacity.

An increase in capacity for HTA, through R&D and training programs, is required.

Aim

To survey existing HTA capacity in Canada, including HTA training programs, HTA courses, and key academic courses related to HTA.

To describe the HTA training program at the University of Alberta and the HTA training initiatives at the University of Toronto.

Methods

Web-Based Survey of HTA Capacity

The Google search syntax used generally restricts to “Pages from Canada” and uses “synonym search” (i.e., prefaced by a tilde for relevant keywords identified from the titles (i.e., “allintitle:” or “intitle:”).

Selection criteria

> An HTA program is defined as an organization for which a major focus of its operation is HTA (e.g. Canadian Coordinating Office for Health Technology Assessment). The web page of each HTA organization was then searched to identify any training or skill development HTA programs.

> A course is selected if the identified web page provides a brief description of its content.

> Searches were conducted by one reviewer in March 2006. The syntax used in the search was first checked to ensure it successfully identified known HTA organizations in the country.

Table 1: HTA Organizations Identified by the Web-Survey

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. of Alberta</td>
<td>HTA Program</td>
</tr>
<tr>
<td>U. of Ontario</td>
<td>HTA Program</td>
</tr>
<tr>
<td>U. of Ottawa</td>
<td>HTA Program</td>
</tr>
</tbody>
</table>

Table 2: Health Technology Assessment Training Program in Canada Identified through the Web-Survey

<table>
<thead>
<tr>
<th>Organization</th>
<th>Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. of Alberta</td>
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<td>Health Technology Assessment Training Program in Canada Identified through the Web-Survey</td>
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<tr>
<td>U. of Toronto</td>
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</table>

Results

The search identified approximately 13 HTA organizations (Table 1).

The search identified approximately 10 HTA programs (Table 2).

Key courses related to HTA are often part of a Master’s program in health sciences (Table 3).

Discussion

Only a few of the 16 HTA organizations found here provide some HTA training programs to future HTA’ers, indicating that capacity building is essential to sustain high quality HTA activities in the country.

HTA-related courses are offered by a large number of academic departments, indicating substantial fragmentation and lack of coordination within university and across universities.

Data collection is on-going in order to refine the inventory of HTA capacity summarized in this paper.

Limitations

The Google search strategies were limited and potentially relevant material could have been missed.

The current survey was not systematic or comprehensive. Only material listed on the Web in March 2006 was identified.

Conclusion

There is a need to define HTA as a unique discipline in order to strengthen current existing capacity. More sustainable emphasis on R&D, especially HTA methodology, is needed.

Our experience suggests that a Pan-Canadian approach between universities may increase capacity to meet the future demand for HTA applications and to provide leadership in methods development.

Acknowledgement

We thank Karen Liu for her assistance throughout the data collection phase of this study.

Disclosure

Ba’ Pham is a PhD student at the University of Toronto (supervisor: Dr. Murray Krahn) and an employee of GlassSmithKline Canada. Andrea Anonychuk is a researcher at the Toronto General Hospital working with Dr. Murray Krahn. She is also working on contract for GlassSmithKline Canada.

HTA Program, University of Alberta

The Department of Public Health Sciences at the University of Alberta has developed a separate stream for Masters’ students who wish to graduate work in HTA. In addition to a one year Masters’ degree program, the Department also admits doctoral students who wish to make HTA their major area of research into a PhD program (Dr. Nicola Cherry, 2004 HTA Capacity Building Grant Program).

Through a 2004 HTA Capacity Building Grant Program, CCHTA provided funding to support two graduate students entering the PhD program. The grant supported students and work on HTA methodology and helped further research in this area.

The MPh in HTA is a 1-year program that provides the knowledge and skills to conduct assessments of a high scientific quality in a broad range of health care areas. Training includes courses designed to provide knowledge and basic skills in areas that are fundamental, including health economics, biostatistics, epidemiology and evaluation. Students also take courses designed to permit them to integrate this information. A practicum in a health care agency allows them to apply their knowledge under supervision. Prior work experience will be considered in assessing applications.

Applicants must have a minimum of a bachelor’s degree in a discipline in the health or social sciences; some work experience in the health care field, including clinical work, is preferred.

The required courses are: Fundamentals of Public Health; Statistical Methods in Health Research or Biostatistics; Epidemiology Methods; Economic Evaluation of Health Care; Technology Assessment for Health Care. Methods for the Assessment of Health Related Quality of Life; Field Practicum. Four additional electives approved by the Department are also required.

The University of Alberta program is still in its early days. But it is becoming clear that it is much more suitable and valuable for individuals who have had 3 to 5 years of experience in some sector of health care, than for new graduates of baccalaureate programs.

HTA Program, University of Toronto

The University of Toronto contains significant capacity in health economics, evidence synthesis, decision analysis, economic evaluation, biostatistics of economic evaluation, health modeling, operations research, and the bioethics of resource allocation.

Individuals with skills in these areas are scattered across the research institutes (e.g. Institute for Work and Health, Institute for Clinical Evaluative Sciences), hospitals (Hospital for Sick Children, Toronto General, Sunnybrook), Faculties and Departments (Pharmacy, Health Policy Management and Evaluation (HPME), Public Health Sciences (PHS), Economics (Mathematics, Engineering) and campuses (St. George, Mississauga) of the University.

Collaboration between researchers, and therefore impact, is suboptimal.

HTA initiatives at U. of T. include:
- Participating in the Ulysses program.
- Informal links between individual researchers and Medical Advisory Secretariat (MOHLTC Ontario) and Drug Programs Branch.
- Proposal to enhance integration of health economic evidence into policy making, supported by Cancer Care Ontario and Drug Programs Branch, MOHLTC, CCOHTA.
- Proposal to formalize links between the Department of HPME and Medical Advisory Secretariat, MOHLTC, CCOHTA.
- Proposal for a collaborative program in HTA across the Departments of Pharmacy, HPME, PHS, Economics, and Engineering.
- Proposal for an Institute for Health Technology Assessment at University of Toronto.