Emerging Professionals: Where We’ve Been and Where We’re Going
HI Education Report Documents
First State-of-the-Nation in Canada

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Careers in health informatics (HI) are on the rise and the eHealth industry is offering exciting emerging job opportunities. HI professionals are expected to have expertise in various roles ranging from IT and project management to quality control and clinical informatics. How does one prepare for these challenging roles and unique job descriptions?

In May 2013, COACH published the first report of its kind—Health Informatics Education in Canada: Landscape of an Emerging Academic Discipline – discussing all types of programs offered to prepare a career in eHealth. Do emerging professionals (EPs) in eHealth need to graduate from an eHealth academic program in order to fulfill the demands to enter the careers they have envisioned for themselves? Perhaps you can decide that after reading what EPs and three report authors* say below.

**Important for Many: Students, Employers, Academic Institutions**

Dr. Ann McKibbon
Director, eHealth Program, McMaster University & A Report Author

The education report is important for many groups of people. Our industry has matured as we move into the realm of complex mature systems, the need for interconnectivity and the expanded expectations of healthcare providers and those who support them. It is no longer sufficient for an eHealth/informatics professional to want to work in the field or to be “in the right place at the right time.” Employers want, and are coming to expect, to hire trained professionals. Our schools have risen to the challenge and now provide a wide range of opportunities from courses, certificates and diplomas through bachelor’s and master’s degrees to PhD level studies. All of these programs are summarized and compared in the report.

The document provides students with the information on the education available and shows strengths and program directions. Users should be able to choose a school based on these summaries and comparisons. The document allows existing programs the ability to assess their strengths, gaps in training and opportunities for specialization and tailoring of direction. New programs can be more strategic in their planning. New strategies are especially needed to address the educational needs of people already working in the field. Programs need to move to providing training through distance and online formats, evening and weekend courses, and other options that are friendly to those wanting part-time education while working. I firmly believe that we need and can benefit from the existing and new programs if they are planned, carefully taking into account what already exists.

Employers also can benefit from the document. They can review existing programs with respect to their personnel needs, hire one or more interns, train them over four or eight months and then either end the relationship or turn it into full-time employment – internships benefit both students and employers. Employers can also interact with programs to direct content, build specializations, and seek help with existing problems or their need for research or development.

**Snapshot of Broad Scope & Diversity in Evolving Profession**

Twylla Bird-Gayson
Director, Master of Health Informatics (MHI) Program, University of Toronto & A Report Author

On their journey toward a secure and
rewarding career, today’s emerging HI professionals and prospective students considering this new academic discipline face a daunting personal and financial commitment. I often receive the following FAQs from prospective students seeking admission to our MHI program:

“Is the MHI an accredited program?”
“What kind of employment can I expect to achieve with this graduate degree?”
“Is this program right for me?”

However, unlike more traditional professions and academic disciplines such as medicine, nursing, engineering, law, etc., the less established HI body of knowledge has little to offer to support the due diligence required for informed academic and career decision-making.

While much work had been accomplished in HI professional associations such as COACH (Canada), HISA (Australia), AMIA (US), UKCHIP (United Kingdom) and IMIA (international) with respect to articulating broad HI competencies, HI career development and employment market demand prior to this report, there was no Canadian-based research on HI education theory and little peer-reviewed published research on how HI education is developed, implemented and evaluated to determine its effectiveness in meeting this demand. Further, while there are professional and education accrediting organizations for HI in Australia as well as for Health Information Management (HIM) in the United States and Canada (but none for HI), it was not certain that the frameworks, models and tools used by these organizations were generalizable for use as standards by Canadian HI academic programs. Therefore, the primary concern of this study and report was:

- the description and interpretation of what is happening within and across specific HI academic settings in terms of their response to industry demand, curriculum content and pedagogical process;
- generating theories about Canadian HI education and its relationship with professional development; and
- providing a foundation for the future development of an evidence-based HI academic, professional and career roadmap.

In my view, for prospective students and emerging HI professionals, this report provides a snapshot and overview of the broad scope and diversity currently encompassed in the evolving HI profession. No matter the interest or perspective, there are innumerable and multi-level opportunities for just about any motivated individual. It informs decisions with respect to academic pathways that may be chosen to achieve particular career goals. The report delineates distinct differences among academic programs and degree levels that have substantial impact on vocational expectations and outcomes.

Secondly, for participating academic programs or academic institutions considering developing a new HI program, this report provides a theoretical perspective of the depth and breadth currently encompassed in HI academic curricula and pedagogy across the degree levels. It provides a solid foundation for future research that will rigorously measure HI curricula and pedagogy and test its impact on HI academic or professional standards, development and deployment.

Finally, for the HI industry (i.e., future employers in both private and public sectors), this report educates the community with respect to the evolution of the HI academic discipline as it responds to local industry need. As it will guide future research, it will have a profound impact for future human resource definition, standards and planning in local as well as national and international contexts.

### A Good Scan for All in HI – For Students & Upgrading

**Alison Delle**  
Director, Programs, COACH

Since our field is still emerging, it’s pretty rare that you’d get someone who says they want to be a HI professional when they grow up. Even within the academic institution, the HI program is often not well understood. The report enhances the profile of HI overall - that it is a profession, not just a standalone program at a university. Compared to other countries in the world Canada actually has a good number and variety of HI programs. However, prior to this report there wasn’t a comprehensive document to assess the variety of HI programs. Although this report is not the only source of information for potential students – they would definitely want to check out the individual programs’ websites for more details – if someone is interested in HI and wants an overview of what the various schools have to offer, they can go to the report as a starting point.

With respect to benefits of the report - the job market for EPIs is tight, and the report highlights that there are many schools you can attend to upgrade your skills (ranging from graduate certificates to Masters and PhD programs). It’s good to know your options. I recommend scanning the report for everyone really, even if they aren’t actively looking at a program right now.
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A Foundation for Building Collaboration

Brad de Bekker
Co-op Student, COACH

As a HI student at Conestoga College, the report represents what has been a snapshot of my previous three years of schooling. The knowledge I have obtained in health, business, computing, and technology, combined with the experience I have gained through cooperative education, represents what it means to be interdisciplinary and collaborative in practice.

While these attitudes have been fostered through education, I have noticed that there are still leaps to be made in regards to workplace cultural attitudes toward changes in process and newly introduced technology. In my experience, having completed a work term in a hospital and with a community care access centre, the biggest challenge to establishing the free flow of information to guide decision-making is the bridging of communication gaps that exist in “departmentalized” environments.

The bridging of gaps should be important to EPs because interdisciplinary and collaborative methods can be taught and encouraged in school, but there must be dedicated effort from all people who work within and throughout a healthcare setting to make these methods possible. Established and EPs alike must embrace methodologies and technologies that are novel and innovative by ensuring they are understood and partly formed in conjunction with those who will use them.

EPs – and, in my perspective, students – can benefit from this report by taking the findings a step further and implementing their own collaborative methods within their institutions. It may seem as though everyone is busy, but what is preventing people from being busy together? Our schools are the place where mistakes can be made without impacting patient care and where bonds between disciplines can be created. By focusing on transformative learning while in school, and embracing cooperation from the start, the transformation of our healthcare systems to fit the needs of the future may not seem so difficult.

The report also does an excellent job of showcasing how HI education is in many ways a grassroots effort of a variety of stakeholders working together to improve Canadian healthcare and work with industry partners in establishing job opportunities for new graduates. This document is almost historical in that it will help the field of HI anchor itself in what has occurred thus far and determine where to go next. The report maps out opportunities for educational institutions to match their student exit competencies to the COACH’s Health Informatics Professional Role Profiles and Core Competencies 3.0 and Career Matrix.

Overall, this report is important to potential students and EPs because it can act as a compass to help them match their professional aspirations to current opportunities. With this document in hand, a student can determine his/her strengths and weaknesses ahead of time and determine which program best fits their intended career goals. Moreover, the report suggests that HI not only has a strong presence in health industry affairs, but also has a growing presence in education as well. Many opportunities exist within academia now to establish one’s career and to make a lasting impact on HI in Canada too. Graduates of HI programs throughout Canada, go forth – there is much to be done!

*The other authors of the HI Education Report are Julie Gaudet, Shan Satoglu, Liz Heathcote and Vikraman.

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