

FINAL ASSESSMENT REPORT

REPORT OF ACADEMIC STANDARDS COMMITTEE TO SENATE

June 3, 2014

PERIODIC PROGRAM REVIEW

HEALTH INFORMATION MANAGEMENT

School of Health Services Management

Ted Rogers School of Management

1. BASIC INFORMATION AND HISTORY

Health Information Management (HIM) is a *part-time degree completion* program comprised of 24 one-semester courses, the equivalent of approximately two years of full-time study, for those with either of the following: a minimum of a two-year CAAT diploma from a CHIMA accredited or recognized health record/health information program with related experience; or a three year CAAT diploma in an applied health science with related experience. Students are admitted directly to the Health Information Management stream of the School of Health Services Management, Bachelor of Health Administration program. The HIM program is designed to further develop a student's knowledge in the theory and management of health information. The HIM program's initial entering class was in 2003 and consisted of 39 students.

Health information management is concerned with health-related information and the management of systems to collect, store, process, retrieve, analyze, disseminate and communicate information related to the planning, provision, research and evaluation of health care services and more specifically includes the application of information to enable evidence based decision making in health care at the individual, department, organizational and system level.

In the early 1990's, the Canadian Health Record Association (CHRA)¹ recognized that, with the evolution taking place in the health services industry, there would be a need to prepare individuals at the baccalaureate level especially in the area of preparing health information to support the decision-making process. Four Canadian universities, including Ryerson University and the University of Western Ontario, were named as suitable sites to address the identified needs. In contrast to the University of Western's direct entry four year undergraduate program, Ryerson proposed a part-time, degree-completion option with the intent to work in partnership with George Brown College which offers a 2-year Diploma program in Health Information Management.

2. SOCIETAL NEED

Healthcare is among the largest industries in Canada. Second only to trade in the services economy, it employs over 10% of the Canadian workforce². Out of fourteen NAICS³ aggregate services-producing economic sectors, healthcare produces the 4th largest gross domestic product in Canada, after the real estate, trade and financial industries⁴. Healthcare is also one of the fastest growing industries in Canada. The rapid growth in the healthcare sector is driven by several factors, including ageing population, increase in life expectancy, mutating diseases, changing policies, a more educated public and increased demand for a better quality of care.

¹ The Canadian Health Records Association subsequently changed its name to Canadian Health Information Management Association (CHIMA) in 2003.

² Statistics Canada, 2007

³ North American Industry Classification System, 2009

⁴ Statistics Canada, 2007

While all students enrolled in the Health Information Management part-time degree completion program are currently employed in the field, health industry experts and stakeholders confirm that there is an increasing need for HIM graduates. Canada Health Infoway reported that, as far as health executives are concerned, healthcare business comes down to information management business. In this respect, a Health Region executive stated the following: *“We’re not [just in] the healthcare business; we’re in the information management business. We should start thinking as information managers dealing with healthcare information, and think about the tools we need to do it properly”*⁵.

3. EXISTING AND ANTICIPATED STUDENT DEMAND

Since inception in 2003 there has been a steady increase in applications and in the last three years it has held steady at 46 applications per academic year. However, from that applicant pool only 15 students per academic year met the requirements for acceptance into the program. Most recently, in the Fall of 2011 there were 27 applications; however, only 5 of these applications were deemed to be qualified and were confirmed. Of note is that of the 5 that were confirmed, all 5 enrolled. While no formal track of records regarding the profile of applicants to the program is available, the primary reasons for turning down applications have dealt with inappropriate academic preparation for the HIM degree completion program (e.g. less than 2 years community college preparation), no work experience and lack of professional certification.

The 2012 Student Survey Results indicated that 13% of the student body was 24 years of age or younger and 40% were over the age of 40 (in 2009 almost 75% were over the age of 40 and none were under the age of 25). This reflects the beginning of a new growth in the younger cohort and would suggest a possible expansion, targeting a younger profile student and perhaps consideration of a full-time direct entry program. As a result, discussions have been underway for a collaborative full-time direct entry program in partnership with the Ted Rogers School of Information Technology Management. As a result of these discussions, and to test interest in the concept, a Certificate in Health Informatics has recently been developed and offered through the Chang School. The results of this collaborative program will be monitored and will inform further discussion going forward.

A joint study on the Human Resource needs for Health Informatics and Health Information Management was released on November 2, 2009 by the Canadian Health Information Management Association (CHIMA), Canada Health Infoway, COACH, the Information and Communications Technology Council (ICTC), and Information Technology Association of Canada – Health (ITAC-Health). The purpose of the report was to estimate the current supply of and five-year requirements for Health Informatics and Health Information Management professionals. The findings indicate serious risks of skills shortages and several initiatives are proposed to avert these shortages. They recommend *“HIM professionals will require additional theoretical knowledge and practical insight into information technology systems and applications. The skill broadening that is required exceeds the learning that is associated with normal working experience. Formalized professional development will be required”*⁶.

By 2014 the number of HI and HIM professional who will require broader skills will increase from 8,880 in 2009 to between 13,690 and 32,170. These figures are particularly important for a degree completion program like Ryerson’s Bachelor of Health Administration in Health Information Management. Among the report’s recommendations is a clear call to *“[expand] the role of skill certification by building on certification programs that are already in place”*. HIM may consider a full time direct entry HIM management program; however, this should not be initiated at the expense of the current programming structure.

4. PROGRAM LEARNING OUTCOMES

By the end of this program HIM graduates will be able to ...

⁵ Canada Health Infoway - http://www2.infoway-inforoute.ca/Documents/Vision_Summary_EN.pdf

⁶ Canada Health Infoway, CHIMA, COACH, ICTC, ITAC. Health Informatics and Health Information Management Human Resources Report. November 2009

1. Apply a deep and broad knowledge of the key concepts, methodologies, current advances and strategies in health information management to a variety of settings which may intersect with and include the wider healthcare and health management fields.
2. Collect, interpret, assess, and debate multiple sources of information informing critical selection of methods, approaches, and strategies for facilitating planning and decision-making in a health care setting.
3. Complete a capstone research project integrating a broad range of skills and knowledge from the health care field by identifying a specialized area of inquiry, by implementing effective research methods (qualitative or quantitative), by critically evaluating resulting data and by formally preparing and presenting findings of publishable quality.
4. Communicate health information, appraisal of literature, arguments, data analysis and interpretation effectively to a variety of audiences first through oral presentations and by responding to questions and secondly through essays, formal research reports and other written assignments.
5. Monitor and appraise the changing field of health care and identify gaps in current understanding, challenging assumptions and re-evaluating current practices in light of new developments and understandings in the field.
6. Apply specialized health information management knowledge, strategies and critical thinking skills to complex multidisciplinary problems involving multiple stakeholders in the health care system demonstrating principles consistent with academic and social responsibility.

Following development of the program learning outcomes, a curriculum mapping exercise was initiated. Learning Outcome 1 is first introduced at an introductory level in the 300 level courses (HSM 301, HIM 300, HIM 301, HIM 302 and HSM 326) then reinforced in later courses at an intermediate level (HIM 403, HIM 404, HIM 405, HSM 437, HSM 417 and HSM 408) and lastly students demonstrate proficiency in Learning Outcome 1 by the time they reach the practicum project (HIM 406 and HIM 407). This pattern is repeated through all the learning outcomes except perhaps Learning Outcome 3 which is particularly applicable to the Practicum experience. Further progression in meeting Goal 3 is demonstrated at an introductory level through Research Methodology (HSM 417) and is reinforced through Program Planning and Evaluation (HSM 408) and culminates in the actual completion of a formal Practicum Research Project of publishable quality (Proficiency).

5. PROGRAM CONSISTENCY WITH OTHER ACADEMIC PLANS

The above learning outcomes are consistent with the University mission and academic plan, the Faculty academic plan and the school's academic plan. Ryerson's degree-completion HIM program is uniquely structured to capitalize on students currently working in the healthcare field who can then apply the skills they are learning immediately to their workplace which draws on Ryerson's history of applied knowledge to address societal needs. Further woven through many of the program goals is a focus on the acquisition of critical thinking, interpretation and assessment of multiple sources of information related to a specialized health information management field as well as the broader health care field and in turn societal needs in general (e.g. public health; Pan Canadian Health record). Lastly program Learning Outcome 3 which applies to the required capstone research project integrates both theoretical and applied knowledge at a high level integrating the learning from the entire program including the application of a broad range of knowledge, critical thinking and research skills to a specific health care management problem within a healthcare organization and measures its success through the demonstration of effective communication skills through a formal presentation to both an academic and business audience and through a formal research document of publishable quality. The rigour required for the Capstone course is deliberately designed to prepare for graduate level work.

School of Health Services Management Vision, Mission and Goals

Mission

- To be the leading and preferred national provider of innovative, part-time undergraduate education in Health Information Management and AUPHA certified degree-completion education in Health Services Management for working professional students

Vision

- To be the national leader in flexible and innovating management education and applied research for career health professionals

Overarching Program Goals

- To educate a health practitioner to assume entry or middle-level management responsibilities in the provision of appropriate, cost effective client-centred health services in institutional and community settings
- To facilitate the personal and professional development of a manager who will contribute to the evolution of multi-disciplinary, holistic health communities
- To build a broad understanding of political, social, economic, ethical, cultural and technological factors which shape health and the health system
- To provide a basis for entry into advanced or graduate studies

6. PROGRAM CURRICULUM AND STRUCTURE

The 24 course degree-completion program in Health Information Management is offered as a part-time program.

- 13 Professional courses
- 7 Professionally related courses (3 required; 4 electives)
- 4 Liberal Studies

The program is designed around the needs of the working professional in health information management and offers courses in various formats such as lecture, intensive on-site and distance course delivery via the internet. The program offerings have gained wide acceptance from students pursuing the Bachelor of Health Administration degree. This structure satisfies the needs of individuals who reside at considerable distances outside the Greater Toronto Area.

Students must take HSM 301 as the first course. This provides the foundation for an understanding of the Canadian health care system. There is no prerequisite to HSM 301 but this course forms the prerequisite for many of the management courses which follow. Of particular note is that many HIM courses are utilized by other certificates and programs, including Health Services Management (HSM 301 and others), Health Informatics (HSM 301 and others), Environmental Public Health Leadership (HSM 408), and Project Management (HSM 301).

Health Information Management Curriculum	
<p>LEVEL I, SEMESTER I Professionally Required Courses HSM 301: The Healthcare System HIM 300: Managing Health Information Services HIM 301: Healthcare Information Analysis</p> <p>Professionally Related and Required (one of) ACC 100: Financial Accounting ECN 104: Introductory Microeconomics ECN 204: Introductory Macroeconomics</p> <p>Professionally Related Elective (One)</p> <p>Liberal Studies_(One)</p>	<p>LEVEL I, SEMESTER II Professionally Required Courses HIM 302: Health Information Systems HSM 326: Law for Health Managers</p> <p>Professionally Related and Required (two of) ACC 100: Financial Accounting ECN 104: Introductory Microeconomics ECN 204: Introductory Macroeconomics</p> <p>Professionally Related Elective (One)</p> <p>Liberal Studies_(One)</p>
<p>LEVEL II, SEMESTER I Professionally Required Courses HIM 403: Managerial Accounting and Finance HSM 417: Research Methodology HSM 437: Human Resources Management HIM 404: Health Economics</p> <p>Professionally Related Elective (One)</p> <p>Liberal Studies (One)</p>	<p>LEVEL II, SEMESTER II Professionally Required Courses HIM 405: Issues in Health Information Mgmt. HSM 408: Program Planning and Evaluation HIM 406: Practicum Seminar HIM 407: Practicum</p> <p>Professionally Related Elective (One)</p> <p>Liberal Studies (One)</p>

Professionally Related Electives	
EID 100 Digital Skills and Innovation for the Global Economy	INT 913 Issues of Migration
GMS 422 Quality Management	INT 914 Settlement Experiences
HSM 307 Principles of Long Term Care Service Delivery	INT 915 Responses to Migration
HSM 308 Project Management-Long Term Care	INT 916 Introduction to Fundraising
HSM 309 Trends in Long Term Care Service Delivery	INT 917 Community Development
HSM 310 Institutional Structure	INT 920 Community Collaborations
INT 901 Gerontology: Critical Issues and Future Trends	ITM 100 Foundations of Information Systems
INT 902 Disability Issues	ITM 102 Business Information Systems I
INT 904 Health Promotion and Community Development	ITM 305 Systems Analysis and Design
INT 905 Conflict Resolution in Community Services	ITM 500 Data and Information Management
INT 906 Sexuality: Power and Pleasure	ITM 505 Managing Information Systems
INT 907 Team Work for Community Services	ITM 595 Auditing of Information Systems
INT 908 Homelessness in Canadian Society	ITM 610 Database Administration
INT 910 First Nations Issues	MHR 522 Industrial Relations
INT 911 International Community Development	MKT 100 Principles of Marketing
INT 912 Community Development: International Field Experience	

Table 1 provides details of the rationale for the inclusion of Professional and Professionally-Related Required courses in the Health Information Management program curriculum. The courses offered in Level I address Learning Outcomes 1, 2, 4 and 5, which reveal a foundational level of learning. In Level II, the students integrate and apply previous learning to complex problems that consider multiple stakeholder issues, including corporate social responsibility (Learning Outcomes 3 and 6).

Table 1

Rationale		
Professionally Related Required		
Introductory Financial Accounting	ACC 100	Establishes the basis for Financial Management
Introductory Microeconomics	ECN 104	Establishes the basics of microeconomic theory and the concepts of demand and supply required for health economics
Introductory Macroeconomics	ECN 204	Establishes the basics of macroeconomic theory and the concepts of monetary and fiscal policy required for health economics
Professionally Required		
Managing Health Information Services	HIM 300	Explores the manager's role as it relates to planning, organizing, leading and control. Is a general management course which establishes the basis for further studies. Students develop skills in problem-solving, decision making, leadership and motivation.
Healthcare Information Analysis	HIM 301	This course focuses on analysis methodologies and the use of current data analysis software such as query and reporting tools, on-line analytical processing (OLAP), executive information systems and data mining tools
Health Information Systems Management	HIM 302	This course is an extension of HIM 301 and takes a systems perspective in terms of database management, quality management and utilization management.
The Healthcare System	HSM 301	Focus is on the health system as a whole and the possibility of an integrated client-centered continuum. Comprised of three main foci: the client, the system, and the manager. Students must be aware of all three facets in the current environment in order to understand changing managerial functions and relationships. Build on previous knowledge of health, illness, client relationships and the health system
Law for Health Managers	HSM326	The effective manager must have an understanding of relevant legal issues in order to ensure client and staff rights and security. It is the manager's role to supervise and instruct others at the unit level
Managerial Accounting and Finance	HIM 403	This course focuses on the unique financial management features, reporting policies and analytic tools in health services organizations. Builds on basic accounting principles, a basic understanding of funding, and the role of the manager.

Health Economics	HIM 404	This course takes the student beyond using the fundamental tools necessary to apply basic economic principles to the health care field. Exposure is provided on a balance of population –based health economics and consumer driven, managed health care economics.
Issues in Health Information Management	HIM 405	This course focuses on current issues in the healthcare field affecting health information management and asks students to consider issues from different stakeholder perspectives. Students are asked to frame the issues through alternate stakeholder perspectives in order to understand and appreciate the complexity of some the health care issues currently being debated.
Program Planning and Evaluation	HSM 408	A central responsibility of the departmental-level manager is to initiate and oversee the development of programs that will meet the needs of the client. The responsible manager will evaluate program outcomes in relation to stated objectives for client well-being. This course builds on the function within the management cycle and on the ability to understand the research process and provides the groundwork for the practicum experience.
Research Methodology	HSM 417	This course builds basic skills in statistics and research methodology in the health field. To ensure the quality, appropriateness and cost-effectiveness of the services they provide, managers must make decisions based on the best available evidence. This course lays the groundwork for the final practicum project.
Human Resource Management	HSM 437	This course increases the understanding of the processes involved in merging human talents, needs and aspirations with the requirement of the client –centered health services organization. It builds on the theory and practice of leadership and communication skills, to develop skills and knowledge in human resources planning, recruitment, selection and evaluation.
Practicum Seminar	HIM 406	The practicum is the “capstone” course of the degree program. It provides the opportunity to apply and integrate theory and skills from all previous courses in a practice setting other than the student’s current setting in the production of a significant research project, thus further developing skills and broadening perspectives on management, the organization and the system.
Practicum	HIM 407	

7. DIVERSITY AND INCLUSION

Diversity and inclusion in the health information management program is reflective of the broader healthcare field and several courses address this topic specifically. For example, HIM405 Current Trends in Health Information Management uses both teaching and assessment methods to encourage reflective practice on alternative and diverse stakeholder viewpoints. The capstone course (HIM 406 and HIM 407) requires students to engage with health service organizations and providers in the field reflective of a very diverse healthcare system. Students are required to work on a research project collecting data and interacting with staff in a collaborative way to produce a high quality presentation to both an academic and business community and a paper which is of sufficient quality to consider submission to an academic journal. This requires students to be aware of and sensitive to a diverse audience who may have different expectations and priorities.

8. CURRICULUM AND STRUCTURE - UNDERGRADUATE DEGREE LEVEL EXPECTATIONS

The following is a brief summary of the UDLE’s mapping matrix:

Depth and Breadth of Knowledge: This is well represented through all courses and reflects all program learning outcomes to some degree. The 300 level courses particularly address Depth and Breadth of Knowledge at an introductory level. This is reinforced through the 400 level courses and by the final courses (the Practicum HIM 406 and HIM 407) student’s depth and breadth of knowledge are demonstrated in both written and verbal form and assessed at the proficiency level through their practicum research project.

Knowledge of Methodologies: HIM is structured to culminate in a high level research project. The 300 level courses are designed to introduce students to the collection, interpretation, assessment and

the debate around multiple sources of information in order to inform critical selection methods, approaches and strategies for facilitating planning and decision-making in a health care setting. These concepts are then reinforced in the Research Methods course (HSM 417) and Program Planning and Evaluation course (HSM 408). They are later applied at a proficiency level in the capstone practicum (HIM 406 and HIM 407) where students are required to engage in and produce a formal research project.

Application of Knowledge: The 300 level courses provide the basic introduction (ex. CHIM 300) into how to critically assess, and weigh and assign power to alternative viewpoints on health information management issues. The 400 level courses both reinforce and formalize the application of their knowledge (ex. CHIM 408) leading to and culminating in a formal research project at a health care institution and including a formal presentation and research paper (CHIM 406 and CHIM 407).

Communication Skills: Many courses use both essays and presentations to assess communication skills. For example, CHIM300 uses both a reflection paper and a research paper to assess written communication skill at an introductory level. Similarly the very first course students are required to take - CHSM 301 - requires both presentations and written assignments for assessment at an introductory level. At the reinforcement level, HSM 408, HSM 417 and HSM 437 integrate both presentations and written assignments into both teaching and assessment. The capstone courses (HIM 406 and HIM 407) require proficiency to present their research findings by means of a formal presentation to the entire School of Health Services Management faculty and students, and often include representatives of the host institution and practicum preceptor. The final research project must be written up as a formal research project suitable for publication.

Awareness of Limits of Knowledge: Awareness of limits of knowledge is associated with courses which require some degree of literature review and critical analysis. Specifically, CHSM 301 and CHIM 300 require research papers and some degree of awareness that there is a wide range of opinion in these areas for which they have only an introductory understanding at this point. This is particularly relevant as many of these students come from a healthcare background and often make the assumption that they already have a good understanding of the system. These first few courses lay the foundation of an awareness of the limits of their understanding. This is then formalized and reinforced in the 400 level courses such as HSM 417 (research methodology) and HSM 408 (program planning and evaluation). In the capstone courses (HIM 406 and HIM 407), students have a greater understanding and appreciation of the limits of their knowledge and how this impacts the strength of their interpretations of that knowledge and the conclusions they can draw from their own research project.

Autonomy and Professional Capacity: Many courses from the 300 level through the 400 level and culminating in the capstone course, the practicum, require students to develop transferable skills such as a broad understanding of the health care field and management field beyond simply the health information management sector. Further they have developed their critical thinking and analytical skills which can be applied to a wide context. Through courses such as CHIM 301 (Health Information Analysis) at an introductory level, CHSM 408 (Program Planning and Evaluation) at an reinforcement level and HIM 406 and HIM 407 (Practicum) students have developed a proficiency in initiative, personal responsibility and accountability as demonstrated by their ability to manage their own learning under changing circumstance particularly through the independent projects required in these courses to access information provided by host healthcare institutions. Further, group work and the ability to manage and work effectively in groups are required by many courses including HSM437; HSM301; HIM404. For those courses which require students to gather data from either their own workplace (ex. HIM 301; HIM302 and HSM408) or in the case of the practicum another workplace setting, students are required to pay significant attention to business ethics and act and behave in a professional manner consistent with academic integrity and social responsibility.

Each course was assessed and the variety of teaching methods and assessment methods used. HIM learned how diverse the teaching and assessment methods were in the program and how well the course structure mapped to program learning outcomes, culminating in the final practicum project which requires the integration of all of program learning outcomes and affirms and clearly resonates with the undergraduate degree level expectations (UDLES).

9. CURRICULUM DEVELOPMENT

Both the Health Information Management Program and the Health Services Management Program undergo curriculum reviews on an annual basis through the curriculum committee. In addition to the curriculum committee, the School Council is involved in all matters related to academic planning, administration, operation and procedural policies. Program retreats are planned for the School of Health Services Management to provide strategic planning opportunities for continued program improvements for both the HSM and HIM program streams.

10. ENROLMENT IN PROGRAM COURSES

Enrolment in program courses by HIM students do not represent the total enrolment of these courses as both HSM program student and CE students also enroll in these courses. In addition, the School of Health Services Management is consistently seeking to provide online offerings to meet the needs of out-of-province students. Further, while the majority of students in each course are from the HSM stream or CE students, it is anticipated that as the HIM program continues to build due to the projected increasing societal demands for HIM trained graduates, additional sections will be required to meet this demand.

11. RELATIONSHIP TO CURRENT DISCIPLINE AND PROFESSION

The Health Information Management program is rather unique. In Canada, the provision of academic preparation for health information professionals at the university level is a relatively new initiative. The programs are predominately offered as diploma programs by community colleges and the Canadian Healthcare Association. In the Toronto region, there are a number of options for professional education in Health Information Management; however, the only viable degree option currently available for comparison purposes besides Ryerson's BHA in Health Information Management is the Bachelor of Health Science in Health Information Management offered by the University of Ontario Institute of Technology (OUIT). However, the program at UOIT is no longer offered, as of the 2013-2014 Undergraduate Calendar.

The HIM program is unique in that most students are already working full time in the health information management field while completing their degree. Students are exposed to both academic integrity and social responsibility in several courses and learning outcomes 6 specifically addresses principles consistent with academic and social responsibility. At a more advanced and experiential level, the Practicum as the capstone course in the program emphasizes both academic and professional integrity through a learning contract. In order to proceed, students enter into a contractual agreement with a healthcare organization around a particular research proposal which addresses the FINER criteria (Feasible, Interesting, Novel, Ethical and Relevant).

Certification

The School of Health Services Management received full re-certification status by AUPHA (Association for University Programs in Health Administration) in 2006 and has been re-certified until 2018. Although the AUPHA focus is on the Health Services Management program, they viewed the HIM stream positively and have recognized the complementary value of the HIM program to the School of Health Services Management. In addition, since students entering the HIM stream are already certified by the Canadian Health Information Management Association (CHIMA) and since CHIMA (formerly CHRA) was involved in the development of this program, the HIM program has been granted full recognition status by CHIMA (Canadian Health Information Management Association). CHIMA's program recognition process is the means by which CHIMA evaluates formal educational programs for their suitability to prepare students to meet national standards and become eligible to enter health information management practice as certified professionals. Graduates of CHIMA-recognized programs

are eligible to challenge the Canadian College of Health Information Management (CCHIM) national certification examination. Programs that achieve CHIMA-recognition are required to undergo a periodic re-recognition process for compliance with all standards to maintain their recognition status with CHIMA.

12. INNOVATIVE OR CREATIVE CONTENT AND/OR DELIVERY

Teaching methods vary from course to course but a variety of methods, including interviews with managers in the field, simulations, group work, and in particular practical research field experience as part of the capstone course, make for a diverse and creative learning experience. Peer feedback and peer teaching (or student teaching) is widely utilized in the program. In addition, case studies are often employed as a teaching method as are guest speakers, films and videos. Computer simulations, games, and role playing exercises are utilized by at least two courses.

13. PARTNERSHIPS OR COLLABORATIVE AGREEMENTS

Informal collaborative agreements are in place with CHIMA certified college diploma programs which provide the foundation for the HIM degree completion model (e.g. George Brown College; Fleming College and St. Lawrence College). Other partnerships particularly relevant to the health information management part-time degree option at Ryerson's School of Health Services Management are the formalized relationships required for the final practicum research project. As a result of the practicum requirement for a major field-research project, the School of Health Services Management has developed ongoing relationships with several health services and health information management partners. Such relationships are important for the future placement of HIM students and are nurtured by the program's Director. The placements include hospital service and information management departments, Community Care Access Centres, long-term care facilities and health information management organizations such as CHIMA and COACH.

14. EXPERIENTIAL LEARNING OPPORTUNITIES

The HIM Program provides experiential learning opportunities at the beginning of the program at the 300 level and at the end of the program and specifically the capstone course in the program. For example:

CHIM 300 Lakeview Simulation via experiencepoint.com: This course is taught over the internet in an asynchronous environment. The simulation is run by experiencepoint.com and is designed to engage students in applying change management theory through a simulation involving a fictitious hospital, Lakeview hospital, which needs to improve its customer satisfaction while operating under extensive resource constraints. Upon completion of the simulation, students are required to write a reflection paper.

CHIM 406 Practicum Seminar: The first pre-field work seminar orients students to the process of experiential learning. Students and faculty supervisors establish learning contracts detailing the terms and conditions of fieldwork placements.

CHIM 407 Practicum: In this course, the Practicum project/exercise must be directly related to health information management. The practicum is the "capstone" course of the Health Information Management program, and provides the opportunity to apply management theory and concepts in a working environment which is specific to health information services delivery. Students evaluate and analyze on-site management issues within the context of their understanding of organizational systems.

15. STUDENT ASSESSMENT

Assessment methods vary from course to course but a variety of methods are employed including assignments, quizzes, presentations and critical analysis papers such as literature reviews and research reports. Of particular note is the increasing emphasis placed on the acquisition of skills directly related to communicating their knowledge in both written and oral formats as the student progresses through the curriculum, culminating in a formal presentation open to the site preceptor and the entire school of health services management and a written research report of publishable quality.

16. STUDENT SUCCESS AND ACHIEVEMENT

The greatest marker of student success and achievement for the HIM program is the successful completion of the capstone course, CHIM 407 Practicum. All students are required to complete the

capstone course as a requirement for graduation and, while challenging, students in general feel the process to be extremely rewarding and recognize it as proof of the knowledge and skills acquired throughout the program.

17. LIBRARY

A subject librarian oversees primary collection development in the core areas of health information management. However, it should be noted that the program is heavily supported by collection development efforts in the following programs and/or courses: Health Services Management, Information and Technology Management, Nursing, Public Health, Business Management, Accounting, Law, Computer Science and others. The report prepared for the PPR entitled *An Evaluation of Library Resources and Services Supporting the Program in Health Information Management*⁷ demonstrates that Ryerson University Library resources and services adequately support the program in Health Information Management.

18. SURVEYS

Student Survey 2012: Currently there are about 70 active students enrolled in the HIM stream and 24 HIM students (34%) responded to the student survey.

- virtually all students were employed either part-time or full-time prior to enrolment in the HIM program
- 12.6% had attended community college
- the majority of respondents were female (83.3%) which is representative of HIM's enrolment as well the age ranges were relatively evenly distributed between 12% and 15% with the highest percentage represented in the 45-49 age bracket and the lowest in the 50 or older bracket.
- the majority of students felt the program was academically challenging (22/24 or 92%), well organized (20/24 or 83%) and of high quality (24/24 or 100%)
- the majority (87.5%) felt the program workload was manageable although 3 of the 24 respondents felt the workload was excessively high

Program *strengths* identified in the student survey:

- problem-solving, written communication
- research skills
- understanding professional/ethical responsibilities
- understanding people from different cultures
- developing a broad knowledge of career field
- mastering specific employment related skills/knowledge
- working in teams

Program *weaknesses* identified in student survey:

- understanding the international context of the career field
- entrepreneurship
- leadership skills
- responding to technological innovations

Other information from student survey:

- there appears to be a reasonable interpretation and consensus that tests, examinations, written assignments, learning materials, classroom instruction, group work and print and computer-based library resources were effective or very effective
- some work or improvements could be directed toward experiences with computer-based technology, which likely are related to students who are solely dependent on online/distance education resources
- the consensus seemed to support that professors are current and knowledgeable, well-organized, available outside of class, intellectually challenging and provide useful feedback
- 16.6% of students felt that professors needed to work on their availability and feedback

⁷ Appendix A1-N Library Resources

- 78% felt that academic advising was either effective or very effective; 22% indicated that the question was not applicable as it would appear they have not used the program department for this purpose
- 90.9% indicated that they would recommend this program to others and 95.8% of students indicated that they would also recommend Ryerson University to other students

The biggest concerns identified by students appear to be the final practicum requirements including travel (distance education students having to fly to drive to Toronto three times for seminars) and the time required to be at the practicum site away from their employment. Another concern was the time required to participate in blackboard discussions (which is typical for distance education).

Alumni Survey 2012:

There was a response rate of seven students of a total possible 25 (28%).

- all were employed when they entered the program and HIM graduates identified their jobs prior to entering the program as HIM Professional (4) and Managers (3). None identified securing a more senior job position as a result of their degree, but this could simply be more reflective of a tighter job market and less room for advancement.
- all seven graduates indicated the level of satisfaction with the core courses as very satisfactory or satisfactory
- with the elective courses two-thirds indicated very satisfactory or satisfactory
- 5 of 7 respondents were satisfied or very satisfied with the practicum
- five respondents indicated courses they felt should be added to the HIM stream including statistics (SPSS training, epidemiology, healthcare research), Informatics courses (Electronic health records, Data Analysis and reporting, computer technologies), and project management
- five respondents commented that there was too much overlap in the economics courses
- other recommendations for the program included improving online learning so all exams can be done online and to revisit the requirement to travel to Toronto for the practicum seminars

Practicum Preceptor Evaluations:

While all HIM students are currently employed in the health information field during their studies, the capstone of the HIM program, the Practicum (HIM 406 and HIM 407), provides students with a unique opportunity to apply what they have learned about management theory and concepts at an alternate work setting through the production of a major research project. Four practicum supervisors completed the evaluation forms. Overall the responses were favourable with all four indicating that their expectations were more than satisfactory or exceeded their expectations.

More recently, a practicum student completed a research paper on the preceptors' perception of the practicum experience based on preceptor responses from January 2007 through to and including January 2011 academic terms. The value in the experience was deemed both pleasurable and enjoyable by the preceptors involved in Ryerson's practicum program. The majority of preceptors were highly impressed by the student's attitude, professionalism, work ethic and final deliverables (written report and/or presentations). The students' projects were deemed both valuable and useful to the host organizations and in several cases had an impact on steering health care management decisions.

Recommendations for improvement included increasing the number of face-to-face visits by faculty, hosting an annual preceptor appreciation breakfast, hiring a full-time faculty member to work exclusively with the practicum program in an effort to fill the existing gap in communication and support identified by the preceptors.

19. FACULTY

Since its inception the HIM program has operated with one tenured faculty member (who is also the Director of the program) and one Limited Term Faculty position. Both positions split their responsibilities equally between the HIM program and HSM program. The remaining faculty are CUPE contracts. (Note that as of 2012 there are now 3 full-time RFA positions)

Faculty members are encouraged to incorporate student participation, as appropriate to their SRC programs and the skills and interests of students. There are very few available resources for supporting faculty research; however a research assistant was hired on a contractual part-time basis from 2009 to 2011 to help manage some of the research activities associated with the practicum and any publications and poster's which resulted from practicum related activities.

20. ADMISSION REQUIREMENTS

Health Information Management is intended for two separate, distinct applicant streams:

Stream A:

For individuals who are graduates of health record/health information accredited or recognized programs, having at least two years related experience in the field of health information and a grade average of 'B' or higher. Documentation of professional registration/certification with CHIMA is also required. Potential candidates with other post-secondary academic backgrounds and extensive work experience in the field will be considered on an individual basis.

Stream B:

Individuals who are graduates from a three-year diploma program with a grade average of 'B' or higher in applied health sciences (e.g. nursing, medical laboratory technology, chiropody, radiology, respiratory therapy) from an Ontario College of Applied Arts and Technology (CAAT), or the equivalent. The diploma must include a one-year introductory, university-level humanities course or equivalent. Candidates must have at least two years of professional experience in the health services field as well as documentation of professional registration/certification where applicable.

Potential students with other post-secondary academic backgrounds and extensive work experience in the field will be considered on an individual basis. Applicants with no specific experience/training in the health information field will be expected to achieve proficiency in the core health information subject areas that are currently taught in the CAATs or equivalent educational systems.

21. STUDENT QUALIFICATIONS

While the admission data indicated a large number of applications with only a few enrollments, a large number of these are due to applications which do not meet the eligibility requirements. Since HIM is a degree-completion program recognized by CHIMA, it is important for the program to maintain standards that are appropriate to maintain CHIMA recognition status. As part of the development plan, there have been some discussions going forward for the design and implementation of a certificate in Health Information Management.

22. ENROLMENTS, RETENTION AND GRADUATION DATA

Students are admitted three times a year in the Fall, Winter and Spring semesters (Table 2). Once admitted, part-time students are given up to eight years to complete their program (and in theory extensions beyond this period are available for special circumstances). It is expected that students will maintain an average registration of one, one-semester course per term for each of the three academic terms per year (i.e. a total of 3 courses/credits per year), but this is not always possible due to a variety of reasons. Since the degree-completion requires twenty four (24) credits, in theory the student should complete the program in the 8-year time-frame.

Table 2 Applications and Acceptances

Academic Year	Total Applications	Accepted
Fall 2008-Spring 2009	46	15
Fall 2009- Spring 2010	46	13
Fall 2010 – Spring 2011	46	11

The retention rate of the HIM program has varied over the years but essentially ranged from 70-90% after 1 year in the program (Table 3). Similarly the 2 year retention rate for the HIM program (Table 4) for the last three academic years was a steady 75%. In the most recent academic year of 2010-2011 the 3 year retention rate was also 75% (Table 5). Of note are the variations and this is often reflective of the part-time nature of the program where students are sometimes unable to complete a course during an

academic year due to a variety of reasons including work related issues or the availability of a particular course in the term of their choice.

Table 3 Percentage of students retained in any year level at Ryerson after one year of study

Reported for part-time programs Retained in:	2007/08	2008/09	2009/10	2010/11
Ryerson	79.1%	75.0%	77.0%	76.6%
Health Information Mgt (PT)	68.8%	75.0%	66.7%	90.9%
Health Services Mgt (PT)	69.2%	77.8%	94.4%	84.0%

Table 4 Percentage of students retained in any year level at Ryerson after two years of study

Reported for part-time programs Retained in:	2007/08	2008/09	2009/10	2010/11
Ryerson	63.6%	68.0%	62.7%	66.9%
Health Information Mgt (PT)	41.7%	75.0%	75.0%	75.0%
Health Services Mgt (PT)	77.8%	61.5%	66.7%	77.8%

Table 5 Percentage of students retained in any year level at Ryerson after three years of study

Reported for part-time programs Retained in:	2007/08	2008/09	2009/10	2010/11
Ryerson	47.7%	52.7%	54.3%	51.4%
Health Information Mgt (PT)	47.1%	25.0%	43.8%	75.0%
Health Services Mgt (PT)	56.0%	50.0%	41.7%	37.5%

The HIM program's initial entering class in 2003 of 39 students graduated their first students in 2007 and currently a total of 25 students have now graduated from the program.

23. RESOURCES

HIM consists of one Director (also the only Tenured faculty), one Limited Term appointed Faculty and one Administrative Assistant (note – as of 2012 there are 3 full-time faculty). The support staff splits responsibilities between the HSM stream and HIM stream. There was a 2 year contract Program Manager position from 2008-2010 and a contract Research Assistant position from 2009-2011. Due to resource constraints neither contract was renewed. There are currently six CUPE instructors involved with the Health Information Management Program. Due to the relatively small class sizes (less than 50), the program does not typically employ Teaching Assistants or Graduate Assistants. Office space includes 3 office spaces for the Director, the LTF and the Administrative Assistant and a shared office space for CUPE instructors.

24. STRENGTHS, WEAKNESSES AND OPPORTUNITIES

As part of the periodic program review, a SWOT analysis was undertaken and input was collected from instructors as well as students and the administrative staff. It should be noted this analysis is ongoing.

Some of the *strengths* of the program include:

- the variety of delivery options (traditional, modular, and online)
- HIM instructors are current and most continue to work in the healthcare management field
- the flexibility and structure of the degree-completion model which builds on previous education and provides students an opportunity to receive credit for their college level work and apply that education towards a baccalaureate degree
- when the full-time University of Ontario Institute of Technology program closes, there will be an increased interest in the HIM part-time degree completion model – HIM has already received some communication for students concerned about the closure of that program and looking to complete their studies at Ryerson

Challenges include:

- lower than expected student enrolment numbers
- a much higher application rate than enrolment, however, many students who apply do not meet the academic requirements for entry into the program

- awareness of the program still appears to be lagging and this may also be affecting the quality and quantity of eligible applicants
- some concern from some students that the demands of the practicum are too high

Opportunities for improvement:

- students have opportunities to study in traditional format and also modular weekend and web-based formats; however, there is a need increase the number of sections and to continue to develop both modular content and web-based content to meet the increasing needs of student from outside the greater Toronto Region
- students are integrated into classes which include the Health Services Management program, Certificate students and other Continuing Education students; an increase in demand as expected by recent industry reports will result in courses needing to be restructured to guarantee access to HIM program students
- for continued success there must be ongoing efforts to ensure the relevancy and timelessness of the curriculum as well as continued efforts at student recruitment and retention
- continued and imaginative methods of program awareness and presentation are necessary to ensure the program's future viability
- due to resource constraints student engagement initiatives such as a Speaker Series and Symposium were unsustainable at the time, however should be considered again in the future should more resources become available.

The vitality, relevance and success of the program are highly integrated into the strong practitioner orientation of the curriculum and the experience of the instructors. The value of an instructing faculty with current health services and health information experience cannot be understated. However, the dependency on CUPE instructors also poses a challenge when it comes to curricular and strategic planning given CUPE instructors typically have full time jobs elsewhere and their loyalties and time constraints do not allow them the flexibility required for these program activities.

25. DEVELOPMENTAL PLAN

Recent changes have impacted the HIM program. Of particular note to this program review is the recent move to the Ted Rogers School of Management from the Faculty of Community Services in 2011. The School of Health Services Management and the Health Information Management program have some plans considered to be imperative to short term and long term development.

Short Term:

- School retreat for strategic planning
- Secure funding for faculty
- Secure funding for staff
- Provide a School "presence" in the Ted Rogers School of Management
- Formalize a budget

Long Term:

- Increase awareness of program
- Increase student performance, retention and graduation rates
- Develop a Master's option
- Develop a HIM Minor and a HIM Major for Bachelor of Commerce students
- Establish pathways to the School of Business Management MBA program
- Develop a 4-year, direct entry, BHA Degree in Health Informatics
- Develop new courses / new potential areas of focus. Based on the alumni survey and informal conversations with experts in the field further consideration should be given to the development of new courses particularly in (a) International Healthcare Systems, (b) Project Management in Healthcare, (c) Quality Improvement in Healthcare, and (d) Managing Complex Chronic Disease.
- Develop a Research Institute with a focus on Chronic Disease Management and Prevention

26. PEER REVIEW TEAM REPORT

i. Outline of the Visit

The Peer Review Team (PRT)⁸ made its on-site visit to the School of Health Services Management occurred on January 15 and 16, 2014.

ii. General Assessment of the HIM Program

The PRT unanimously concluded that the HIM program is of high quality. The HIM program is viewed very positively among faculty, students, professional associations, and prospective employers. The key strengths of the HIM program include:

- the relevancy of the curriculum
- flexibility of on-site and distance options
- quality of the on-site facilities (e.g., classroom and meeting space)
- passion that the students, faculty and Director show towards the program

Despite numerous positive aspects, the PRT indicated a number of concerns with the HIM program including:

- the low program enrollment
- the lack of role clarity for various aspects of the program
- the need for additional administrative and operational support
- possible excessive expectations of the practicum
- lack of broad program awareness in the health care community
- low health services management research capacity

In terms of course content, key steps that the School of Health Services Management should undertake to improve program quality include:

- (1) reducing the number of economics courses in the program
- (2) removing an introductory information technology course from the program
- (3) adding courses in health care statistics, process view of information systems, IT privacy and ethics, project management, data analytics/big data, and change management
- (4) moving a number of professionally related electives to liberal studies electives

Other steps that the School of Health Services Management can take to improve the quality of the HIM program include:

- (1) initiating a health care research seminar series to help increase research capacity
- (2) working with CHIMA to best operationalize the latest HIM program entry option
- (3) working with the Association of University Programs in Health Administration (AUPHA) and CHIMA to identify and assess alternatives to the HIM practicum

The most pressing issues with the HIM program require working closely with the Dean of the Ted Rogers School of Management and focus on increasing HIM program enrollment and enhancing research capacity. Key steps include:

- (1) striking a committee to examine the workload and expectations of the HIM practicum
- (2) reinstating the position of HIM Program Manager, but with increased responsibilities
- (3) adding a tenure-track position with the goal of enhancing health services management research capacity
- (4) reinstating the part-time undergraduate research coordinator position
- (5) developing a five-year plan to significantly increase HIM program enrollment
- (6) initiating extensive HIM program marketing activities

iii. Assessment of Program Objectives

The mission of Ryerson University is the advancement of applied knowledge and research to address societal need, and the provision of programs of study that provide a balance between theory and

⁸ Dr. Norman Archer, Professor Emeritus, DeGroote School of Business McMaster University, Dr. Todd Boyle, Associate Professor and Chair of Information Systems, Canada Research Chair in Quality Assurance in Community Pharmacy, Gerald Schwartz School of Business, St. Francis Xavier University and Karen Spalding Associate Professor and Program Director, Master of Nursing, Daphne Cockwell School of Nursing, Ryerson University.

application and that prepare students for careers in professional and quasi-professional fields. The HIM program is unique as it is a degree completion program where the vast majority of students have previous community college education and currently work in the health care field while they are enrolled in the program. Students have the unique opportunity through this program to complete a Bachelor's degree while also taking courses that enhance their knowledge and skills in their specialized professional field – health informatics. Currently, this is the only degree program of its kind in Canada, thus meeting a crucial need for not only Ontario but all provinces, since the courses are offered on-line. Students are enrolled in the HIM program from Newfoundland to British Columbia.

The courses are taught by faculty with expertise in health services management and by instructors who are currently working in the field. The curriculum mapping demonstrates that the courses offer sufficient breadth and depth of knowledge expected at an undergraduate level. The courses are sequenced to ensure that students have an opportunity to learn about the health care system at an introductory level (i.e., 300 level courses). These concepts are then reinforced in specialized courses occurring during the second year (i.e., 400 level courses). Lastly, students demonstrate proficiency in program goals through completion of a capstone research project. This project requires the application of a broad range of knowledge, critical thinking, and research skills to a specific health care management problem within an external organization. Students are required to submit a written report, as well as formally present key findings to an audience that includes faculty, students, and health care organizations.

iv. Admission Requirements

The PRT believes that the admission requirements are appropriate and enable students to be successful in the program. However, since the two year undergraduate entry option (effective January 2014) allows for students to enter the HIM program without first completing courses from an accredited CHIMA institution, CHIMA provided some concerns regarding this newest program entry option.

Historically, the CCHIM (Canadian College of Health Information Management) has supported the Ryerson degree completion program due to the requirement that the students only gain entry after successfully completing an Accredited HIM diploma level program AND successfully challenging the national certification exam. Under the two year undergraduate entry option (effective January 2014) the Ryerson program graduates would not have CCHIM certification, would not have covered core HIM content, and may not be deemed suitable for many of the jobs that require this credential and core content.

This may have implications for Ryerson; offering a speciality degree in an area where employers may require certification and yet this is not the ultimate outcome of the program. Additionally, many job postings also require the applicant to be a CHIMA member in good standing and this too is not an option with this criteria. CCHIM is open to discussing new models Ryerson might be looking at undertaking and potential pilot Accreditation options. CCHIM would like to strengthen their affiliation as the Accrediting body with any and all options Ryerson considers for the HIM stream moving forward.

While the PRT views that such justification and expectations may be excessive and limit the flexibility of the School of Health Services Management to enhance the HIM program, it is important that there is some agreement between the two parties on this particular admission criterion. The need to maintain a positive relationship with CHIMA is critical given their importance in HIM program marketing and growth and the impact of CHIMA accreditation on student employment success.

Recommendation 1: The current Director of the School of Health Services Management should meet with appropriate members of the Canadian Health Information Management Association to discuss how to best operationalize the new HIM program entry option which is effective January 2014.

v. Curriculum and Teaching Assessment

The PRT concluded that, for the most part, the degree requirements (e.g., required and elective courses), level expectations and learning outcomes are appropriate for an undergraduate degree in health information management. The online courses appear to be well developed, at an appropriate level, and have clearly communicated expectations. Students liked the option of completing courses either in-class

or online, felt that the courses were well designed, and believed that the instructors did an excellent job of delivering the courses.

A review of the professionally required courses indicates that they are appropriate and of sufficient depth and breadth for HIM professionals. The PRT also reviewed the list of professionally related required courses. Among this list, the PRT believes that there is currently too great an emphasis on economics. The PRT believes that three economic courses should be streamlined to free up space in this group for new courses.

Recommendation 2: The School of Health Services Management should remove ECN 104 and ECN 204 from the list of professionally related required courses in the HIM program and replace them with a single introductory course in economics. This new course would be the prerequisite for HIM 404 Health Economics.

The removal of an economics course would allow space in the HIM program for a new course in health care statistics. Discussions with HIM students and alumni indicated that there is demand for such a course, which is currently absent from the HIM program curriculum.

Recommendation 3: The School of Health Services Management should introduce a new course in health care statistics and include it in the list of professionally related required courses.

A total of four professionally related electives provide an opportunity for students to build a broad background in health care management. However, among the courses listed in this category, it is the view of the PRT that INT 901 (Gerontology: Critical Issues and Future Trends), 904 (Health Promotion and Community Development), 907 (Team Work for Community Services), 908 (Homelessness in Canadian Society), and 910 (First Nations Issues) belong in the Liberal Studies Electives category.

Recommendation 4: The School of Health Services Management should move INT 901, 904, 907, 908, and 910 to the Liberal Studies Electives category to free up options for new professionally related electives.

It is recommended that one of the introductory courses in information systems, specifically ITM 102 (Business Information Systems I) be removed from the list of professionally related electives. It is expected that the majority of students have already received the equivalent content as part of their previous college education or based on their industry experience. As a result, this course reintroduced as part of the Ryerson University HIM program may be offered at too low a level to be of much value to students.

Recommendation 5: The School of Health Services Management should remove ITM 102 from the list of HIM professionally related electives courses.

A review of the current ITM course listing highlights a number of ITM courses that should be made available for students in the HIM program. The current ITM courses in the HIM program are very functionality oriented and do not adequately convey the process view of modern information systems. In addition, courses in information ethics and privacy are also missing, both of which are critical issues in an age of e-health.

Recommendation 6: The School of Health Services Management should add to the list of HIM professionally related electives courses focused on the process view of information systems and IT privacy and ethics. Such courses may include ITM 407 (Info Tech, Ethics, and Society), ITM 410 (Business Process Design), and ITM 602 (Configuring and Implementing ERP Apps) among others.

Based on interviews with CHIMA and Program Advisory Council members, there are a number of courses that are relevant and desirable for HIM professionals but seem to be missing or not extensively addressed in the current curriculum.

Recommendation 7: The School of Health Services Management should add courses in project management, data analytics/big data, and change management to the list of professionally related electives in the HIM program.

The practicum, delivered through HIM 406 (Practicum Seminar) and HIM 407 (Practicum), allows students to apply key concepts and skills obtained in the HIM program to a real health care setting.

Student input on the practicum indicates that it is a very heavy load, well over the 6 hours allocated to these courses and particularly the 3 hours allocated to HIM 407. Based on the student interviews and discussions of the nature and scope of their practicum projects, the PRT has concerns that the current workload and expectations may be too high for a Bachelor's degree. The PRT also notes, however, that students may not be in the best position to assess issues surrounding program workload and expectations.

Recommendation 8: The Ted Rogers School of Management should strike a committee to examine the workload and expectations of the practicum in the Health Information Management program. The committee will contain members from Ryerson University undergraduate programs that have a similar requirement (e.g., practicum, major project, undergraduate thesis). This committee will: (1) assess if the practicum workload and expectations match similar requirements in other Ryerson University undergraduate degree programs; and (2) provide metrics to enable HIM faculty and students to assess when the practicum requirements may be beyond normal expectations.

Discussions with HIM faculty indicate that a significant amount of work is required to prepare (e.g. ethics review) and supervise students involved in the practicum. The preparation and supervision activities appear to be spread out over a number of HIM faculty members. Based on discussions with HIM faculty, it appears that various activities related to the practicum are taking them away from more critical activities (e.g., research, broader university service) needed for tenure and promotion through the ranks. The PRT concludes that many of the operational aspects of the practicum are being completed by faculty on a volunteer basis and the PRT believes that relying on such goodwill is a short-term and unstable approach for practicum delivery. In addition, the PRT believes that this approach may have negative long-term consequences on the careers of junior faculty.

Recommendation 9: The Ted Rogers School of Management should reinstate the position of Program Manager in the School of Health Services Management, but with a higher level of expectations. Among other things, this individual will be the primary point of contact for students while undertaking the practicum exercise. It is further recommended that: (1) the ad-hoc or goodwill activities related to the operation and management of the practicum be transferred to the Program Manager, with the goal of freeing up time for HIM faculty to focus on their broader university commitments (e.g., research, recognized university service); and (2) the Director activities related to the operational aspects of the practicum (e.g., assessing host work environment, dealing with host-student issues, practicum grading) be delegated to the Program Manager, in order to enable the Director to focus more time on HIM program growth.

It is also the view of the PRT that the practicum may be a significant bottleneck in student progress through the HIM program and overall program growth. Given the type of students served by the program (e.g., working professionals from across Canada), the PRT believes that students should be provided with alternatives to the practicum to help increase program flexibility. Such options may include, for example, a combination of a smaller project, detailed case study, and job shadowing of a HIM professional.

Recommendation 10: The School of Health Services Management should undertake discussions with the Ted Rogers School of Management, Association of University Programs in Health Administration (AUPHA), and the Canadian Health Information Management Association (CHIMA) to identify and assess alternatives to the HIM practicum, with the goal of providing students with more flexible options to completing the HIM program.

vi. Quality Indicators and Required Resources

Students that were interviewed commented that academic services were adequate on-site but did suggest that for students commuting and/or from other provinces improvements in on-line support would be helpful. Faculty also commented that when delivering on-line courses, there are times when electronic interfaces were not working and they often had to troubleshoot any related technology or software issues on their own.

Recommendation 11: The Ted Rogers School of Management should appoint a resource person to serve as the key point of contact for addressing, on the faculty's behalf, technology issues related to online course development, online course delivery, and student use of the course technology.

Applications to the HIM program have remained relatively flat since program introduction in 2003. Over the past ten years, a total of 31 students have graduated from the HIM program. Given that students are only completing the equivalent of two years of full-time study (versus the more traditional four years) the graduation time is noted, but understandable as the program is targeted to working professionals employed full-time in the health care field. However, the low enrollment is of concern to the PRT, given that the program has been in existence for 10 years, the ideal physical location of the program (i.e., large number of health care providers in the local area), and the lack of direct competition (i.e., similar university programs) within the local area and across Canada. In addition, the overall interest and enrollment in the HIM program is low when compared to the other Bachelor of Health Administration program (i.e., Health Services Management) in the School of Health Services Management (i.e. 241 current students or approximately 72% of the students in this School

Recommendation 12: The School of Health Services Management should work with the Dean of the Ted Rogers School of Management to develop a five-year plan to grow and sustain the HIM program to a similar size as that of the Health Services Management program.

There is a lack of HIM program awareness in the health care area, with the program described as a “best kept secret” by one of the interviewees. It was noted in the interviews with stakeholders that this program is not well known outside of Ryerson University and its partner organizations utilized for student placements. While the HIM self-study document highlights the need for increased program awareness, the steps outlined appear to be more of a piecemeal approach, versus a formal, thorough, and well-developed communication/marketing strategy and plan.

Recommendation 13: The School of Health Services Management should partner with an external marketing agency, Canadian Health Information Management Association, HIM Program Council, and HIM alumni to develop an aggressive marketing campaign to increase awareness of the HIM program, both within the Greater Toronto Area and across Canada.

The vast majority of the courses in this program are taught by sessional faculty who are hired through the Chang School of Continuing Education on a course by course basis. The one positive outcome of this approach is that the sessional instructors, for the most part, have recent experience in the health care field that they can bring to the classroom. However, as per their hiring contracts, sessional instructors are not expected to publish or conduct research. As a result, the research-related activities of the faculty involved in the HIM program are very limited.

Recommendation 14: The School of Health Services Management should hire a tenure-stream RFA position with a HIM specialty and a strong HIM or health services management research capability.

It is important for HIM students to be involved in strengthening research capacity and in the dual roles of the receiver and disseminator of research results. Ongoing engagement in research is one of the key differentiators between community college and university education. To help solidify that the HIM degree is indeed a university program, versus a two-year continuation of a college program, it is important that students are exposed to health care research throughout the HIM program and beyond their own practicum or that of their classmates.

Recommendation 15: The School of Health Services Management should initiate a health care research seminar series. Students would be required to attend in person or view online a number of these sessions throughout the HIM program.

To help build research capacity it is also important that students be provided with the support needed to disseminate their work to the broader research community. From 2009 to 2011, a research assistant was hired on a part-time basis in the School of Health Services Management to help students disseminate through posters and publications the key outcomes from practicum-related activities. It is recommended that such a position be reinstated. However, given the low enrollment in the HIM program, a dedicated HIM resource for this task is not appropriate at this time. Instead, it is recommended that a formal part-time position (i.e., 0.5 FTE) be created at the Ted Rogers School of Management to help undergraduate students in the entire business school disseminate their work to the broader research community. This resource would: (1) actively encourage undergraduate students to publish their work (e.g., extensive marketing of the service); (2) serve as the key point of contact for students with questions regarding presenting or publishing their work; (3) assist students with selecting appropriate publication outlets or

conferences; and (4) arrange for an internal (i.e. within Ryerson University) peer-review of the work prior to formal (i.e., external) conference or journal submission.

Recommendation 16: The Ted Rogers School of Management should create a part-time undergraduate Research Coordinator position to facilitate the dissemination of undergraduate research.

27. Program Response to the Peer Review Team Report

The 2014 HIM Peer Review Team Report concluded that the program is “high quality”, enabling health care information management workers to complete their degrees part time. The most significant concerns expressed were: (1) the lack of a RFA tenure track member in the School of Health Services Management (SHSM) with research and teaching expertise in HIM, (2) the relatively small size of the program, (3) the program’s sustainability in terms of faculty load, (4) the limited research output of the SHSM faculty, and (5) various curriculum course redundancies and opportunities.

These assessments gave rise to 16 recommendations, not necessarily ranked in terms of substantive importance. Not all of these are in the SHSM’s, or in some cases, Ted Rogers School of Management’s (TRSM) mandate to initiate. The SHSM agrees with most of the recommendations made, and is ready, if feasible to take on the ambitious change agenda proposed.

It is the view of the SHSM that the most important recommendations are to: (1) hire an RFA with HIM research and teaching expertise, and (2) reinstate the “Program Manager” position. Both hires would contribute to distributing faculty work load, releasing time for more research activity. This would also supply capacity for more active program promotion and to help handle the administrative and academic demands of the larger cohort thus produced. The hires would also be used to sustain and build relations with key stakeholders, including alumni and the Canadian Health Information Management Association (CHIMA).

The workload concern was linked to the high demands the final practicum seminar/project/paper requirement places on faculty and students. While the SHSM hopes to preserve this important program element, and retain our capability to deliver it, it is understood that it may have to be streamlined if enrollment grows.

The most important curriculum suggestions were: (1) to reduce the Introductory Economics requirement by one course, and (2) add a required applied “statistics for healthcare management” course. With two or three exceptions, the other curriculum proposals were agreed to by the SHSM.

In sum, the HIM Peer Review Team Report supplies a useful map for the SHSM HIM program. In its present state, the program is sustainable, though finding time to commit to research is challenging. The SHSM welcomes the prospect of a larger and more vital HIM program; however the School would have difficulty sustaining quality without the commitment of Ryerson University investments in a HIM RFA faculty member and a Project Manager.

Recommendations and responses:

The Peer Review Team’s Report is thorough and thoughtful, offering 16 specific, and therefore useful, recommendations that can contribute to the program’s improvement. In general the SHSM agrees with the Review Team’s assessments and suggested directions. While some suggestions cannot be implemented by SHSM, most can be initiated by the School, then TRSM and University support will be required to see them through.

Response to Recommendation 1:

i. SHSM will meet with CHIMA officials to work towards creating admission standards, and/or in-program requirements that meet CHIMA expectations, while providing non-Accredited yet HIM-skilled candidates fair access to the program. CHIMA has supported the HIM program as complementary to its own. However, it is clear that qualified graduates of information systems and/or computer science programs, who do IT work in healthcare should be eligible to apply for the program. CHIMA conducts assessments of experienced practitioners holding degrees to determine eligibility to sit for the

Association's National Certification Exam⁹. It may be possible to create a comparable approach for HIM students.

Response to Recommendation 2:

HIM will request the Department of Economics to create a single introductory micro/macro course. In the interim, ECN 204 will be removed as a Professionally Related required course. Two economics courses in a short program are more than necessary. Introductory microeconomics principles are the most relevant for healthcare economics.

Response to Recommendation 3:

HIM intends to design and introduce an applied course, "Introduction to Healthcare Statistics", that introduces sampling and probability principles and applies fundamental statistical analyses in healthcare contexts. It should develop skills in Excel and a statistical package (e.g. R or SPSS). This course will be added as a Professionally Related required course.

Response to Recommendation 4:

The SHSM cannot deem courses from other programs as Liberal Studies electives; it is the responsibility of the courses' home Department/Faculty of Record to do this. Further, this recommendation detracts from the spirit of the intent of Liberal Studies electives. The Ryerson BHA is a university degree so intellectual breadth is necessary. The courses, with the possible exceptions of First Nations Issues and Homelessness in Canada, are more appropriately placed as Professionally Related Electives. Most HIM students are graduates of applied college programs so it is necessary to ensure that they also undertake Liberal Studies as part of their education. Finally, the Professionally Related elective list is not finite, so there is no need to "open up" options on this table.

Response to Recommendation 5:

The SHSM will remove ITM 102 from the Professionally Related electives list. It is a sensible idea. The students are expected to have IT background and experience. The CHIMA accreditation, one held by many students, includes familiarity with Information Management as a core competency. It would be redundant for students to take this course.

Response to Recommendations 6 & 7:

The SHSM will consult with ITM curriculum experts to identify whether the ITM courses identified and/or others, are appropriate HIM Professionally Related electives for the Program. The SHSM will also consult with other Schools in TRSM and Ryerson Faculties to identify appropriate candidate courses for the Professionally Related elective list. Beyond Big Data, it may be appropriate to explore the possibility of adding a GIS course (e.g. Spatial Databases and Digital Cartography, CODG 101) to this list.

Response to Recommendations 8 and 10:

The SHSM will strike a committee, comprising faculty and students, to examine the expectations of the practicum. The committee will look at practices in other Schools that have comparable requirements. However, the intent is to preserve the core elements of the practicum because of the value-added noted by graduates. In order to reduce faculty load, SHSM will endeavour to engage sessional faculty to support practicum activities.

The Practicum and associated research project produce work comparable to that of professional Masters Degrees. Notably all students conduct applied studies involving data collection and analyses; vital skills as evidence-based management is promoted in the healthcare system. Since the projects are individually done, SHSM can be confident that students have demonstrated capabilities. (This is not feasible in the larger TRSM programs where numbers preclude individual assessments of this quality).

⁹ CHIMA (n.d.) Advanced standing Candidates, External Graduate Program. Avail <https://www.echima.ca/advanced-standing-candidates/external-graduate-program>.

The Practicum is labour-intensive for students and faculty, but not easily scalable in its current format. Nonetheless the SHSM has developed processes, networks, etc. that are worth preserving. Should the SHSM be successful in developing a Master's program, this capability could be migrated to that level, and the current Practicum requirements may adjusted to "normal" undergraduate expectations.

Response to Recommendation 9:

The SHSM will request the reinstatement of a Program Manager to support Faculty Department Assistant activities, including program promotion and stakeholder relation management (including practicum logistics, alumni relations, program development, etc.) SHSM has three full time faculty, including a Director, and one DA for about 300 part time students in the HIM and a sister Bachelor of Health Administration program in Health Services Management. More than half of the curriculum is delivered by sessional instructors through CE. Substantial expansion of the program and its activities is not feasible without more administrative support. It should be noted that this Program manager would contribute half of their time to the HIM program and the other half to HSM.

Response to Recommendation 11:

The SHSM will discuss the appointment of a resource person to support student use of online course delivery with Ryerson's Chang School of Continuing Education, which is responsible for the School's online offerings.

Response to Recommendations 12 and 13:

The SHSM will develop and execute a program promotion plan, with the assistance of the proposed Program Manager, mentioned in relation to Recommendation 9. The plan should incorporate closer cooperation with CHIMA as suggested.

Response to Recommendation 14:

The SHSM will reconfirm the need for an RFA hire with HIM expertise and research capacity. It is remarkable that SHSM has been offering a HIM program since 2003 without a permanent HIM faculty member; relying mostly on sessional instructors (Professionally and/or academically qualified) for the core HIM courses. Such in-house expertise would contribute to the legitimacy of the program and its offerings. Two years ago an LTF was appointed to build the HIM certificate and contribute to the program; however this position was not renewed in 2013-14.

Response to Recommendation 15:

The SHSM will, with the assistance of the proposed Program Manager, introduce a research seminar series. This is a good way to develop research capacity and understanding through broadly engaging faculty and students.

Response to Recommendation 16:

Creating a part-time undergraduate Research coordinator to facilitate the dissemination of undergraduate research is an interesting idea that the SHSM supports. The SHSM will confer with other Schools that have similar capstone projects that may be candidates for publication, and work towards building a case for such a position in TRSM.

28. Dean's Response

The Dean wrote that the School of Health Information Management (HIM) had received and reflected upon the collegial suggestions provided in the Program Review Team (PRT) Report and stated that the recommendations were thoughtful and generally quite helpful for bolstering the program.

The Dean focussed his response on resourcing and the plans for the future of Health Information Management, as those areas provided a convenient frame to analyze the core issues. On the issue of resourcing, the program response to the PRT report was to reconfirm the need for an RFA hire, with HIM expertise and research capacity. The Dean allocated a tenure-track position to HIM early-on in his tenure as Dean. The Dean sees the potential of the program and the high quality of the industry partnerships and student practicums as features to be proud of and build upon. The addition of the faculty member in 2014-2015 will enable more intensive research and ease the pressure on CUPE teaching.

The Dean stated that TRSM must assess whether the Chang School is best suited to delivering this program or if this should be handled within TRSM. The Dean's assessment is that having a strong Health Information Management program strategically positions TRSM, and would be strongly in favour of moving to a self-administered and taught program. TRSM, however, is operating in a time of fiscal constraint, so while reinstating a program manager would also be a legitimate aspiration, both the amount of work of said individual, and the fiscal environment would need to change in order to action this recommendation and response. On the up-side, TRSM is exploring a Master's degree in HIM, and if this came to fruition, a project manager would be an inevitable requirement of growth.

The Dean stated that the potential for a differentiated Master's program in HIM has the potential to reshape the School and the prominence of HIM within TRSM. As the reviewers and response indicate, the practicum in the current undergraduate program is on par with professional Masters requirements. This is likely due to strong leadership in building intensive partnerships and a willingness of key faculty to take on an intensive workload in supervising undergraduate students. While these characteristics that differentiate the program in the marketplace are laudable, they are likely not sustainable. Enrollment numbers must be openly questioned and ways sought out to streamline the practicum to make the degree program more attractive to prospective candidates. More targeted marketing of the program would likely yield increased enrollments and help build the case for a Master's program. A Master's program with the current practicum requirements would not only better align with Master's level expectations, it would also likely be well received in the market. The development of a Master's program would allow HIM to streamline the practicum requirements at the undergraduate level to a far more manageable (and sustainable) level.

The Dean wholeheartedly endorsed the notion of becoming closer partners with the Canadian Health Information Management Association (CHIMA). The area of health informatics is a niche that Ryerson (and HIM) could exploit and it has strong institutional (university) capacity and commitment. Further, by aligning the HIM program with the Association's National Certification Exam, Ryerson may become even more well-known to an important industry body (and thereby have highly capable students channeled towards the University's programs).

In summary, the Dean was supportive of the response to the PPR subject to fiscal constraints, increased student enrollments, offering the program through TRSM, graduate level aspirations and a deepened relationship with CHIMA.

29. ASC EVALUATION

The Academic Standards Committee's assessment of the Periodic Program Review of the Bachelor of Health Administration in Health Information Management indicated that, overall, the review was well-done and provided an informative evaluation of the program. The ASC indicated the following recommendations to be addressed in a follow-up report:

1. Provide a more in-depth analysis of the curriculum mapping of courses to program learning outcomes to include all learning outcomes. Consider gaps, overlaps and redundancies and how they will be addressed.
2. Provide an update on discussions with with Canadian Health Information Management Association (CHIMA) officials to work towards creating admission standards, and/or in-program requirements that meet CHIMA expectations, while providing non-Accredited yet HIM-skilled candidates fair access to the program.
3. Provide an update on advances made in developing/implementing the recommendations made by the Dean and the Peer Review Team as well as initiatives contained in the HIM developmental plan.

30. FOLLOW-UP REPORT

In keeping with usual practice, the follow-up report which addresses the recommendations stated in the ASC Evaluation Section is to be submitted to the Dean of the Ted Rogers School of Management and the Provost and Vice President Academic by the end of June, 2015.

31. IMPLEMENTATION PLAN

- i. Approval of the recommendations set out in the Final Assessment Report:
The recommendations have been approved by the Dean and by Senate. Ryerson University's IQAP Policy 126 states: "Senate is charged with final academic approval of the Program Review."
- ii. Responsibility for providing any resources made necessary by those recommendations:
Ryerson University's IQAP Policy 126 states: "The Chair/Director and Dean are responsible for requesting any additional resources identified in the report through the annual academic planning process. The relevant Dean(s) is responsible for providing identified resources, and Provost is responsible for final approval of requests for extraordinary funding. Requests should normally be addressed, with a decision to either fund or not fund, within 2 budget years of the Senate approval. The follow-up report to Senate will include an indication of the resources that have been provided."
- iii. Responsibility for acting on those recommendations:
Ryerson University's IQAP Policy 126 states: "If the report includes a recommendation for approval of the program review, it will include a date for a required follow-up report to be submitted to the Dean and Provost on the progress of the developmental plan and any recommendations or conditions attached to the approval."
- iv. Timelines for acting on and monitoring the implementation of those recommendations:
Ryerson University's IQAP Policy 126 states: "The initial follow-up report is normally due by June 30 of the academic year following Senate's resolution. The Provost may require additional follow-up reports."

32. REPORTING

- i. The distribution of the Final Assessment Report (excluding all confidential information) and the associated Implementation Plan to the program, Senate and the Quality Council:
The Office of the Vice Provost Academic is responsible for distribution of the Final Assessment Report to all relevant parties.
- ii. The institutional Executive Summary and the associated Implementation Plan be posted on the institution's website and copies provided to both the Quality Council and the institution's governing body:
The Office of the Vice Provost Academic is responsible for posting the information on the Curriculum Quality Assurance website at www.ryerson.ca/curriculumquality. The information is provided to the Board of Governors on an annual basis.
- iii. The timely monitoring of the implementation of the recommendations, and the appropriate distribution, including web postings, of the scheduled monitoring reports:
The Office of the Vice Provost Academic is responsible for following up with the programs and their respective Deans to ensure the recommendations are implemented. The follow-up report

is submitted to the relevant Dean(s) and the Vice Provost Academic for review.

- iv. The extent of public access to the information made available to the public for the self-study: Ryerson University's Senate Policies are available to the public through the Senate website at www.ryerson.ca/senate. This includes Policy 110 Institutional Quality Assurance Process and Policy 126 Periodic Program Review of Graduate and Undergraduate Programs. The Final Assessment Report (excluding all confidential information) and the associated Implementation Plan is available on the Curriculum Quality Assurance website at www.ryerson.ca/curriculumquality. A summary of the Report of the Review Committee is contained within the Final Assessment Report. A summary of the responses provided by the Dean and the program to the Report of the Review Committee is contained within the Final Assessment Report.

33. SCHEDULE

The next periodic program review for the Health Information Management program is scheduled for 2021/22.