

**Course Description:**

Present day healthcare relies on the sharing of health information across clinical information systems, integrated hospital and primary care information systems, and regional health information systems. We will look at the collection, use, storage and retention of health data; flow of data and health information across the care continuum; and information governance and the management of health information through its lifecycle. Other aspects of complex health information systems will be explored including security and privacy of health data/information, change management, adoption of innovation and new technologies, and organizing effective project teams.

Prerequisites: MHI4100F/9100F: Introduction to Health Informatics.

**Course Goal**

To appreciate the complexities involved in transforming data into information and knowledge for decision making. To understand the management of health information through its lifecycle. To look critically at examples of health information systems and analyze the data, data flows, technology, control and management issues involved (including security and privacy controls). To be familiar with principles of project management, change management and effective teams that are involved in implementing and using integrated health information systems. To understand the central role of health information management in quality assurance and performance improvement, planning and management of resources, risk management, disease surveillance, research and education.

**Course Objectives**

Upon the completion of the course, the students should:

1. Understand the principles of good data and information governance.
2. Have a general understanding of records and information management principles and practice.
3. Understand the data to information to knowledge continuum and appreciate the complexity of transforming data into information and knowledge.
4. Appreciate the different venues in which data are collected in Canada (e.g., acute care, rehabilitation, cancer care, chronic disease management, primary care, mental health, and community, residential and ambulatory levels of care, continuing care, long term care).
5. Appreciate the different classification and data abstraction systems in Canada including acute care, rehab, primary care, mental health, and community care (e.g., rehabilitation (FIM-FRGs), mental health (DSM IV TR or V), home care, cancer care (ICD-O), International Classification of Functioning, Disability and Health (ICF), and primary care (ICPC 2)).
6. Appreciate the different uses and users of health data and information within the health care system in clinical care, disease surveillance, research, policy, management and decision making and the importance of data quality and data and information standards.
7. Understand current regulations regarding security, privacy and confidentiality of health data.
8. Understand general principles of project and change management, in particular with regard to implementing an integrated clinical or health information system.
9. Understand how teams and teams of leaders can be used effectively to implement change within an organization or across multiple organizations or agencies.

**Evaluation:**

Evaluation will be based on five written assignments, a team project and participation in class and in the Forum on OWL.

## **Written Assignments:**

### **Assignment #1**

#### **Definition of Health Information Management**

**10%**

Explore the definition of health information management (HIM). Discuss the features/knowledge/skills and competencies that distinguish HIM from health informatics and what roles HIM professionals may fill.

**Assignment due by Monday, Jan 20, 2020 by 5 p.m.**

### **Assignment #2**

#### **Information Governance**

**10%**

Define what is meant by "information governance." Outline the general principles within information governance for a health care organization and what policies, procedures, facilities (people and/or technology) are needed. What barriers may exist to the implementation of a robust governance framework? What are the implications of not having an information governance policy in place?

**Assignment due by Monday, Feb 10, 2020 by 5 p.m.**

### **Assignment #3**

#### **Data Flows Within the Health System**

**20%**

Using the clinical scenario provided, describe the type of data that would be collected at each stage and model the data flow across the encounters and systems described. Discuss what type of technology might be used to facilitate collection and exchange of the data and information across the continuum of care. What considerations must be kept in mind and put in place to facilitate this (e.g., data standards, technology standards, policies on information sharing, privacy, confidentiality, etc.)?

**Assignment due by Monday, March 2, 2020, by 5 p.m.**

### **Assignment #4**

#### **Security, Privacy and Confidentiality of Health Data – Policies and Procedures**

**20%**

Provide a definition (with appropriate references) for each of the terms: security, privacy, and confidentiality. In this assignment you are asked to develop the policies and procedures that address the use of, and access to, health data for a group of students working within a health facility. You will need to consider issues related to authorized use and access, necessary training, and security safeguards. Your final written assignment should include your final recommendations for the facility's policy and procedures. Within the latter you may include any documentation to assist in rolling out these new policies and procedures.

**Assignment due by Monday, March 23, 2020 by 5 p.m.**

### **Assignment #5**

#### **Team Work / Team Project**

**30%**

During the term all members of the class will participate in the development of a project (for example, an HIM blog, a health app, a white paper or professional practice brief) within the field of health information management. Possibilities will be discussed in class and an appropriate assignment determined by January 20. At the end of the term each team will present their final project (as a group effort) and each student should provide a brief summary and overview of what they contributed to the project. (20%)

Additional material will be distributed in class that can be used to report on team effectiveness and team building. (10%)

**Final project due by Monday, April 6, 2020.**

### **Participation**

**10%**

In class participation and forum discussion will be considered in the mark.

## Learning Resources:

Course notes are found online in OWL and include a list of objectives, notes, suggested readings, and further instructions for your written assignments.

## Readings:

There is no required text for the course, but I would recommend that you use the Canadian text “Fundamentals of Health Information Management” (*HIM*), the second edition was published in 2013, and “The Canadian Health Information Management Lifecycle” published in 2017 through CHIMA. Several other books on health information management and health informatics are available but deal either with the American health care system or approach the subject with a medical informatics emphasis. There are a number of excellent health informatics and HIM journals, many available online, and journal articles that supplement the course notes will be posted to the OWL course site for download. A variety of sites related to the field of health information management and health informatics are also listed below.

### *Fundamentals of Health Information Management, Second Edition*

Eds. Kelly Abrams and Candace Gibson

Canadian Health Information Management Association (CHIMA)

CHA Press, 2013

(indicated as *HIM* in the course outline reading list)

The definitive text on health information management in Canada.

### *The Canadian Health Information Management Lifecycle*

Eds. Kelly J Abrams, Shirley Learmonth and Candace J Gibson

Canadian Health Information Management Association (CHIMA)

(indicated as *Lifecycle* in the course outline reading list)

Published through Lulu Publishing Services, 2017.

Two American texts that you may find useful and that will be available through the reference desk of the library.

### *Health Information: Management of a Strategic Resource, Fifth Edition*

Eds. Mervat Abdelhak and Mary Alice Hanken

Elsevier, St. Louis, Missouri, 2016

(indicated as *HI* in course outline reading list)

### *Health Information Management: Concepts, Principles, and Practice, Fourth Edition*

Eds. Kathleen M. LaTour, Shirley Eichenwald Maki, & Pamela K. Oachs

AHIMA, Chicago, Illinois, 2013

(indicated as *LaTour* in course outline reading list)

## Journals

BMC Medical Informatics and Decision Making

(link from UWO library e-journals)

Electronic Healthcare

<http://www.longwoods.com/home.php?cat=248>

Health Information Management and Communications Canada

<http://www.healthcareimc.com/>

JAHIMA (Journal of the American Health Information Management Association)

<http://journal.ahima.org/>

## **Canadian Organizations**

CHIMA (Canadian Health Information Management Association)  
<http://www.echima.ca>

CIHI (Canadian Institute for Health Information)  
<https://www.cihi.ca/en>

Digital Health (formerly COACH - Canada's Health Informatics Association)  
<https://digitalhealthcanada.com/>

Infoway (Canada Health Infoway)  
<http://www.infoway-inforoute.ca/>

## **American Organizations**

AHIMA (The American Health Information Management Association)  
<http://www.ahima.org>

AMIA (American Medical Informatics Association)  
<http://www.amia.org/>

HIMSS (Healthcare Information and Management Systems Society)  
<https://www.himss.org/>

## **International Organizations**

IFHIMA (The International Federation of Health Information Management Associations)  
<http://www.ifhima.org/>

IMIA (The International Medical Informatics Association)  
<http://www.imia.org>

**MHI 4110G/9110G – Health Information Management – Course Outline:**  
**Weekly two-hour lecture/seminar – Mondays, 3:30 – 5:30 pm, HSA H410**  
**Course Instructor: Candace Gibson, PhD, CHIM**

HIM text book readings from “Fundamentals of Health Information Management.” Additional pertinent readings will be provided online through OWL or as handouts during class. Class schedule (day and time) will be confirmed at our first meeting.

Week	Material Covered	Readings	Web Resources
<b>Health Information Management: Introduction and Overview</b>			
<b>1</b> <b>Jan 6</b>	<b>Module 1</b> <b>Health Information Management</b> Introduction & Overview <ul style="list-style-type: none"> <li>• HIM – Definition</li> <li>• HIM Professionals</li> <li>• Health Records and Health Information Management Lifecycle - Overview</li> </ul> <b>Introduction to Teams and Team Work</b>	<i>HIM</i> Ch. 2 – The Health Information Management Profession Ch. 7 – Health Information Management  <i>Lifecycle</i> Overview of Canadian Health Information Management Lifecycle  <i>HI</i> Ch. 2 – The Health Informatics and Health Information Management Profession <i>LaTour</i> Ch. 3 – The Health Information Management Profession	CHIMA – <a href="http://www.echima.ca">http://www.echima.ca</a> AHIMA - <a href="http://www.ahima.org/">http://www.ahima.org/</a>  CIHI – <a href="http://www.cihi.ca">http://www.cihi.ca</a>  Canada Health Infoway - <a href="https://www.infoway-inforoute.ca/">https://www.infoway-inforoute.ca/</a>
<b>Information Governance and HIM Planning</b>			
<b>2</b> <b>Jan 13</b>	<b>Module 2</b> <b>Information Governance Framework</b> <ul style="list-style-type: none"> <li>• Information Governance versus Data Governance</li> <li>• Enterprise Information Management</li> <li>• Planning and evaluation</li> <li>• Information sharing agreements</li> </ul>	<i>Lifecycle</i> Overview of Canadian Health Information Management Lifecycle Stage 1: Health Information Management Planning & Stage 7: Evaluation  <i>HIM</i> Ch. 7 – Health Information Management	CHI - See CHI white paper on “ <b>Information Governance</b> ” in Readings  AHIMA Resources on Information Governance - <a href="http://www.ahima.org/topics/infogovernance">http://www.ahima.org/topics/infogovernance</a>  CHIMA – <a href="http://www.echima.ca">http://www.echima.ca</a>

	<b>Principles of Record and Information Management</b>	<p>Ch. 15 – Legal Aspects of Health Information Management</p> <p><i>HI</i></p> <p>Ch. 4 – Health Data Concepts and Information Governance</p> <p><i>LaTour</i></p> <p>Ch. 6 – Healthcare Data Life Cycle: Governance and Stewardship</p>	<p>AHIMA - <a href="http://www.ahima.org/">http://www.ahima.org/</a> ARMA - <a href="http://www.arma.org/">http://www.arma.org/</a></p> <p>Accreditation Canada - <a href="https://accreditation.ca/">https://accreditation.ca/</a></p> <p>Canadian Patient Safety Institute - <a href="http://www.patientsafetyinstitute.ca/English/Pages/default.aspx">http://www.patientsafetyinstitute.ca/English/Pages/default.aspx</a></p>
<b>Data Collection, Capture and Receipt</b>			
<b>3 Jan 20</b>	<p><b>Module 3 Health System Use of Data</b></p> <ul style="list-style-type: none"> <li>Review – Uses and Users of Health Data</li> <li>Primary versus Secondary Use → Health System Use</li> </ul> <p><b>Data Flows within Health Care</b></p> <ul style="list-style-type: none"> <li>Looking at the ‘continuum of care’</li> <li>Collect once, use many times – what do we need?</li> </ul> <p><b>More on Teams and Team Work</b></p>	<p><i>HIM</i></p> <p>Ch. 4 – Principles of Data and Health Information Management</p> <p>Ch. 7 – Health Information Management</p> <p>Ch. 13 - Secondary Uses of Health Data and Health Databases</p> <p><i>LaTour</i></p> <p>Ch. 14 – Secondary Records and Healthcare Databases</p> <p><i>HI</i></p> <p>Ch. 4 – Health Data Concepts and Information Governance</p> <p>Ch. 13 – Data Analytics: Reporting, Interpretation, and Use</p> <p>Ch. 7 – Health Information Management</p>	<p>CIHI – <a href="http://www.cihi.ca">http://www.cihi.ca</a></p> <p>Statistics Canada - <a href="http://www.statcan.gc.ca/start-debut-eng.html">http://www.statcan.gc.ca/start-debut-eng.html</a></p> <p>See “Health” databases</p> <p>AHIMA – <a href="http://www.ahima.org">http://www.ahima.org</a></p>
<b>4 Jan 27</b>	<p><b>Module 4 Data Governance</b></p> <p>Data Assets</p> <ul style="list-style-type: none"> <li>Types of data; data and information collection formats</li> </ul>	<p><i>Lifecycle</i></p> <p>Stage 2: Data Collection, Capture and Receipt</p> <p><i>HI</i></p> <p>Ch. 4 – Health Data Concepts and Information Governance</p>	<p>AHIMA – <a href="http://www.ahima.org">http://www.ahima.org</a></p> <p>CIHI – <a href="http://www.cihi.ca">http://www.cihi.ca</a> (see section under “Standards”; see ICD-10-CA, CCI and SNOMED-CT)</p>

	<b>Information &amp; Data Standards</b> <ul style="list-style-type: none"> <li>• Technological</li> <li>• Data (Coding &amp; Classification)</li> </ul>	Ch. 7 – Classification Systems, Clinical Vocabularies, and Terminology  <i>HIM</i> Ch. 5 – Clinical Classifications, Terminologies and Nomenclatures Ch. 6 – Health Information Standards  <i>LaTour</i> Ch. 8 – Health Informatics Standards Ch. 15 – Clinical Classifications and Terminologies	
<b>Access, Use &amp; Disclosure of Health Information</b>			
<b>5 &amp; 6</b> <b>Feb 3 &amp; 10</b>	<b>Module 5 &amp; 6</b> <b>Security, Privacy &amp; Confidentiality of Health Data</b> <ul style="list-style-type: none"> <li>• Technical, legal and ethical aspects of health information management</li> <li>• Cybersecurity</li> </ul>	<i>Lifecycle</i> Stage 4: Access, Use, and Disclosure  <i>HIM</i> Ch. 15 - Legal Aspects of Health Information Management Ch. 16 - Privacy, Confidentiality, Access and Release of Personal Health Information Ch. 17 - Ethical Aspects of Health Information Management and Professional Practice  <i>HI</i> Ch. 15 – Privacy and Health Law <i>LaTour</i> Ch. 12 – Legal Issues in Health Information Management Ch. 13 – Ethical Issues in HIM	Information and Privacy Commissioner of Ontario - <a href="https://www.ipc.on.ca/">https://www.ipc.on.ca/</a> and <a href="https://www.ipc.on.ca/health-organizations/">https://www.ipc.on.ca/health-organizations/</a>  Office of the Privacy Commissioner of Canada - <a href="https://www.priv.gc.ca/en/">https://www.priv.gc.ca/en/</a>
<b>Week of Feb 16 – 22      READING WEEK</b>			

Storage, Maintenance, Retention & Disposal			
<b>7</b> <b>Feb 24</b>	<b>Module 7</b> <b>Maintenance, Retention, and Protection</b> <ul style="list-style-type: none"> <li>• Paper Records</li> <li>• Electronic Records</li> <li>• Retention Guidelines</li> </ul> <b>Disposition / Destruction</b> <ul style="list-style-type: none"> <li>• Disposal Procedures/Policies</li> </ul> <b>More on Teams and Team Work</b>	<i>Lifecycle</i> Stage 5: Maintenance, Retention, and Protection Stage 6: Disposition / Destruction  <i>HIM</i> Ch. 7 – Health Information Management Ch. 15 – Legal Aspects of Health Information Management	
Evaluation			
<b>8</b> <b>March 2</b>	<b>Module 8</b> <b>Evaluation of Health Data and Health Information Systems</b> <ul style="list-style-type: none"> <li>• Evaluation Frameworks</li> <li>• Benchmarks</li> <li>• Re-abstraction Studies</li> </ul>	<i>Lifecycle</i> Stage 7: Evaluation  <i>HIM</i> Ch 18 – Quality & Utilization Management	CIHI – Health System Performance - <a href="http://www.cihi.ca/CIHI-external/internet/EN/Theme/health+system+performance/cihi010646">http://www.cihi.ca/CIHI-external/internet/EN/Theme/health+system+performance/cihi010646</a>  Your Health System – In depth <a href="https://yourhealthsystem.cihi.ca/hsp/indept?lang=en&amp;_ga=2.211359957.113111406.1.1577910780-1488804528.1538497944#/">https://yourhealthsystem.cihi.ca/hsp/indept?lang=en&amp;_ga=2.211359957.113111406.1.1577910780-1488804528.1538497944#/</a>  Canada Health Infoway – Benefits Evaluation Network - <a href="https://www.infoway-inforoute.ca/en/communities/benefits-evaluation-network">https://www.infoway-inforoute.ca/en/communities/benefits-evaluation-network</a>  Change Management Network - <a href="https://www.infoway-inforoute.ca/en/communities/change-management-network">https://www.infoway-inforoute.ca/en/communities/change-management-network</a>



Putting Integrated Health Information Systems in Place – Change Management, Project Management, Leadership			
<p><b>9 &amp; 10</b> <b>March 9 &amp; 16</b></p>	<p><b>Module 9</b> <b>Implementation of Integrated Health Information Systems for Health Care</b></p> <ul style="list-style-type: none"> <li>• Project management/change management</li> <li>• Phases of Implementation</li> <li>• Adoption of new technologies</li> <li>• Factors for success</li> <li>• Barriers to implementation</li> </ul>	<p><i>HIM</i> Ch. 20 – Introduction to Leadership Ch. 21 – An Introduction to Project Management</p> <p><i>LaTour</i> Ch. 23 - - Managing and Leading During Organization Change Ch. 27 – Project Management Ch. 29 – Strategic Thinking: Strategic Management and Leading Change</p>	<p>Canada Health Infoway – Managing eHealth Change - <a href="https://www.infoway-inforoute.ca/en/component/edocman/resources/toolkits/change-management/methodologies-and-approaches/1659-a-framework-and-toolkit-for-managing-ehealth-change-2">https://www.infoway-inforoute.ca/en/component/edocman/resources/toolkits/change-management/methodologies-and-approaches/1659-a-framework-and-toolkit-for-managing-ehealth-change-2</a></p> <p>Government of Canada – Managing Change - <a href="https://www.canada.ca/en/employment-social-development/programs/homelessness/hifis/training/administrative/module-1/change.html?it=managing-your-business/employees/implementing-tools-for-human-resources-administration/managing-change/&amp;it=eng/page/2628/">https://www.canada.ca/en/employment-social-development/programs/homelessness/hifis/training/administrative/module-1/change.html?it=managing-your-business/employees/implementing-tools-for-human-resources-administration/managing-change/&amp;it=eng/page/2628/</a></p> <p>Project Management Institute - <a href="http://www.pmi.org/">http://www.pmi.org/</a></p>
<p><b>11</b> <b>March 23</b></p>	<p><b>Module 10</b> <b>Teams and Teams of Leaders</b></p> <ul style="list-style-type: none"> <li>• Working on Teams within organizations and across organizations</li> <li>• Measuring Team Effectiveness</li> <li>• Summary of teams/leadership</li> </ul>	<p><i>HIM</i> Ch. 20 – Introduction to Leadership</p>	<p>Canadian College of Health Leaders - <a href="https://www.cchl-ccls.ca/index.html">https://www.cchl-ccls.ca/index.html</a></p> <p>Teams of Leaders - <a href="http://www.teamsofleaders.org">http://www.teamsofleaders.org</a></p>
<p><b>12</b> <b>April 6</b></p>	<p><b>Presentation of Team Project(s)</b></p>		