



SERIES # 3: Clinical Information Management



STUDY GUIDE: MODULE 2 - Clinical Data Exchange, Minimal Data Sets, Interoperability | Podcast Run Time: 11:55 |

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AFMC & Infoway eHealth Faculty Development

- 1 Personal & Shared Information Management: Presented by Candace Gibson, PhD
- 2 Clinical Decision Management: Presented by Dr. Robert Hayward
- 3 Clinical Information Management: Presented by Dr. Gerard Farrell**
- 4 Health Communication Management: Presented by Aviv Shachak, PhD, Dr. Sharon Domb, Dr. Shmuel Reis, Elizabeth Borycki, PhD and Andre Kushniruk, PhD

About Module 2:

In an increasingly digitally-enabled practice, clinicians are faced with the need to extract data from different information systems. They need to know how to get information from one system to another. The skill of finding data from these systems needs to be taught in medical education as it is a key component to the reality of current clinical practice.

Tackling the issue of how to get systems to talk to one another, the second Clinical Information Management (CIM) module discusses key points on clinical data exchange, minimal data sets and interoperability.

The presenter discusses the need of having data exchange standards in healthcare across all systems in order to break down the silos of electronic information that currently exist.

About Clinical Information Management Series:

The CIM podcast series is comprised of three modules. Each module discusses key components of CIM with the main goal of the series being to increase medical educators' knowledge of CIM and stress that there is a place for it in medical education. The emphasis for integration of CIM into medical school teaching comes out of a need to meet new and evolving standards in patient information gathering, sharing and care in a digital environment.

Learning Objectives:

Through this podcast participating faculty will:

- Understand the importance of teaching clinical data exchange, minimal data sets and interoperability to medical students
- Be aware of the implications from the silos of electronic information across healthcare sectors
- Recognize the need for data integrity and data exchange standards

Workshop Presenter:

Gerard Farrell, MD
Associate Professor, Director eHealth Research Unit
Memorial University of Newfoundland



Access the full eHealth podcast/ vodcast series and supporting resources: chec-cesc.afmc.ca/en/collections/ehealth-workshop-toolkit-collection



Key Learning Points:

- “ There is no one electronic place clinicians can refer to when searching for specific patient data. For example, there are different technologies and information systems that will contain information on x-rays and bloodwork
- “ There exist numerous data systems in healthcare, such as pharmacy, long-term care and hospital systems, which contribute to the existence of information silos
- “ Medical students will need to know how to extract relevant and important patient-specific information from a multitude of digital systems to be successful as a clinician
- “ While standards exist in healthcare, such as HL7, there is still a lack of data exchange standards
- “ Current data systems do not talk to each other . there is no easy way to input data from one system to another

Reflective Questions:

1. What healthcare standards are you aware of in your hospital/ practice? In your region?
2. How would you integrate your experience with data exchange, including benefits and barriers, into your medical teaching?
3. How do you think standards should be created across information systems?
4. What are the challenges to breaking down healthcare electronic information silos? How can healthcare sectors such as pharmacy, nursing and medicine, work together to create a more efficient and effective data sharing system?

Competencies...

Related Core Competencies

CanMEDS 2015:

[CanMEDS 2015 Framework](#)

Acknowledgements

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- Medical Expert
 - 2. Perform a patient-centred clinical assessment and establish a management plan
 - 2.2 Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
- Communicator
 - 4. Engage patients and their families in developing plans that reflect the patient's health care needs and goals
 - 4.2. Assist patients and their families to identify, access, and make use of information and communication technologies to support their care and manage their health
 - 5. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy
 - 5.1. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements
 - 5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology
- Leader
 - 1. Contribute to the improvement of health care delivery in teams, organizations, and systems
 - 1.4. Use health informatics to improve the quality of patient care and optimize patient safety