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Canadian Approaches to Optimizing Quality of Administrative Data for Health System Use, Research, and Linkage

Eastwood, C[1], Denny, K[2], Kelly, M[2], and Quan, H[1]

[1]University of Calgary
[2]Canadian Institute for Health Information

Theme: Data and Linkage Quality
Objectives:

1. To define health data quality from clinical, data science, and health system perspectives

2. To describe some of the international best practices related to quality and how they are being applied to Canada's administrative health data.

3. To compare methods for health data quality assessment and improvement in Canada (automated logical checks, chart quality indicators, reabstraction studies, coding manager perspectives)

4. To highlight how data linkage can be used to provide new insights into the quality of original data sources

5. To highlight current international initiatives for improving coded data quality including results from current ICD-11 field trials

Dr. Keith Denny: Director of Clinical Data Standards and Quality, Canadian Insititute for Health Information (CIHI), Adjunct Research Professor, Carleton University, Ottawa, ON. He provides leadership for CIHI's information quality initiatives and for the development and application of clinical classifications and terminology standards.

Maureen Kelly: Manager of Information Quality at CIHI, Ottawa, ON. She leads CIHI's corporate quality program that is focused on enhancing the quality of CIHI's data sources and information products and to fostering CIHI's quality culture.

Dr. Cathy Eastwood: Scientific Manager, Associate Director of Alberta SPOR Methods & Development Platform, Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, AB. She has expertise in clinical data collection, evaluation of local and systemic data quality issues, disease classification coding with ICD-10 and ICD-11.

Dr. Hude Quan: Professor, Community Health Sciences, Cumming School of Medicine, University of Calgary, Director Alberta SPOR Methods Platform; Co-Chair of Hypertension Canada, Co-Chair of Person to Population Health Collaborative of the Libin Cardiovascular Institute in Calgary, AB. He

has expertise in assessing, validating, and linking administrative data sources for conducting data science research including artificial intelligence methods for evaluating and improving data quality.

Intended Outcomes:

"What is quality health data?" The panel of experts will address this common question by discussing how to define high quality health data, and measures being taken to ensure that they are available in Canada. Optimizing the quality of clinical-administrative data, and their use-value, first requires an understanding of the processes used to create the data.

Subsequently, we can address the limitations in data collection and use these data for diverse applications. Current advances in digital data collection are providing more solutions to improve health data quality at lower cost.

This panel will describe a number of quality assessment and improvement initiatives aimed at ensuring that health data are fit for a range of secondary uses including data linkage. It will also discuss how the need for the linkage and integration of data sources can influence the views of the data source's fitness for use.

CIHI content will include:

- Methods for optimizing the value of clinical-administrative data

- CIHI Information Quality Framework

- Reabstraction studies (e.g. physician documentation/coders' experiences)

- Linkage analytics for data quality

University of Calgary content will include:

- Defining/measuring health data quality

- Automated methods for quality assessment and improvement

- ICD-11 features and coding practices

- Electronic health record initiatives