Development of a Concept Dictionary to Standardize Definitions and Classifications While Working With a Common Repository of Linked Administrative Data

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Introduction

Supporting standardized approaches to common tasks is an important component of quality research using linked administrative data. Standard concept definitions and classifications are vital for ensuring accuracy and consistency in definitions between projects, and improving efficiency and quality. Other leading organizations have published online standard definitions of concepts and classifications.

Objectives and Approach

We developed a comprehensive concept dictionary using a standardized definition template of key components including data sources, codes, scale or range of values, validation details, limitations, SAS code and formats, related concepts, and MeSH terms. A web-based application (built on the Microsoft SharePoint platform) was developed to offer the latest web content authoring capabilities, and advanced search mechanisms enabling the user to search concepts by MeSH terms and key words. It also allowed for navigating concepts through category navigation including clickable categories and sub-categories. Entries will be reviewed annually to ensure the content remains up-to-date.

Results

To date, ten concepts, with accompanying codes, have been published on the concept dictionary with another ten currently undergoing editorial review. These concepts span a variety of topics such as injuries, mental health and addictions-related outpatient services, and annual physical exams. New concepts written by content experts and reviewed by an editorial committee will be added on an on-going basis; thirty concepts are currently under development.

Conclusion/Implications

Development of a concept dictionary provides standardized definitions, algorithms and codes to ensure consistency and quality of research and analysis across multiple projects. Future aims include expansion of the internal organizational site to an external site through collaboration with key stakeholders.