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Identifying and Prioritizing Low Value Care in British Columbia Using Three Administrative Health Data Assets

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Introduction

Clinical recommendations and/or lists of low value care (i.e., health technologies that provide little to clinical benefit for certain patient groups) have garnered attention internationally through campaigns such as Choosing Wisely. However, uptake of such recommendations at the healthcare system-level remains challenging in the absence of routine, data-driven processes.

Objectives and Approach

The objective of this work was to develop and implement a process, leveraging administrative health data assets and lists of 'low value' care, to identify and prioritize technologies at the healthcare system-level for reassessment and potential disinvestment. The British Columbia (BC) healthcare system was selected as the pilot site to test the process. Three provincial administrative health databases were used to examine the extent of low value care across the system: the discharge abstract database (DAD); the Medical Service Plan (MSP) physician claims database; and the MSP laboratory database.

Results

Over 1300 recommendations of low value technologies (i.e., from the National Institute for Health and Care Excellence "do not do" recommendations, low value technologies in the Australian Medical Benefits Schedule, and Choosing Wisely "Top 5" lists) were identified. Using appropriate coding systems for BC's administrative health data (e.g., International Classification of Diseases), low value technologies were queried to examine frequencies and costs of technology use between fiscal years 2010/11 and 2014/15. This information was used to rank technologies based high budgetary impact, defined as total in-hospital and claims expenditures exceeding $1M in any fiscal year examined. Clinical experts reviewed the ranked technologies prior to dissemination and stakeholder action. Pilot testing resulted in the prioritization of 9 candidate technologies for reassessment in the BC healthcare system.

Conclusion/Implications

This work demonstrates the feasibility and strength of using administrative data to identify low value care at the healthcare system-level and prioritize candidates for reassessment. Faced with increasing pressure to control exorbitant costs, while maintaining quality of care, this process has been adopted and operationalized by the BC Ministry of Health.