

Title: Enhancements to the Emergency Visits component of Comprehensive Ambulatory Classification System (CACS) methodology.

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Introduction:

The Canadian Institute for Health Information (CIHI) is responsible for developing and maintaining the Comprehensive Ambulatory Classification System (CACS) methodology, which is a national grouping methodology for ambulatory care patients treated in emergency departments (ED), out-patient clinics and same day surgery. Patients are grouped based on their clinical characteristics and resource utilization. CIHI is currently reviewing the ED component of the CACS methodology, looking for opportunities to better reflect ED complexity and associated resource utilization, both in how cases are assigned to CACS cells and in the calculation of Resource Intensity Weights (RIWs).

Methods:

CIHI reviewed the current logic for assignment of ED visits and are exploring alternative ways to assign some specific patient groups (e.g., patients that are admitted or patients with interventions) and incorporate additional grouping variables. CIHI is also reviewing the labels used to define CACS cells to ensure they are intuitive for ED clinicians and representative of the patient groups they treat. For the RIW derivation, in contrast with the current approach where the RIW values for ED cases are derived from a general model for all the ambulatory care patient population, CIHI has developed an ED-specific RIW model. Various iterations of the model were tested using age groups and indicators for anesthetic technique and investigative technology as adjustment factors. We are also testing additional factors in the model to improve the overall performance of the model and better capture ED complexity.

Results:

CIHI is working with a panel of ED clinicians to test ED-specific RIW regression models for CACS. Based on preliminary findings, creating an ED-specific model, exclusive of any other modifications did not significantly impact the overall model performance for ED patients. To this end, CIHI is expanding the regression models to incorporate additional variables and is testing modifications to the overall logic to better address ED complexity for certain patient cohorts (e.g. those admitted and those receiving moderate and high-cost interventions). An evaluation of the various options and the recommended final model will be discussed in the presentation.

Conclusion:

Ensuring the CACS grouper best reflects ED complexity and resource utilization is of critical importance. Improving the overall performance of this model and creating setting-specific models within CACS, will provide healthcare facilities and policy makers with better information to help them monitor and improve the care and services provided.