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Meeting abstract

Case mix adjusting short stay inpatient mental health episodes

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Introduction

Inpatient mental health represents a significant component of hospital activity, with costs exceeding C$194 million ($180 million US$). The Province of Ontario has recently implemented a minimum data set reporting for hospital activity occurring in adult inpatient mental health beds. The mental health dataset is based on clinical conditions and mental health (mental function, ability to develop and maintain relationships and adapt to change). A case mix classification system for inpatient mental health activity is currently being evaluated. Evaluation of the case mix classification system has revealed that a significant portion of inpatient mental health hospital admissions are short stay (0–3 days length of stay, or LOS), whereby insufficient clinical data is collected regarding clinical conditions and mental health to case mix adjust patient stays. We propose a methodology to case mix adjust inpatient mental health short stay admissions and validate using available information.

Data

The Ontario Ministry of Health and Long-Term Care (MOHLTC) mandated the collection of the Resident Assessment Instrument – Mental Health (RAI-MH) for all activity occurring in inpatient mental health beds in the Province of Ontario (12 million residents) in 2005. Since implementation, there have been 105,001 patient assessments. Of these, 14,976 assessments (14.3%) are short stay admissions, representing 25% of episodes. For those mental health patients admitted from the Emergency Department (ED), 66.6% of patients have an electronic discharge summary containing summary diagnostic information, triage level and ED case mix classification (and cost weights). In addition, for a subsample of ED records, daily cost records from the Ontario Case Cost Initiative (OOCI) are available to validate ambulatory-based cost weights.

Methods

Using data from the ED discharge summary and ambulatory case mix classification results, per diem costs (and cost weights) are estimated for inpatient mental health short stay admissions. The results are validated by comparing estimated costs to daily ED costs from the OCCI. Performance of cost weights is evaluated by computing the mean square errors of estimated costs.

Results and conclusion

Inpatient mental health is an important component of hospital activity and existing DRG-based classification systems have proven to be inadequate descriptors of patient cost. The current inpatient mental health case mix classification system cannot classify, and weight, short stay episodes. The methods proposed in this abstract estimate, and validate, per diem cost weights for short stay mental health patients. The results of this analysis are intended to complement the classification system being considered for widespread implementation for case mix adjusting mental health activity in the Province of Ontario.