

CONFERENCE ABSTRACT

Measures for evidence based improvement in integrated care: Comparative analysis of hospital patients with chronic physical conditions and mental illness

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Introduction: Internationally, there is growing concern that hospitals are not adequately integrating physical and mental healthcare. To support population health and efficient functioning of the overall health system, we need to recognise measures that detect the need for better integrated hospital care. Length of stay (LOS), per capita cost and number of admissions per patient are measures that reflect aspects of quality of care and efficiency, in line with the objectives of integrated care. This project compared trajectories of two acute patient cohorts: chronic physical condition with comorbidity of mental illness (MI) versus chronic physical condition only, examining whether these three measures identified the need for improved integrated care.

Methods: Secondary analysis of 16,618 admissions with a primary diagnosis of one of five chronic medical conditions (lung or colorectal cancer, chronic obstructive pulmonary disease, type II diabetes, ischaemic heart disease and stroke), between July 2010 to June 2015, across four hospitals that collectively cover 95% of public hospital admissions in Tasmania, Australia.

Comparisons of average admissions per patient, LOS per admission, per capita cost and patient characteristics such as age, socio-economic status and Charlson Comorbidities were made between the chosen two acute patient cohorts.

Results: Patients with MI, within each physical condition, had significantly longer LOS, higher per capita cost and lower average admissions than for the non-MI group. Patients with stroke, with MI, had the largest discrepancy from the non-MI group. Generally, patients with MI were significantly younger than the non-MI group, with the exception of the cancer cohort.

Discussion: The combination of longer LOS, lower number of admissions and higher cost for patients with chronic physical conditions and MI, over a period of 5 years, is indicative of disintegrated hospital care. This result resonates with the existing knowledge of MI patients not navigating the health system and having hospital admissions at the right time and, consequently, incurring longer hospital stay and cost. A longer LOS is a compromise to quality

of care, exposing patients with MI to a higher risk of adverse events, including hospital-acquired infection.

Interventions to improve integrated care at hospitals should be systematic, prioritising those chronic conditions with highest discrepancy between the MI and non-MI groups.

Conclusions: Patients with chronic physical conditions and MI comprise a known vulnerable population. A comparative look at LOS, cost and number of admissions per patient, has confirmed poorly integrated hospital care in this population. These three measures are useful to assess areas of improvement in the provision of integrated care within hospitals.

Lessons learned: There is a case for systematic, patient-specific and evidence-based improvement of integrated care in hospitals.

Limitations: In this study, the socioeconomic status of patients is a generalisation based on the postcode of residence. We have not explored the precise reasons for the longer LOS in patients with MI.

Suggestions for future research: Future studies to evaluate the robustness of the measures of LOS, per capita cost and number of admissions per patient, by investigating the association between these measures and core aspects of integrated care.

Keywords: integrated care in hospitals; chronic physical condition and mental illness; length of stay; cost; average admissions
