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POSTER ABSTRACT

Associations between primary care continuity and acute care utilization among adult inpatients

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Shelly Vik, Colin Weaver, Ceara Cunningham, Robin Walker, Rob Skrypnek, Richard Lewanczuk, Judy Seidel

Alberta Health Services, Canada

Introduction: Many jurisdictions in Canada are exploring the role of primary health care in mitigating the challenges of increasing and unsustainable reliance on acute care services. In the province of Alberta, several projects are underway to examine the links between use of primary health care services, patient outcomes and utilization of acute care services - work that may potentially inform policy direction. The current analysis examined the impact of continuity with primary health care services on acute care utilization among an inpatient population.

Methods: Data were extracted from five administrative data sources for Alberta residents 18 years and older who were discharged to home after their first acute care inpatient encounter in 2016/17. Relational continuity was assessed in the 3 years prior to hospitalization, thus the sample was restricted to patients who were continuously registered with the Alberta Health Care Insurance Plan during that period. After exclusion of deaths in the 30 days post-discharge, 180,657 patients remained for this analyses. Continuity was calculated for patients with at least 3 physician visits using the Usual Provider Continuity (UPC) index, with the provider defined as a primary care clinic. Continuity was categorized as high (≥80%), moderate (50-79%), low (<50%) and patients with <3 visits. Covariates included: age, sex, prior emergency and inpatient use, index admission type, region of residence, health status and history of medication use. Logistic regression models were used to examine associations between continuity and three outcomes; inpatient length of stay, emergency use and unplanned inpatient readmission in the 30 days post-discharge.

Results: Most patients had high (50%) or moderate (33%) continuity; approximately 17% had low continuity or had <3 visits to a primary care provider in the 3 years prior to hospitalization. In the adjusted models, high continuity was significantly associated with reduced likelihood of an emergency visit in the 30 days post-discharge, compared to the low continuity group. Patients with high continuity also tended to be less likely to have inpatient stays over 30 days, although this association did not reach statistical significance. There was no apparent association between continuity and unplanned readmissions.

Discussion and Conclusions: In the province of Alberta, most physicians still operate independently from the rest of the provincial health care system. These results suggest that continuity with primary care services may have a modest impact on emergency use, but further work is needed to assess primary care activities and mechanisms to improve coordination with acute care services.

Lessons learned: Qualitative and survey data are needed to supplement administrative data sources to capture the full scope of activities in primary health care.

Limitations: The continuity measure employed was limited to administrative sources that primarily cover physician services, thus access to other primary care providers was not captured.

Suggestions for future research: A larger program of research is being planned that will include multiple modes of data collection and patient focus groups to gather evidence and identify solutions that will facilitate integration of primary health care with other sectors of the health system.

Keywords: continuity of care; primary health care; health outcomes; administrative data