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Title

Exploring the Role of Primary Care Clinic Continuity for Patients with COPD or Heart Failure

Priority 1 (Research Category)

Healthcare Services, Delivery, and Financing

Presenters

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Abstract

Context: Family physicians (FP) play a vital role in managing patients with chronic obstructive pulmonary disease (COPD) or heart failure (HF). Much emphasis has been placed on care pathways which involve community FPs caring for patients following hospitalization or treatment in the Emergency Department (ED). Given the trend in part-time practice, questions remain on the role of clinic continuity and its impact on health outcomes.

Objective: Our objective is to understand the impact of varying level of primary care clinic continuity (i.e. group care) on patient health outcomes.

Study Design and Analysis: We conducted a retrospective observational study of all FPs and COPD and HF patients in Alberta from 2015-18 to explore the association between patient health outcomes and three levels of community-based primary clinic continuity. FP claims data were linked to patients' ED and inpatient encounters. Usual provider care index (UPC) was calculated for each provider and facility over 3 years. The proportion of a patient's visits to a non-panel provider at their panel providers main facility was calculated and called the "Group Care Rate" (GCR). The GCR for each patient was calculated and categorized as low (0-10%), moderate (10-20%) and high (21+%). Patients with 100% UPC were removed from the analysis, since by definition their GCR=0, leading to collinearity in the modelling. Multivariable zero-inflated negative binomial models were fit, adjusting for age, sex, complexity and UPC.

Dataset: De-identified FP claims were linked to ED and inpatient encounters from Alberta Health.

Intervention or Instrument: None.

Outcome Measures: ED visit or Hospital admission for COPD or HF.

Result: Zero-inflated negative binomial regression models showed that high GCR (20%+) has a protective effect, for both COPD and HF patients, relative to low GCR (0-10%). Specifically, relative to low GCR, COPD patients with high GCR had an IRR of 0.75 (0.72, 0.80) in terms of hospital visits, and 0.90 (0.87, 0.93) in terms of ED visits. Similarly, relative to low GCR, HF patients with high GCR had an IRR of 0.77 (0.72, 0.81) in terms of hospital visits, and 0.90 (0.86, 0.95) in terms of ED visits.

Conclusions: Patients with COPD or HF who seek care from community-based primary care clinics with high (relative to low) group care were associated with reduced rates of ED visits and hospitalizations.