

Evidence from an Applied Research Health Question (AHRQ): Healthcare utilization of HIV patients before and after admission to Casey House, a specialized HIV hospital

Plumptre, L¹, Graves, E¹, Ishiguro, L², Antoniou, T², Stewart, A³, and Carusone, SC³¹ICES Central²ICES³Casey House

Introduction

The Applied Health Research Question (AHRQ) portfolio is an initiative funded by the Ontario Ministry of Health and Long-Term Care, leveraging the linked data and the scientific expertise at ICES to answer questions from Knowledge Users that have a direct impact on healthcare policy, planning or practice.

Objectives and Approach

A request from Casey House, a specialty HIV hospital located in Toronto, ON, was reviewed and approved by the ICES AHRQ Team to evaluate patient healthcare utilization and costs. The purpose was to support the design of programs and services, improve transitions from healthcare settings to community services, and inform continuous quality improvement initiatives. Using inpatient records, hospital admissions to Casey House were identified in fiscal years 2009-2014. Inpatient, emergency, outpatient and home care visits were characterized before and after admission. Using the Ontario Drug Benefit Claims, antiretroviral (ARV) prescription fills were examined 7 days post discharge.

Results

Between April 1, 2009 and March 31, 2015, 268 HIV patients had one or more hospital admissions to Casey House. The majority of Casey House patients had an Aggregated Diagnosis Group (ADG) ≥ 10 (79%) or Resource Utilization Band (RUB) = 5 (78%), indicating a high co-morbidity burden. Rate of emergency department usage declined from 4.61 to 2.46 per person-year, before and after Casey House admission ($p < 0.0001$). Conversely, home care visits increased from 24.29 to 35.63 per person-year and family physician visits increased from 18.33 to 22.59 per person-year before and after Casey House admission (both $p < 0.0001$). Interestingly, 89% did not fill an ARV prescription within 7 days of Casey House

discharge, however 76% followed up with an outpatient HIV visit within 30 days.

Conclusion/Implications

Healthcare utilization differed before and after admission to Casey House. Follow-up post-discharge warrants further examination to increase ARV prescription fills. Data from this AHRQ has facilitated future policy and programming changes. Results have been disseminated throughout the Toronto HIV research community to generate discussion on quality improvement in this population.

