PCSI 2025
Québec, Canada
September 9 to 12

Case mix measures and resource estimates associated with ALC days in Canada.
Authors: Sheril Perry (a), Joanie Gingras (a)

Introduction
What happens when an inpatient is ready for discharge, but their personal circumstances (such as cognitive state, mobility, continence, and/or living situation) do not allow for them to be safely discharged? In the Canadian Discharge Abstract Data (DAD), these extra days of stay are referred to as alternate level of care days or ALC days. The case mix characteristics of these patients provide insight into who these patients are as well as the overall health system requirements. This information was combined with Canadian Patient Cost Data (CPCD) to assess the resources associated with providing these alternate services.

Methods
The past two years of Canada's inpatient hospital data were explored to evaluate the reporting of alternative level of care stays in Canada. A case mix lens was applied to this data to help characterize these cases and identify the sources of ALC reporting and variation in reporting. From there, cluster analysis helped identify the key characteristics of those who require alternate care days, and cost information from the CPCD was used to produce an average ALC per-diem cost value. This value was applied to the data and compared to the overall resource consumption to assess the impact of ALC on resources across Canadian jurisdictions.

Results
While there was a significant variation in ALC reporting across Canada, the patient profiles were relatively consistent. Cluster analysis indicated that the majority of ALC patients are older, frail seniors with cognitive concerns who present with clinical characteristics like higher-acuity long- term care patients. They are most likely to be assigned to case mix groups associated with dementia or trauma, have higher comorbidity levels, but with a lower percent of interventions and intervention factors.

While patients with reported ALC days only represents 7% of those admitted to hospital, these patients tend to stay in hospital approximately five times longer than the average acute inpatient. These longer stays, result in ALC patients occupying approximately one out of every five inpatient hospital beds. And while the care of ALC patients in an inpatient setting is less expensive than non ALC patients, it is still approximately 2 to 3 times more expensive than care provided to similar patients in the LTC setting.

Conclusions
ALC patients are a significant barrier to efficient inpatient hospital management. A small portion of low-acuity patients are occupying acute care beds, impacting acute care bed availability and consuming more resources that would be required to care for the same patient in a long-term care setting.

a: Canadian Institute for Health Information (CIHI), Canada