

Patient and System-Level Factors Associated with Alternate Level of Care in BC

Background:

Delayed discharge is a common challenge for many health systems worldwide. In Canada, the term alternate level of care (ALC) is the designation given to patients using hospital beds who are medically fit for discharge but cannot access the appropriate post-acute care services. ALC is a prevalent problem in Canada; it accounted for 5% of hospitalizations and 14% of hospital days in 2008-2009. In addition to limiting system flow, ALC also results in prolonged exposure to the hospital environment which places patients at higher risk of cognitive and functional decline, falls, and adverse events.

Objectives:

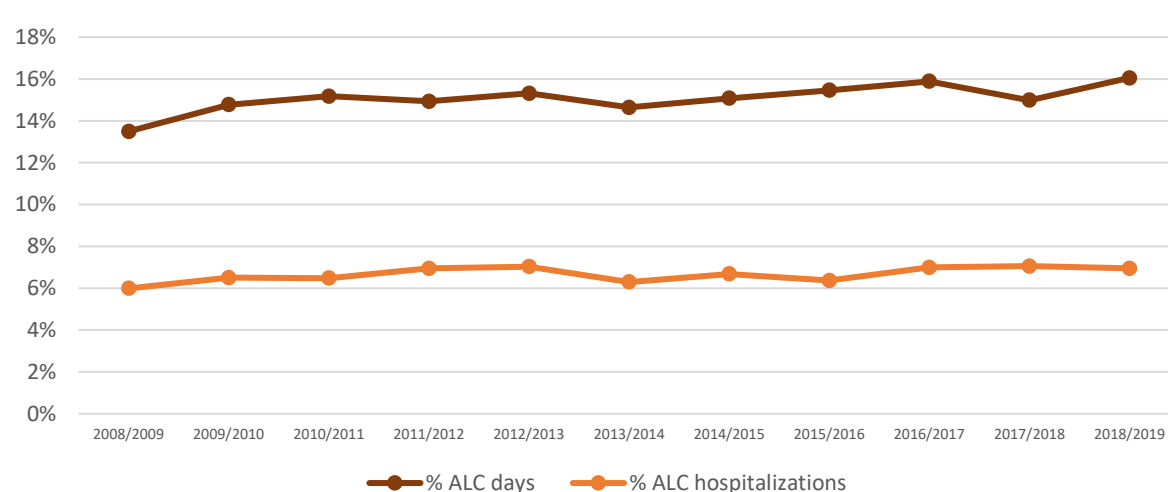
1. To describe trends in ALC use from 2008/9 to 2018/9
2. To examine the patient-level and system-level factors associated with ALC designation and ALC length of stay.

Methods:

A population-level retrospective cohort study using linked administrative data provided by Population Data BC was conducted. The study population included all acute care patients in BC age 40 and over discharged between April 1, 2008 and March 31, 2019. Descriptive analyses of changes in ALC use over time from 2008/2009 to 2018/2019, and patient and system-level (i.e. LHA-level) characteristics of ALC and non-ALC hospitalizations from 2015/2016 to 2018/2019 were conducted.

Results:

Figure 1. Percent ALC hospitalizations and percent ALC days from 2008/2009- 2018/2019 (Obj 1)



The final study sample included 567,587 individuals and 1,060,156 episodes of hospitalizations from 2015/2016 to 2018/2019 (Obj 2).

Table 1. Patient-level characteristics of ALC and non-ALC hospitalizations, 2015/2016- 2018/2019

	Non-ALC	ALC
N (%)	987,750 (93.2)	72,406 (6.8)
ALC length of stay, median	--	11
Acute length of stay, median	4	15
Age at admission, median	69	81
Female, %	49.2	53.6
No economic family member, %	51.2	72.3
Neighbourhood income quintile, %	24.0	28.4
Lowest	24.0	28.4
Highest	16.6	12.4
Urgent admission, %	75.3	95.7
Prior FP/GP contacts, median	9	10
Prior ED visits, median	1	2

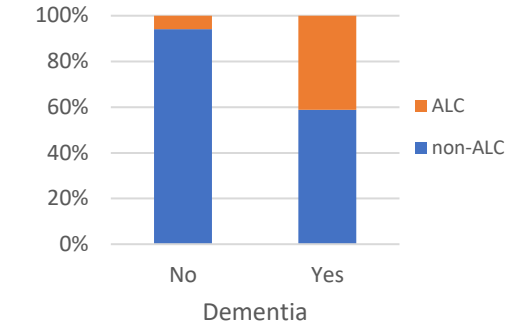
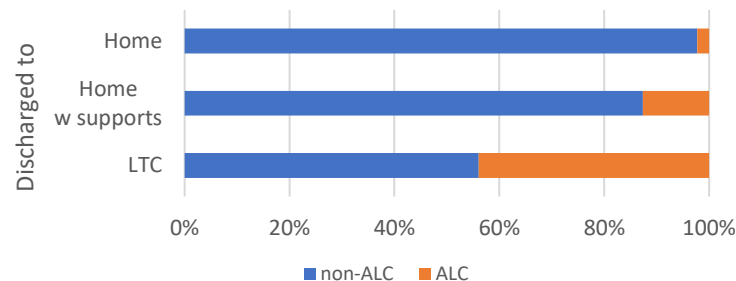


Table 2. System-level (LHA) characteristics

	Median (IQR)
Percent population 65+	19.4 (9.5)
LTC bed capacity per 1000 population 65+	22.1 (17.6)
FP/GPs per 1000 population (all ages)	115 (54)

Conclusion:

Delayed discharge remains a prevalent issue in BC and may be associated with **both patient and system-level factors**, indicating a need for **policy action to address both levels** (e.g. investment in long-term care) to reduce delayed discharge.

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