IDENTIFYING INFORMATION	
Name:	**Length of patient hospital stay compared to Canadian average length of hospital stay**
Calculation:	The number of acute days in acute care hospitals compared to expected length of stay in acute care hospitals[17] = $\left(\frac{\text{Total number of acute days in hospital for acute care inpatients}}{\text{Total number of expected inpatient days as determined by CMG Plus}^{18}\text{ groupers from CIHI}}\right) \times 100$ Metric: Acute (actual) LOS (ALOS) as a percentage shorter or longer than the expected LOS (ELOS)
Description:	This measure compares the acute LOS to the Canadian Institute for Health Information (CIHI) expected/anticipated LOS for Canadian acute care patients with similar disease complexity. **Inclusion criteria:** All typical[19] inpatient cases from acute care hospitals, as determined by CIHI. **Inpatient length of stay (LOS):** The number of days from the date of admission to the hospital to the date of discharge, indicated in a hospital record (Statistics Canada, 2012). These include acute care inpatient days and alternate level of care (ALC) days (see *Hospital patients who require an alternate level of care* measure). Only the acute portion of the inpatient LOS is included in the calculation of this measure.
Data source:	AHS Provincial Discharge Abstract Database (DAD)
Assumptions:	If acute LOS is shorter than the expected LOS it may suggest efficiencies in overall inpatient length of stay. If acute LOS is longer that the expected LOS it may indicate an opportunity to reduce inpatients' acute LOS.
Exclusions:	**Exclusion criteria:** ▪ Atypical[22] inpatient cases, as determined by CIHI ▪ Acute care inpatient days classified as alternate level of care (ALC)

[17] Statistics Canada (2000)
[18] The Case Mix Group Plus (CMG+) assignment is a grouping of patient stays with similar clinical and resource utilization for comparison of hospital resource use. It also takes into account the reason for hospitalization, age, comorbidity, and complications. The CMG+ assignment is based on the patient's Most Responsible Diagnosis (MRDx); the diagnosis that, at discharge, is determined to have been responsible for the greatest portion of the patient's length of stay (LOS) in hospital or resource use (Alberta Health, 2015).
[19] In case mix classification systems, patients are categorized as typical or atypical, based on several criteria. A typical patient is one who has a normal length of stay, whose treatment is completed in a single facility, and whose resource use is relatively homogeneous within their case mix classification. Typical patients can be assigned a relative resource weight according to their case mix classification. An atypical patient is one where the hospitalization involves a transfer, sign-out against medical advice, ends in death, includes non-acute days, or has a length of stay beyond the trim point established by CIHI (additional days are deemed outliers). An atypical patient has a different resource use within the hospital relative to a typical patient (Alberta Health, 2015).

Limitations:	1. Excluded atypical cases include long-stay patients, where acute (actual) LOS greatly exceeds the expected LOS or cut-off established by CIHI. This may result in the ALOS:ELOS result not being sensitive to frequent long-stay cases and resource implications for this patient population. 2. ALC days are based on a retrospective count from the DAD data source. Therefore, the measure should be interpreted as the percentage of hospital beds that were occupied by an ALC patient *discharged* within the reported time period. This means that the number of days subtracted because they are designated as ALC is not a true count of ALC days during the reporting time period, but rather the number of ALC days accrued by patients discharged during the reporting time period. 3. CIHI's CMG Plus groupers are updated on a yearly basis and applied retrospectively to historical data. This results in slight changes to the results reported in previous report iterations every year. The process of applying this update historically was established by CIHI in order to minimize historical change of reported results (due to different CMG Plus groupers being applied to different years of data) and to allow for the reliable comparison of Alberta results with results from other provinces across Canada.

Alberta Health Services, Analytics. "Provincial ELOS vs ALOS Dashboard." (2024) [Dashboard showing monthly and quarterly results for the ratio of acute length of stay versus expected length of stay (for typical inpatient cases), by facility]. *AHS Tableau Reporting Platform.* Retrieved from https://tableau.ahs.ca

Alberta Health. Performance Measure Definition: Acute LOS to Expected LOS Ratio (February 2015). Available at: http://www.health.alberta.ca/documents/PMD-Acute-Expected-LOS-Ratio.pdf

Statistics Canada: Health Indicators (December 2000). Available at: http://www.statcan.gc.ca/pub/82-221-x/4060874-eng.htm.

Statistics Canada (Johansen and Finès). Acute care hospital days and mental diagnoses (November 2012). Available at: http://www.statcan.gc.ca/pub/82-003-x/2012004/article/11761-eng.pdf.