

IDENTIFYING INFORMATION	
Name:	Frailty and risk of health decline
Short/Other Names:	Percentage of long term care residents showing signs of frailty and risk of decline in health
BACKGROUND, INTERPRETATION AND BENCHMARKS	
Description:	<p>This measure reports information about the percentage of long term care (LTC) residents with frailty, health instability, and decline in health status using the Changes in Health, End-Stage Disease, Signs and Symptoms (CHESS) Scale. The CHESS Scale detects risk of frailty and health decline and is part of the Resident Assessment Instrument – Minimum Data Set 2.0 (RAI-MDS) assessment. Nine items are used: change in cognitive status, change in activities of daily living function, end-stage disease, edema, shortness of breath, vomiting, dehydrated, weight loss, and leaving food uneaten.²⁵</p> <p>A summary score is determined, using specific codes (0 = no symptoms present; 1 = 1 symptom present; and, 2 = 2+ symptoms present), for each of the following symptoms: dehydration, edema, shortness of breath, vomiting, weight loss, and decline in food intake.</p> <p>To this summary score, 1 point is added to each to the following items to create an overall summary score: worsening of decision making over previous 90 days, decline in activities of daily living over previous 90 days, and end-stage disease.</p> <p>In the summary score a range of values exists, which is 0 to 5. 0 represents (no health stability) and 5 represents (very high health instability).</p>
Rationale:	<p>To provide information on the proportion of LTC residents with risk of frailty and health decline. This information can be used to inform system-level planning for quality improvement, program development, and resource allocation. This is because this data, when reported at an aggregate level, provides a description of the population that requires services in relation to risk of frailty and health decline. It does not describe the quality of care or services provided at a site.</p>

²⁵ Hirdes, JP, Frijters, D, Teare, G. The MDS CHESS scale: a new measure to predict mortality in the institutionalized elderly. J Am Geriatr Soc. 2003;51(1):96-100.

Interpretation:	<p>Each category in this chart illustrates the proportion of LTC residents with:</p> <ul style="list-style-type: none"> ▪ Low risk of decline/stable (score of 0) ▪ Intermediate risk of decline/moderately stable (score of 1) ▪ High risk of decline/unstable (score of 2 or greater)
Target/Benchmark:	Benchmark is not appropriate because the measure is intended to describe the clinical characteristics of long term care residents.
INDICATOR CALCULATION	
Calculation:	<p>Percent of residents in each outcome scale category =</p> $\left(\frac{\text{Number of LTC residents scored within a given category}}{\text{Number of LTC residents with a valid outcome scale score}} \right) \times 100$ <p>Type of Measure: Percentage</p> <p>Adjustment Applied: None</p>
Denominator:	The total number of LTC residents with a valid outcome scale score.
Numerator:	The total number of LTC residents with a valid outcome scale score, who were scored within a given category (as indicated above).
DATA DETAILS	
Data Sources:	Alberta Continuing Care Information System (ACCIS), Alberta Health
Reporting Frequency:	<p>Type of Year: Fiscal year [starts April 1, ends March 31]</p> <p>First Available Year: 2015/16</p> <p>Last Available Year: 2019/20</p>
Geographic Coverage:	The province of Alberta excluding the military, prisoners, and indigenous persons living on reserves.
Reporting Levels:	Province, zone