

IDENTIFYING INFORMATION	
<b>Name:</b>	Risk of frailty and health decline
<b>Short/Other Names:</b>	Percentage of long term care residents showing signs of frailty and risk of decline in health
BACKGROUND, INTERPRETATION AND BENCHMARKS	
<b>Description:</b>	<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.<sup>1</sup></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>
<b>Rationale:</b>	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.
<b>Interpretation:</b>	<p>Each category in this chart illustrates the proportion of LTC residents with:</p> <ul style="list-style-type: none"> <li>• Low risk of decline/stable (score of 0)</li> <li>• Intermediate risk of decline/moderately stable (score of 1)</li> <li>• High risk of decline/unstable (score of 2 or greater)</li> </ul>

<b>Target/Benchmark:</b>	Benchmark is not appropriate because the measure is intended to describe the clinical characteristics of long term care residents.
<b>INDICATOR CALCULATION</b>	
<b>Calculation:</b>	<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><b>Type of Measure:</b> Percentage</p> <p><b>Adjustment Applied:</b> None</p>
<b>Denominator:</b>	The total number of LTC residents with a valid outcome scale score.
<b>Numerator:</b>	The total number of LTC residents with a valid outcome scale score, who were scored within a given category (as indicated above).
<b>Data Details</b>	
<b>Data Sources:</b>	Alberta Continuing Care Information System (ACCIS), Alberta Health
<b>Reporting Frequency:</b>	<p><b>Type of Year:</b> Fiscal year [starts April 1, ends March 31]</p> <p><b>First Available Year:</b> 2015/16</p> <p><b>Last Available Year:</b> 2018/19</p>
<b>Geographic Coverage:</b>	The province of Alberta excluding the military, prisoners, and indigenous persons living on reserves.
<b>Reporting Levels:</b>	Province, zone

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