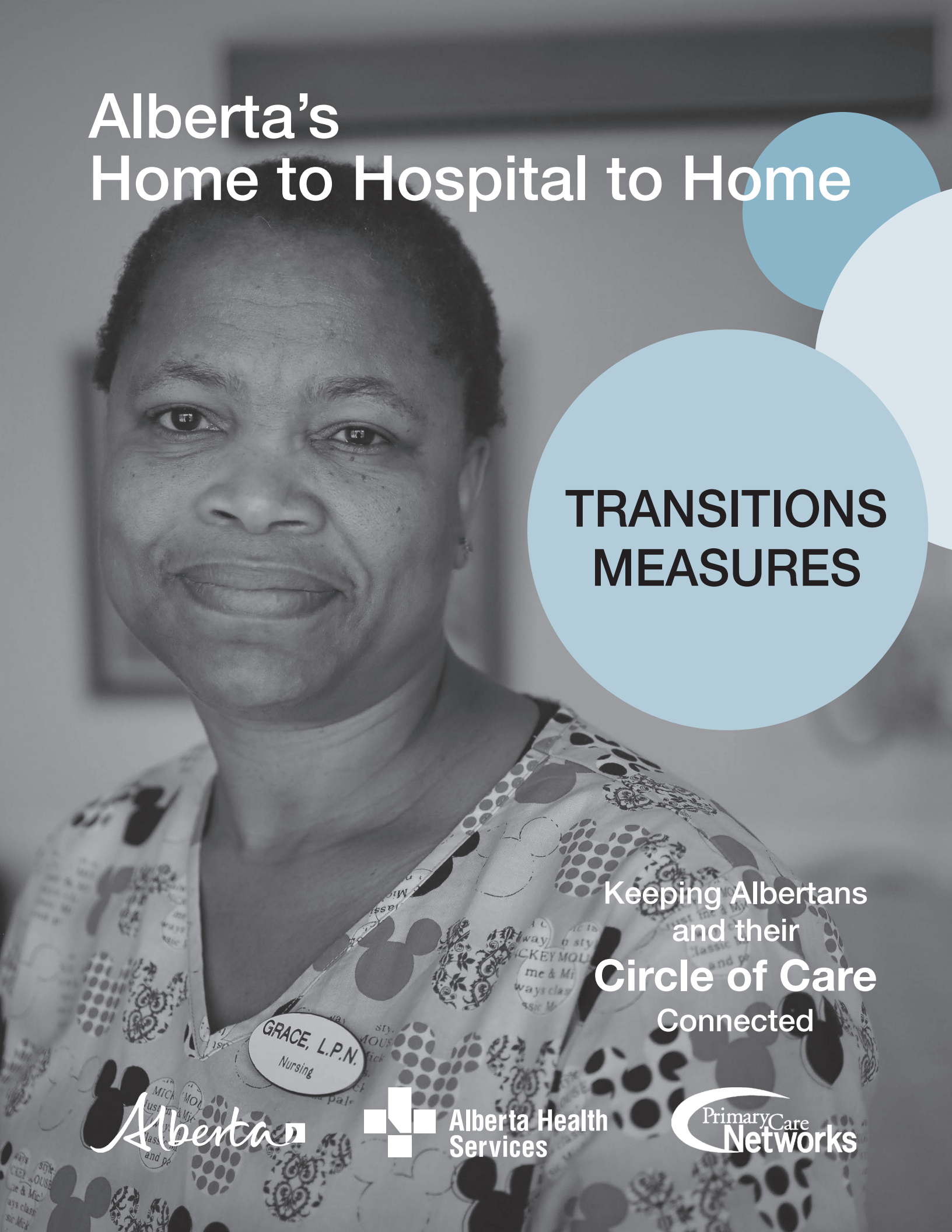
Alberta's Home to Hospital to Home



TRANSITIONS MEASURES

Keeping Albertans and their

Circle of Care

Connected

Alberta

Alberta Health Services

Primary Care Networks

November 2020

This guideline has been prepared by the Primary Health Care Integration Network, Alberta Health Services.

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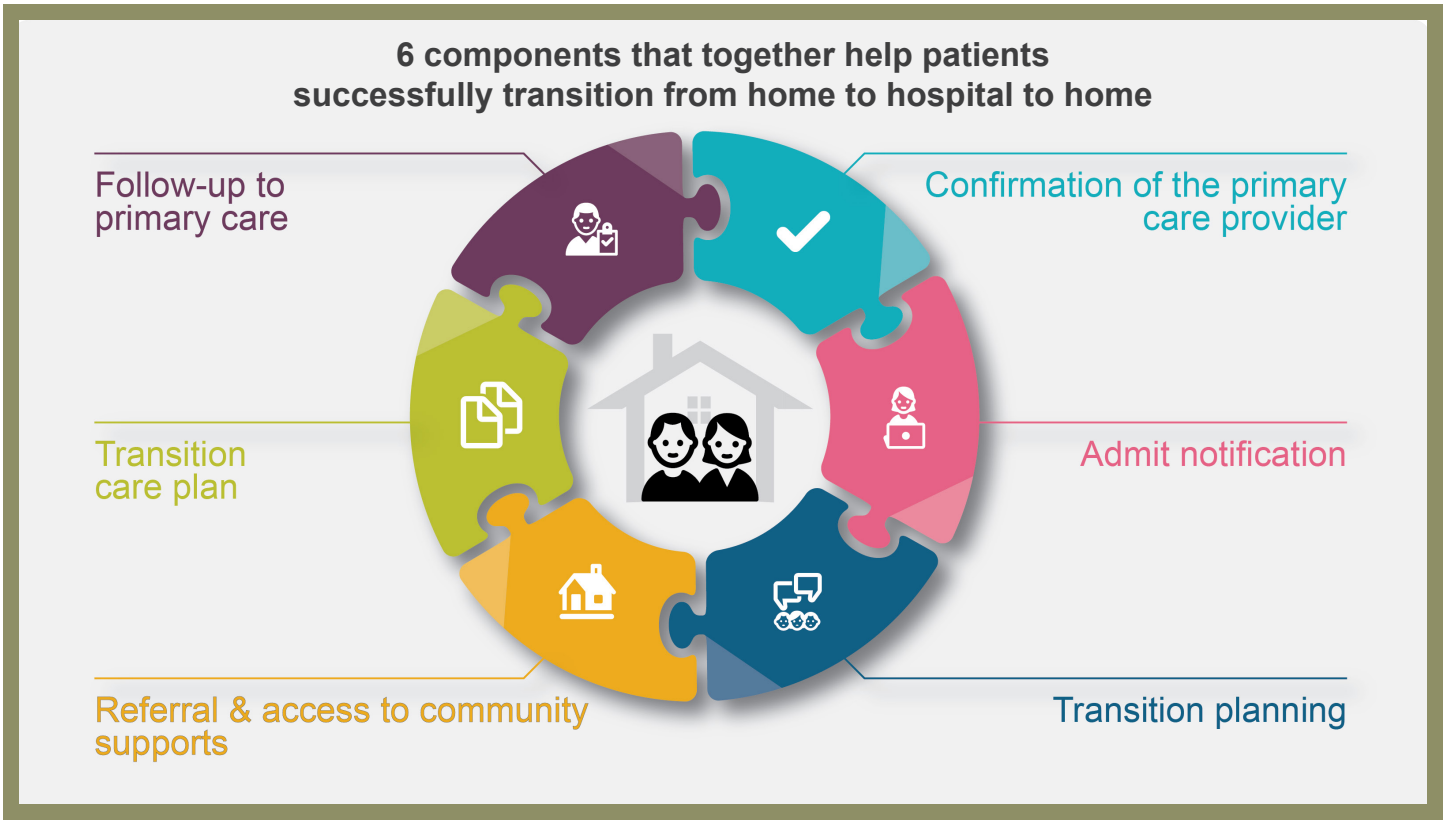

> "If there is better planning and better familiarization with the situation (around transitions of care), many of these patients will be able to cope and understand what they are going through, and that will be beneficial to them both in the confidence they have in the outcome of the situation and also in their confidence of the healthcare system in general."
>
> – John, patient/family advisor

Forewords

Alberta Health

Primary health care is the main point of contact for most Albertans with the health care system, and provides connection and coordination with other parts of the health and social system. Primary health care supports continuity, which means patient care is coordinated across settings, information is shared with the patient, and transferred across providers.

Alberta's first Home to Hospital to Home Transitions Guideline will provide a framework for primary health care and acute care to ensure safe, successful transitions between acute, primary and community care providers. Patients and their families should be equal partners in making decisions about their care, and the guideline places an emphasis on the patient as the center of transition planning. I look forward to Primary Care Networks (PCN) and Alberta Health Services (AHS) working together to implement these guidelines.

Dean Screpnek
Assistant Deputy Minister
Health Workforce Planning and Accountability
and Chair, Provincial Primary Care Network Committee
Alberta Health

Alberta Health Services

Alberta's healthcare facilities provide world-class care, but what happens within the hospital walls is only one piece of a patient's journey. The Home to Hospital to Home Transitions Guideline outlines how to integrate the support a patient receives from primary healthcare, their community and their loved ones, with the care they receive while in the hospital. I am thrilled that Alberta continues to be a world leader in integration by defining how best to manage transitions in care. I am asking all providers and patients from across the province to join me in embracing the processes and partnerships outlined in this guideline because I truly believe this will benefit Albertans.

Dr. Verna Yiu
President and Chief Executive Officer
Alberta Health Services

Primary Care Network Physician Leads Executive

As primary care physicians, we know our patients' stories. We understand the nuances of their medical history and have learned what matters most to them and their families. Implementing the Home to Hospital to Home Transitions Guideline aims to facilitate working in partnership and coordinating patient care with AHS providers, throughout a patient's journey. The Provincial PCN Committee was pleased to collaborate on Alberta's first provincial guideline for home to hospital to home transitions. We endorse its use in all primary care practices, PCNs and AHS facilities. We look forward to better, safer transitions for all our patients.

Dr. Ernst Greyvenstein, Calgary Zone
Dr. Fredrykka Rinaldi, South Zone
Dr. Helen Akosile Xulu, North Zone
Dr. Jordan LaRue, Central Zone
Dr. Justin Balko, Edmonton Zone
Primary Care Network Physician Leads Executive

John Hanlon
Patient and Family Advisor

Patients and Families

My passage through Alberta's health system was successful but not quick or entirely smooth. I had suffered a sudden and sharp hearing loss that made even simple communication with others either difficult or nearly impossible. Eventually, though, I returned to the World of Hearing courtesy of hearing aids. Throughout my journey I was impressed by the quality and concern of the healthcare professionals. But the long waits? They were new to me, as I had spent the last 20 years smoothly navigating the healthcare system in Tokyo where I worked as a journalist. There, I routinely visited specialists or underwent MRIs just a week after referral.

I was aware, however, that Alberta Health Service was taking measures to improve the system. So I decided to do whatever I could to help. That's why I became a patient and family advisor and eventually joined this Home to Hospital to Home project.

It aims to help patients by making their transitions to and from home and hospitals safer and more effective. The importance of this goal became painfully clear to me after talking with patients whose transitions hadn't gone well. One tearful mother described her helplessness and anguish over repeated and avoidable failures to get the treatment her daughter needed. Another patient told me his promised homecare didn't materialize. Quelling what he called a panicky feeling, he realized he would have to change his own dressing. But first he had to learn how.

Now, with this guideline, we have an opportunity to help patients avoid situations like these by making hospital and home transitions better and, yes, safer. The recommendations you will read are the result of more than a year of intensive collaboration among patients, healthcare providers, health system leaders and physicians. There will be challenges in implementing these recommendations, but I'm encouraged by the passion and commitment of the many healthcare providers and Alberta Health Services staff whom I've come across during the project. If they're an indication of the overall enthusiasm to implement safer transitions, patients have good reason to be optimistic.

I would like to thank Alberta Health Services staff who went to great lengths to ensure that patients took part in the guideline initiative. To ensure patients have the tools they need to be equal partners in the transition process, they formed the Patients Transitions Resources team that I and other patient and family advisors served on. I praise my teammates for their insight, dedication and passion while serving so effectively as the voice of Alberta patients. I am proud to have worked with them.

John Hanlon
Patient and Family Advisor
Alberta Health Services

Acknowledgement

With input from over 750 stakeholders, including more than 15 patient and family advisors, this Home to Hospital to Home Transitions Guideline initiative is a critical resource to enable system integration.

Providers from acute, primary and community care united alongside patients and researchers to design Alberta's first provincial guideline on how to support patients as they transition from their community, into hospital and back home again. The input of so many stakeholders helped ensure the guideline reflects leading evidence, best practice and the real needs of Albertans.

Integration and team-based care, where providers across the system collaborate with each other and with patients and families, is the future of healthcare. The diverse groups of people who sat down together during this initiative — from patient advisors to family physicians, allied healthcare providers to hospital physicians and administrators — demonstrate that future is already coming to life in our province.

> "Input from over 750 stakeholders, including more than 15 patient/family advisors."

To every person, team and organization who set aside traditional roles and organizational boundaries to work on this guideline, thank you for making the guideline reflective of a patient's full continuum of care. The publication of the Home to Hospital to Home Transitions Guideline marks a major milestone in our province's journey towards complete system integration. Because of your willingness to come together and collaborate, the future is now!

> "Perspectives from patient/family advisors helped ensure this guideline reflects the needs of Albertans from Lethbridge to Sexsmith, from Foremost to Sylvan Lake."

To our patient and family advisors who generously volunteered hundreds of hours and courageously shared their stories, thank you for being our partners. Hearing what matters to you transformed the way we approached this initiative. You are the reason each section of the guideline outlines the important role patients, families and caregivers play in successful and safe transitions. Your stories illustrated what evidence tells us — that equal partnerships with patients and their loved ones are critical to wellness and recovery. We can't thank you enough for walking beside us each step of the way on this Home to Hospital to Home initiative. Perspectives from patient and family advisors helped ensure this guideline reflects the needs of Albertans from Lethbridge to Sexsmith, from Foremost to Sylvan Lake.

"Alone we can do so little; together we can do so much." These words from Helen Keller capture perfectly the collaboration required to create safe, reliable and effective transitions in care. Whether you were involved in the guideline initiative or, most importantly, are embracing it in your day-to-day work, thank you. Together we can and are making a difference in the lives of Albertans.

Rob Skrypnek
Senior Program Officer, Primary Health Care
Senior Provincial Director, Primary Health Care Integration Network
Alberta Health Services

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Introduction

Transitions in care are defined as a set of actions designed to ensure the safe and effective coordination and continuity of care as patients experience a change in health status, care needs, healthcare providers or location (within, between or across settings, including home).[1] High-quality, seamless transitions improve relational, informational and management continuity.[2] As patients transition across care settings, transfer of information, appropriate follow-up and coordination across the continuum is imperative. Albertans consistently identify transitions in care as a critically important issue, particularly for patients with chronic conditions and complex care needs as they are the highest users of the health system with the most frequent transitions.[3]

Call to Action

In 2017, the call for a coordinated approach to improve patient transitions accelerated in Alberta when the new Primary Care Network Governance Framework was approved. Many leaders identified transitions as a priority and began work to coordinate and improve healthcare transitions and build on improvement projects underway in the province for several years. To support this work, the Alberta Health Services' Quality, Safety and Outcomes Improvement Executive Committee (QSO) and the Provincial Primary Care Network Committee (PPCNC) created mandates recommending the creation of a transition guideline as a means to foster agreement on what ideal transitions would entail. The Primary Health Care Integration Network (PHCIN) was selected to support this work given its focus on integration across care settings.

> "As patients transition across care settings, transfer of information, appropriate follow-up and coordination across the continuum is imperative."

Solution

Improvement initiatives that simultaneously implement several components of a transition across the patient journey (e.g., timely follow-up with primary care, transition-planning processes involving the patient and care team) have been reported to have the most positive outcomes, such as reduction in readmission, length of stay and emergency department encounters.[4]

The proposed solution was to co-design a provincial Home to Hospital to Home Transitions Guideline and related monitoring measures. Thus, PHCIN worked with a diverse group of stakeholders including primary care providers; community health service providers; specialists; and patients, family and caregivers to identify key processes foundational to transitioning patients across care settings. The PHCIN supplemented this with an environmental scan, literature review, a co-design collaborative, stakeholder interviews and panel of experts to finalize content (modified Delphi methodology).

> "Improvement initiatives that simultaneously implement several components of a transition across the patient journey."

Purpose

This document provides a listing of recommended monitoring measures, both system and strategic, for home to hospital to home transitions in care within the Alberta healthcare system. Although the monitoring measures are focused on transition points between the patient's home to the hospital and back to home, future iterations will include monitoring measures relevant to other care transitions (e.g., emergency department to home). The measures within this document are aligned with the current Home to Hospital to Home Transitions Guideline as well as the PPCNC transitions in care measures.

The system- and strategic-level measures are intended for higher level reporting and monitoring. Although these measures may be directly applicable to specific zone or transition project assessment, additional measures, such as tactical process and outcome measures, will be required to assess progress and success of specific project-level implementation.

> "This document provides a listing of recommended monitoring measures, both system and strategic, for home to hospital to home transitions in care within the Alberta healthcare system."

Approach

The following approach was taken to identify monitoring measures to be used as potential indicators valuable to assess transitions of care, specifically to monitor the health system in regards to home to hospital to home transitions.

Environmental Scan: The PHCIN Scientific Office conducted an environmental scan to review past and current initiatives nationally and internationally addressing measurement of transitions in care, specifically related to home to hospital to home transitions. This included provincial initiatives that were reviewed and found to align with home to hospital to home transitions (see Appendix 1).

Identification of Monitoring Measures: The following criteria was used to refine the list of measures identified in the environmental scan.

Inclusion Criteria:

1. Measure applicable to home to hospital to home specific transition;
2. Measure applicable to Alberta/Canadian context;
3. Evidence based;
4. Alignment with other provincial or national indicators.

Exclusion Criteria:

1. Measure duplicative in nature (e.g., multiple indicators measuring the same concept). Measures that most aligned with existing indicators being used in the Alberta and primary healthcare context were selected.

After this criterion was applied, a draft list of system, strategic and future measures was constructed. Alberta's Health System Outcomes and Measurement Framework Cascading Accountabilities (see Appendix 2) was used to classify measures (e.g., system and strategic) and each recommended measure was mapped to an Integrated Health Care Delivery Domain System (see Appendix 3).[5]

Internal and External Consultations: The purpose of the consultations with internal and external partners was to review and refine the list of monitoring measures by allowing for new measures to be added, existing measures to be removed, as well as identifying gaps among the current measures. Consultations included the following partners: Alberta Health Services (AHS) Analytics, AHS Research and Evaluation, AHS Strategic Clinical Networks (SCNs), Alberta Medical Association, Joint Venture Council, Primary Care Alliance and the AHS Clinical Outcomes Executive Committee.

Modified Delphi: Final selection of measures were determined with an expert panel using consensus ranking methodology. The expert panel consisted of members from AHS, family physicians, specialists, SCNs, researchers from the University of Calgary and providers from pharmacy, social work and continuing care.

The remainder of this document outlines the following:

- Snapshot of 5 system and 10 strategic recommended measures as well as future measures for consideration (2 system, 5 strategic).
- Detailed measurement specifications for recommended system measures.
- Detailed measurement specifications for the recommended strategic measures aligned with the Home to Hospital to Home Transitions Guideline (sections include Confirmation of the Primary Care Provider, Admit Notification, Transition Planning, Referral and Access to Community Supports, Transition Care Plan, Follow-up to Primary Care).

Snapshot of System Measures

Recommended System Measures (n=5)

- % (#) of patients who experienced an unplanned readmission to hospital within 30 days of discharge
- % (#) of patients who experienced an emergency department visit within 7 and 30 days post-hospital discharge
- % change in acute length of stay compared to expected length of stay (aLOS/eLOS)
- % of bed days used by people whose care needs could be met by an alternative level of care (ALC)
- % of people placed in home care or continuing care living option within 30 days from acute care facilities

Future Measures (n=2)

- Patient-reported experience measure (PREM) and
- Patient-reported outcome measure (PROM)

Snapshot of Strategic Measures

Guideline Section	Recommended Strategic Measures (n=10)	Future Measures (n=5)
Confirmation of the Primary Care Provider	% (#) of patients who report having a primary care provider upon admission % (#) of primary care providers who agree to the attachment relationship	% (#) of unattached patients requiring connection with a primary care provider (upon admission and/or discharge) % (#) of unattached patients successfully connected with a primary care provider (upon admission and/or discharge)
Admit Notification	% (#) of admit notifications sent by hospital to the attached patient's primary care provider	% (#) of admit notifications sent by mode of transmission (e.g., eNotification, fax, paper, phone)
Transition Planning	% (#) of discharged patients with risk stratification completed (e.g., 8P or LACE) % (#) of patients with a medication reconciliation at admission and discharge	
Referral and Access to Community Supports	% of patients identified as needing access to post-discharge community supports who had to wait for the services Median time (in days) between request for home-care service and the first home visit Median time (in days) between approval for placement in a continuing care facility and actual placement	
Transition Care Plan	% (#) of patients with a transition care plan sent by hospital team and received by primary care in a timely manner (24 hrs; 48 hrs; >48 hrs)	% (#) of patients who had a 'complete' transition care plan sent to primary care
Follow-up to Primary Care	% (#) of patients (stratified by risk) followed up by primary care provider/team within 7 days/30 days post-hospital discharge	% (#) of high-risk, complex patients with primary care provider/team follow-up appointment in place prior to hospital discharge

Measurement Specifications for System Measures

There are five recommended system measures and two future measures for consideration (refer to Appendix 4). The system measures provide a lens of how the healthcare system is performing in relation to home to hospital to home transitions in care.

1. Percentage of patients who experienced an unplanned readmission to hospital within 30 days of discharge

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	Thirty day unplanned readmissions to acute care facilities following a discharge from an inpatient stay may be tracked to monitor quality of care provided as well as care coordination upon discharge. High unplanned readmission rates act as a signal for acute care to look more carefully at their practices regarding hospital to home transitions (e.g., admit notification), including the risk of not notifying primary care providers of hospital admission/discharges, discharging patients too early and the relationship with primary care providers/teams. Alignment: Provincial Primary Care Network Committee, Alberta Health Services (AHS) Performance Measures, Health Quality Ontario, Canadian Institute for Health Information (CIHI)
Description of the Measure Including technical description where applicable	The proportion of occurrences of a non-elective admission to hospital for any cause within 30 days of a patient being discharged from the hospital. Only initial visits where the patient is discharged are included. Transfers, sign-outs and deaths are excluded. **Indicator** Numerator: # of discharges with an unplanned readmission to any acute care hospital in Alberta within 30 days from an initial index discharge date Denominator: # of total discharges within the report period Direction of Improvement: ↓
Availability of the Measure	Tableau Dashboard: Provincial Readmission Rates (published by AHS Analytics) The existing dashboard allows stratification of this measure by several factors: age, zone, condition (e.g., heart failure, chronic obstructive pulmonary disease, etc.), based on most responsible diagnosis, case mix group (CMG)[i] or major clinical category (MCC) and most responsible physician (MRP) service. Reporting Period: monthly, quarterly, annually.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems

[i] The case mix group is a methodology developed by Canadian Institute for Health Information to allow grouping of patients with similar characteristics (age, comorbidity) and resource utilization (e.g., interventions). https://www.cihi.ca/en/cmg

Limitations	A measure of disease severity (e.g., clinical risk grouper/CIHI Grouper) is not included in the dashboard. Not all readmissions are preventable and evidence is needed regarding the proportion of readmissions at Alberta facilities that are actually avoidable.[6] Non-clinical factors, including financial, socioeconomic, emotional, literacy, transportation and other social support issues may also impact and influence unplanned readmission to hospital.
Suggested Related Measures/Bundles	To be determined.
Comments	Stratify by age, sex, comorbidities, reason for admission, social determinants of health

2. Percentage of patients who experienced an emergency department visit within 7 days and 30 days post-hospital discharge

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	Similar to hospital readmissions, the quality of transitions from the hospital to home may impact utilization of emergency services post-discharge from hospital. If only hospital readmissions are assessed, then approximately more than 50% of all returns to acute care after hospital discharge are missed.[7] Further, a recent analysis showed that patients receiving outpatient care in a Primary Care Network had fewer emergency department visits (for any cause) compared to those not receiving care.[8] Thus, unscheduled return visits to the emergency department is an important quality indicator of the transition from hospital to home. Alignment: Provincial Primary Care Network Committee, Health Quality Ontario, Canadian Institute for Health Information
Description of the Measure Including technical description where applicable	The proportion of emergency department visits for any cause within 7 and 30 days of a patient being discharged from the hospital. **Indicator** Numerator: # of discharges with an unplanned emergency department visit to any emergency department in Alberta within 7 days and 30 days from an initial index discharge date Denominator: # of discharges within the report period. Direction of Improvement: ↓
Availability of the Measure	Standard reporting is not currently available for this measure. Data is available in Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS). Reporting Period: monthly, quarterly, annually

Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems
Limitations	This indicator provides a general trend of emergency department visits within 7 and 30 days for all causes. Non-clinical factors, including financial, socioeconomic, emotional, literacy, transportation and other social support issues may also impact and influence emergency department visits post-hospital stay. Emergency department utilization post discharge may also be a reflection of whether the patient has timely access to primary care.
Suggested Related Measures/Bundles	Unplanned readmission to hospital within 30 days of discharge Other measures to be determined
Comments	Stratify 7- and 30-day all-cause emergency department visit rate by: age, sex, disease severity (Canadian Institute for Health Information Population Grouper), condition (e.g., heart failure, chronic obstructive pulmonary disease, acute myocardial infarction, etc.), geographic location (e.g., urban, rural, remote), zone, Canadian Triage and Acuity Scale Level, primary reason for emergency department visit, frequent/persistent emergency department attenders,[9] social determinants of health and attachment status (attached, linked to primary care upon discharge, unattached). A patient's risk of returning to the emergency department is increased with an increasing number of emergency visits prior to index visit.[10] A 2012 Canadian Institute for Health Information[10] publication reported 7-day emergency department visit post-hospital discharge at 9% and 30-day post-discharge at 19.6%.

3. Hospital length of stay - actual length of stay compared to expected length of stay (aLOS/eLOS)

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	To improve system-wide health services delivery, there is a need to measure length of stay in the hospital. This is typically measured using a ratio of the patient's actual length of stay (aLOS) compared to their expected length of stay (eLOS). Monitoring this ratio can help healthcare teams ensure the appropriateness and efficiency of care, as well as help identify opportunities for improved patient care. Improvement in this measure, meaning the ratio gets smaller, indicates more patients were treated with existing beds and other resources. Early transition planning has been found effective in reducing the length of stay.[11] Alignment: Provincial Primary Care Network Committee, Alberta Health Services (AHS) Performance Measures, Canadian Institute for Health Information (CIHI)

Description of the Measure Including technical description where applicable	This measure compares the number of acute days in hospital compared to CIHI's eLOS for acute care patients with similar disease complexity (defined by CIHI's Case Mix Group methodology). aLOS is defined as the number of days indicated in a hospital record, specifically the number of days from the date of admission to the date of discharge. eLOS is calculated on typical patients taking into account the reason for hospital admission, age, comorbidity and complications. **Indicator** Numerator: # of actual inpatient days Denominator: # of expected inpatient days Direction of Improvement: ↓
Availability of the Measure	Tableau Dashboard: Provincial aLOS vs eLOS Dashboard (published by AHS Analytics) The existing dashboard allows stratification of the aLOS/eLOS ratio by several factors: • Condition (e.g., heart failure, chronic obstructive pulmonary disease, etc.), based on most responsible diagnosis, case mix group (CMG)[ii] or major clinical category (MCC) • Most responsible physician (MRP) service • Reporting Period: monthly, quarterly, annually • Zone, facility type, facility Reporting Period: monthly, quarterly, annually
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems
Limitations	This measure does not include alternative level of care (ALC) days in acute care length of stay and excludes atypical cases. Thus, this measure may be impacted by variation in coding definitions/practices of ALC days across sites in AHS and also fail to reflect long stay cases.[12] This measure does not consider social determinants of health.
Suggested Related Measures/Bundles	To be determined
Comments	Stratify by age, sex, comorbidities, reason for admission, social determinants of health. If available, stratify by risk assessment [e.g., 8P, LACE (length of stay, acuity, co-morbidities, emergency visits)]. For interpretation purposes, it is recommended to look at the median length of stay in addition to aLOS/eLOS ratio. There are typically outliers in length of stay which potentially skew data/results. The data should be stratified by case mix group, top 10 conditions and International Classification of Disease (ICD) chapters when using the median length of stay.

[ii] The case mix group is a methodology developed by Canadian Institute for Health Information to allow grouping of patients with similar characteristics (age, comorbidity) and resource utilization (e.g., interventions). https://www.cihi.ca/en/cmg

4. Percentage of bed days used by people whose care needs could be met by an alternate level of care (ALC)

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	Alternate level of care (ALC) is a classification used in Canada that is applied when a patient is occupying a bed in a facility and does not require the intensity of resources/services provided in that care setting[13-15]. For patients, it means that they are not in the most appropriate place for the type of care they need (e.g., home, supportive living, long-term care). For hospitals, it is an indication of capacity and suggests that beds may not be available, which causes further effects in the system (e.g., increased wait time for elective procedures; admissions from the emergency department). Alignment: Alberta Health Services (AHS), Provincial Primary Care Network Committee, Canadian Institute For Health Improvement, Health Quality Council of Alberta
Description of the Measure Including technical description where applicable	A patient is classified as an ALC patient if they are occupying an acute or subacute hospital bed and they do not require the intensity of resources and/or services provided in that care setting. The patient, however, is not well enough to be discharged home and requires an alternate level of care. Beds included for ALC classification: • Acute care beds • Mental health beds • Rehabilitation beds • Sub-acute care beds • Transition beds The ALC time frame starts on the date and at the time of designation of ALC and is documented in the patient chart or record. The ALC time-frame ends 1) on the date and at the time of departure from the ALC setting or 2) on the date and at the time the individual's care needs change such that the ALC designation no longer applies. For a patient who is ALC and reverts to acute status and then becomes ALC again, the patient's total count of ALC days should resume and not start again from zero.[14,15] **Indicator** Numerator: # of inpatient ALC days Denominator: # of inpatient days Direction of Improvement: ↓
Availability of the Measure	Tableau Dashboard - Published by AHS Analytics ALC is measured using the Provincial Discharge Abstract Database (DAD) and reported on a monthly and quarterly basis. The patient must be designated ALC by the most appropriate care team member, which may be a physician, long-term care assessor, patient-care manager, discharge planner or other care team member. The decision to assign ALC status is a clinical responsibility. Reporting Period: monthly, quarterly, annually

Category of Integration Domains	Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems
Limitations	Caution is urged when making comparisons between facilities prior to 2013; historical differences in data capture (e.g., inconsistent definitions, documentation and coding practices) make comparisons between facilities unreliable prior to that time in Alberta. While in the hospital, there is a period of assessment to see whether a patient qualifies as requiring an ALC. At the end of the assessment period an 'approval' is issued to proceed with determining an appropriate placement for the patient. This process may take several days. ALC days are counted from the date of 'approval,' thus underestimating the total number of ALC days attributed to each patient and, by extension, the hospital. ALC days are based on a retrospective count from the discharge abstract 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.[13-15]
Suggested Related Measures/Bundles	Number of people placed in home care or a continuing care living option within 30 days from acute care and community settings
Comments	Stratify by % of all bed days and >60 bed days

5. Percentage of people placed in home care or continuing care living option within 30 days from acute care facilities

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	This measure monitors the percentage of people who are moved from hospital into home care and community-based continuing care. A high percentage means there is capacity available for long-term care, designated supportive living, or home-care supports in the community setting.[16] When a patient no longer requires the intensity of care provided in a hospital setting, timely and appropriate access to home care, long-term care and continuing care are critical to help improve patient flow, drive patient-centred care decrease wait time and deliver care in a more cost-effective manner. Timely placement can also reduce stress on clients and family members.[16,17] Alignment: Alberta Health Services, Alberta Health

Description of the Measure Including technical description where applicable	Continuing Care Living Option refers to the level of care in a publicly funded resident accommodation that provides health and support services appropriate to meet the client's assessed unmet needs (e.g., designated supportive living level 3 or 4 or long-term care). Assessed and Approved Date refers to the date the client is placed on the waitlist for a Continuing Care Living Option following the completion of the assessment and approval process.[16,17] **Indicator** Numerator: # of patients who received their appointment or placement within 30 days Denominator: # of patients in hospital determined to be eligible for home care or continuing care Direction of Improvement: ↑
Availability of the Measure	Tableau Dashboard - Published by Alberta Health Services Analytics This measure (excluding home-care data) is publicly available and monitored by Alberta Health Services and Alberta Health. Data is extracted and collated for quarterly reporting.[16] Additional data extraction for home-care assessment, capacity and placement would be required. Reporting Period: monthly, quarterly, annually
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & System
Limitations	This measure is currently measured by Alberta Health Services, but does not include home-care capacity/placement within the metric. This measure will require linkage of various data sets in Alberta Health Services Analytics. It will also require ongoing data quality audits to ensure completeness and accuracy of information collected.
Suggested Related Measures/Bundles	Percentage of bed days used by people whose care needs could be met by an alternate level of care (ALC)
Comments	Stratify by age, gender, comorbidities, and type of continuing care service (e.g., home care, long-term care, supportive care)

Confirmation of the Primary Care Provider

Background

Confirming the attachment relationship between a primary care provider and a patient is a crucial step in ensuring bidirectional flow of information between primary care providers and hospitals. Confirmation needs to occur as early as possible in the admission process. This step ensures the hospital admit notification and subsequent transition care plan are sent to and received by the correct primary care provider. Additionally, the primary care provider will be able to provide key information to assist with the patient's hospital care and their transition from hospital to home. Without this step, the patient and hospital team may assume the primary care provider is still practicing in Alberta (i.e., has not retired or moved to another area to practice) and agrees to accept responsibility for the care of this patient upon discharge.

During this step, three types of attachment will be identified:

1. **Current attachment**
   – a patient's attachment to a primary care provider is confirmed
2. **Previous attachment**
   – a patient's attachment to a primary care provider is not confirmed
3. **No attachment**
   – a patient has no attachment to a primary care provider (i.e., unattached)

When the attachment relationship is not confirmed and the patient would like to be connected to a primary care provider, the hospital team will work collaboratively with the appropriate Primary Care Network to facilitate a connection with a primary care provider who has capacity to care for the patient. Patients who are currently unattached may also request to be connected with a primary care provider upon discharge, whereas other patients may not want to pursue this connection.

Recommended System Measures (n=5)

- % (#) of patients who report having a primary care provider upon admission
- % (#) of primary care providers who agree to the attachment relationship

Future Measures (n=2)

- % (#) of unattached patients requiring connection with a primary care provider (upon admission and/or discharge)

Measurement Specifications for Confirmation of the Primary Care Provider

1.1 Percentage of patients who report having a primary care provider upon admission

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	The patient upon every admission, registration and transition process within the acute care system, identifies their primary care provider. The identification of the primary care provider is the first crucial step to ensuring informational continuity between the hospital and home; without this step, the primary care provider will be unaware of the patient's admission and be unable to participate in the patient's care in hospital. The Central Patient Attachment Registry (CPAR) is a provincial registry that captures the confirmed relationship with primary care providers and their paneled patients. When CPAR is integrated with Alberta Netcare, the hospital team will have the ability to retrieve the identity of the primary care provider (in cases where the patient is unable to provide the primary care provider's name) in the patient's electronic health record. Further processes should be developed to identify the appropriate primary provider, or link the patient to another primary provider, if necessary. Alignment: None
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of patients admitted as an inpatient who identify a primary care provider Denominator: # of patients admitted Direction of Improvement: ↑
Availability of the Measure	The identification of the primary care provider is not consistently collected during every registration process; there are noted discrepancies within rural hospitals. A standardized process across all facilities will need to be implemented to collect this information during the registration process. Processes will have to be developed in order to collect this information later in the hospital stay if patients are unable to remember or are nonverbal at the time of admission.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems

Limitations	Patients may not know the full name of their primary care physician (e.g., Dr. Smith), or may know their physician by an alternative name (Dr. Dayo instead of Dr. Dayeoudhou). Processes should be developed to assist with identifying the clinic or the Primary Care Network in order to identify the primary care physician.
Suggested Related Measures/Bundles	To be determined
Comments	Stratify by age, sex, comorbidities, type of admission and physician's participation in CPAR

1.2 Percentage of primary care providers who agree to the attachment relationship

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	Once the patient identifies their primary care provider, an admit notification will be sent to that provider. The primary care provider will confirm the attachment when the admit notification is received. If they do not know the patient and believe the admit notification was sent in error, the primary care provider is obligated to inform the hospital of the error. This step is important to ensure information is sent to and received by the appropriate primary care provider. A previous unpublished study demonstrated that approximately 17% of all notifications are sent to the incorrect primary care provider following hospital discharge. The Central Patient Attachment Registry (CPAR) is a provincial registry that captures the confirmed relationship with primary care providers and their paneled patients. When CPAR is integrated with Alberta Netcare, the hospital team will have the ability to retrieve the identity of the primary care provider (in cases where the patient is unable to provide the primary care provider's name) from the patient's electronic health record. Alignment: None
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of primary care providers who confirm the attachment relationship Denominator: # of primary care providers contacted by the hospital Direction of Improvement: ↑

Availability of the Measure	The identification of the primary care provider is not consistently collected during every registration process; there are noted discrepancies within rural/remote hospitals. A standardized process across all facilities will need to be implemented to collect this information during the registration process. Processes will have to be developed in order to collect this information later in the patient's inpatient journey if they are unable to remember or are nonverbal at the time of admission.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems
Limitations	There is little evidence to suggest linkage to a primary care provider will have an impact on patient readmission risk. Nevertheless, this measure could be viewed as a surveillance measure to gather evidence as to whether this step does impact readmissions.
Suggested Related Measures/Bundles	To be determined
Comments	Stratify by age, sex, comorbidities, type of admission and physician's participation in CPAR

Admit Notification

Background

Admission to hospital is a transition point that requires organized and prompt communication between a patient's identified circle of care and the hospital.[18] Awareness of an admission presents the opportunity for bidirectional flow of information between a patient's circle of care and the hospital (i.e., informational & management continuity). The patient's circle of care can contact the hospital team (i.e., attending physician) to convey vital information, such as a patient's history, care plan, medications and any social or family dynamics that may affect care.[19-21]

It is important to note the confirmation of the primary care provider has already occurred and supports the implementation of this section of the guideline.

Recommended System Measures (n=5)

- % (#) of admit notifications sent by hospital to the attached patient's primary care provider

Future Measures (n=2)

- % (#) of admit notifications sent by mode of notification (e.g., eNotification, fax, paper, phone, etc.)

Measurement Specifications for Admit Notification

2.1 Percentage of admit notifications sent by hospital to the attached patient's primary care provider

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	Notify the attached patient's primary care provider of hospital admission within a 48-hr time period through eNotification (e.g., electronic medical record). The attached primary care provider will receive this notification and take appropriate action. Involving primary care providers early in the hospital admission potentially allows more time to develop post-hospital treatment plans and helps patients and caregivers prepare for the shift from hospital to home.[20] Specifically, timely notification of a patient's hospital admission presents the opportunity for the primary care provider to be in contact with the acute care providers to update a patient's history and discuss vital information such as concerns about a care plan, medications, medical history and any social or family dynamics that may impact care.[21] Alignment: Health Quality Ontario
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # patients admitted to hospital that have an admit notification sent to their primary care provider/team notifying them of the admission to hospital Denominator: # of eligible patients admitted to hospital Exclusion Criteria: Patients who meet the criteria but who died, transferred to a different facility or signed out against medical advice Direction of Improvement: ↑
Availability of the Measure	Currently not collected Requires primary data collection May be available after implementation of Connect Care and when the Central Patient Attachment Registry (CPAR) is integrated into Alberta Netcare
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Information Technology; Organizational Processes & Systems
Limitations	Currently not collected; do not know the mode of notification
Suggested Related Measures/Bundles	Discharge notification
Comments	Stratify by time (immediate, <24 hrs, etc.), age, sex, comorbidities

Transition Planning

Background

Preparing patients, family and caregivers for their recovery at home is at the heart of transition planning. This process should occur as early as possible after admission for all patients. Successful planning requires the active participation and involvement of patients, family and caregivers and the circle of care team.[22] This step can help the patient navigate many of the challenges associated with transitions in care.

There are a number of different factors required for effective transition planning, including an individually tailored, easy-to-understand transition care plan. This plan provides a comprehensive set of resources that will support a safe transition in care.

Key challenges related to transition planning include:

1. lack of informational continuity between hospital and patients' circle of care;
2. discrepancies in medication lists before and after discharge;
3. inadequate preparation with patients, family and caregivers prior to discharge.[10-11]

These challenges can increase the burden of care, confuse patients, family and caregivers and lead to undesirable outcomes (e.g., hospital readmissions, emergency department visit, etc.).

Recommended System Measures (n=5)

- % (#) of discharged patients with risk stratification completed [e.g., 8P or LACE (length of stay, acuity, co-morbidities, emergency visits)]
- % (#) of patients with a medication reconciliation at admission and discharge

Future Measures (n=2)

- None

Note: Patient experience survey questions that pertain to this process, with emphasis on involvement of patients, family and caregivers in planning and creation of transition care plan, will be included.

Measurement Specifications for Transition Planning

3.1 Percentage of discharged patients with risk stratification completed

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	Use an evidence-based tool [e.g., 8P Screening Tool or LACE (length of stay, acuity, co-morbidities, emergency visits)] to evaluate patients' risk potential for adverse events that may lead to unplanned readmission to hospital or emergency department visits. This tool should be administered as early as possible in the hospital stay so everyone can properly prepare for the transition. All patients to be discharged from hospital are eligible to be screened with this risk stratification tool. Certain patients are at higher risk for adverse events, such as hospital readmission, due to clinical or demographic factors.[24] Screening tools determine if a patient may be at increased risk and can help providers with the transition process by better tailoring a plan to meet these patients' post-acute care needs.[25] These tools typically include risk-specific interventions hospitals can use throughout the patient's hospitalization to mitigate post-discharge risk. Alignment: Health Quality Ontario[26]
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of discharged patients with evidence of a risk stratification score Denominator: # of eligible discharged patients Direction of Improvement: ↑
Availability of the Measure	The 8P Screening Tool will be available in Connect Care. The LACE tool is also in use within Alberta and included in many disease specific pathways (e.g., heart failure and chronic obstructive pulmonary disease).
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Organizational Processes & Systems
Limitations	Currently there is no recommended standardized risk assessment tool used within Alberta.
Suggested Related Measures/Bundles	Consider reporting on the stratified population (e.g., the percentage of discharged patients who were identified as 'high risk' on the risk stratification tool)[27] and relating that to the system-level measures (e.g., unplanned readmission to hospital within 30 days of discharge).

Comments	The stratification of patients according to risk should be considered a potential foundational element during discharge planning. Positive outcomes associated with this process are most often associated with patients who have the highest risk.[28] This extends to social risk as well, which may underlie many readmissions and is potentially underreported.[29]

3.2 Percentage of patients with a medication reconciliation at admission and discharge

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	Medication reconciliation is a recommended best practice at admission and discharge. The goal is to reconcile the medications the patient was taking prior to admission (Best Possible Medication History) and those initiated in hospital with the medications they need to be taking post-discharge. All patients admitted to hospital should be asked about their medication history within 24-48 hrs; a second medication reconciliation should be conducted close to the time of discharge (within 24 hrs). The potential harm from medication changes (adverse drug events) during transitions of care is a significant patient safety issue.[18,30,31] Medication reconciliation is a formal process where providers, patients, family and caregivers ensure accurate and comprehensive medication is communicated consistently across the various transitions of care. Alignment: Alberta Health Services Recommended Policy; Institute for Safe Medication Practices Canada; Health Quality Ontario; Institute of Healthcare Improvement
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of admitted patients with evidence of a medication reconciliation Denominator: # of eligible admitted patients **Indicator** Numerator: # of discharged patients with evidence of a medication reconciliation Denominator: # of eligible discharged patients Direction of Improvement: ↑
Availability of the Measure	None at this time. There is likely an opportunity to use Connect Care features to evaluate this measure in the future.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Organizational Processes & Systems

Limitations	Lack of a standard protocol
Suggested Related Measures/Bundles	A more specific monitoring measure may also relate to the number of patients who have at least one outstanding unintentional medication discrepancy.[32] This measure could also be leveraged against the indicator identifying 'high-risk' patients who would be most in need of medication reconciliation at each transition point.
Comments	There may be opportunities in the future to develop other monitoring measures that capture other aspects of the medication reconciliation process, such as types of errors that have occurred during the transition (i.e., unintentional discrepancy or an undocumented change).

Referral and Access to Community Supports

Background

Timely and appropriate access to community supports are essential for patients transitioning from hospital to home.[33] The patient's functional, social, cognitive and mental health needs must be assessed in order to determine what community supports are required after they leave hospital.

Assessing need for these services should occur as early on in the hospital admission as possible to ensure that the appropriate services, such as rehabilitation and continuing care, are identified for the patient post-discharge.

Recommended System Measures (n=5)

- % of patients identified as needing access to post-discharge community supports who had to wait for the services
- Median time (in days) between request for home-care service and the first home visit
- Median time (in days) between approval for placement in a continuing care facility and actual placement

Future Measures (n=2)

- None

Measurement Specifications for Referral and Access to Community Supports

4.1 Percentage of patients identified as needing access to post-discharge community supports who had to wait for the services

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	During transition planning with patients, family and caregivers, post-hospital care needs are assessed and arranged if needed. This should occur as early as possible during the patient's stay so that community supports can be ready when the patient is discharged. Timely access to community supports ensures higher quality of life for patients.[34] By improving access to community supports, Alberta Health Services is able to improve flow throughout the system, provide care that is more appropriate, decrease wait times and deliver care in a more cost-effective manner. Alignment: Provincial Primary Care Network Committee, Health Quality Council of Alberta, Canadian Institute for Health Information, Health Quality Ontario, Saskatchewan Health Quality Council
Description of the Measure Including technical description where applicable	This measure will provide data regarding the ongoing demand for continuing care services in Alberta and provide an indication of the delay patients experience. It will also inform the consequences of delay through the suggested/related measures. **Indicator** Numerator: # of patients that had experienced a wait for post-discharge community supports (segmented into different temporal increments) Denominator: # of patients identified as needing post-discharge community supports **Indicator** Numerator: # of patients identified as needing post-discharge community supports Denominator: # of patients discharged from hospital Direction of Improvement: ↓ Note: Lower rate indicates that eligible patients had shorter wait times before receiving post-discharge community support
Availability of the Measure	Tableau Dashboard: Continuing Care Living Option (published by AHS Analytics)
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Governance structure and finance/funding initiatives; Organizational Processes & Systems

Limitations	The metric can be somewhat misleading as it is dependent on bed and home-care growth being consistent with population need.
Suggested Related Measures/Bundles	Unplanned readmission to hospital within 30 days of discharge; all cause and less urgent emergency department visit within 7 and 30 days post-hospital discharge for patients who are eligible for continuing care support and those who waited for support.
Comments	This measure is not currently collected by Alberta Health Services. Data should be segmented by type of post-discharge community supports required (e.g., clinical versus non-clinical).

4.2 Median time (in days) between request for home-care services and the first home visit, upon discharge

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	During transition planning with patients, family and caregivers, post-hospital care needs (mobility, meal preparation, personal care) are assessed and home-care support is arranged if needed. This assessment should occur as early as possible during the patient's stay so that it will be ready in time for the patient's transition back home. Measuring the wait time for home-care services provides an indicator of system responsiveness and resources for timely and patient-centred support after discharge. By improving access to continuing care, Alberta Health Services is able to improve flow throughout the system, provide more appropriate care, decrease wait times and deliver care in a more cost-effective manner.[35] The wait is measured from hospital discharge to a patient's first home visit. Alignment: Health Quality Ontario; Provincial Primary Care Network Committee, Health Quality Council of Alberta, Canadian Institute for Health Information, Saskatchewan Health Quality Council

Description of the Measure Including technical description where applicable	This is the median number of days new patients waited to receive publicly funded home care. The median is the midpoint at which half of patients waited less and half waited longer. Indicator: Wait time, in days, between application/discharge and first service Unit of Measurement: Days Calculation Methods: The wait time is calculated as the number of days between two time points Calculation: the median number of days between the application date and the first non-case management service date Denominator: N/A (No denominator because value will be given as a median) Direction of Improvement: ↓ Note: Lower median implies more eligible patients waited less time before home-care services were available for them
Availability of the Measure	Tableau Dashboard: Continuing Care Living Option (published by AHS Analytics)
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Governance structure and finance/funding initiatives; Organizational Processes & Systems
Limitations	This measure can only be calculated after the patient has received their first visit. There could be patients who wait for long periods (>90 days), but this would not be discernible within the metric.
Suggested Related Measures/Bundles	To be determined
Comments	This measure only applies to new home-care clients and would not apply to existing home-care patients discharged from hospital.

4.3 Median time (in days) between approval for placement in a continuing care facility and the actual placement, upon discharge

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	During transition planning with patients, family and caregivers, post-hospital care needs are assessed and arrangement of supportive living or long-term care is initiated. This assessment of need should occur as early as possible during the patient's stay. Delayed admission to a continuing care home can result in health complications for patients, as well as create stress for patients, families and caregivers. Patients waiting in hospital when they could be in a continuing care facility may affect the hospital's ability to provide services to other patients who require immediate acute care.[35] Alignment: Provincial Primary Care Network Committee, Health Quality Council of Alberta, Canadian Institute for Health Information, Health Quality Ontario, Saskatchewan Health Quality Council
Description of the Measure Including technical description where applicable	This is the median number of days new patients waited to receive placement in a publicly funded supportive care or long-term care facility. The median is the midpoint at which half of patients waited less and half waited longer. Indicator: Wait time, in days, between application/discharge and first service Unit of Measurement: Days Calculation Methods: The wait time is calculated as the number of days between two time points. Calculation: The median number of days between the application date and the first non-case management service date Denominator: N/A (No denominator because value will be given as a median) Direction of Improvement: ↓ Note: Lower median implies more eligible patients waited less time before supportive living or long-term care placement was available for them
Availability of the Measure	Tableau Dashboard: Continuing Care Living Option (published by AHS Analytics)
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Governance structure and finance/funding initiatives; Organizational Processes & Systems
Limitations	This measure can only be calculated after the patient has received a placement in continuing care facility. There could be patients who wait for long periods (>90 days), but this would not be discernible within the metric.

Suggested Related Measures/Bundles	To be determined
Comments	Stratified by type of continuing care service

Transition Care Plan

Background

A timely and complete discharge summary is a good metric of care coordination for an organization.[36] It is an important document that serves both as a permanent record of a patient's visit to hospital and as a critical communication method to transfer information back to primary care.[37] Unfortunately, because of this dual purpose, it is often delayed or incomplete when sent to primary care as the completion of the health record is given priority over the patient's continuity of care. Providers in Alberta have reported the negative impact on their ability to provide timely, comprehensive follow-up care when they receive incomplete or delayed discharge summaries.[38] Nearly half of adverse events that occur during the transition from hospital to home are shown to be preventable though improved communication among providers.[39]

Due to the challenges associated with delivering the discharge summary to primary care, a solution is to create an individually-tailored transition care plan; one copy is sent to the primary care provider/team and the other accompanies the patient when they transition back to their home. This plan is not an exhaustive and complete synopsis of every activity the patient experienced while admitted, but rather a synthesis of the most important points to facilitate good care coordination and management continuity for the primary care provider/team. The patient's transition care plan must be in plain language and constructed to support their self-management.

Recommended System Measures (n=5)

- % (#) of patients with a transition care plan sent by hospital team to primary care and received in a timely manner (24 hrs; 48 hrs; >48 hrs)

Future Measures (n=2)

- % (#) of patients who had a 'complete' transition care plan sent to primary care

Measurement Specifications for Transition Care Plan

5.1 Percentage of patients with a transition care plan sent to primary care in a timely manner (24 hrs; 48 hrs; >48 hrs)

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	The discharge summary is presently the primary method for documenting a patient's encounter with the acute care system and communicating this information to primary care. This includes translating relevant descriptions about the hospitalization, such as the diagnosis, pertinent results and pending tests for follow up, medication changes and other suggested actions that are critical for a patient's continuity of care during the transition.[40] A good discharge summary relies not only on complete and accurate information, but it must be transferred to primary care in a timely manner. Evidence suggests the length of time between discharge and the receipt of the provider summary is linked to an increased risk of readmission and other adverse events.[36,41] Because of these challenges, we are suggesting the use of the Transition Care Plan. Alignment: Centre for Excellence in Education and Practice, University of Toronto;[42] Academy of Medical Royal Colleges (AoMRC) Standards for the Clinical Structure and Content of Patient Records[43]
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of patients with a transition care plan sent to primary care <24 hrs, 24-48 hrs or >48 hrs Denominator: # of patients discharged from hospital **Indicator** Numerator: # of patients with a transition care plan received by primary care <24 hrs, 24-48 hrs or >48 hrs Denominator: # of patients discharged from hospital Direction of Improvement: ↑
Availability of the Measure	This requires primary data collection
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Organizational Processes & Systems
Limitations	Unclear if this will be reported directly in Connect Care

Suggested Related Measures/Bundles	This indicator is offering a detailed breakdown of the timeliness (% <24 hrs; % 24-48 hrs; % >48 hrs) of transition care plans sent and received. However, a future indicator could be developed to account for the 'completeness' of the transition care plan as primary care providers require both timely and accurate/ required information for good care continuity.
Comments	This indicator has the strongest evidence base, with timely communication of relevant information to primary care about the hospital stay being associated with better outcomes post-discharge.

Follow-up to Primary Care

Background

Prompt patient follow-up with a primary care provider has been promoted as a key strategy to reduce hospital readmissions and emergency department utilization post-hospital discharge.[11, 44-51] This reduction has been noted specifically in high-risk patients (i.e., those with multiple conditions and complex needs).[44] A collaborative approach between the hospital team and primary care ensures appropriate sharing of information to enhance management and informational continuity. Although patient follow-up to the primary care provider post-discharge may reduce further acute care utilization, it is important to note that some encounters may not be preventable.

Recommended System Measures (n=5)

- % (#) of patients (stratified by risk) followed up by primary care provider/team within 7 days/30 days post-hospital discharge

Future Measures (n=2)

- % (#) of high-risk, complex patients with primary care provider/team follow-up appointment in place prior to hospital discharge

Measurement Specifications for Follow-Up to Primary Care

6.1 Percentage of patients followed up by primary care provider/team within 7 days/30 days post-hospital discharge

Type of Measure System, Strategic, Tactical	Strategic
Rationale Including alignment to other national/provincial performance measures	Follow-up appointment is booked with patients' primary care provider/team before discharge from hospital. Ideally, acute and primary care providers would work together to identify each patient's medical and social risks for hospital readmission and base timing of follow up as follows: • High-risk, complex patients: within 7 to 14 days of discharge, or sooner based on clinical judgement • Moderate to low-risk patients: within 7 to 30 days of discharge, or sooner/later based on clinical judgment A follow-up phone call or visit for high-risk, complex patients may be warranted within 48 hrs (or 24-72 hrs) of discharge to assess ability to manage care.[52,53] The period immediately after discharge from hospital can be a potentially high risk and vulnerable transition point for patients. Early follow-up with primary care provider/team after hospital discharge for high-risk patients (e.g., those with multiple conditions and complex needs) has been associated with improved patient outcomes, such as reduced rates of readmission and emergency department visits within 7 days of discharge.[44] Alignment: Provincial Primary Care Network Committee, Health Quality Council of Alberta, Canadian Institute for Health Information, Health Quality Ontario, Saskatchewan Health Quality Council
Description of the Measure Including technical description where applicable	**Indicator** Numerator: # of high-risk patients who had a follow-up appointment with a primary care provider/team within 7 days of discharge from hospital Denominator: # of high-risk patients discharged from hospital **Indicator** Numerator: # of moderate to low-risk patients who had a follow-up appointment with a primary care provider/team within 30 days of discharge from hospital Denominator: # of moderate to low-risk patients discharged from hospital Direction of Improvement: ↑ Note: Higher rate implies more eligible patients received follow up from their primary care provider after hospital discharge

Availability of the Measure	Since fiscal year 2013/14, Health Quality Council of Alberta has measured: % of time patients are followed up by family doctors/nurse practitioners within 7 days/30 days of discharge from acute care for selected chronic conditions. A new fee code developed by Alberta Health, specific for patients discharged from the hospital for follow-up visit in primary care, would be ideal.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Governance structure and finance/funding initiatives; Organizational Processes & Systems
Limitations	Post-discharge, follow-up visits with a specialist will not be considered for this measurement. Other types of follow-up in primary care (e.g., nurse practitioner) may be captured by this indicator if this provider is engaging in shadow billing. However, follow-up with other team members (e.g., registered nurse) may not be captured in billing data and thus would not be included while calculating this indicator. Follow-up visit is not condition/discharge specific and does not necessarily have the same reason for visit as the hospitalization. Deaths that take place in the community during the follow-up period cannot be accounted for and cannot be removed from the calculation.
Suggested Related Measures/Bundles	Unplanned readmission to hospital within 30 days of discharge, emergency department visit within 7 and 30 days post-hospital discharge, % of high-risk patients with primary care provider/team follow-up appointments in place prior to hospital discharge.
Comments	Most existing evidence and measures do not distinguish between primary and specialist care follow-up physician visits post-hospital discharge. Follow-up visits post-hospitalization measures in other provinces and internationally are typically calculated for only specific chronic conditions.

List of Contributors

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- Joint Venture Council
- Health Quality Council of Alberta
- Provincial and Zone Primary Care Network Committees and Task Groups
- Provincial Practitioner Executive Committee
- Quality Safety and Patient Outcomes Executive Committee
- Strategic Clinical Networks
- Zone Medical Advisory Councils

AHS departments and programs:

- Accreditation
- Access Improvement - eReferral and Quality Referral Evolution (QuRE)
- Allied Health
- CoACT
- Community Engagement & Communications
- Enhancing Care in the Community
- Emergency Medical Services – Mobile Integrated Healthcare
- Medical Affairs
- Nutrition Services
- Path to Care
- Pharmacy
- Planning and Performance
- Population, Public and Indigenous Health
- Referral, Access, Advice, Placement, Information & Destination (RAAPID)
- Seniors Health & Continuing Care
- Transitions Services
- Zone Operations (Primary, Community and Acute)

Appendix 1:

Review of existing initiatives within Alberta

The following initiatives within Alberta were reviewed in order to align the measures with existing indicators related to transitions of care:

- O'Brien Institute of Public Health; Community Health Care Measures Project (commissioned by Alberta Health)
- Provincial Primary Health Care Quality Measurement Framework
- Primary Health Care Integration Network Evaluation Framework/Integration Quality Indicators
- Health Evidence Review - Alberta Health Integration Indicators Proposal
- Provincial Primary Care Network Committee (PPCNC measures)
- Alberta Primary Health Care Research Network; Academic/Clinicians
- Home to Hospital to Home Transitions Guideline
- Alberta Health Services Analytics Performance and Monitoring Measures
- Alberta Medical Association Practice Level Measures
- Primary Care Network Schedule B Indicators

Appendix 2:

Alberta Health Cascading Accountabilities for Analytics

Alberta Health. (2014) Health System Outcomes and Measurement Framework

Appendix 3:

Domains of Integrated Health Care Delivery

1. Human- (Person-) Centred Outcomes
   - Patient/family/care-provider centred philosophy; focusing on their needs.
   - Patient/family/care-provider engagement and participation.
   - Person-focused and population-based care.

2. Relationships/Partnerships & Care Coordination
   - To enable collaboration, trust and rapport across service providers.

3. Culture and Leadership
   - Organizational support with demonstration of commitment.
   - Leaders (physicians and administrators) with vision who are able to instill a strong, cohesive culture focused on improvement for healthy outcomes for all Albertans.
   - To challenge the boundaries of traditional scopes of practice (e.g., beyond clinic walls), removal of inhibitors, citizen empowerment, breadth of ambition (not being afraid of failure), and innovation management.

4. Governance and Financing
   - Strong, focused, diverse governance represented by a comprehensive membership from all stakeholder groups.
   - Organizational structure that promotes coordination, integration and alignment across settings and levels of care.
   - Aligning service funding to ensure equitable funding distribution for different services or levels of services.
   - Funding mechanisms that promote inter-professional teamwork and health promotion.

5. Information Management and Information Technology (IMT)
   - State of the art information systems to collect, track and report activities of health service delivery and population health.
   - Efficient information systems that enhance communication and information flow across the continuum of care.
   - To improve access to and flow of health information, to use data to expose issues, to cross boundaries and bridge gaps in health systems that are increasingly complex.

6. Organizational Processes and Systems
   - Processes that help systems by guiding the overall design of local, zone and provincial integration of services for clients through macro-, meso- and micro-level integration.

Appendix 4:

Future system measures

1. **Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs)**

   Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) are essential to supporting a patient-centred approach to care and to understand whether healthcare services make a difference to a patient's quality of life. PROMs are instruments completed by patients for use in reporting on aspects of their health status that are relevant to their quality of life including symptoms, functionality, and physical, mental and social health.[54] Alternatively, PREMs are used to measure a patient's perception of their personal experience of the healthcare they received.[55] PREMs are often obtained through a generic survey tool, which may not capture the elements of the patient's experience that matter for the intervention at hand.

   Both PROMs and PREMs are measured from patients' perspectives and they can be used together to more fully assess transitions in care. PROMs can also complement traditional sources of data such as information derived from clinical administrative data. Together these measures provide an enriched source of patient information to better inform policies and programs to support patient-centred and value-based healthcare delivery.

   EQ-5D

   An example of a PROM is the EQ-5D, a standardized instrument for measuring generic health status and widely used in outcome measurement in the delivery of healthcare services. In 2015, the Alberta PROMs and EQ-5D Research and Support Unit (APERSU) was formed. They support the use of the EQ-5D and PROMs in the province of Alberta. Alberta has secure licensing for the use of the EQ-5D and it will also be available in Connect Care.

2. **Provider Experience Measure**

   Very little is known about the provider experience during care transitions, specifically home to hospital to home. Considering the experience of different providers at different steps is critical to improving their capacity to engage in key organizational priorities for improvement, such as safe transitions in care. Ensuring the providers' perspective (hospital, primary and community care) is represented will benefit the creation seamless home to hospital to home transitions and successful implementation of the guideline.

Patient-Reported Experience Measure

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	Understanding a patient's experience when he or she receives healthcare is integral to improving patient-centred care. Very little is known about the patient experience during care transitions, specifically home to hospital to home, the services they need, or the outcomes they value. Poor and fragmented care transition experiences can have substantial consequences, including creating patient and caregiver mistrust, anxiety and confusion; precipitating family conflict; and contributing to inefficient care delivery, avoidable health system use and delayed recovery.[56] To ensure that care transitions are safe and supportive of patients' recovery, patients should be better prepared for self-care at home and healthcare systems should design accessible means of ongoing care support when and where it is needed. Thus, it is very important to measure experience in the Albertan context. Alignment: Alberta Health Services Performance Measure, Health Quality Ontario, Canadian Institute for Health Information
Description of the Measure Including technical description where applicable	A good patient experience survey should capture system-level measures that cover all components of the home to hospital to home transition. There are existing surveys to pull relevant questions from if needed. For example: 1. The Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS) asks some questions related to home to hospital to home transitions (see Appendix 5 for methodology): • Understanding all medications at time of discharge • Having information about what you do if you are worried about your condition/treatment after discharge • Having a better understanding of your condition at discharge versus admission to the hospital • Discussing with hospital team about any help you would need once returning home • Getting information in writing about what symptoms/health problems to watch out for after leaving the hospital 2. Alberta Health Services Performance Measure – Patient Satisfaction with Hospital Experience. Question: "We want to know your overall rating of your stay at the hospital" Direction of Improvement: ↑ patient satisfaction
Availability of the Measure	Tableau Dashboard: Hospital Consumer Assessment of Healthcare Providers and Systems (published by AHS Analytics) Any additional measures would need to be further developed and primary data collection is required.

Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Culture and Leadership; Information Technology; Organizational Processes & Systems
Limitations	The HCAHPS survey only captures a sample of the provincial population, thus cannot be generalizable to the entire Albertan population. Given this limitation, it is suggested that this measure/subset of measures be used in conjunction with the other key performance indicators and/or development of a new patient survey.
Suggested Related Measures/Bundles	To be determined
Comments	Other existing survey questions that may be related to home to hospital to home transitions: EQ-5D, Caregiver survey from Seniors Community Hub (SCH), or Canadian Institute for Health Information Canadian Patient Experiences Reporting System (CPERS). Further, patient-reported outcome measures (PROMs), or patient-reported experience measures (PREMs) are powerful measures for performance improvement. It is important to survey the patient regarding all points in the transition from home to hospital to home, including their experience after discharge. If the survey only focuses on the patient experience within hospital or immediately after discharge, vital information may be missing regarding the transition back home.

Provider Experience Measures

Type of Measure System, Strategic, Tactical	System
Rationale Including alignment to other national/provincial performance measures	Very little is known about the provider experience during care transitions, specifically home to hospital to home. Considering the experience of different providers at different steps is critical to improving their capacity to engage in key organizational priorities for improvement, such as transitions in care. Ensuring the providers' perspective (acute and primary care) is represented will benefit the creation of seamless home to hospital to home transitions and successful implementation of the guideline.
Description of the Measure Including technical description where applicable	A provider experience survey should capture system-level measures that cover all components of the Home to Hospital to Home Transitions Guideline. Questions related to provider attitudes and major barriers should be included. Direction of Improvement: dependent on survey questions
Availability of the Measure	This measure will need to be developed and requires resources as well as primary data collection.
Category of Integration Domains	Human-Centre Outcomes; Relationships, Partnerships & Care Coordination; Culture and Leadership; Information Technology; Organizational Processes & Systems
Limitations	None at this time
Suggested Related Measures/Bundles	To be determined
Comments	Currently did not find any provider survey questions that may be related to home to hospital to home transitions. Needs further investigation.

Appendix 5:

Methods related to the HCAHPS* Survey, Alberta Version

Sample size: Since the 2014-2015 fiscal year, the sampling methodology is 10% or eligible hospital discharges (see sampling exclusions below).

Methodology: The survey is administered by telephone (using the Computer Assisted Telephone Interview (CATI) software.

Sampling framework: The sampling strategy used ensures that results are representative of all hospital facilities both small and large in size. Data collection quotas are set for each facility to prevent oversampling.

Sampling exclusions: The following exclusions are applied to obtain the eligible sample population:

- Persons under 18 years of age
- Stayed less than 24 hours
- Died during hospital stay
- Psychiatric patients
- Stayed only in emergency department
- Day surgery or ambulatory procedure
- Dilation and curettage (D&C) procedure
- Still birth
- Baby length of stay is greater than 6 days

Reporting: Reporting of survey results is available quarterly, annually and at certain levels (provincial, zones, hospitals and units).

Survey dashboard (please note that this dashboard is only available to AHS staff):
https://tableau.albertahealthservices.ca/#/workbooks/12798/views
https://tableau.albertahealthservices.ca/#/workbooks/12797/views
https://tableau.albertahealthservices.ca/#/workbooks/12410/views

* Hospital Consumer Assessment of Healthcare Providers and Systems Survey

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