ACP CRIO
Advance Care Planning Collaborative Research & Innovation Opportunities Program

ACP/GCD Indicators: Standards Manual

Implementation of indicators to monitor successful uptake of Advance Care Planning in Alberta

ACP CRIO (www.acpcrio.org) is an AIHS-funded team of researchers and knowledge end-users working together on "Advance Care Planning and Goals of Care Alberta: a population based Knowledge Translation (KT) intervention study". We are studying how to optimally implement a formalized ACP framework across a large population and throughout a complex, multi-sector healthcare system.

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Source of Financial Support:

Alberta Innovates Health Solutions Collaborative Research and Innovation Opportunities (CRIO) Program Grant 201201157: "Advance Care Planning and Goals of Care Alberta: A population Based Knowledge Translation Intervention Study."

How to use this document:

This document (ACP/GCD Indicators: Standards Manual) was prepared by the ACP CRIO research program in partnership with, and for use by, Alberta Health Services (AHS) and Covenant Health. The intended purpose of our partnership and in preparing this Standards Manual was to describe a strategy to standardize evaluation and audit for Advance Care Planning (ACP) and Goals of Care Designation (GCD) policies. Herein, the Standards Manual operationalizes nine ACP/GCD indicators, determined through a consensus-based Delphi process, for implementation within a web-based dashboard. The intention is for these indicators to be measured on a regular, ongoing basis, and be reported via dashboard(s) that will allow AHS and Covenant Health to monitor and improve their performance in the rollout of ACP/GCD.

Measurement of these nine indicators will be conducted by AHS and Covenant Health, using three data sources: 1) administrative data (including DIMR), 2) chart reviews (including Green Sleeves), and 3) telephone surveys. Frequency of data collection/audits/surveys, sample sizes, selection criteria, measurement settings, and other methodological details will be based on available resources and determined by AHS and Covenant Health.

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Executive Summary

INTRODUCTION. In April 2014, Alberta Health Services (AHS) and Covenant Health implemented a province-wide policy for Advance Care Planning (ACP) and Goals of Care Designation (GCD). ACP/GCD provides a formal way to register a capable patient's opinion on care details for use when the patient is incapable of communicating his/her wishes. AHS and Covenant Health have the scope to evaluate limited measures of ACP/GCD uptake, but it is not known whether these are the most informative measures to sustain practice change nor how best to communicate the results to end-users. A study was conducted to identify and develop *performance indicators* for use in an ACP/GCD dashboard, in order to provide data that can be used by AHS and Covenant Health to monitor and improve their performance in the completion of ACP/GCD.

METHODS. Using a Delphi consensus-based approach, invited panelists[1] evaluated and refined an initial list of 132 ACP/GCD indicators through a combination of face-to-face meetings and online surveys (**Figure 1**).

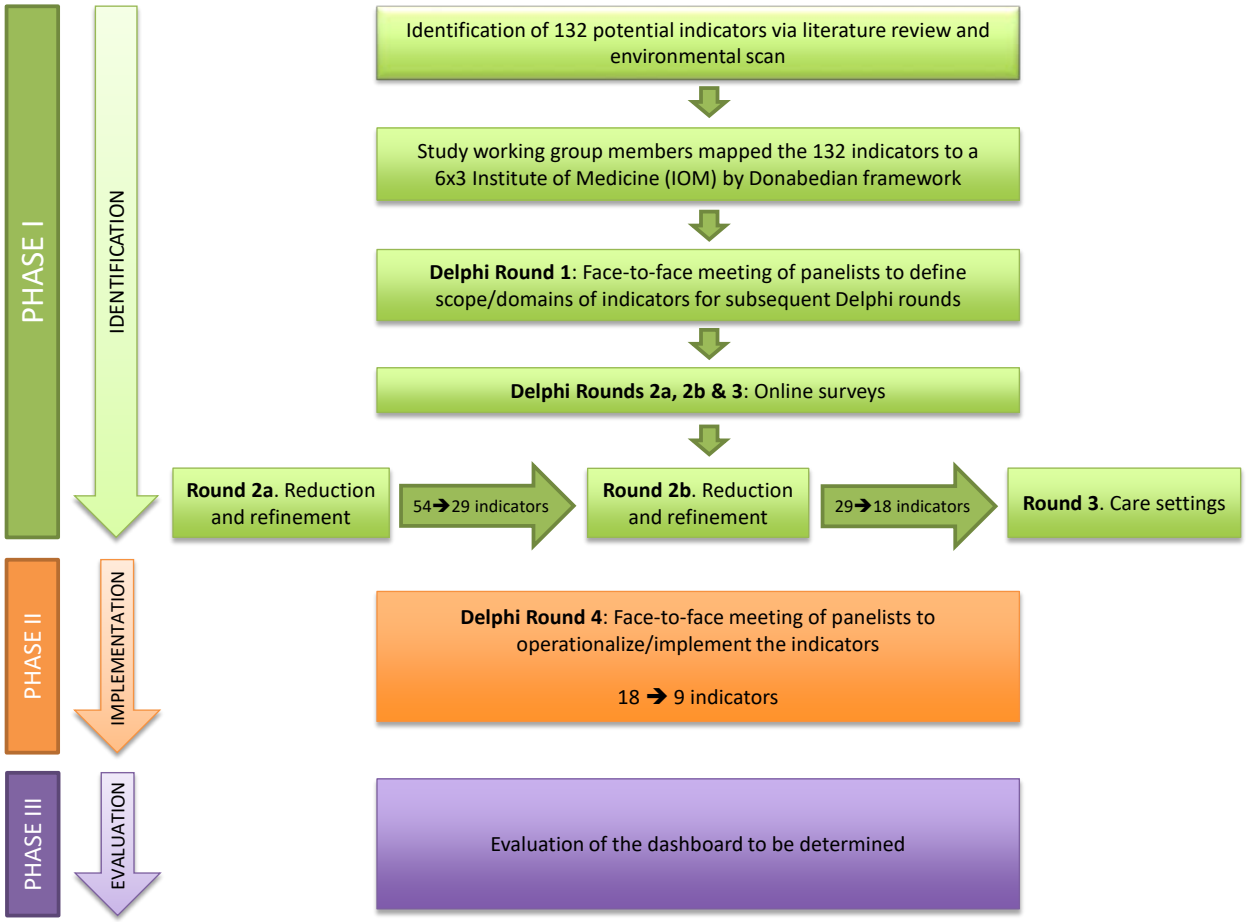

Figure 1. Study flowchart.

[1]Invited panelists (n=149) included: members of AHS' ACP GCD Provincial Implementation Committee, members of Covenant Health's ACP GCD implementation committee, Strategic Clinical Network members, AHS' Research Innovation and Analytics representatives, AHS' Information Technology representatives, specialist physicians and clinicians, academics, government representatives, representatives of professional bodies and non-profit health organizations, and public advisors.

RESULTS. A 6x3 Institute of Medicine (IOM) by Donabedian framework was adopted/supported in Delphi Round 1 (face-to-face meeting February 2015, n=12 participants). Two online Delphi survey rounds (Rounds 2a and 2b)[2] reduced and refined the 132 indicators to 18 indicators mapping to 14 IOM x Donabedian domains. A third online Delphi survey round (Round 3)[3] evaluated settings of care for the 18 indicators. A final face-to-face meeting (Delphi Round 4, n=19 participants) was held in January 2016 to operationalize the indicators into a measurable format (i.e. numerator, denominator, data source defined, etc). Nine indicators (**Table 1**), covering 11 of the 18 IOM x Donabedian domains (**Table 2**), could be operationalized. This report summarizing the final list of nine indicators has been circulated to all Delphi round panelists (n=149) for final review and comment.

Table 1. ACP/GCD indicators (n=9) operationalized into measurable format after Delphi Round 4

1. Percentage of healthcare providers who have completed the AHS Advance Care Planning: Goals of Care Designations - Adult eLearning module
2. Percentage of charts with GCD order(s) in the Green Sleeve
3. Percentage of patients with a GCD order anywhere in the health record
4. Percentage of patients with a completed ACP/GCD tracking record
5. Percentage of patients with a Personal Directive in the health record
6. Percentage of patients and/or alternate decision-makers who have had an advance care planning conversation with a health care provider
7. Percentage of deceased patients who die having had an M1, M2, C1 or C2 GCD in the week prior to their death, who received resuscitative or life-support interventions in advance of death
8. Percentage of deceased community care patients with a C2 GCD who were transferred to acute care and/or ICU
9. Percentage of patients or family members/friends satisfied with ACP conversation

Table 2. ACP/GCD indicators #1-9 mapped to the 6x3 IOM x Donabedian framework

	Structure	**Process**	**Outcome**
Timely	#2		
Safe		#4	#7
Patient-centered		#6	#9
Effective	#1	#3, #5, #6	#7
Efficient	#2	#4	#8
Equity			

SUMMARY. Nine ACP/GCD indicators mapping to 11 of 18 IOM x Donabedian domains are recommended for operationalization into an ACP/GCD dashboard.

[2] **Round 2a participation rate**: 16 participants/73 invited (22%); **Round 2b participation rate**: 9 participants/72 invited (13%)
[3] **Round 3 participation rate**: 24 participants/62 invited (39%)

Glossary[4]

Advance Care Planning: a process which encourages people to reflect and think about their values regarding clinically indicated future health care choices; explore medical information that is relevant to their health care concerns; communicate wishes and values to their loved ones, their alternate decision-maker and their health care team; and record those choices.

Advance Care Planning/Goals of Care Designation Documentation:

1. Advance Care Planning Tracking Record: a record to document the decisions/next steps/outcomes of discussions related to ACP and Goals of Care Designation. Goals of Care discussions are ongoing and may include any combination of the Six (6) core elements: (1) Prognosis and Anticipated Outcome of current treatment; (2) Patient's values and their understanding/expectation of treatment options; (3) Life Sustaining Measures/Degree of Benefit (e.g. enteral tube feeding, intravenous hydration, dialysis); (4) Comfort Measures; (5) Resources Available (e.g. palliative care, spiritual care, social work); (6) Goals of Care. Any member of the interdisciplinary team may initiate or participate in discussions related to advance care planning and/or goals of care.

2. Goals of Care Designation order: the documented order for the goals of care designation as written by the most responsible health practitioner (or designate).

3. Personal Directive (PD): a written document in accordance with the requirements of the *Personal Directive Act* in which an adult names an agent(s) or provides instruction regarding his/her personal decisions, including the provision, refusal and/or withdrawal of consent to treatments/procedures. A personal directive (or part of) has effect with respect to a personal matter only when the maker lacks capacity with respect to that matter.

Alternate Decision-Maker: a person who is authorized to make decisions with or on behalf of the patient. These may include: a minor's legal representative, a guardian, a 'nearest relative' in accordance with the *Mental Health Act*, an agent in accordance with a personal directive, a co-decision-maker, a specific decision-maker or a person designated in accordance with the *Human Tissue and Organ Donation Act.*

Delphi method[5]: an approach for collecting and organizing informed opinions from a group of individuals who are knowledgeable in a specialized area. A panel of individuals is generally surveyed about specific items or issues, usually involving several iterations ('rounds') of a structured questionnaire. The outcome is to obtain converging consensus on a given subject.

Donabedian framework[6]: an assessment approach that classifies healthcare quality information into three categories: structure (the attributes of the settings in which care occurs), process (what is actually done in giving and receiving care), and outcome (the effects of care on the health status of patients and populations).

Eligible Patient: see 'Approaches to Measurement - Target populations'

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[4] Unless otherwise specified, all definitions are from the "Advance Care Planning and Goals of Care Designation: Policy Level 1", the "Advance Care Planning and Goals of Care Designation: Procedure Level 1", or the "Advance Care Planning Tracking Record", Alberta Health Services (2014). Available from: http://www.albertahealthservices.ca/info/Page9099.aspx. Accessed 2 February 2016.

[5] Boberg AL, Morris-Khoo SA. The Delphi method: a review of methodology and an application in the evaluation of a higher education program. Can J Program Eval 1992;7:27–39.

[6] Donabedian A. The quality of care: how can it be assessed? JAMA 1988;260:1743-1748.

Goals of Care: the intended purposes of clinically indicated health care interventions and support as recognized by a patient or alternate decision-maker, health care team, or both.

Goals of Care Designation: one of a set of short hand instructions by which health care providers describe and communicate general care intentions, specific clinically indicated health interventions, transfer decisions, and locations of care for a patient as established after consultation between the most responsible health practitioner and patient or alternate decision-maker.

R Medical Care and Interventions, Including Resuscitation	R – May intervene with medical care, including Resuscitative Care if required Goals of care: directed at cure or control of a patient's condition. The patient would desire ICU care if it was required, and would benefit from ICU if their medical condition warranted it.	R1 = Medical Care including ICU admission if required, with intubation and chest compressions
		R2 = Medical Care including ICU admission if required, with intubation but without chest compressions
		R3 = Medical Care including ICU admission if required, without intubation or chest compressions
M Medical Care and Interventions, Excluding Resuscitation	M – May intervene with medical care, excluding tertiary level ICU Goals of care: directed at cure or control of a patient's condition. These patients either choose to not receive care in an ICU or would not benefit from ICU care.	M1 = Medical care with transfer to Acute care when required and without the option for life-saving ICU care
		M2 = Medical care without transfer to Acute care and without the option for life-saving ICU care
C Medical Care and Interventions, Focused on Comfort	C – Provide comfort care Goals of care: directed at symptom control rather than at cure or control of a patient's underlying condition that is expected to result in death. All interventions are for symptom relief.	C1 = Symptom Comfort Care
		C2 = Terminal Care

Healthcare professional: an individual who is a member of a regulated health discipline, as defined by the *Health Disciplines Act* or the *Health Professions Act*, and who practices within scope or role.

Health Record: the Alberta Health Services legal record of the patient's diagnostic, treatment and care information.

Institute of Medicine quality framework[7]: a model for healthcare quality that advocates that health care should be safe (free from harm), effective (using best available evidence), patient centered (focused on the patient), timely (available when needed), efficient (limits waste), and equitable (equally available)**.**

Life Support Interventions: interventions typically undertaken in the Intensive Care Unit but which occasionally are performed in other locations in an attempt to restore normal physiology. These may include chest compressions, mechanical ventilation, defibrillation and physiological support.

[7] Institute of Medicine Committee on the Quality of Health Care in America. Crossing the quality chasm: a new health system for the 21st century. Washington, DC: National Academy Press; 2001.

Life Sustaining Measures: therapies that sustain life without supporting unstable physiology. Such therapies can be used in many other clinical circumstances. When viewed as life-sustaining measures, they are offered in either a) the terminal stages of an illness in order to provide comfort or prolong life, or b) to maintain certain bodily functions during the treatment of intercurrent illnesses. Examples include enteral tube feeding and intravenous hydration. These measures should by clinically relevant and congruent with the patients' goals.

Most responsible health practitioner: the health practitioner who has responsibility and accountability for the specific treatment/procedure(s) provided to a patient and who is authorized by Alberta Health Services to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within the scope of his/her practice.

Settings of Care[8]:

Primary care: Routine care, care for urgent but minor health problems, mental health care, maternity and child care, psychosocial services, and chronic disease prevention and management.

Hospital care:

Emergency and ambulatory care:
Medical care delivered on an outpatient basis. It is one of the largest-volume patient activities in Canada, making it a key component of the continuum of health services in Canada.

Acute care:
Acute inpatient care provides necessary treatment for a disease or severe episode of illness for a short period of time, with the goal of discharging patients as soon as they are stable.

Continuing care:
Serves people who may not be ready for discharge from hospital but who no longer need acute care services. Also known as extended care, chronic care or complex continuing care, this type of hospital care provides ongoing professional services to a diverse population with complex health needs.

Rehabilitation:
Care for both short-stay and long-stay rehabilitation patients.

Community care:

Home care:
Home care programs provide assessment, case management, health and personal support services to people with diverse care needs.

Residential care:
Residential care provides living options in community-based facilities for those who need different levels of support to optimize independence.

8 Canadian Institute for Health Information: Types of Care. https://www.cihi.ca/en/types-of-care. Accessed April 6, 2016

Approaches to Measurement

Data sources

Measurement of the nine indicators is accomplished through a variety of data sources and can be summarized as three separate approaches. **Table 3** tabulates these approaches for each of the 9 indicators.

Table 3. Data sources for ACP/GCD indicators #1-9

Data source:	Indicator #:
Administrative data (including DIMR)	1, 7, 8
Chart audit (including Green Sleeves)	2, 3, 4, 5, 7, 8
Telephone survey	6, 9

* Data Integration Management and Reporting (DIMR)

Target populations

(1) **Hospital care patients**:
   a. **Acute care patients:** alive or deceased patients, minimum stay ≥ 7 days, >50 years of age, not transferred from out of province, not a Mental Health & Addictions patient

(2) Community care patients:
   a. **Residential care**: alive or deceased patients, minimum stay ≥ 30 days, not transferred from out of province, not a Pediatric or Mental Health & Addictions resident
   b. **Designated living, supportive living, assisted living**: alive or deceased patients, palliative or long-term clients, Long Term clients with a minimum stay ≥ 90 days, not transferred from out of province, not a Pediatric or Mental Health & Addictions resident
   c. **Home care/home living**: alive or deceased patients, palliative or long-term clients, Long Term clients with a minimum stay ≥ 90 days, not transferred from out of province, not a Pediatric or Mental Health & Addictions resident

Data collection instruments (Table 3)

(1) **Administrative Data (including DIMR):**

a) **Discharge Abstract Database (DAD)**. The DAD is a national database for information on all separations from acute care institutions, including discharges, deaths, sign-outs and transfers, within a fiscal year (April 1 to March 31). Over time, the DAD has also been used to capture data on day surgery procedures, long-term care, rehabilitation and other types of care. The format of the DAD abstracts is based upon The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) and The Canadian Classification of Health Interventions (CCI). (Data Quality Documentation, Discharge Abstract Database—Multi-Year Information. CIHI). Each DAD record contains information about one patient's hospital admission/discharge with up to 25 diagnoses, up to 20 interventions with their dates, up to 6 events of SCU/ICU admission. Presently (February 2016), DAD does not contain any ACP/GCD information. In Alberta DAD information is available in electronic form through AHS Data Integration, Measurement and Reporting (DIMR).

b) **MyLearningLink**: MyLearningLink is an online Learning and Content Management System (LMS/LCMS) that provides a single point of access to AHS learning opportunities. MyLearningLink opportunities are available exclusively to AHS employees and affiliates with access to the AHS network. In order to access MyLearningLink, staff must have access to the AHS network, have an email address of @albertahealthservices.ca, and be paid through e-People. Select strategic partners (e.g. physicians and Lamont employees) are also able to access MyLearningLink. The MyLearningLink system hosts and tracks learning. Each day, MyLearningLink receives data from e-People which updates the learner and manager accounts in MyLearningLink.

(2) **Chart Review (including Green Sleeves)[9]:**

AHS chart audits are conducted for acute care patients, residential care patients, designated/supportive/assisted living patients and home care/home living clients in Alberta where ACP/GCD has been implemented. Implementation refers to sites where: (1) Core education has been delivered to staff, (2) Workload process/es have been established, (3) Staff has access to materials, and; (4) Staff are beginning to enact the process. Purpose of the data collection would be to determine (a) to what extent GCD Orders and ACP Tracking Records are being utilized and (b) for those deceased residents/patients/clients with a GCD Order, if their care during the end of life was in line with their GCD Order.

(3) **Telephone Survey[10]:** AHS telephone surveys are conducted with patients and/or family members of patients who have a Goals of Care Designation or documented Advance Care Planning conversation identified through previous chart audits. A sample of patient/resident/client charts would be audited from select hospital and community care sites in Calgary, Central, and Edmonton Zones in order to identify the level of uptake of GCD Orders and ACP Tracking Records. Patients/residents/clients that have either an ACP Tracking Record or a GCD Order in their chart are eligible for a follow-up telephone survey to assess their familiarity and experience with ACP/GCD related forms and processes. Family members of (a) hospital patients who lacked capacity to participate in the survey, (b) long term care residents, and (c) supportive living residents will be contacted to participate as proxy respondents.

[9] Advance Care Planning and Goals of Care Designation: Chart Audit 1. Alberta Health Services (2014)
[10] Advance Care Planning and Goals of Care Designation: Telephone Survey Report. Alberta Health Services (2014)

Coding to be used for outcome measures

The Alberta Health Services "Advance Care Planning and Goals of Care Designation: Policy Level 1" (Document # HCS-38) defines differences between GCD orders with respect to five classes of interventions (see Table below):

Intervention*	Description	CCI code**	Not appropriate at care levels
Resuscitation	Resuscitation cardiocerebral (CCR)	1.HZ.30	M1, M2, C1, C2
	Resuscitation cardiopulmonary [CPR]	1.HZ.30	M1, M2, C1, C2
	Resuscitation heart	1.HZ.30	M1, M2, C1, C2
	Resuscitation pulmonary	1.GZ.30	M1, M2, C1, C2
	Intubation trachea [endotracheal] Respiratory assistance endotracheal	1.GJ.53 1.GZ.31	R3, M1, M2, C1, C2
	Mechanical ventilation	1.GZ.31	R2, R3, M1, M2, C1, C2
Life support interventions	Stimulation, heart NEC (not elsewhere classified; includes: Defibrillation, heart; Open cardiac massage)	1.HZ.09	M1, M2, C1, C2
	Implantation of internal device, heart NEC (not elsewhere classified; includes Cardiac resynchronization therapy defibrillator and Cardiac resynchronization therapy pacemaker)	1.HZ.53	M1, M2, C1, C2
	Installation of external appliance, heart NEC (not elsewhere classified; 1.HZ.37.JA-NN installation of temporary (external) cardiac pacemaker)	1.HZ.37	M1, M2, C1, C2
Life sustaining measures	Are possible at any level of care and codes are not included here.		C2
Major surgery	Does not have distinguishing CCI codes and is not appropriate only at C2 level, where its use is very unlikely. No CCI codes are included here.		C2 (may be appropriate for symptom management)
Transfers	Transfer to acute care: DAD record showing admission to acute care hospital [identified by Alberta institution number] with admission date after [C2] GCD order date. Transfer to ICU: DAD record showing admission to ICU/SCU with ICU/SCU admission date after [C2] GCD order date.		C2 (may be appropriate for symptom management)

*CCI = Canadian Classification of Health Interventions. CIHI: https://www.cihi.ca/en/data-and-standards/standards/classification-and-coding/canadian-classification-of-health

**Included code definitions: AHS Advance Care Planning and Goals of Care Designation. Document HCS-38-01, April 2014; Sunnybrook Health Sciences Centre. Decisions about Life Support Interventions, Including CPR: Addressing Communication and Disagreement. Policy PC-127, April 2009; Alberta Health Performance Measure Definition Patients Discharged from Emergency Department or Urgent Care Centre within 4hrs. http://www.health.alberta.ca/documents/PMD-Patients-Discharged-Emergency-Department-4Hours.pdf. Accessed Feb 3 2016.

ACP/GCD Indicators

1. Percentage of AHS MyLearningLink account holders who have completed the AHS Advance Care Planning: Goals of Care Designations - Adult eLearning module

Description	This measure is used to assess the proportion of AHS' workforce that has completed the AHS **Advance Care Planning: Goals of Care Designations - Adult** eLearning module.
Rationale	Facilitation of ACP conversations is essential to the success of the communication, reflection and decision-making undertaken by patients and those close to them. Healthcare providers require education and support to attain and maintain these ACP facilitation skills. As prescribed in the AHS Advance Care Planning and Goals of Care Designation Level 1 Procedure, "Staff and physicians providing care to a patient have the required knowledge and experience with ACP and the Goals of Care Designations". This indicator provides a measure of the extent to which AHS' workforce is equipped to facilitate ACP and GCD conversations.
Measurement setting	Department (as per MyLearningLink report column headings)
Level of measurement	Site/city/zone (as per MyLearningLink report column headings)
Numerator	Number of MyLearningLink account holders who have completed the AHS **Advance Care Planning: Goals of Care Designations - Adult** eLearning module
Inclusion criteria for Numerator	• MyLearningLink account holders with a status of 'Pass' for the adult eLearning module
Exclusion criteria for Numerator	• MyLearningLink account holders with a status of 'Incomplete', 'Not Attended', or 'Withdrawn' for the adult eLearning module
Data source(s) for Numerator	MyLearningLink
Denominator	Total number of active MyLearningLink account holders (approx. 105,000 as of Feb 2016)
Inclusion criteria for Denominator	• Employee of AHS with an AHS employee number and who is paid by ePeople • Physicians with a MyLearningLink account created by Medical Affairs • Other users with an active MyLearningLink account (e.g. Lamont employees)
Exclusion criteria for Denominator	• Inactive or suspended MyLearningLink account • Users who access the eLearning module outside of MyLearningLink
Data source(s) for Denominator	MyLearningLink
IOMxDonabedian domain	Structure/Effective

2. Percentage of charts with GCD order(s) in the Green Sleeve[11]

Description	This measure is used to determine whether a standardized process is used to locate GCD orders in the health record (i.e. filing the GCD order in the patient's Green Sleeve).
Rationale	Having a standardized process for locating the GCD order in the medical record increases the likelihood that it will be accessed by the healthcare team when needed.
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of patient charts with GCD order located in Green Sleeve
Inclusion criteria for Numerator	• Identified GCD on GCD form or copy of form in Green Sleeve
Exclusion criteria for Numerator	• GCD form not signed and dated • GCD form located elsewhere in health record
Data source(s) for Numerator	Patient charts* - Green Sleeve
Denominator	Number of eligible** patients with a Green Sleeve in the health record
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Data source(s) for Denominator	Patient charts
IOMxDonabedian domain	Structure/Timely, Structure/Efficient

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'
** see 'Approaches to Measurement - Target populations'

Discussion point:

- Note: Indicator #2 differs from Indicator #3 in that Indicator #2 measures GCD forms present in the Green Sleeve, whereas Indicator #3 measures GCD forms present anywhere in the health record.

[11] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.

3. Percentage of patients with a GCD order anywhere in the health record[12,13]

Description	This measure is used to assess the percentage of adult patients with a GCD order in the health record. This is one of three measures used to assess completion of ACP-related documents (the other two measures being Indicator 4 (ACP/GCD tracking record) and Indicator 5 (Personal Directive)).
Rationale	The priority aim addressed by this measure is to increase the written completion of ACP documentation. ACP involves conversations among patients, families and clinicians about who should make decisions if the patient is unable, and what type of care the patient desires. As per AHS' Advance Care Planning and Goals of Care Designation Level 1 Procedure, "A Goals of Care Designation order shall be written by the most responsible healthcare practitioner (or designate) and documented on the patient's health record."
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of GCD forms that are signed and dated by the most responsible health care provider
Inclusion criteria for Numerator	• Identified GCD on GCD form or copy of form
Exclusion criteria for Numerator	• No identified GCD on GCD form • GCD forms not signed and dated
Data source(s) for Numerator	Patient charts* – GCD form
Denominator	Total # of eligible** patients
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Data source(s)	Patient charts
IOMxDonabedian domain	Process/Effective

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'

** see 'Approaches to Measurement - Target populations'

[12] AHS Advance Care Planning/Goals of Care Designation 2014. Chart Audit Report #1.

[13] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.

4. Percentage of patients with a completed ACP/GCD tracking record[14,15]

Description	This measure is used to assess the percentage of adult patients with a completed tracking record (i.e. at least one documented conversation on the tracking record). This is one of three measures used to assess completion of ACP-related documents (the other two measures being Indicator 3 (GCD order) and Indicator 5 (Personal Directive)).
Rationale	The priority aim addressed by this measure is to increase the written completion of ACP documentation. ACP involves conversations among patients, families and clinicians about who should make decisions if the patient is unable, and what type of care the patient desires. As per AHS' Advance Care Planning and Goals of Care Designation Level 1 Procedure, "Pertinent details of advance care planning and goals of care conversations shall be documented in the patient's health record and the AHS ACP/GCD Tracking Record".
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of tracking records with at least one documented conversation
Inclusion criteria for Numerator	• One documented conversation (based on date of discussion)
Exclusion criteria for Numerator	• No documented conversation
Data source(s) for Numerator	Patient charts* – Tracking Record
Denominator	Total number of eligible** patients
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Data source(s)	Patient charts – Tracking Record
IOMxDonabedian domain	Process/Safe, Process/Efficient

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'
** see 'Approaches to Measurement - Target populations'

[14] AHS Advance Care Planning/Goals of Care Designation 2014. Chart Audit Report #1.
[15] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.

5. Percentage of patients with a Personal Directive in the health record[16,17]

Description	This measure is used to assess the percentage of adult patients with a Personal Directive in the health record. This is one of three measures used to assess completion of ACP-related documents (the other two measures being Indicator 3 (GCD order) and Indicator 4 (ACP/GCD tracking record)).
Rationale	The priority aim addressed by this measure is to increase the written completion of ACP documentation. ACP involves conversations among patients, families and clinicians about who should make decisions if the patient is unable, and what type of care the patient desires. As per AHS' Advance Care Planning and Goals of Care Designation Level 1 Procedure, "Where an adult patient's personal directive is known to exist, a reasonable effort shall be made to obtain a copy for placement on the health record."
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of Personal Directives
Inclusion criteria for Numerator	• Personal Directive
Exclusion criteria for Numerator	• No Personal Directive
Data source(s) for Numerator	Patient charts* – Personal Directive
Denominator	Total number of eligible** patients
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations'
Data source(s) for Denominator	Patient charts
IOMxDonabedian domain	Process/Effective

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'
** see 'Approaches to Measurement - Target populations'

[16] AHS Advance Care Planning/Goals of Care Designation 2014. Chart Audit Report #1.
[17] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.

6. Percentage of patients and/or alternate decision-makers who have had an advance care planning conversation with a health care provider[18,19]

Description	This measure is used to assess the percentage of adult patients or their alternate decision-makers who have had an ACP discussion with a health care provider.
Rationale	As per the AHS Level 1 ACP/GCD policy, ACP "will be the process by which clinicians and patients/alternate decision-makers will consider the future care for a patient. These conversations allow for respectful understanding of a patient's wishes concerning general focus of care as well as limits of specific interventions. This process will include communication between healthcare professionals, patients, and when appropriate, alternate decision-makers. The most responsible health practitioner (or designate) should ensure conversations include: a) the patient's prognosis and the anticipated outcomes of current treatments; b) exploration of the patient's values, understanding, hopes, wishes, and expected outcomes of treatment; c) the role of life support interventions and/or life sustaining measures and their expected degree of benefit; d) information regarding comfort measures; e) if appropriate, an offer for involvement of resources such as, but not limited to, palliative care, social work, clinical ethics consultation or spiritual care".
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of respondents indicating that a HCP had asked what treatments the patient would prefer to have or not have if he/she were to develop a life threatening illness
Inclusion criteria for Numerator	• Number of respondents who answered "Yes" to "Did a HCP ever ask you what treatments you prefer to have or not have if you were to develop a life threatening illness?"
Exclusion criteria for Numerator	• Respondents who answer "No", "Unsure" or "N/A"
Data source(s) for Numerator	Telephone survey
Denominator	Total number of respondents surveyed
Inclusion criteria for Denominator	• Patients capable of participating (alive, cognitively intact), OR • Family member or friend with the most experience caring for the patient • Patients found to have a GCD order and/or ACP/GCD Tracking Record during a previous chart audit
Exclusion criteria for Denominator	• Family members/friends whose loved one had died less than six months prior to the telephone survey • Long term care residents who had transferred out of the facility since the audit • Hearing impairment that precludes completion of the survey
Data source(s) for Denominator	Telephone survey
IOMxDonabedian domain	Process/Effective, Process/Patient-Centered

[18] AHS ACP/GCD Telephone Survey Report. 2014.
[19] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.

7. Percentage of deceased patients who die having had an M1, M2, C1 or C2 GCD in the week prior to their death, who received resuscitative or life-support interventions in advance of death[20,21]

Description	This measure is used to assess the percentage of patients who received resuscitative or life support interventions that did not align with their GCD (i.e. patients with M or C GCDs who receive resuscitative or life support interventions).
Rationale	The ultimate goal of ACP is to help people get medical care that is consistent with their values, goals and preferences during serious and chronic illness. However, miscommunication of patients' end-of-life preferences is unfortunately common[22], and can lead to the provision of unwanted end-of-life care. Discordance between a patient's care received and his or her wishes is increasingly being viewed as a consequential medical error, and a target for improving patient safety[23].
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of deceased patients with an identified M1, M2, C1 or C2 GCD who receive resuscitative or life support interventions in advance of death
Inclusion criteria for Numerator	• Deceased patients (patients who died between [*defined audit period*]) • Have an identified M1, M2, C1 or C2 GCD one week prior to death • Received resuscitation (see technical notes) in the time period of their M1, M2, C1 or C2 GCD • Received life support interventions (see technical notes) in the time period of their M1, M2, C1, C2 GCD
Exclusion criteria for Numerator	• Alive patients • No identified GCD on GCD form • GCD forms not signed and dated
Data source(s) for Numerator	Patient charts* – GCD forms, physician notes, nurses narrative, ACP tracking record
Denominator	Number of deceased patients with an identified M1, M2, C1 or C2 GCD
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations', plus: • Have an identified M1, M2, C1 or C2 GCD one week prior to death
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations', plus: • No identified GCD on GCD form • GCD forms not signed and dated
Data source(s)	Patient charts – GCD forms; DAD
IOMxDonabedian domain	Outcome/Safe, Outcome/Effective
Technical notes	Resuscitation: is undertaken for acute deterioration, may include intubation, ventilation and chest compression Life support interventions (for these purposes): means transfer to ICU

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'

[20] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.
[21] AHS Advance Care Planning/Goals of Care Designation 2014. Chart Audit Report #1.
[22] Heyland et al. Failure to engage hospitalized elderly patients and their families in advance care planning. JAMA Intern Med. 2013;173(9):778-787.
[23] Allison & Sudore. Disregard of patients' preferences is a medical error. JAMA Intern Med. 2013;173(9):787

8. Percentage of deceased community care patients with a C2 GCD who were transferred to acute care and/or ICU[24,25,26]

Description	This measure is used to assess the percentage of patients with a C2 GCD who were transferred to acute care and/or ICU.
Rationale	The ultimate goal of ACP is to help people get medical care that is consistent with their values, goals and preferences during serious and chronic illness. However, miscommunication of patients' end-of-life preferences is unfortunately common[27], and can lead to the provision of unwanted end-of-life care. Discordance between a patient's care received and his or her wishes is increasingly being viewed as a consequential medical error, and a target for improving patient safety[28].
Measurement setting	Community care
Level of measurement	Individual facility/program, aggregate up to zone and province
Numerator	Number of deceased patients with an identified C2 GCD who were transferred to acute care and/or ICU
Inclusion criteria for Numerator	• Deceased community care residents/clients who have an identified C2 GCD • Were transferred to acute care and/or ICU within the time frame of their C2 GCD (including orders made in community care)
Exclusion criteria for Numerator	• Alive patients • Patients outside community care • No identified GCD on GCD form • GCD forms not signed and dated
Data source(s) for Numerator	Resident/client charts* – GCD forms, physician notes, nurses narrative, ACP tracking record, Discharge Summary
Denominator	Number of deceased community care clients with an identified C2 GCD
Inclusion criteria for Denominator	See 'Approaches to Measurement - Target populations' for community care patient inclusion criteria, plus: • Community care patients who died between [*defined audit period*] • Have an identified C2 GCD
Exclusion criteria for Denominator	See 'Approaches to Measurement - Target populations' for community care patient exclusion criteria, plus: • Alive patients • Patients outside community care • No identified GCD on GCD form • GCD forms not signed and dated
Data source(s)	Resident/client charts – GCD forms; DAD
IOMxDonabedian domain	Outcome/Efficient

* In the community care setting, patients' Green Sleeves are audited in lieu of 'patient charts'

[24] AHS 18 month post-policy implementation progress report.
[25] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.
[26] AHS Advance Care Planning/Goals of Care Designation 2014. Chart Audit Report #1.
[27] Heyland et al. Failure to engage hospitalized elderly patients and their families in advance care planning. JAMA Intern Med. 2013;173(9):778-787.
[28] Allison & Sudore. Disregard of patients' preferences is a medical error. JAMA Intern Med. 2013;173(9):787

9. Percentage of patients or family members/friends satisfied with ACP conversation[29,30,31]

Description	This measure is used to assess the percentage of patients or family members/friends who were satisfied with their involvement in decision-making related to ACP.
Rationale	ACP conversations are essential to providing patient-centered care. Measurement of patients' satisfaction with involvement in decision making therefore characterizes value of advance care planning. Since some patients and families prefer to be fully involved in health care decisions while others prefer to leave this decision to health care providers, the ACP procedure in both cases should lead to a satisfactory result for a patient.
Measurement setting	Hospital care, community care
Level of measurement	Individual unit/facility/program, aggregate up to zone and province
Numerator	Number of respondents satisfied with ACP conversation
Inclusion criteria for Numerator	• Number of respondents who answered "4" or "5" to: "On a scale of 1 to 5 with 1 being very dissatisfied and 5 being very satisfied, how satisfied were you with this discussion [i.e. Did a health care provider ever ask you what treatments you prefer to have or not have if you were to develop a life threatening illness?]?
Exclusion criteria for Numerator	• Respondents who answered "1", "2" or "3"
Data source(s) for Numerator	Telephone survey
Denominator	Total number of respondents who participated in ACP conversations
Inclusion criteria for Denominator	• Patients capable of participating (alive, cognitively intact), OR • Family member or friend with the most experience caring for the patient • Answered 'Yes' to any of the 4 ACP questions: a) treatments you prefer, b) what is important to you, c) prognosis, d) fears/concerns • Patients found to have a GCD order and/or ACP/GCD Tracking Record during a previous chart audit
Exclusion criteria for Denominator	• Family members/friends whose loved one had died less than six months prior to the telephone survey • Long term care residents who had transferred out of the facility since the audit • Patients with a hearing impairment precluding them from completing the survey
Data source(s) for Denominator	Telephone survey
IOMxDonabedian domain	Outcome/Patient-Centered

[29] AHS ACP/GCD Telephone Survey Report. 2014.
[30] AHS: "ACP/GCD Phase II Evaluation Framework" (draft) September 9, 2015.
[31] Molloy et al. Systematic implementation of an advance directive program for nursing homes: a randomized controlled trial. JAMA 2000; 283(11): 1437-1444.