

Care at end of life Measurement and improvement framework

October 2020

Care at end of life: Measurement and improvement framework

Published by the State of Queensland (Queensland Health), September 2020



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Queensland Health) 2020

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Healthcare Improvement Unit, Clinical Excellence Queensland, Department of Health, GPO Box 48, Brisbane QLD 4001, email CareAtEOL@health.qld.gov.au.

Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information).

Contents

Overview	4
Section 1: Initiate	7
Section 2: Plan	8
Section 3: Deliver	11
Section 4: Sustain	13
Appendix 1: Quality Statements	18
Appendix 2: Automatically generated data sets from existing information systems	19
Appendix 3: End of Life Care Audit	26
Appendix 4: Palliative Care Outcomes Collaboration (PCOC)	28
Appendix 5: Patient reported experience measures	30
Appendix 6: Care Plan for the Dying Person, Terminal Powerplan audit	33
Appendix 7: Mortality and morbidity review processes	35
Appendix 8: Continuing education measures	38
Appendix 9: Governance processes	42
References.....	43

Overview

Why measure the quality of end of life care?

The development of a local, systematic measurement and improvement framework that uses reliable and timely data may lead to an increased person-centred approach to end of life care (EOLC) for patients, their families and care partners. Queensland Health is committed to continually improving the quality of care provided to every patient, every time. The cornerstone of quality improvement is evidence. Having meaningful data helps to identify issues or gaps in services and demonstrate whether changes that have been implemented have resulted in an improvement.

“If you can’t measure it, you can’t improve it.” Peter Drucker

How can data help drive quality improvement?

Data can help to drive a non-blaming culture of continuous interprofessional learning, where the potential causes of a problem can be evaluated and tested. These may include knowledge and skill gaps, need to clarify interprofessional team members’ roles, changes in the organisation and delivery of the service, or equipment use. Data may assist under-resourced teams to collect and present evidence to advocate for additional staff or equipment, or conversely, provide evidence a team is operating effectively and efficiently. The regular use of data collections may require a change within a team whereby data is considered an integral part of the team’s continuous learning culture, rather than a mechanism for finding fault or uncovering failures.

Purpose of this framework

The purpose of the *Care at the End of Life: Measuring and Improving End of Life Care Framework* (the Framework) is to support Hospital and Health Services (HHS) to develop a local plan for collecting performance data and using it to drive quality improvement activity. It is one component of a coordinated approach to improving care at the end of life for all Queenslanders. The following sections provide advice and guidance about developing such a framework.

The Framework is not intended to be prescriptive by mandating data sets and schedules for collection and reporting, but rather to guide each HHS as they evaluate their own data gaps and determine how data can best drive quality improvement in their local environment.

National Safety and Quality Health Service (NSQHS) Standards

The suggested approaches to data and measurement are intended to align with the NSQHS standards. The Standards provide a nationally consistent statement of the level of care consumers can expect from health service organisations. The Comprehensive Care Standard aims to ensure that patients receive health care that meets their individual needs and considers the impact of their health issues on their life and wellbeing.

The Care at the End of Life Actions are included in the Comprehensive Care Standard. Where possible, the relevance to the Actions 5.15 – 5.20 have been included in the descriptions of the established activities, methods and approaches for monitoring and collecting data (see Appendices 2 – 9).

The Care at the End of Life Actions are as follows:

- 5.15 *The health service organisation has processes to identify patients who are at the end-of-life that are consistent with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care*
- 5.16 *The health service organisation providing end-of-life care has processes to provide clinicians with access to specialist palliative care advice*
- 5.17 *The health service organisation has processes to ensure that current advance care plans:*
 - a. *Can be received from patients*
 - b. *Are documented in the patient's healthcare record*
- 5.18 *The health service organisation provides access to supervision and support for the workforce providing end-of-life care*
- 5.19 *The health service organisation has processes for routinely reviewing the safety and quality of end-of-life care that is provided against the planned goals of care*
- 5.20 *Clinicians support patients, carers and families to make shared decisions about end-of-life care in accordance with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care*

Framework overview

The Framework has been prepared in line with the Clinical Excellence Queensland Project Management Framework (CEQ - PMF) method; a four-phased approach to change management and continuous quality improvement. In the first instance, HHS should use their locally endorsed project management approach; otherwise, the CEQ - PMF is available to guide their strategy implementation.

The sections of the Framework are outlined as follows:

Section	Objective
1. Initiate	<ul style="list-style-type: none">• Establish the concept and prepare the environment
2. Plan	<ul style="list-style-type: none">• Conduct an analysis of data and improvement needs, gaps and opportunities• Develop the evaluation method• Develop the local HHS <i>Care at the End of Life: Measuring and Improving End of Life Care Framework</i>
3. Deliver	<ul style="list-style-type: none">• Implement the Framework using a range of evidence-based resources and data collection methods
4. Sustain	<ul style="list-style-type: none">• Evaluate the outcomes and impact of the Framework• Report progress of the Framework implementation to key stakeholders• Embed into organisational processes

Several options for collecting data are then presented, with their advantages, disadvantages, exemplar quality indicators and opportunities for improvement also discussed (see appendices 2-9).

Section 1: Initiate

Objective: To establish the concept locally and prepare the environment for measuring and improving the quality of end of life care.

Establish the concept and prepare the environment

Before you start any auditing or quality improvement process, it is important to get in-principle support from your line manager, an authorising group such as an EOLC Committee, or Executive of a branch or office. You may need to prepare a concept submission form detailing your proposal. Check your local processes with your line manager or safety and quality team.

You will need to consider:

- the scope of the work to be undertaken
- the proposed resources required
- the anticipated outcomes and benefits of the project.

Form your team

Including the right people on your team is important. Key stakeholders should be consulted or involved in planning and measuring the quality of EOLC. Stakeholders may be internal or external to your team or service.

- Think about who can help you plan a project, collect and interpret data, and disseminate the results.
- Link up with team members who may have expertise that you don't have, or who are interested in completing a quality project in their area.
- You may like to find out if there are any medical, nursing or allied health students who could help with aspects of planning, data collection, collation, analysis and reporting.
- Engage with local HHS planning teams to obtain relevant data, e.g. service delivery, financing, key performance indicators, morbidity and mortality data and regional demographics.
- Talk to your business manager about the process for applying for funding, if required.

Section 2: Plan

Objective: To establish how the Framework will be delivered, managed and evaluated.

Analyse data and improvement needs, gaps and opportunities

A needs analysis for data and quality improvement should be conducted in collaboration with key stakeholders. This process is critical to identifying gaps, increasing a commitment to quality improvement, gaining management support and establishing data for monitoring and evaluation. A needs analysis may be completed with a survey of key stakeholders, in a workshop-style session as part of an EOLC Committee meeting, or taking information from an M&M register or Riskman.

Questions to ask:

The most important question to ask is: Is the data being sought to inform and drive quality improvement:

- at the health system performance level?
- at the service or quality improvement level?
- for clinical care through real-time, daily or weekly data monitoring?

Other important questions include:

- What do we want to know?
- Who requires the data?
- What settings will be included?
- What is the data gap and why do these gaps exist?
- What will the data be used for?
- Which evaluation tools will be used?
- Is there pilot or pre-intervention data available, or an existing data collection method that could be expanded, enhanced or dual-purposed?
- What data collection method would be most suitable?
- How will the data be analysed?
- Are there any risks to the evaluation process?
- When should evaluation occur?
- Who will conduct the evaluation?
- How and where will findings be presented?
- What resources are required?
- Are there existing data standards published in the [Queensland Health Information Knowledgebase](#)?

Set realistic goals. A small project done well is much better than a large project that never gets past the starting line.

EOLC can be measured in diverse ways. The **Quality Statements for EOLC** (Appendix 1) will provide some guidance on the scope of your project, and whether aspects of clinical care, workforce support, or the organisation and delivery of care are of most interest to your team.

Develop an HHS Measurement and Improvement Strategy

The HHS Measurement and Improvement Strategy should address the gaps and opportunities identified in the needs analysis

Strategic Objectives

Determine how the work relates to the *Statewide strategy for end-of-life care 2015* or the associated *Implementation Plan*, relevant NSQHS Standards for accreditation requirements, the National Palliative Care Standards 2018 or local quality improvement plan. The relevant NSQHS Standards for accreditation include not only the Comprehensive Care Standard – End of Life Care, but also *Clinical Governance, Partnering with Consumers, Communicating for Safety, and Recognising and Responding to Acute Deterioration*.

An example of the types of activities and their alignment with the *Statewide strategy for end-of-life care 2015* and Comprehensive care at the end of life actions include:

Service actions:	Example measurable outcomes:
<ul style="list-style-type: none"> Undertake a needs analysis of education and training on care at the end of life (Service Direction 1: Knowledge) 	<ul style="list-style-type: none"> The training strategy is rolled out across all HHS services, the proportion of staff receiving training increases over time and is documented. Quality Indicators for continuing education are implemented, systems are in place for monitoring these and education planning is responsive to the feedback received. <p>(Actions 5.16, 5.18)</p>
<ul style="list-style-type: none"> Implement standardised assessment tools, policies and procedures for quality care at the end of life into routine clinical practice at key trigger points (Service Direction 2: Access) 	<ul style="list-style-type: none"> The HHS can demonstrate that standardised assessment tools, policies and care pathways are in use and are appropriate for patients' EOLC needs. Quality indicators for the quality of documentation such as for the Care Plan for the Dying Person are regularly generated from audits and are used to drive education and quality improvement. <p>(Actions 5.15, 5.19, 5.20)</p>
<ul style="list-style-type: none"> Undertake regular audits of the quality of care provided to patients whose deaths were anticipated. Integrate standardised measures for quality care at the end of life into audits and morbidity and mortality (M&M) reviews. Evaluate whether patients' choices for information, their involvement in decision-making and place of care are fulfilled. Identify key quality measures and implement regular audits to measure the quality of care provided. Implement appropriate methods for assessing patients and/or family satisfaction with services provided. (Service Direction 3: Quality and Safety) 	<ul style="list-style-type: none"> A regular audit meeting or agenda item on the EOLC Committee has been established to examine the quality of EOLC An EOLC audit is implemented and an audit schedule established M&M meetings address the quality of EOLC using specific measures Demonstrate that systems and pathways are in place to ensure patients' choices are met. <p>(Actions 5.16, 5.19, 5.20)</p>

Evaluation and Reporting

During the planning stage, consider how you will evaluate and report on the implementation of your Framework.

Evaluation is a critical component of effectively and objectively measuring the success of projects and interventions. The outcomes of effective evaluations can be used to:

- Help teams to build a culture of continued learning, rather than blame and fault-finding
- Enhance understanding about a project's impact, and assess whether it is achieving its objectives
- Improve decision-making in relation to the development of future interventions
- Assist with assessing the appropriateness and value for money of projects to influence decisions about resource allocation and drive continuous improvement
- Demonstrate outcomes achieved to key stakeholders.

It is recommended that an evaluation plan be determined in the planning phase. Plan the evaluation by considering the following:

- Identify the needs of key stakeholders
- Define the aims and objectives of the evaluation process
- Define the evaluation questions
- Choose an appropriate evaluation type
- Specify criteria for measuring success
- Choose appropriate data collection methods
- Choose data analysis techniques
- Decide how to report on evaluation findings and results
- Determine any risks to the evaluation process
- Determine when evaluation should occur
- Decide who will conduct the evaluation, and required resources
- Commence collecting pre-intervention data, if appropriate.

Section 3: Deliver

Objective: To implement the Measurement and Improvement Strategy

The Quality Statements for EOLC (Appendix 1) may provide some guidance on the scope of your project, and whether aspects of clinical care, workforce support, or the organisation and delivery of care are of most interest to your team. Each HHS has different demographic and workforce characteristics and strategic priorities, so data and measurement needs will also differ. There are many established activities, methods and approaches that can be considered for monitoring and collecting data. Each of are described in Appendices 2 – 9, including discussion of:

- *Objective:* The main purpose of the approach
- *Details:* An overview of the approach and how it may be used to measure the quality of care
- *Advantages*
- *Disadvantages*
- *Important considerations.* Setting up the project, data collection and collation, stakeholders and the health or care setting.
- *Examples of quality indicators and improvement opportunities,* including indicators that could be generated, how they relate to the quality statements, and how data may drive quality improvement.
- *Link to further information:* Weblinks and other resources.

NB: Consideration needs to be given to any data and measurement activity to ensure appropriate privacy and confidentiality for people accessing health services, and members of the workforce. There needs to be governance systems to ensure there are appropriate controls in place for people accessing and using data and information.

Examples of data activities are outlined in the table below.

	Activity	Details
1	Automatically generated data sets	<p>A list of data items has been identified that can be used to generate data sets to compare performance over time, and between sites within an HHS. These data may be available from existing data collections. Performance data can be used to generate quality indicators against the Quality Statements.</p> <p>The data items that exist in Data Collections and Applications are under the governance of the formally approved Data Custodian and Application Custodian. Governance processes and approvals from the custodians will need to be adhered to if data is being requested.</p>
2	End of Life Care Audit	<p>The End of Life Care Audit was developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC) in 2018. The Audit tool is part of a suite of resources for measuring the quality of care provided to patients who died in an inpatient facility.</p>
3	Palliative Care Outcomes Collaboration (PCOC)	<p>PCOC is the national evidence hub on patients' daily pain and symptoms outcomes in Australia. PCOC can also be used in specialist and non-specialist palliative care (geriatrics or chronic disease management), and residential aged care.</p>
4	Patient Reported Experience Measures (PREMs)	<p>There are several PREMS available for use. Tools can be used on an ongoing basis for patients receiving care from specialist palliative care services, or in chronic disease clinics.</p>
5	Documentation audits	<p>Documentation audits can be performed on standard clinical care tools used within Queensland Health, including the Care Plan for the Dying Person and Terminal PowerPlan. These can be completed periodically on a selection of patient records in a ward or within a clinical specialty.</p>
6	Mortality and Morbidity (M&M) review processes	<p>Established (M&M) processes could be enhanced with the addition of questions to establish whether there was early identification that the patient was dying, and the quality of care provided.</p>
7	Continuing education measures	<p>Indicators can provide information about how the programs are meeting the needs of participants, providing value for money and are ultimately improving person-centred care for patients, families and care partners.</p>
8	Governance processes	<p>Established governance processes are essential to ensure adequate resources and support for the workforce and multidisciplinary teams.</p>

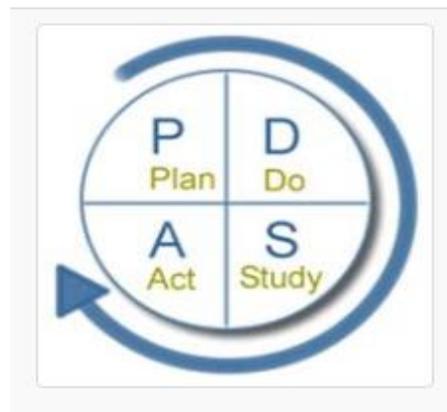
Section 4: Sustain

Objective: To develop and implement the Measurement and Improvement Strategy and monitor changes in quality or safety measurements.

Evaluate the outcomes and impact of the *HHS Measurement and Improvement Strategy*

Data can help teams to recognise issues with service delivery, or the organisation and delivery of care. Once the data is available and needs have been established, get your EOLC Committee involved in interpreting the results and prioritising improvement opportunities. Develop an improvement plan with the help of your safety and quality improvement unit. Including consumer representatives on your team will give you a valuable and unique perspective on how care could be improved.

The PDSA cycle is used to organise and manage change and continuous improvement. A project may require the implementation of multiple PDSA cycles. Report against quality indicators identified as part of the analysis of results. These results can be monitored over time or used to compare different facilities or services within the same HHS.



Plan:

This is a change or review aimed at achieving an improvement. In this phase, intended improvements should be identified and actions planned from existing data. This can include:

- referring to information that indicates a change is required
- selecting the change or identifying the need to implement change
- defining the current process and the opportunities for improvement
- planning how you will monitor the progress and change
- documenting your goals and objectives – what improvements/changes do you expect to see?

Do:

The change or improvement should be carried out. Implement the activities planned. Check or study the results. What was learned? What went wrong?

Study:

This is a crucial step in the PDSA cycle. After the change has been implemented for a short time, determine how well it is working. Is it really achieving the improvement as hoped? Spreadsheets, charts and graphs can be helpful with this measurement. Some methods you might use in this phase include observation, monitoring, measuring, studying the data you collect, analysing, discussing, holding 'team reviews', and looking at results.

Questions to ask:

- Did you get the results you wanted?
- Did you get a different result?
- If it didn't go as planned, why not?
- Are things now better or worse?
- If better, can they be improved?
- If worse, why and what should you do next?

Act:

The change should be adopted, discarded, or reviewed through the cycle again. If the change led to a desirable improvement or outcome, you may choose to expand the trial to a different area, or slightly increase the complexity. This recommences the Plan phase and repeats the continuous improvement process. With each cycle, you cannot help but improve your quality system.

Developing quality indicators

The Quality Statements at Appendix 1 are concise statements outlining the level and quality of healthcare patients should receive through the end of life, workforce requirements and the organisation and delivery of care. They may apply to a specific step in a pathway, or the overall delivery of care. Quality Statements are not intended to be measurable, but rather are aspirational care standards. They should be linked with quality indicators to enable objective measurement of performance.

Quality indicators can provide information about how the programs are meeting the needs of participants, providing value for money and are ultimately improving person-centred care for patients, families and care partners.

Quality indicators can be organised into three main types: structure, process and outcomes. [1, 2]

Structural indicators *What is needed*

These include the health care provider's capacity to deliver high quality care, including workforce, funding, and infrastructure. These may include measures of prevalence of disease, demographics, economic resources and service organisation.

Examples include: provider to patient ratios; number of hospital beds.

Process indicators *What is done*

These refer to the activities and outputs of a program as measures of whether a program is being implemented correctly.

Examples include: number of people completing advance care plans; percentage of correctly completed advance care planning documents; length of stay.

Outcome indicators *What is achieved or expected*

Outcome indicators refer to the impact of the treatment or care program on patients' health status.

Examples include: concordance between preferred and actual place of death; advance care planning conversations completed by a health professional following a continuing education program; morbidity or mortality; reduced bereavement risk following early intervention education program for families and carers.

Goal Setting

Initially, it may be difficult to determine the most appropriate goal for an indicator. It might be an important first step to measure the target and aim to increase performance over a specified time period, or between different wards, teams or facilities, e.g.:

Initial measure: 20% of patients who had a MET review while in West Ward had an ARP in place, reviewed or completed within 24 hours

Target measure: 30% of patients who have a MET review have an ARP in place, reviewed or completed within 24 hours, to be achieved in West Ward within 3 months

Set SMART goals: Specific, Manageable, Achievable, Relevant and Time-bound.

Potential benefits from using data and quality indicators

It may be difficult to measure health benefits directly as this may depend on multiple, interrelated causes, however this may be achieved using indicators that are associated with improved health outcomes or a reduction in the burden of disease. The following benefits should be considered when planning quality improvement projects.

Domain	Description
Access and equity	Health services are available to people at the right place, at the right time, based on need, and address health inequalities.
Capacity and capability	The health workforce has the skills, knowledge and capability to respond to existing and emerging health needs and enable a high performing and innovative health sector. Health infrastructure is fit for purpose and able to respond to existing and emerging health needs.
Effectiveness	Health services are high quality and evidence based, with a focus on value and outcomes.
Efficiency and sustainability	Health services are cost efficient and financially sustainable.
Experience	Health services are respectful and responsive to individual patients' preferences, needs and values.
Health and wellbeing	Health services deliver improvements to individual patients' health outcomes and quality of life, and overall population health.
Social	People are supported to continue their social connections.
Mandatory requirements and risk	The health system meets mandatory legislative and regulatory standards and manages risk appropriately.

Report and spread the changes

Project reporting is a formalised means of communicating the status of the Framework to the project sponsor, governance group and key stakeholders. It provides a progress update against the objectives outlined in the planning phase. Regular reporting is important to ensure achievements are communicated, issues are identified and action to address them has been taken.

Reporting can include:

- Information about the opportunities for improvement that have been identified
- Good news about the types of improved outcomes achieved following the implementation of quality initiatives
- A monthly status report to the project sponsor or HHS executive
- A regular status report at EOLC Committee meetings
- Overall annual monitoring of the *Statewide strategy for end-of-life care 2015* implementation conducted by the Care at the End of Life Project Team
- Presenting outcomes to the HHS board
- Promoting achievements through local media, or internal or external to Queensland Health.

Appendix 1: Quality Statements

Quality Statements – Clinical Care	
1	People approaching the end of life are identified in a timely way
2	People receive care from multidisciplinary healthcare teams with appropriate attitudes, knowledge and skills, including equity of access to specialist clinicians
3	People needing end of life care can access services as close to their home, community or other preferred place of care as practical
4	Patients, their family and carers participate in ongoing comprehensive care planning that incorporates a broad needs assessment, establishing clear goals of care and advance care planning using shared decision-making principles
5	People do not receive low benefit care that may cause harm, be overly burdensome or have significant personal cost to patients, the teams that care for them and the health service
6	People, their families and carer(s), have adequate access to services to support care in the community for as long as possible
7	People receive consistent, coordinated and seamless care between settings, healthcare providers and across the lifespan
8	People are supported to continue their social connections, including intimate relationships, recreation, education and employment according to their individual preferences and capacity
9	People identifying as Aboriginal and/or Torres Strait Islander are provided with culturally appropriate care in a culturally safe environment, with access to an Aboriginal and/or Torres Strait Islander Health Practitioner or Indigenous Liaison Officer
10	People receive compassionate, equitable access to care through the end-of-life and after death, regardless of illness type, location, living arrangements, disability or impairment, sexual identity or orientation, cultural and linguistic diversity, religious and spiritual beliefs, and socioeconomic status
11	The community in which a person lives has the capacity to support people approaching the end of life, their families and professional carers
Quality Statements - Workforce and Organisation and Delivery of Health Services	
12	Multidisciplinary team members providing end of life care participate in continuing education, quality improvement and/or research activities that have measurable outcomes for participants, patient and carers, and for the organisation and delivery of care
13	Assessment tools, audits, policies, procedures and systems are in place to oversee the delivery of services to patients, their families and carers through the end of life
14	Resources and support are provided to the workforce to deliver safe and high-quality end of life care
15	Health services have established governance arrangements for end of life and palliative care service provision

Appendix 2: Automatically generated data sets from existing information systems

Objective:

Quality indicators for local use on a periodic or ongoing basis will provide visibility over current service delivery and governance issues, identify service gaps and opportunities for improvement, and may support advocacy for additional resources or resource allocation.

Details:

The Quality Indicators Advisory Group met on 9 March 2020 to consider quality indicators that could be used to measure quality against the Quality Statements. A list of data items was identified to generate data sets to compare performance over time, and between sites within an HHS.

Advantages:

- Some data are available from HBCIS and ieMR
- Data reports can be requested periodically or automatically set up with the help of data support teams
- Dashboards can be developed to present data on a regular basis to monitor changes over time

Disadvantages:

- Some data may need to be drawn from multiple sources (e.g. MET calls and Advance Care Planning documents)
- Some data may need to be manually collected
- Data requires interpretation, monitoring and governance systems in place to ensure gaps in care are identified, contextualised and addressed

Important considerations:

It is worth considering commencing data collections with just one or two indicators to ensure they are useful, and for the local EOLC Committee to determine how the data can drive quality improvement.

Data that exist in Data Collections and Applications are under the governance of the formally approved Data Custodian and Application Custodian. Governance processes and approvals from the custodians will need to be adhered to if data is being requested.

If a formally approved Data Custodian and Application Custodian is not in place, this needs to be progressed. Governance of approved data sets is through the Clinical Data standards Working Group. Information regarding approval of the data sets should be directed to eHealth-IMStrategy@health.qld.gov.au.

For ieMR sites, data captured within ieMR can be requested to be extracted via a report or creation of a dashboard. This is managed by the Office of the Chief Clinical Information Officer (OCCIO) and Queensland Digital Application services (DAS) ieMR teams.

Link to further information:

<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/rapid-review-quality-and-safety-indicators-end-life-care-acute-hospitals>

Alignment with comprehensive care at the end of life actions: 5.15, 5.16, 5.17, 5.18, 5.19, 5.20

Examples of quality indicators and improvement opportunities:

	Indicator	Improvement opportunities
Emergency department:	Proportion of deaths occurring in the emergency department (ED) (Actions 5.15, 5.16, 5.18, 5.19, 5.20)	<ul style="list-style-type: none"> • May guide resource allocation or organisation e.g. need for implementation of DandELinE in ED to enhance care provided to patients and facilitate early disposition planning where appropriate • May identify need for enhanced team-based education for ED staff • May prompt EOLC audit for ED deaths to evaluate quality of dying
	Time (in hours) in the ED for patients who died in ED (Actions 5.15, 5.16, 5.18, 5.19, 5.20)	<ul style="list-style-type: none"> • May prompt best practice guides for care in the ED, transit benchmarks, protocol for direct admission to a SPC inpatient unit or day unit, or evaluate their implementation
	Time (in hours) in ED in the last 6 or 12 months of life (Actions 5.15, 5.16, 5.18, 5.19, 5.20)	<ul style="list-style-type: none"> • Real-time data may identify patients who may benefit from SPC referral, Nurse Navigator service, or comprehensive or complex care plan in conjunction with GP
Hospital admissions:	Hospital encounters or inpatient admissions in the last 12 months of life (Actions 5.15, 5.16, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • Patients with multiple hospital admissions, chronic conditions, cognitive impairment and frailty may be approaching end of life • Patients with frequent, recent hospitalisations may be candidates for comprehensive care planning including resuscitation, goals of care, advance care planning, and include clinical action plans to guide current delivery of care, and anticipatory clinical action plans and prescribing to guide the delivery of care during future deteriorations or when dying • Frequent hospitalisations may be an indicator of deterioration, unstable illness, the lack of a clear clinical action plan that addresses current clinical care, unexpected deterioration, or anticipatory care planning and prescribing in lace for care in the dying phase • Real-time data may highlight patients who may benefit from SPC referral, Nurse Navigator service, complex care plan in conjunction with GP, or attendance at chronic/supportive care clinics • Management by a SPC service may prevent hospital admission, direct admission to a SPC inpatient unit or day unit, or home-based care • Potential for this to be combined with other information such as age, presence of ARP/other ACP documents to drive real-time clinical care – prioritising people who require ACP discussions • Potential future use in research
	Length of stay for admissions where separation mode is	<ul style="list-style-type: none"> • Variability in data may drive earlier referral to SPC, care at home or in RACF • Analysis of contributing factors may reveal increased length of stay associated with delays in accessing home-based services, social supports or disease progression

death (Actions 5.15, 5.16, 5.17, 5.19)	
Hours in ICU for patients admitted to the ICU & where separation mode is death (Actions 5.15, 5.16, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • High measures may lead to analysis of factors: low rates of resuscitation planning, limited access to continuing education for end of life care conversations, late referral to ICU, multiple MET calls prior to ICU admission, late referral to palliative care etc • Investigation of non-compliance with the use of Advance Care Plans, and actions taken to deal with these incidents
Days in ICU in the last month of life (Actions 5.15, 5.16, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • High measures may lead to analysis of factors: low rates of resuscitation planning, limited access to continuing education for end of life care conversations, late referral to ICU, multiple MET calls prior to ICU admission, late referral to palliative care etc • Investigation of non-compliance with the use of Advance Care Plans, and actions taken to deal with these incidents
Hours of ventilation for patients admitted to the ICU & where separation mode is death (Actions 5.15, 5.16, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • High measures may lead to analysis of factors: low rates of resuscitation planning, limited access to continuing education for end of life care conversations, late referral to ICU, multiple MET calls prior to ICU admission, late referral to palliative care etc • Investigation of non-compliance with the use of Advance Care Plans, and actions taken to deal with these incidents
Sub and Non Acute Patient palliative care type episodes with unplanned representations or admission within [timeframe] after hospital separation (Actions 5.15, 5.16, 5.19, 5.20)	<ul style="list-style-type: none"> • Data may highlight: <ul style="list-style-type: none"> - the need for increased comprehensive care planning (resuscitation, ACP and goals of care) - limited access to continuing education for end of life care conversations - late referral to palliative care - lack of referral to palliative care etc • Engagement with GPs regarding home-based care and altered parameters for seeking hospital care/escalation criteria • Implementation of telehealth or telephone support with patient/carer provided with detailed escalation criteria
Length of stay for Sub and Non Acute Patient palliative care type episodes where separation mode is death or where the patient is discharged	<ul style="list-style-type: none"> • Earlier engagement with SPC teams • % of palliative care type episodes with SPC team involvement • High rates of engagement with SPC may highlight the need to drive system-wide upskilling of generalist clinicians who deliver end of life care e.g. medication management, multi-disciplinary care meetings

	alive (Actions 5.15, 5.16, 5.19)	
	Presence of a dedicated space to care for patients approaching the end of life, and/or meet with family members (Actions 5.15)	<ul style="list-style-type: none"> • Person-centred care should value the needs of patients, their families, friends and other caregivers
Medical emergency team	Medical Emergency Team (MET) review in admission where separation mode is death (Actions 5.15, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • Multiple MET calls could prompt ARP, goals of care discussion, comprehensive care planning, ACP • Investigation of non-compliance with the use of Advance Care Plans, and actions taken to deal with these incidents
	Proportion of patients with [≥ number of] MET calls with an ARP, goals of care plan or advance care plan in place at the time of the [initial] MET call (Actions 5.15, 5.17, 5.19, 5.20)	<ul style="list-style-type: none"> • Methodology for MET dashboard has been written, and is able to be shared to other HHS who are interested in implementing • Some variables may need to be drawn from The Viewer, QHERS or ieMR • Multiple MET calls could prompt ARP, goals of care discussion, comprehensive care planning, ACP • Comparison over time may be a measure of the impact of an education intervention or quality project to increase ARPs for vulnerable patients • The quality of documentation on an ARP could be examined, particularly related to whether a person's care includes receiving MET calls or medical review for deterioration • Investigation of non-compliance with the use of Advance Care Plans, and actions taken to deal with these incidents
Specialist Palliative Care (SPC)	Waiting times for SPC initial assessment (Actions 5.16, 5.19)	<ul style="list-style-type: none"> • Measure of quality of care/person-centred care • Potential to support advocacy for new services • Impacts of quality improvement processes to decrease wait times can be measured, e.g. introduction of telehealth
	Initial assessments conducted (Actions 5.16, 5.19)	<ul style="list-style-type: none"> • Number of initial, and subsequent consultations • Type of consultations (face-to-face, telehealth, phone calls) • These measures may be a measure of service efficiency • Number and type of consultations provided by the Hub and Spoke in the Care in the Right Setting (CaRS) service delivery model
	Distance from	<ul style="list-style-type: none"> • Measure of service equity

preferred place of care to specialist palliative care services [kilometres] (Actions 5.16, 5.19)	<ul style="list-style-type: none"> • Number of rural/remote/highly isolated patients may be a driver of resource allocation • High numbers of rural/remote/highly isolated patients may lead to service redesign, such as extending transport for patients without transport to streamline home visits, or routine use of telehealth (phone and video)
Proportion of patients who have access to telehealth services (Actions 5.16, 5.19)	<ul style="list-style-type: none"> • Measure of service equity • Impact of the introduction of telehealth on other indicators could be measured, such as readmission, or number of ED presentations
Proportion of patients with access to 24/7 specialist palliative care telephone or clinic support (Actions 5.16, 5.19)	<ul style="list-style-type: none"> • Measure of service equity • Impact of the introduction of telephone/clinic support on other indicators could be measured, such as readmission, or number of ED presentations
Proportion of deaths at home / in hospital for [specialist unit] or [SPC] or [disease type] (Actions 5.16, 5.19, 5.20)	<ul style="list-style-type: none"> • Benchmarking over time could be used to advocate for: <ul style="list-style-type: none"> - More community-based services - Earlier referral to palliative care - Multidisciplinary management between SPC and other specialties • Engagement with GPs regarding home-based care and altered parameters for seeking hospital care/escalation criteria • Implementation of telehealth or telephone support with patient/carer provided with detailed escalation criteria • Important for service planning to monitor demand for community-based services over time
Time and location of care in the last [timeframe, e.g. 2/52] (Actions 5.16, 5.19, 5.20)	<ul style="list-style-type: none"> • Acute / Community / RACF / Hospice • With/without SPC • Trends may give information about numbers of transfers from acute care to hospice care in the last 24/24 of life • May be used to advocate for further SPC or generalist palliative care resources or community-based resources • May be used to measure impact of introducing telehealth or 24-hour telephone/clinic support
Change of location in the last 2/52 weeks of life (planned and unplanned) (Actions 5.16, 5.19, 5.20)	<ul style="list-style-type: none"> • Trends may reveal high numbers of transfers from acute care to hospice care in the last 24/24 • May be used to advocate for further palliative care resources/community-based resources (generalist end of life care) • May be used to measure impact of introducing telehealth or 24-hour telephone/clinic support
Proportion of patients with a documented comprehensive,	<ul style="list-style-type: none"> • Measure of service appropriateness • May be established via a retrospective chart audit for patients who died

	multidisciplinary assessment (Actions 5.19, 5.20)	
--	--	--

Appendix 3: End of Life Care Audit

Objective:

The End of Life Care Audit was developed by the ACSQHC in 2018. The Audit tool is part of a suite of resources for measuring the quality of care provided to patients who died in an inpatient facility.

Details:

The Audit tool is comprised of 28 core questions, with additional question sets to record activity relating to resuscitation plans, Advance Care Planning (ACP), and Medical Emergency Team (MET) calls.

Advantages:

- The Audit tool is evidence-based, can be used to compare performance over time or between sites, and can be adapted for local use.
- Data can be collected using a simple Excel spreadsheet, and will soon be available through the Measurement Analysis and Reporting System (MARS).
- The tool can be used as a quality improvement tool, or within a research context. This may be useful to sites aiming to build their research capability and capacity, or who wish to present changes in results over time following the implementation of a quality improvement project.
- Data collection can be completed by multiple people simultaneously, although there should ideally be a central coordination point within each HHS.

Disadvantages:

- Audits can be time consuming in the data collection and analysis phases
- Audits do not necessarily include the patient's treating team, so it is not a reflective process

Important considerations:

- Decide upon your sample size, and sample period
- Gather your team: Link up with other team members who may have expertise that you don't have, who may need to complete a quality project in their area, or can help interpret and disseminate the results
- Make sure there is consistent understanding of the data to be collected using the data dictionary, and ensure good data quality (complete, accurate, reliable and valid)
- Don't collect manually what you can collect automatically through a data request! Some of the data for this audit can be automatically extracted from existing data systems, such as admission and discharge date, and ventilator use in ICU. The Care at the End of Life team can provide a standardised data request for you to submit to your data team.

Examples of quality indicators and improvement opportunities:

The results of the audit can identify gaps in care and help identify opportunities to improve the quality of care provided to patients, their families and care partners through the end of life. Any of the data points in the Audit can be presented as a quality indicator. Examples of these include:

- Proportion of inpatients who died who resided at a Residential Aged Care Facility (RACF) prior to hospital admission (Audit q.9). This aligns with Quality Statements 1, 3, 5
 - May guide resource allocation or organisation, e.g. advocating for the need for specialist palliative care or geriatric assessment team presence in ED to facilitate early disposition planning
 - Consideration may be given to outreach services or GP shared care to reduce transfer to acute facility for end of life care where this aligns with patients' values and priorities, and increase concordance between preferred, and actual place of death
 - RACF's with a higher proportion of patients transferred to hospital for EOLC may not be sufficiently accessing Commonwealth funding to support people to receive adequate palliative care in the RACF, and this could be highlighted through appropriate data
- Proportion of patients who were admitted to an acute hospital in the 12 months prior to this hospital admission (Audit q.10) This aligns with Quality Statements 1, 4.
 - Data is currently available via existing information systems
 - Data may prompt the identification of patients or patient types who may be eligible for direct admission to a specialist palliative care inpatient or day unit, or Hospital in the Home program within a care arrangement agreed to with the patient's GP, and development of best practice guidelines or protocols to support this type of care transition
 - Real-time data may identify patients who meet criteria for referral to specialist palliative care services, the Nurse Navigator service, or the development of a comprehensive or complex care plan in conjunction with GP to support patients at home for as long as possible
 - May prompt a broad needs assessment, establishment of goals of care and initiation of ACP
- Proportion of patients who died who had a resuscitation plan documented (Audit q.14). This aligns with Quality Statements 1, 4, 5, 7.
 - Data may be currently available via existing information systems (iEMR)
 - Low proportion of resuscitation plans may prompt a service-wide quality improvement project with an education component to highlight the importance of early resuscitation planning
 - Audit results may support resource allocation to implement simulation-based education for end of life conversations

Link to further information:

- www.safetyandquality.gov.au/our-work/comprehensive-care/end-life-care/end-life-care-audit-toolkit

Alignment with comprehensive care at the end of life actions: 5.15, 5.16, 5.17, 5.18, 5.19, 5.20

Appendix 4: Palliative Care Outcomes Collaboration (PCOC)

Objective:

PCOC is a national evidence hub on patients' daily pain and symptoms outcomes in Australia. It is used to measure the quality of routine clinical assessment and response to provide consistent information to plan and deliver care.

Details:

PCOC uses a cycle of routine assessment and measurement of patient outcomes, reporting and benchmarking to drive improvements in palliative care. The data collections can be used in specialist palliative care (inpatient, outpatient and community-based settings), in other specialty areas such as geriatric medicine, oncology or other chronic disease area, and in residential aged care.

Advantages:

- Benchmarked reports are issued every 6 months to provide feedback to individual services, help identify improvement opportunities and service-to-service benchmarking as part of routine clinical practice
- Data can be collected routinely at the point of care
- The Queensland-based PCOC team can provide information and support for the local implementation of data collection and reporting
- People engaged in service evaluation at the bedside may be prompted to think differently, or more critically about the care being provided
- Can provide real-time opportunities to change the quality of care being provided

Disadvantages:

- Data entry can be time-consuming, particularly for teams or organisations with a large caseload
- Access to the free software for the national data entry portal SNAPSHOT is required and needs to be arranged through local IT teams
- Staff need to participate in initial training and receive ongoing support and training to ensure data collection is accurate
- Documentation quality is dependent upon the experience of the clinicians collecting the data

Important considerations:

- A [readiness assessment](#) may be a useful first step to evaluating your team's capacity to implement PCOC
- Start by having a look through the [PCOC reports](#) to determine the type of information they contain

Examples of quality indicators and improvement opportunities:

- Proportion of patients who are in the unstable phase for 3 days or less meeting or exceeding the state-wide benchmark (goal is 90%). This aligns with Quality Statements 1, 2.

- An unstable phase alerts clinical staff to the need for urgent changes to the plan of care, or that emergency intervention is required. This may be due to a new, unanticipated problem, a rapid increase in the severity of the problem, or a patient's family or care partner experience a sudden change in circumstances that adversely impacts the patient's care. The patient moves out of the unstable phase when a new plan of care has been put in place, has been reviewed and does not require any additional changes, or the patient is likely to die within a matter of days and moves into the terminal phase
- If the national or state-wide benchmark is not reached, a [Case Review: Patients in unstable phase of four days](#) or more can be undertaken in pairs or small teams to review the patient's documented care. This may allow a team to identify a quality improvement opportunity or change in process to help address the findings.
- PCOC has a range of [accreditation, standards and quality](#) resources on their website, including audit tools, case review templates and examples of quality improvement activities undertaken by services across Australia

Link to further information:

- www.ahsri.uow.edu.au/pcoc/index.html
- The [PCOC Quality and Change toolkit](#) has examples of quality improvement activities prompted by the use of PCOC data

Alignment with comprehensive care at the end of life actions: 5.15, 5.16, 5.18, 5.19, 5.20

Appendix 5: Patient reported experience measures

Objective:

Patient Reported Experience Measures (PREMS) collect information about the quality of care provided from the perspective of patients, their family or care partners.

Details:

There are several Patient Reported Experience Measures (PREMS) available for use, including FAMCARE and the Care of the Dying Evaluation (CODE™). FAMCARE aims to measure the degree to which family members are satisfied with the health care received by both the patient and the family. CODE™ is a 40-item self-completion questionnaire that assesses the quality of patient care and family-carer support from the perspective of bereaved relatives.

Tools can be used on an ongoing basis for patients receiving care from specialist palliative care services, or teams providing services to people with chronic disease.

Advantages:

- Consumer feedback is GOLD! Patient feedback offers a unique perspective on services.
- Consumers can be involved in designing quality improvement activities arising from consumer feedback
- There are PREMs available for use that have been validated, are simple to use and easy for patients and their carers to complete
- Existing tools can be adapted for local use, although this will affect their validity
- PREMs can be used on an ongoing basis, periodically for a defined time (e.g. for 4 weeks every 6 months), or as a once-off activity
- Data can be collected routinely at the point of care
- PREMs can be combined with after-death reflective practices to determine how they align
- PREMs can provides qualitative, not just quantitative data such as that elicited from an audit

Disadvantages:

- Data collection, entry and analysis can be time consuming and will need a dedicated person to take on a coordination role
- Some surveys that collect responses about the level of satisfaction of the respondent can tend to elicit a high proportion of 'satisfied' or 'very satisfied' responses.[3] A low proportion of 'dissatisfied' or 'very dissatisfied' responses does not provide sufficient guidance about how the quality of care could be improved. Specific questions should also be considered such as:
 - "How could we have improved the care we provided to you or your family member?";
 - "What could we do better?"

Consider using a different type of Likert scale in response to the questions, e.g.: "My loved one's pain was managed: never – some of the time – unsure – most of the time – all of the time"

Important considerations:

- Substitute decision-makers should be given the opportunity to participate in shared decision-making with the patient and medical team where the patient agrees to this
- The names of substitute decision-makers should be clearly recorded on a patient's medical chart
- Collect data electronically where possible using a tablet or laptop, and creating the survey in a platform such as SurveyMonkey
- Decide who should be in the quality improvement team
- Decide where the data will be collected (e.g. outpatient clinics, during home visits), and whether it will be collected for a specific period, or when a certain number of patients or their families have been consulted (e.g. number of questionnaires received)
- Administration team members will be crucial to its success if being administered in outpatient clinics, so make sure they are a critical part of the quality improvement team
- Consumer representatives should be considered an integral part of any efforts to address issues that have been identified through survey activity and would be a very valuable addition to your quality improvement team
- Your local quality and safety, and consumer engagement teams may be able to provide you with support for your project

Examples of quality indicators and improvement opportunities:

- Proportion of patients (or families/care partners) who considered their pain to be adequately controlled. This aligns with Quality Statements 2, 6, 7.
 - The views of patients and their families/care partners may differ, which may reveal gaps in symptom control
 - Poor results may prompt the development of patient information sheets about pain control, a quality improvement project to address family concerns, or provision of information about pain management or advice line contact details
 - Consumers may be invited to co-design individualised pain management plans
- Proportion of patients (or families/care partners) who were satisfied or very satisfied with the family conferences held to discuss the patient's illness. This aligns with Quality Statements 4, 5, 7, 10.
 - Consumer feedback may be sought about how family conferences may be improved
 - Consumers may be given verbal and written information and advice about what a family conference involves, how to request a family conference, and their benefits
 - Consumers can help to co-design a family conference structure and how outcomes and actions are recorded and communicated to families and care partners
 - Results may identify key areas that should be targeted for improvement, such as how tests and treatments are followed up, the frequency of family conferences, or how the spiritual needs of patients, and their families and carers are addressed

- Proportion of families reporting they are included in treatment and care decisions most, or all the time. This aligns with Quality Statements 2, 4, 7.
 - Substitute decision-makers should be given the opportunity to participate in shared decision-making with the patient and medical team where the patient agrees to this
 - The names of substitute decision-makers should be clearly recorded in the ACP Tracker in the ieMR, or in a patient's paper-based medical chart
 - Teams may consider participating in the new End of Life conversations simulation-based continuing education program to review how to conduct end of life conversations with patients and their family members
- Quality improvement activities arising from family feedback may include the development of new procedures, changes in clinical care protocols or workplace instructions, development of a business case to systematically replace equipment such as mattresses to improve patient comfort, or advocate for staff to be released to participate in continuing education for improving communication skills in end of life care

Link to further information:

- FAMCARE – 2 scale - www.npcrc.org/files/news/famcare_scale.pdf
- CODE – www.journals.sagepub.com/doi/10.1177/0269216318818299
- (Views of Informal Carers – Evaluation of services) VOICES questionnaire – www.assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215505/dh_130569.pdf

Alignment with comprehensive care at the end of life actions: 5.15, 5.16, 5.17 5.18, 5.19, 5.20

Appendix 6: Care Plan for the Dying Person & Terminal PowerPlan Adult

Objective:

The Care Plan for the Dying Person (CPDP) and Terminal PowerPlan Adult are clinical tools that support quality, comprehensive multidisciplinary care in the last hours and days of life in hospital settings. Audits for these tools can evaluate documentation and examine the clinical and procedural aspects of care to identify gaps in safety and quality.

Details:

The CPDP documentation audit is available from the Care at the End of Life team.

For ieMR sites, a report is currently available for authorised users to run from [Powerchart Insight Explorer](#).

Advantages:

- The audit can be conducted at any time, as it is done retrospectively
- Data can be collected using a simple Excel spreadsheet
- The data collection tools are already available
- Small samples of patient records can be audited as a snapshot on a regular basis, for an individual ward, or clinical specialty, or for a certain time period
- Data collection can be completed by multiple people simultaneously, although there should ideally be a central coordination point within each HHS

Disadvantages:

- Audits can be time consuming in the data collection and analysis phases

Important considerations:

- Set up the data collection tool in a central point, such as Sharepoint
- Decide upon your sample size, and sample period
- Gather your team: Link up with other team members who may have expertise that you don't have, who may need to complete a quality project in their area, or can help interpret and disseminate the results
- Are there medical, nursing or allied health students who could help with data collection and collation?

Examples of quality indicators and improvement opportunities:

The results of the audit can identify gaps in care and help identify opportunities to improve the quality of care provided to patients, their families and care partners at the end of life. Any of the data points in the Audit can be presented as a quality indicator. Examples of these include:

- Proportion of records where the person's psychological and spiritual well-being is supported. This aligns with Quality Statements 2, 4, 8, 9, 10, 11
- Proportion of records where all care after death items have been completed, initialled and dated. This

aligns with Quality Statements 9, 10

- Proportion of patients with a valid ARP that states resuscitation is not to be provided. Aligns with Quality Statements 1, 2, 4, 5, 7, 10
- Proportion of patients with a documented Substitute Decision Maker documented. Aligns with Quality Statements 4, 7, 9, 10
- Proportion of Substitute Decision Makers who understand that the patient is dying. Aligns with Quality Statements 1, 4, 5, 9, 10
- Proportion of Substitute Decision Makers who have had a bereavement assessment. Aligns with Quality Statements 2, 4, 7, 10
- Continuing education needs may be identified and provided to a team or ward to refresh or update aspects of clinical care
- Teams may consider participating in the new End of Life Conversations simulation-based continuing education program to improve the quality of conversations with patients, their families and friends
- Consumers may be engaged to advise on how care delivered to people at the end of life could be enhanced
- A policy, procedure, workplace instruction or handover protocol may need to be developed or reviewed to support quality care at the end of life
- Family education booklets such as the Care at the End of Life Bereavement resources may support family members to access practical and bereavement support

Link to further information:

- www.clinicalexcellence.qld.gov.au/resources/clinical-pathways/care-plan-dying-person

Alignment with comprehensive care at the end of life actions: 5.15, 5.16, 5.17, 5.18, 5.19, 5.20

Appendix 7: Mortality and morbidity review processes

Objective:

Morbidity and Mortality (M&M), or Clinical Review processes are an important part of system improvement. They aim to identify issues with systems and processes of care that could be improved to prevent serious outcomes or adverse events in the future, and improve the quality of care provided to patients, their families and care partners.

Details:

Your EOLC Committee and M&M / Clinical Review Committees could consider adding questions to existing M&M review templates to identify opportunities to improve person-centred care. Each of the following sets of prompt questions have been organised according to the relevant Actions within the Delivering Comprehensive Care criterion.

Action	Prompt question
5.15	<p><i>The health service organisation has processes to identify patients who are at the end-of-life that are consistent with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care</i></p> <ul style="list-style-type: none"> • Was this a reversible illness, or was the person approaching the end-of-life on admission? • Could the treating team have identified that the patient was at risk of dying during the episode of care despite treatment? • Is there documentation that the patient was dying? • Was the patient and/or their family aware the patient was dying? • Was an Acute Resuscitation Plan (ARP) documented? Was it revised or changed at any time during the admission? Was this completed when the patient was in the terminal phase of life, or before? Had it expired (more than 12 months after completion) • Did the patient receive Medical Emergency Team (MET) calls during the admission? Total number? When was the last MET review? • Did a MET call prompt a discussion about goals of care, or completion of an ARP? • Did the patient receive any investigations/interventions in the final 48 hours of life? (Chemotherapy, radiotherapy, intubation/ invasive mechanical ventilation, renal replacement therapy (dialysis), non-invasive ventilation, vasoactive drugs, cardiopulmonary resuscitation (CPR), anaesthetic/ operation, IV antibiotics, IV fluids, artificial nutrition, blood tests, medical imaging, blood product transfusions, Intra-Aortic Balloon Pump (IABP), cardiac catheter, other)
5.16	<p><i>The health service organisation providing end-of-life care has processes to provide clinicians with access to specialist palliative care advice</i></p> <ul style="list-style-type: none"> • Was the patient referred to specialist palliative care during their admission? Did they provide and deliver consultation, education, periodic follow up for support, ongoing shared care? • Was there evidence that the patient was referred to a palliative care inpatient unit but died in hospital? • At any time during the admission was there discussion with the patient or their substitute decision-maker that investigations or treatments be limited or ceased, or

	that comfort care plans or palliative care referral be made?
5.17	<p><i>The health service organisation has processes to ensure that current advance care plans:</i></p> <p><i>a. Can be received from patients</i></p> <p><i>b. Are documented in the patient's healthcare record</i></p> <ul style="list-style-type: none"> • Prior to admission was there any evidence of a written advance care plan or advance health directive? • Was there an opportunity to commence end-of-life discussions earlier with the patient, for example if the patient was hospitalised more than twice in the last 12 months? • Is there any documentation that the patient's preferences for care were discussed during this admission?
5.18	<p><i>The health service organisation provides access to supervision and support for the workforce providing end-of-life care</i></p> <ul style="list-style-type: none"> • Was the specialist palliative care service contacted for advice? • Did the SPC service provide and deliver consultation, education, periodic follow up for support, or ongoing shared care? • Was the patient's care transferred to the SPC service?
5.19	<p><i>The health service organisation has processes for routinely reviewing the safety and quality of end-of-life care that is provided against the planned goals of care</i></p> <ul style="list-style-type: none"> • Was this death aligned with the persons wishes and preferences? • Did the patient or their family express dissatisfaction with any component of their care during the admission? • What was done for the patient and family to ensure their quality of life and a good death? • Did the treating team take a person-centred approach and holistic approach to healthcare prior to death, which recognised the persons mental, social, emotional, spiritual and physical care needs?
5.20	<p><i>Clinicians support patients, carers and families to make shared decisions about end-of-life care in accordance with the National Consensus Statement: Essential elements for safe and high-quality end-of-life care</i></p> <ul style="list-style-type: none"> • If appropriate, was there an opportunity for the treating team to commence earlier end-of-life management planning that included identifying the patient's wishes? • Did the patient have a legally appointed substitute decision-maker documented? • Was an Indigenous Health Worker involved in the care provided to the patient and their loved ones? • Were cultural care needs accommodated? • Were interpreters used where appropriate? • Was the patient and/or their family or care partners offered psychosocial support during the admission? • Was the patient and/or their family or care partners offered spiritual support during the admissions? (e.g. from Chaplain/faith leader)

Advantages:

- All Hospital and Health Services (HHS) will have established M&M or clinical review processes

Disadvantages:

- Additional questions may make the process of review longer
- Data requires monitoring and governance systems in place to ensure gaps in care are identified, escalated where appropriate, monitored and a quality improvement process initiated where appropriate to address the issue

Important considerations:

- A gap analysis may be a good place to start by considering the questions in your current M&M template that address the quality of end of life care and comparing them against the suggested questions
- The addition of one or two questions could be trialled to determine whether they are useful before additional questions are added

Examples of quality indicators and improvement opportunities:

- Proportion of patients with Advance Care Planning activity documented in the ACP Tracker. Aligns with Quality Statements 1, 4, 5, 7, 8, 10.
- Proportion of patients who had an ARP documented at the time of death. Aligns with Quality Statements 1, 4, 5, 6.
- Proportion of patients and care networks who were offered spiritual support from a Chaplain during the admission. Aligns with Quality Statement 10.

Link to further information:

- [Recommended Guidelines for Conducting and Reporting Mortality and Morbidity / Clinical Review Meetings, Clinical Excellence Commission NSW](#)
- [Royal Australasian College of Surgeons Research, Audit and Academic Surgery Guideline reference document for conducting effective Morbidity and Mortality meetings for Improved Patient Care](#)

Appendix 8: Continuing education measures

Objective:

Quality indicators for continuing education aim to increase the proportion of the workforce attending continuing education to support quality EOLC.

Details:

In 2019, Queensland Health released the *Care at the end of life: Education and training framework* to support HHSs to develop a local education and training strategy. This is one component of a coordinated approach to improving care at the end of life for all Queenslanders. Person-centred end of life care (EOLC) requires a workforce that is appropriately qualified, confident, knowledgeable, and skilled. All members of the interdisciplinary team should receive education about their roles and responsibilities in relation to local systems and processes for recognising and managing end-of-life care.

Advantages:

- All HHS will have existing education and training structures that can be adapted to incorporate delivery of end of life continuing education programs
- EOLC continuing education can be of benefit for all members of the workforce
- The *Care at the end of life: Education and training framework* provides a very comprehensive structure to adapt for local needs

Disadvantages:

- Local systems to collect data will need to be developed, as will monitoring, reporting and quality improvement systems

Important considerations:

- A gap analysis or needs analysis of continuing education and training for quality EOLC is an important first step. This will allow the local HHS to understand the needs of the workforce, allow resources to be directed appropriately and allow comparison of needs over time

Examples of quality indicators and improvement opportunities:

Continuing education outcomes can be evaluated using simple, or more complex methods. They include:

Indicator type	Indicator	Rationale and improvement opportunities
1.Attendance	Proportion of the total specialist and non-specialist palliative care medical, nursing, allied health, operational and administration staff, volunteers and students attending continuing education Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • Total EOLC continuing education sessions, or topic-specific sessions such as symptom management or communication skills • Review of poorly attended continuing education activities to determine whether time, location, competing priorities or subject matter was a contributing factor • Review of feedback sheets completed by participants • Work with senior clinicians to promote relevance of end of life continuing education to workforce group • Promote opportunities for workforce participation in continuing education • Ensure scope of practice and roles of each workforce group are defined in procedural documents
2.Satisfaction	Proportion of attendees rating continuing education session as satisfactory Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • To increase the appropriateness and acceptability of the content and delivery method of continuing education • Compile feedback, including quantitative and qualitative comments and compare over time • Carry out needs analysis for each occupational group: medical, nursing, allied health, volunteer, operational and administration • Promote opportunities for workforce participation in continuing education • Co-design continuing education with representatives from occupational groups to ensure information is relevant and delivery method is appropriate. • Review policy and procedural documents to identify gaps in clinical care, organisational or service delivery
3.Improvements in confidence, skills and knowledge	Positive changes in confidence, skills and knowledge following participation in education intervention. Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • Compile feedback, including quantitative and qualitative comments • Work with senior clinicians to review continuing education content for workforce group • Promote opportunities for workforce participation in continuing education • Ensure scope of practice and roles of each workforce group is defined in procedural documents • Carry out needs analysis for each occupational group: medical, nursing, allied health, volunteer, operational and administration • Co-design continuing education with representatives from occupational groups to ensure information is relevant and delivery method is appropriate
4. Change in clinical practice resulting from	Proportion of attendees who implement skills or knowledge following continuing education	<ul style="list-style-type: none"> • Review of reasons for not implementing new knowledge skills (verbal report or questionnaire)

continuing education	Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • Carry out needs analysis for each occupational group: medical, nursing, allied health, volunteer, operational and administration • Co-design continuing education with representatives from occupational groups to ensure information is relevant and delivery method is appropriate. • Measure clinical prevalence of a clinical parameter (e.g. audit of ACP documents, audit of ARP completion in clinical area) to raise awareness and drive quality projects • Review clinical incidents in Riskman to measure change in trends • Implement quality improvement activity to increase a specific aspect of clinical care
5. Change in clinical outcomes for patients, their families and care partners	Proportion of patients who had improved clinical outcomes because of participants' attendance at continuing education Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • Implementation of Patient Reported Experience Measures and Patient Reported Outcome Measures • Implementation of telehealth options for patient as an alternative to face-to-face services • Implementation of DandELinE in emergency department
6. Change in the organisation or governance or care	Changes to policy, procedures, workplace instructions, initiation of a quality improvement project or permanent addition of education program to curriculum Aligns with Quality Statements 12, 14	<ul style="list-style-type: none"> • Review of M&M templates and prompt questions against suggested questions that focus on the quality of EOLC • Review of team handover sheets, family meeting formats or case conference format to incorporate EOLC planning • Addition of the 'Surprise Question' or the Supportive and Palliative Indicators Tool (SPICT) to team handover sheets and case conference forms • Needs analysis of education and training needs, including measures of confidence, knowledge and skills • Development of procedures for Advance Care Planning procedures that incorporate descriptions of workforce roles in ACP for medical, nursing, allied health, operational and administration staff, volunteers and students to ensure they work to full scope of practice • Development of procedures for ACP documentation

Link to further information:

- [Improving care at end of life in Queensland education and training QHEPS page](#)
- [Care at the end of life: Education and training framework](#)

Alignment with comprehensive care at the end of life actions: 5.18

Example evaluation questionnaire: Continuing education for end of life conversations

Questionnaire for evaluating face-to-face end of life conversations continuing education	Pre-test	Post-test	3 months post-test
1. The workshop objectives were stated clearly and met (did not meet expectations – 1 2 3 4 5 6 7 8 9 10 – expectations fully met)		√	
2. The workshop was well organised (not at all – 1 2 3 4 5 6 7 8 9 10 – very well organised)		√	
3. The presenter(s) provided adequate time for questions and answered them satisfactorily (not at all – 1 2 3 4 5 6 7 8 9 10 – expectations fully met)		√	
4. Please rate your knowledge of how to conduct end of life conversations with patients, their families or care partners (very poor – 1 2 3 4 5 6 7 8 9 10 – very good)	√	√	√
5. Please rate your skill in conducting end of life conversations with patients, their families or care partners (very poor – 1 2 3 4 5 6 7 8 9 10 – very good)	√	√	√
6. Please rate your confidence in conducting end of life conversations with patients, their families or care partners (very poor – 1 2 3 4 5 6 7 8 9 10 – very good)	√	√	√
7. In the last month, I have participated in end of life conversations with patients, their families or care partners (not at all – 1 2 3 4 5 6 7 8 9 10 – very often)	√	√	√
8. In the last 3 months, my team, ward or service has completed the following in relation to end of life conversations: a. Requested education about advance care planning b. Requested education about legal aspects of end of life care planning c. Developed or updated a procedure relating to end of life planning or conversations d. Developed or updated a team handover sheet, family meeting format or case conference format to incorporate aspects of end of life planning or conversations e. Initiated a quality improvement project relating to advance care planning or end of life f. Added question prompts relating to the quality of end of life care to the M&M review process yes / no / not sure	√	√	√

Appendix 9: Governance processes

Objective:

Robust governance structures aim to support the delivery of safe and high-quality EOLC.

Details:

Adequate resources and support for the workforce, and governance structures are required to support the safety and quality of EOLC. The organisation and delivery of care may be related to governance arrangements, resources and support for the workforce, and support for multidisciplinary team members.

Advantages:

- There are many existing resources that have been developed by the Care at the End of Life team to support local governance arrangements, such as the Education and Training Template

Important considerations:

The Care at the End of Life team may be able to link HHS with other HHS who have resources to share such as an EOLC Terms of Reference

Examples of quality indicators and improvement opportunities:

- The HHS has an EOLC Committee or a dedicated EOLC component of a safety and quality committee meeting
- The HHS has a designated officer for EOLC and/or overarching responsibility for the End of Life Care component of the Comprehensive Care Criterion
- The HHS has a strategic plan for EOLC as part of the Comprehensive Care Criterion, or as a stand-alone plan
- The EOLC Committee has a clear line of reporting to a parent committee
- Procedures are in place detailing the support and supervision available to the workforce, including peer support, formal case review and employee assistance
- There is a dedicated space to care for patients approaching the end of life, and/or to meet with family members
- A consumer information/education needs analysis been conducted

Alignment with comprehensive care at the end of life actions: 5.18, 5.19

References

1. Agency for Healthcare Research and Quality. *Types of health care quality measures*. 2019 [29 August 2019]; Available from: <https://www.ahrq.gov/talkingquality/measures/types.html>.
2. Centers for Disease Control and Prevention. *Indicators*. 2019 [cited 2019 29 August 2019]; Available from: <https://www.cdc.gov/eval/indicators/index.htm>.
3. Dunsch, F., et al., *Bias in patient satisfaction surveys: a threat to measuring healthcare quality*. *BMJ Global Health*, 2018. **3**(2): p. e000694.