

End-of-life care in hospital: an audit of care against Australian national guidelines

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Abstract

Objective. The aim of this study was to map end-of-life care in acute hospital settings against Elements 1–5 of the Australian Commission on Safety and Quality in Health Care's (ACSQHC) Essential Elements for Safe and High-Quality End-of-Life Care.

Methods. A retrospective medical record audit of deceased in-patients was conducted from 2016 at one public ($n = 320$) and one private ($n = 132$) hospital in Melbourne, Australia. Ten variables, key to end-of-life care according to the ACSQHC's Elements 1–5 were used to evaluate end-of-life care.

Results. Most patients (87.2%) had a limitation of medical treatment. In 91.97% ($P < 0.0001$) of cases, a written entry indicating poor prognosis preceded a documented decision to provide end-of-life care, with a documented decision noted in 81.1% of cases ($P < 0.0001$). Evidence of pastoral care involvement was found in 41.6% of cases ($P < 0.0001$), with only 33.1% of non-palliative care patients referred to specialist palliative care personnel ($P = 0.059$). An end-of-life care pathway was used in 51.1% of cases ($P < 0.0001$).

Conclusion. There is clear scope for improvement in end-of-life care provision. Health services need to mandate and operationalise Elements 1–5 of the ACSQHC's Essential Elements into care systems and processes, and ensure nationally consistent, high-quality end-of-life care.

What is known about the topic? Acute care settings provide the majority of end-of-life care. Despite the ACSQHC's Ten Essential Elements, little is known about whether current end-of-life care practices align with recommendations.

What does this paper add? There is room for improvement in providing patient-centred care, increasing family involvement and teamwork, describing and enacting goals of care and using triggers to prompt care. Differences between public and private hospitals may be the result of differences in standard practice or policy and differences in cultural diversity.

What are the implications for practitioners? The Essential Elements need to be mandated and operationalised into mainstream care systems and processes as a way of ensuring safe and high-quality end-of-life care.

Additional keywords: care pathway, communication, death, decision-making, dying, family care, goals of care, palliative care, pastoral care, treatment limitation.

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Introduction

As in many developed countries, Australia's population is aging¹ and the demand for end-of-life care is increasing.^{1,2} Hospice care is widely considered the gold standard, and the quality of end-of-life care in Australia is among the world's best, yet only a small proportion of those who die receive hospice care.³ Rather,

acute hospitals provide the majority of end-of-life care,^{2,4} with 80 000 people per year dying in hospital.³

Measuring the quality of end-of-life care is essential. A recent Australian study sought to determine the gap between issues defined as important by people approaching the end of life and 'usual care' in general wards across two tertiary referral

hospitals.⁵ Using the first edition of the National Safety and Quality Health Service Standards (NSQHS) as the conceptual framework,⁶ that study showed that usual care reduced the likelihood of people receiving quality care as defined by consumers.⁵ Effective communication, shared decision making, expert care, trust and confidence in clinicians and respectful, compassionate care were considered most important by patients and families at the end of life.⁷ This evidence demonstrates that what is needed is an approach that addresses people's expectations and reliably provides safe, evidence-based, measurable, quality care at the end of life.⁵

The Australian Commission on Safety and Quality in Health Care (ACSQHC) identified several priorities to improve the quality of end-of-life care in acute care settings.² A national consensus statement was produced, providing recommendations for the delivery of safe, timely and high quality end-of-life care in the form of the Essential Elements for Safe and High-Quality End-of-Life Care.⁴ Elements 1–5 relate to the way in which end-of-life care should be provided (Table 1).⁴ However, the elements are not mandatory, nor is guidance provided to aid acute health services in operationalising the elements.⁴

The second edition of the NSQHS, released in 2017, provides a nationally consistent statement about the standard of care consumers can expect from health services to improve the quality of health service provision.⁸ Standard 5 – Comprehensive Care recommends that comprehensive care is provided at the end of life in accordance with the Essential Elements.^{4,8} This includes that clinicians have access to specialist palliative care advice, advance care plans are received from patients and documented in the medical record, clinicians support patients and family to make shared decisions and that health services routinely review the safety and quality of end-of-life care.⁸

Objective

The objective of this study was to map end-of-life care in acute hospital settings against Elements 1–5 of the ACSQHC's Essential Elements for Safe and High-Quality End-of-Life Care.

Methods

Following ethics approval from Epworth Healthcare (EH2017-212), Monash Health (17-293XL) and Deakin University (2018-077), a retrospective medical record audit was undertaken within two acute hospitals.

Table 1. Elements 1–5 of the Australian Commission on Safety and Quality in Health Care's Essential Elements for Safe and High-Quality End-of-Life Care⁴

Element 1: patient-centred care	Patients are part of the decision making about end-of-life care
Element 2: teamwork	Clinicians work together to provide end-of-life care
Element 3: goals of care	Clear goals improve the quality of end-of-life care
Element 4: using triggers	Triggers identify when patients need end-of-life care
Element 5: responding to concerns	Clinicians get help to rapidly respond to patient suffering

Setting

Two metropolitan health services, one public and one private, in Melbourne, Victoria, were audited. In 2016, the private health service provided 148 000 admissions and the public health service provided more than 250 000 admissions. Collectively, care was provided to more than 2300 adult in-patients who died between January and December 2016.

Participants

Health service databases indicated 619 and 1701 deaths occurred in 2016 within the private and public health services respectively. Deceased patients from the private hospital were 53.2% male, had a mean (\pm s.d.) age of 77.2 ± 13.4 years and a mean (\pm s.d.) length of stay (LOS) of 13.6 ± 15.5 days; in comparison, deceased patients from the public hospital were 53.8% male, with a mean (\pm s.d.) age of 75.9 ± 13.8 years and a mean (\pm s.d.) LOS of 9 ± 11 days.

From the entire sample, a random selection of 20% of adult in-patient deaths was generated using the 'select cases' function in SPSS Version 25 (IBM Corp., Armonk, NY, USA). A 20% sample was considered large enough to be representative of the entire sample. Sex, age and LOS for the 20% sample were compared with the entire sample to ensure that the 20% sample was demographically similar to the entire sample. Patient demographic data, including ethnicity, religion, urgency of admission and admitting speciality, were collected to further describe the sample.

Outcome measures

To develop and refine the data collection tool, a pre-test was conducted using the final admission of 10 randomly selected patients from each health service. Each of the medical records included in the pre-test were examined to get a sense of how end-of-life care was provided at each health service, including how end-of-life care was approached, delivered and recorded. Multiple potential variables considered relevant to the study were identified. Variables not consistently located across all medical records in the pre-test sample were excluded. For example, evidence of advance care plans was considered relevant, but data were not consistently available; hence, the variable was excluded. The variables that were retained for extraction, and how they are mapped against Elements 1–5, are presented in Table 2.

Analysis

Frequencies and percentages were calculated for categorical variables; continuous variables are summarised as the mean \pm s.d. Cross-tabulations and Chi-squared statistics were calculated to explore differences in categorical variables between three patient cohort groups (private hospital, public hospital non-palliative care and public hospital palliative care). Adjusted standardised residuals (z_{adj}) were examined to investigate individual cell differences. Continuous variables were analysed using *t*-tests for independent samples. Two-tailed $P \leq 0.05$ was considered significant.

Table 2. Variables (and source) mapped against Elements 1–5
LOMT, limitation of medical treatment; MR, medical record

Variables (grouped by source)	Related element
Free-text clinician entry in the progress notes	
1. Documented care goal on admission	1
2. Written entry indicating poor prognosis (preceding a decision to provide end-of-life care)	3
3a. Decision to provide end-of-life care	1, 3, 5
3b. Evidence of family involvement in decision	1, 5
4. Referral to specialist palliative care personnel	2, 5
5. Pastoral care involvement	2, 5
6a. Time of death	5
6b. Family present at death	1
Official medical record document (denoted by MR number)	
7. LOMT form completed	4
8. End-of-life care pathway used	3, 4, 5

Results

Demographic characteristics

Patient demographic characteristics and clinical data related to the final admission in which they died are summarised in Table 3. Patient groups from both hospitals were similar for mean age and sex. Although most patients identified as non-Indigenous Australian ($n = 223$; 54.7%), deceased patients from the public hospital were significantly more ethnically ($\chi^2_1 = 25.87$, $P = 0.002$) and religiously ($\chi^2_8 = 139.15$, $P < 0.0001$) diverse. In the private hospital, where specialist in-patient palliative care is not provided, patients were most likely to be admitted under the care of medical oncology ($n = 49$; 37.1%), cardiology ($n = 17$; 12.9%) and general medicine ($n = 14$; 10.6%) specialist teams. In contrast, public hospital patients were most likely to be admitted under palliative care ($n = 101$; 31.6%),

Table 3. Demographic characteristics of patients who died in hospital in the 2016 calendar year ($n = 452$)Unless indicated otherwise, data are given as the mean \pm s.d. or as n (%). LOS, length of stay

Variable	Sector		P-value (Chi-squared)
	Private hospital ($n = 132$)	Public hospital ($n = 320$)	
Age (years)	77.6 \pm 12.9	75.8 \pm 13.2	0.349
Sex			
Male	70 (53.0)	172 (53.8)	0.918
LOS (days)			
Mean \pm s.d.	14.8 \pm 17.4	10.1 \pm 12.1	<0.0001
Range	0–100	0–97	
Ethnicity			
Oceanian	89 (67.4)	142 (44.7)	0.002
Australian (non-Indigenous)	89 (67.4)	134 (41.9)	
Other	0 (0)	9 (2.8)	
North-west European	16 (12.1)	44 (13.8)	
Southern and Eastern European	20 (15.2)	74 (23.1)	
North African and Middle Eastern	1 (0.8)	7 (2.2)	
Other	6 (4.5)	47 (14.7)	
Not Stated	0 (0)	5 (1.6)	
Religion			
Buddhism	1 (0.8)	4 (1.3)	<0.0001
Christianity	97 (73.5)	179 (55.9)	
Hinduism	0 (0)	4 (1.3)	
Islam	0 (0)	6 (1.9)	
Judaism	0 (0)	1 (0.3)	
Other religions	0 (0)	1 (0.3)	
Secular beliefs, no religion	33 (25.0)	90 (28.1)	
Not specified	1 (0.8)	35 (10.9)	
Urgency of admission			
Elective	63 (47.7)	108 (33.8)	0.008
Emergency	69 (52.3)	212 (66.3)	
Admitting speciality			
Cardiology	17 (12.9)	23 (7.2)	<0.0001
Clinical haematology	7 (5.3)	6 (1.9)	
General medicine	14 (10.6)	115 (23.9)	
Geriatrics	7 (5.3)	14 (4.4)	
Medical oncology	49 (37.1)	3 (0.9)	
Neurology	2 (1.5)	10 (3.1)	
Neurosurgery	9 (6.8)	8 (2.5)	
Palliative care	0 (0.0)	101 (31.6)	
Other surgery	9 (6.8)	15 (4.7)	
Respiratory	3 (2.3)	4 (1.3)	
Other	13 (9.8)	21 (6.6)	

Table 4. End-of-life care variables extracted from medical records (*n* = 452)Data are given as *n* (%). LOMT, limitation of medical treatment

	Private hospital (<i>n</i> = 132)	Cohorts Public hospital non-palliative care (<i>n</i> = 220)	Public hospital palliative care (<i>n</i> = 100)	<i>P</i> -value (Chi-squared)
Documented care goal on admission				
Active treatment	105 (79.5)	155 (70.5)	7 (7.0)	<0.0001
Palliation	27 (20.5)	55 (25.0)	92 (92.0)	
Unable to determine	–	10 (1.0)	1 (1.0)	
LOMT form completed				
Yes	116 (87.9)	182 (82.7)	91 (91.0)	0.109
No	16 (12.1)	38 (17.3)	9 (9.0)	
Written entry indicating poor prognosis preceding decision to provide end-of-life care				
Yes	122 (92.4)	186 (84.5)	99 (99.0)	<0.0001
No	10 (7.6)	34 (15.5)	1 (1.0)	
Decision to provide end-of-life care				
Yes	100 (75.8)	151 (68.6)	99 (99.0)	<0.0001
No	32 (24.2)	69 (31.4)	1 (1.0)	
Evidence of family involvement				
Yes	88 (88.0)	141 (93.4)	91 (91.0)	0.323
No	12 (12.0)	10 (6.6)	9 (9.0)	
Referral to specialist palliative care personnel				
Yes	50 (37.9)	62 (28.2)	N/A	0.059
No	82 (62.1)	158 (71.8)		
Pastoral care involvement				
Yes	87 (65.9)	15 (6.8)	52 (52.0)	<0.0001
No	45 (34.1)	205 (93.2)	48 (48.2)	
End-of-life care pathway used				
Yes	19 (14.4)	99 (45.0)	94 (94.0)	<0.0001
No	113 (85.6)	121 (55.0)	6 (6.0)	
Time of death				
0801–2000 hours	70 (53.0)	94 (42.7)	50 (50.0)	0.207
2001–0800 hours	61 (46.2)	119 (54.1)	48 (48.0)	
Not recorded	1 (0.7)	7 (3.2)	2 (2.0)	
Family present at death				
Yes	76 (57.6)	113 (51.4)	67 (67.0)	<0.032
No or not documented	56 (42.4)	107 (48.6)	33 (33.0)	

general medicine (*n* = 115; 23.5%) and cardiology specialties (*n* = 23; 7.2%; $\chi^2_{27} = 226.83$, $P < 0.0001$).

A specialist palliative care unit existed in the public but not private hospital. Patients admitted to the public hospital were separated into two cohorts, described as the public non-palliative care cohort and the public palliative care cohort, giving a total of three cohorts. It is important to note that although 37.9% (*n* = 50) of private hospital patients and 28.2% (*n* = 62) of public hospital patients were referred to specialist palliative care personnel during their final admission ($P = 0.059$), they remained under the care of the original admitting speciality. Findings related to end-of-life care are presented in Table 4.

Overall, 52.3% (*n* = 267) of patients from the entire sample were admitted for active treatment. There was a significant relationship between patient cohorts and care goal on admission ($\chi^2_2 = 153.92$, $P < 0.0001$, Cramer's $V = 0.59$), such that admission for the purpose of palliation was significantly more likely for public hospital palliative care cohort ($z_{\text{adj}} = 12.4$), whereas patients in the public hospital non-palliative care cohort ($z_{\text{adj}} = 5.4$) or the private hospital cohort ($z_{\text{adj}} = 5.3$) were significantly more likely to have been admitted for active treatment.

A limitation of medical treatment (LOMT) form, similar to a not-for-resuscitation (NFR) or goals of care form,⁹ was completed in 87.2% (*n* = 389) of cases, indicating some form of treatment limitation. However, there was no significant difference in rates of completion between patient cohorts ($\chi^2_2 = 4.44$, $P = 0.109$).

Written clinician entries to indicate a patient's poor prognosis, such as an entry stating the patient was likely to die, were found in 91.97% (*n* = 407) of cases. There was a significant relationship between evidence of written clinician entries to indicate poor prognosis and patient cohorts ($\chi^2_2 = 17.20$, $P < 0.0001$, Cramer's $V = 0.20$), such that patients in the public hospital palliative care cohort were significantly more likely to have an entry indicating the patient's poor prognosis preceding an entry indicating a decision to provide end-of-life care ($z_{\text{adj}} = 3.4$), whereas this was significantly less likely for the public non-palliative care cohort ($z_{\text{adj}} = -3.8$). A decision to provide end-of-life care was documented in 81.13% (*n* = 350) of cases in the total sample. There was a significant relationship between a documented decision to provide end-of-life care and cohorts ($\chi^2_2 = 36.57$, $P < 0.0001$, Cramer's $V = 0.28$). Patients in the public hospital palliative care cohort were significantly more

Table 5. Subgroup analysis of non-palliative care patients where a decision was made to provide end-of-life care ($n = 251$)Data are given as n (%)

	Private hospital ($n = 100$)	Cohorts Public hospital non-palliative care ($n = 151$)	P -value (Chi-squared)
Referral to specialist palliative care personnel	44 (44.0)	62 (41.1)	0.644
Pastoral care personnel involvement	44 (44.0)	13 (8.7)	<0.0001
End-of-life care pathway used	19 (19.0)	97 (64.2)	<0.0001

likely to have a documented decision to provide end-of-life care ($z_{\text{adj}} = 5.8$), and those in the public hospital non-palliative care cohort were significantly less likely to have a documented decision to provide end-of-life care ($z_{\text{adj}} = 4.4$). Family involvement in end-of-life decision making was evident in 90.8% ($n = 320$) of cases ($\chi^2_2 = 2.62$, $P = 0.323$).

Family were present at 58.7% ($n = 256$) of deaths. There was a significant relationship between family presence at death and time of death ($\chi^2_1 = 18.85$, $P < 0.0001$, Cramer's $V = 0.21$). Family were significantly more likely to be present when death occurred between 0801 and 2000 hours ($z_{\text{adj}} = 4.3$) and significantly less likely to be present when death occurred between 2001 and 0800 hours ($z_{\text{adj}} = -4.3$). There was also significant association between patient cohorts and family presence at death ($\chi^2_2 = 6.91$, $P = 0.032$, Cramer's $V = 0.124$), with family significantly more likely to be present at death for the public hospital palliative care cohort ($z_{\text{adj}} = 2.4$) and significantly less likely to be present at death for the public hospital non-palliative care cohort ($z_{\text{adj}} = 2.4$).

Pastoral care personnel were involved in 41.57% ($n = 154$) of cases. There was a significant relationship between pastoral care involvement and patient cohorts ($\chi^2_2 = 146.62$, $P < 0.0001$, Cramer's $V = 0.57$). Pastoral care involvement was significantly more likely for the private hospital cohort ($z_{\text{adj}} = 9.2$) and those in the public hospital palliative care cohort ($z_{\text{adj}} = 4.3$), and significantly less likely for the public hospital non-palliative care cohort ($z_{\text{adj}} = 11.9$). Referral to palliative care personnel, once the public hospital palliative care cohort was excluded, occurred in 33.05% ($n = 112$) of cases ($\chi^2_1 = 3.58$, $P = 0.59$).

An end-of-life care pathway was used in 51.1% ($n = 212$) of cases ($\chi^2_2 = 145.40$, $P < 0.0001$, Cramer's $V = 0.57$) and was significantly more likely to be used for the public hospital palliative care cohort ($z_{\text{adj}} = 10.7$) and significantly less likely to be used for the private hospital cohort ($z_{\text{adj}} = -8.9$).

Further analysis was undertaken for the subgroup of patients ($n = 251$) for whom a decision was made to provide end-of-life care to identify associations between rates of referral to palliative care personnel, pastoral care involvement and the use of an end-of-life care pathway (Table 5). Referral rates for palliative care personnel were low across both hospitals ($n = 106$; 42.6%; $\chi^2_1 = 0.21$, $P = 0.644$). Private hospital patients were more likely to have pastoral care personnel involvement ($n = 44$; 44.0%) than public hospital patients ($n = 13$; 8.7%; $\chi^2_1 = 116.47$, $P < 0.0001$). Private hospital patients were less likely to have care guided by an end-of-life care pathway ($n = 19$; 19.0%) than public hospital patients ($n = 97$; 64.2%; $\chi^2_1 = 49.53$, $P < 0.0001$).

Discussion

Using Elements 1–5 of the ACSQHC's Essential Elements⁴ as a conceptual framework, the analysis of clinical data provides an evaluation of end-of-life care practice and performance that may be indicative of end-of-life care across public and private health-care hospitals. The findings suggest two major areas of concern. The first relates to challenges in the recognition of dying and changing the direction of care from active treatment to end-of-life care. The second is the variation in end-of-life care, likely indicative of a lack of clear direction in the provision of end-of-life care and differences in hospital services and systems. Although the Essential Elements were designed to provide a framework for safe and high-quality end-of-life care, the ACSQHC calls for health services to develop their own systems and processes to support adoption and implementation of the Elements. Gaps in end-of-life care were identified in all five elements.

Element 1: patient-centred care

Although there was evidence of family involvement in the decision to provide end-of-life care, why this did not occur in all cases is not known. The identification of patient deterioration towards death and prognostication challenges may have contributed to this. Effective and early communication with the patient and family are key components of shared decision making and quality end-of-life care.^{7,10} Yet, many hospital systems lack formal procedures or requirements for involving family in decision making.¹⁰ These findings suggest there is room for improvement in how clinicians and health services ensure end-of-life care is patient and family centred. Recent legislative changes in Victoria, specifically the *Medical Treatment, Planning and Decisions Act 2016 (Vic.)*, requires system changes to ensure patient values and preferences are followed. There are many nuanced areas of patient and family involvement in end-of-life care, communication and decision making that are necessary for high-quality care. The low rates of documented family involvement in decision making suggest that ongoing communication between clinicians and family is not occurring.

Evidence of family presence in just over 58% of deaths may suggest that either the patient's impending death was not clearly communicated, was communicated too late to enable family presence, the family did not wish to be present or whatever occurred was simply not documented. Although family may elect not to be present, evidence indicates that family members value the opportunity to be present in the lead up to and at the time of death.¹¹ Family presence at death is a quality marker in end-of-life care,¹¹ indicative of family care that is compassionate and timely.⁴

Element 2: teamwork

Despite the availability of palliative care and pastoral care personnel, rates of involvement of both were low, yet similar to what has been found previously.¹² Safe and high-quality end-of-life care requires access to appropriately qualified and skilled clinicians⁴ who can provide expert care.⁷ End-of-life care provided by non-palliative care clinicians could be enhanced by the timely and appropriate inclusion of, and expert guidance from, specialist palliative care clinicians¹² and pastoral care personnel, as a matter of routine care rather than exception. Previous research has shown that multiple factors affect the referral to pastoral care personnel. Pastoral care availability, clinician understanding of the role of pastoral care,¹³ the religiosity of the treating clinician and clinicians' perceptions that the patient is experiencing negative emotions¹⁴ affect referral.

Element 3: goals of care

For patients admitted for the purpose of 'palliation', a clear goal of care was identified and enacted. For the remaining patients who were initially admitted for 'active treatment' but deteriorated during their admission, it was less clear whether their deterioration meant the goal of care had changed from active treatment to palliation. In almost 10% of cases, there was no written entry in the medical record indicating the patient's poor prognosis, logically a precursor to a decision to provide end-of-life care and commence an end-of-life care pathway. Furthermore, despite the availability of an end-of-life care pathway in both hospitals, the pathway was not used for all dying patients, for several possible reasons. Recognition of dying and pathway use is more likely for patients with cancer,¹⁵ yet the diversity in admitting specialties in this cohort suggests that recognition of dying and prognostication may not have been so obvious, potentially affecting timely recognition of dying and pathway use.

Recent intense scrutiny of the Liverpool Care Pathway in the UK has meant that end-of-life care pathways have received significant negative attention,¹⁶ possibly affecting clinician perceptions of their utility. Furthermore, in some clinical contexts, commencement of an end-of-life care pathway was a medical decision; hence, unless initiated by a doctor, the end-of-life care pathway was not routinely used.¹⁷ Given that care pathways are known to increase the efficiency of care and improve outcomes for patients,¹⁸ this is an area for improvement.

Element 4: using triggers

Identifying and using triggers as an opportunity to re-evaluate or initiate care is integral to the provision of timely end-of-life care, but it can also be difficult for clinicians to identify triggers that may prompt re-evaluation of care. For example, among older patients, such as in the present study, and those with non-cancer diagnoses or multimorbidity, uncertain illness trajectories may mean there is not an easily identifiable or clear-cut point at which the end-of-life phase begins.¹⁹ Nonetheless, other milestones or elements of care were identified in this study that could represent triggers for clinicians to consider end-of-life care. For example, in more than 87% of cases, the LOMT form was completed, and although the high completion rate was likely related to organisational mandates for completion soon after admission,²⁰ it also presents an opportunity, or trigger, for clinicians to review goals of care and begin

broader conversations with the patient (and family) about treatment goals and expectations.^{20,21} If used as a trigger, resulting conversations with the patient or family provide an opportunity for shared decision making⁷ and could also be used as a prompt for referral to palliative care, involvement of pastoral care personnel and/or commencement of an end-of-life care pathway.

Element 5: responding to concerns

Element 5 recommends that clinicians get help to rapidly respond to patient deterioration. Data were not specifically collected in relation to patient-reported symptoms or interventions, such as use of analgesics. Given that end-of-life care pathways are perceived to improve the care of dying patients, particularly with regard to symptom control,^{22,23} it is likely that patient reports of symptoms may be more readily identified and addressed when care is guided by an end-of-life care pathway. Hence, increased use of the available end-of-life care pathway would assist in managing patient symptoms.

For patients with complex needs associated with deterioration and dying, referral to specialist palliative care is considered necessary.²⁴ It is of note that only 33% of patients had received a referral to specialist palliative care personnel, and this likely reflects the late recognition of dying. In addition, routine referral to pastoral care personnel, who are acknowledged as skilled in helping patients emotionally and spiritually,¹³ is likely to assist in responding to patient concerns.

Sector differences

Although the primary intention of this study was not to compare private and public hospitals, the two hospitals were chosen for their heterogeneous patient populations and likely differences in systems, processes and approach to end-of-life care. However, there are some interesting findings and patterns of difference between hospitals and palliative care and non-palliative care patient cohorts that would benefit from further investigation. It is not known whether the differences could suggest a sector effect, caused by variations in standard practice or policy between public and private hospitals.

Patients from the public hospital cohort were more culturally diverse than those from the private hospital. With Australia's population becoming increasingly culturally diverse, consideration for the cultural and religious needs of patients and family before and after death must be considered.²⁵ This is particularly important because, in the absence of this understanding, assumptions are made about preferences for end-of-life care based on assumed cultural values or attributes.²⁶

What this study did show was that rates of completion of the LOMT form, written entries indicating poor prognosis, end-of-life decision making and family involvement, referral to palliative care and pastoral care personnel and family presence at death were all lower for patients who were admitted to the public hospital. Given public hospital patients were more religiously and ethnically diverse, it is possible that aspects of cultural diversity may have influenced end-of-life communication and care, but we cannot be sure.

Limitations

This work is retrospective. Hence, the audit is limited by the available evidence in patient medical records. It is possible that

aspects of care, such as family involvement in decision making, evidence of verbal communication, decision making and referrals to specialist personnel, occurred but were not documented. Although this study was conducted across two hospitals, the findings are not necessarily generalisable to other settings, where systems, policies and processes may differ.

Conclusion

Elements 1–5 of the ACSQHC's Essential Elements for Safe and High-Quality End-of-Life Care provide a framework for mapping and evaluating existing end-of-life care delivery and practices, and identify areas for practice improvement to ensure timely and high-quality end-of-life care in acute hospital settings. The findings of this study demonstrate clear gaps in end-of-life care across hospitals, most notably in relation to recognition of dying and variability in end-of-life care provision.

To help bridge these gaps and improve end-of-life care, the logical answer is for health services to mandate and operationalise Elements 1–5 first, followed by Elements 6–10, of the Essential Elements into care systems and processes. Obviously, the requisite changes will need to be tailored to each setting, the needs of the population and the available resources and personnel.⁴ Moreover, a plan to increase resources and access to specialist personnel needs to be prioritised to achieve this.

Competing interests

The authors declare no competing interests.

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