

# Improving the quality of family meeting documentation in the ICU at the end of life

Aaron C. Kennedy , Daryl A. Jones, Glenn M. Eastwood, Duncan Wellington, Emily See and Jane E. Lewis

Palliative Care & Social Practice

2022, Vol. 16: 1–10

DOI: 10.1177/  
26323524221128838

© The Author(s), 2022.  
Article reuse guidelines:  
sagepub.com/journals-  
permissions

## Abstract

**Objective:** Improve documentation quality of end-of-life family meetings in a tertiary intensive care unit (ICU).

**Design:** Before-and-after interventional quality improvement project between October 2018 and February 2020 utilising an electronic pro-forma record.

**Setting:** Australian, University affiliated, mixed medical-surgical 22 bed adult ICU.

**Participants:** Patients who were admitted to the ICU for active management and subsequently died during that ICU admission. We enrolled 50 patients who died before and 50 patients after the introduction of the electronic family meeting pro-forma record.

**Intervention:** Through collaboration with ICU medical and nursing staff, End-of-life Special Interest Group and Clinical Documentation Committee we developed the ICU Family Meeting Discussion Note as an electronic pro-forma record with multiple key fields of entry.

**Main outcome measures:** Patient records were examined for the presence of documented details around patient's admission, family meetings and specific elements surrounding the patient's death.

**Results:** The introduction of a pro-forma record markedly improved the quality of documentation of end-of-life care related family meetings. Documentation increased in recording hospital admission date/time (6% vs 84%), meeting location (14% vs 70%), the reason patients were absent from the meeting (34% vs 72%), the Medical Treatment Decision Maker (MTDM) (10% vs 44%), the patient's resuscitation status (22% vs 54%), and treatment options discussed (78% vs 94%) ( $p \leq 0.005$  for all).

**Conclusion:** Introducing an electronic pro-forma record to facilitate family meeting documentation increased the frequency of important recorded information. Further studies are required to assess whether documentation quality improvements are sustainable and whether they affect patient- or relative-centred outcomes.

**Keywords:** deaths, end-of-life issues, family communications, intensive care, palliative care

Received: 20 January 2022; revised manuscript accepted: 6 September 2022.

## Introduction

Family meetings are common, occurring regularly during intensive care unit (ICU) admissions.<sup>1</sup> Such meetings are key to improving the understanding, experience and satisfaction of patients and their loved ones and are often used to prepare family for the death of their loved one.<sup>2</sup> Thorough documentation is important for numerous reasons. In addition to being a clinical record with medico-legal implications, it

is integral to good clinical management and handover.<sup>3</sup> Well-documented family meetings enable clinicians to carry on the longitudinal conversation with the long stay ICU patient's family.<sup>4</sup> As critically ill patients are often unconscious, intubated, or possibly delirious, such family meetings are essential to educate loved ones of clinical situations and potential pathways of care moving forward. The meetings may also help bring forth the patient's health care wishes or advance care

Correspondence to:  
**Aaron C. Kennedy**  
ICU Registrar, Intensive  
Care Unit, Austin Hospital,  
c/o ICU, 145 Studley Rd,  
Heidelberg, VIC 3084,  
Australia.  
[Aaron.Kennedy@austin.org.au](mailto:Aaron.Kennedy@austin.org.au)

**Jane E. Lewis**  
Intensive Care Unit, Austin  
Hospital, c/o ICU, 145  
Studley Rd, Heidelberg,  
VIC 3084, Australia.  
[Jane.LEWIS2@austin.org.au](mailto:Jane.LEWIS2@austin.org.au)

**Daryl A. Jones**  
**Glenn M. Eastwood**  
**Duncan Wellington**  
**Emily See**  
Intensive Care Unit, Austin  
Hospital, Heidelberg, VIC,  
Australia



plans.<sup>5</sup> In addition, variability in documentation impairs future audits.<sup>6</sup> For all of these reasons, high-quality and consistent documentation is vital.

Anecdotal evidence from our ICU indicated that the rate of documented family meetings was low, and that content was variable and often missing important information. This is not unique to our hospital and has been reported consistently.<sup>7,8</sup> Frequency and quality of documentation increases with the introduction of a standardised form.<sup>5,9</sup> Any such form that tries to improve documentation would need to be inexpensive as it may be applied to multiple centres, such as using a pro forma record template. In 2010, Nelson *et al.*<sup>10</sup> reported that the use of a meeting planner and documentation template was associated with improvement in the quality and frequency of family meetings. Furthermore, electronic communication tools have been shown to enhance interdisciplinary collaboration for patients receiving palliative care.<sup>11</sup> Pilot work from the Development of the Serious Illness care programme indicated a dramatic rise in documentation quality before and after the introduction of an electronic medical record (EMR) module.<sup>5</sup>

We undertook a quality improvement (QI) project to enhance the quality of documentation of family meetings in our ICU.<sup>12</sup> We hypothesised that an electronic pro forma record coupled with an education programme and periodic reminders would improve the rate of documentation of key information in family meetings of critically ill patients. Our intervention (the pro forma record) was created to capture important details of end-of-life care family meetings in the patient's EMR. We compared the details of family meeting notes from before and after the introduction of the pro forma record.

## Method

### Setting

Our hospital is an Australian, University affiliated, mixed medical-surgical 22 bed adult ICU. Specialties include cardiac surgery, neurosurgery, decompensated liver disease, liver transplantation, complex aortic surgery, patients with complex respiratory weaning and patients with acute spinal cord injuries. Documentation at our hospital is a hybrid model with both paper, proprietary intensive care clinical information system and a

hospital wide EMR in use. The proprietary intensive care clinical information system is Alarta by Incarta and the EMR software is Millennium PowerChart by Cerner.

### Design and phases

The QI project was conducted in our ICU between October 2018 and February 2020. A review of the current literature identified key components of a family meeting. The pro forma record was developed de novo and informed by the literature, senior ICU leadership and hospital committee review to ensure application to our patient population and meeting hospital standards. The first draft, formed from the literature review, was presented to the ICU medical leadership team for feedback and iterative improvement. The draft was then shared at a meeting with the ICU End of Life Care Special Interest group, where suggestions were incorporated. The updated draft was again circulated within the ICU medical leadership team for final approval from clinicians. The pro forma record was then adapted and programmed into the hospital EMR software, Millennium PowerChart, by a Clinical Informatics Analyst (DW). The final form was reviewed by the hospital's Health Information Services team for medico-legal compliance and approved for use and record by the hospital's Clinical Documentation Committee in May 2019.

The final proforma template (Figure 1) contained fields for details about the patient, the attendees, the meeting location, topics of discussion including resuscitation status before and after the meeting, prognosis, treatment goals and options, questions, conflict, family understanding, and outcomes of the meeting. There were no mandatory fields in the pro forma record. Review of documentation by non-physician practitioners was not included in this QI project.

### Documentation at baseline

Prior to introduction of the pro forma record, family meetings were documented by the treating intensive care physician. The documentation was non-standardised and freeform, entered in the patients' medical record wherever the physician deemed appropriate, including hand-written or electronic progress notes. There was no template for this documentation and it occurred after the completion of the family meeting.

### Details of intervention

In May 2019, the pro forma record was released to the EMR to help prompt treating clinicians to record salient points from the family meeting with a goal to improve documentation frequency and quality (Figure 1). Education and training on use of the pro forma record was provided to the ICU medical staff. The intensive care physicians were instructed to use the pro forma record in place of their usual documentation method. Documentation was still to be completed after completion of the family meeting. Training was delivered at meetings and medical teaching sessions, and via email to all clinical ICU staff. It was reinforced with periodic reminders, by email and in person. One-page quick reference guides were distributed by email periodically to remind ICU medical staff how to complete the pro forma record. A lead-in time and run-in period of 4 months allowed for training, exposure and new staff to become acquainted with the form. Data collection for patients in the pre-intervention group began in May 2019 and for the post-introduction group in August 2019.

### Participants

Eligible patients were any adult patient who was admitted to the ICU for active management and died during that admission. We included a convenience sample of 50 patients in each phase of the QI project. As a pilot, this sample size was chosen based on the anticipated number of eligible patient admissions in a 6-month time period. Patients were excluded if their ICU admission was specifically for end-of-life care.

Eligible patients were audited in a 'before period' and 'after period'. The 'before period' was retrospective from May 2019 with sequential identification in reverse chronological order of 50 eligible patients (November 2018 to May 2019). The 'after period' included a separate group of 50 eligible patients who were eligible and identified from August 2019 to March 2020 then retrospectively underwent chart review.

### Data collection

The data were obtained from first and last meetings recorded in the patient medical record. In instances where there was only one meeting recorded, those details were used. The variables

### Intensive Care Family Meeting Discussion

Patient:           MRN:           FIN:  
Age: Sex:   DOB:  
Associated Diagnoses:  
Author:

### Consultation Discussions

The patient was admitted to Austin Health on  
The patient was admitted to the Intensive Care Unit on  
Location of the meeting:  
Attendees of the family meeting:

### Patient involvement in the meeting

Reason for patient absence.  
Family/Support

### Topics of discussion

#### Patient preferences/Advance care plan:

#### Premorbid Functional Status:

#### Problem List:

#### Prognosis:

#### Current goals of care (See L.051 Goals of Care form):

#### Treatment goals/options

What is the treatment?  
What is the likelihood of success?  
What does success look like?  
When will we meet again?  
Any limitations of medical treatment discussed:

#### Questions raised and addressed:

#### Conflict / lack of agreement

Conflict / lack of agreement that occurred in the meeting?  
Parent unit lack of agreement?

#### Family Preferences

Family preferences.

#### Outcomes

Family understanding?  
Further meetings necessary?  
New L 0.51 Goals of Care form?  
Organ Donation Referral (ATOD) / Donate Life)?  
Next steps/Follow up:  
Other notes:

#### AUTHOR:

Signed:

**Figure 1.** Screen of the electronic standardised pro forma record template, the intervention.

ATOD; Austin Health Tissue and Organ Donation Team; DOB, Date of Birth; FIN, Financial Identification Number; L.051, Internal document identification code; MRN, Medical Record Number.

collected are outlined in Figure 1. Data were entered into a data collection form and then collated into a Microsoft Excel (ver. 16.39) spreadsheet by the lead author (AK).

### *Statistical analysis*

Descriptive statistics were performed by an independent investigator (ES) using Stata (MP16.1). Data were analysed as numbers (frequencies), means (standard deviation), and medians (interquartile ranges). Between group comparisons were made by chi squared, unpaired student t or Wilcoxon rank-sum tests, as appropriate. A  $p$  value  $< 0.05$  was considered significant.

## **Results**

### *Baseline Characteristics*

Age, primary organ system failure, comorbidities, time to ICU admission and admitting unit are outlined in Table 1. Both groups included patients with a variety of conditions seen in the ICU and a mix of medical and surgical admitting units. The pre- and post-intervention groups were similar aside from an increase in chronic heart failure and median time to ICU admission in the post-intervention group.

### *Pre-intervention documentation*

Key components of documentation were often absent in the pre-intervention period (Table 2). Specifically, hospital admission time and date were recorded 6% of the time, meeting location 14%, reason for the patient's lack of participation in the meeting was recorded at a rate of 34% and the Medical Treatment Decision Maker was recorded 10% of the time. A patient's premorbid function was recorded 22% of the time and a patient's resuscitation status was recorded in 22% of notes examined. Treatment options were recorded 78% of the time and the next steps were recorded 66% of the time. In addition, 68% of notes were recorded in the ICU specific software and 22% were recorded in handwritten notes.

### *Post-intervention documentation*

The electronic pro forma record was used 78% of the time compared with 16% recorded elsewhere and 6% with no record ( $p < 0.001$ ). The intervention was associated with significant improvements ( $p < 0.001$  unless otherwise stated) in where the documentation was recorded, hospital admission date/time, meeting location, the reason that patients were absent from the meeting, the Medical Treatment Decision Maker (MTDM),

the patient's resuscitation status, and treatment options discussed ( $p = 0.005$ ) (Table 2).

At least one family meeting was documented in both the pre- and post-intervention cohorts in the majority of patients. Among the patients in the pre-intervention group 46 (92%) had a family meeting recorded compared with 47 (94%) in the post-intervention group ( $p = 0.7$ ).

### *Documentation of details of deaths that occurred in the ICU*

The characteristics surrounding patient deaths was similar in both phases of the QI project (Table 3). No patient in the post-intervention group were classified as 'for cardiopulmonary resuscitation' (CPR). Exactly the same proportion were receiving active management and comfort management in both groups. In addition, there was no significant difference in time to instituting comfort care, or to the time from comfort care to death between the two groups.

### *Documentation in the post-intervention period*

Post hoc analysis of the post-intervention group identified a trend towards more thorough documentation with those that used the electronic pro forma record compared with those that did not (Table 4). Significant improvements were observed in the recording of hospital admission date/time ( $p < 0.001$ ), meeting location ( $p < 0.001$ ), reason for patient absence ( $p < 0.001$ ), questions answered ( $p = 0.04$ ), family preference documentation ( $p = 0.009$ ) and family understanding documentation ( $p < 0.001$ ). The patient's premorbid function was recorded in 69% of notes using the pro forma record compared with 14% using the in-house EMR ( $p < 0.001$ ). Prognosis was recorded in 97% of pro forma record based notes compared to 86% using the in-house record ( $p < 0.001$ ). There were trends towards improved documentation in all other categories in the post-intervention group except the ICU admission date/time and the acknowledgement of the presence of a patient's Advance Care Plan (ACP).

## **Discussion**

The Australian Commission on Safety and Quality in Health Care has highlighted quality of documentation as a key safety and quality issue. The National Consensus Statement on Essential Elements for Safe High-Quality End of Life Care

**Table 1.** Baseline characteristics.

	Pre-intervention Nov '18 to Mar '19 N = 50	Post-intervention Aug '19 to Mar '20 N = 50	p value
Age in years, median (IQR)	67.5 (56, 74)	70 (61, 78)	0.35
System			
Cancer	2 (4%)	3 (6%)	0.84
Cardiac	11 (22%)	11 (22%)	
Digestive	4 (8%)	8 (16%)	
Neurological	14 (28%)	11 (22%)	
Other	7 (14%)	8 (16%)	
Renal	2 (4%)	3 (6%)	
Respiratory	7 (14%)	5 (10%)	
Trauma	3 (6%)	1 (2%)	
Comorbidity			
Hypertension	22 (44%)	17 (34%)	0.31
Diabetes	15 (30%)	19 (38%)	0.40
Chronic lung disease	2 (4%)	7 (14%)	0.081
Chronic heart failure	0 (0%)	7 (14%)	0.006
Chronic kidney disease	7 (14%)	13 (26%)	0.13
Chronic liver disease	3 (6%)	7 (14%)	0.18
Malignancy	7 (14%)	11 (22%)	0.30
No. of comorbidities, median (IQR)	1 (0, 2)	1 (1, 3)	0.054
Hours from hospital to ICU admission, median (IQR)	4.8 (1.5, 10.5)	10.5 (4.0, 124.5)	0.019
Admitting unit			
Medical	35 (70%)	35 (70%)	1.00
Surgical	15 (30%)	15 (30%)	
ICU, intensive care unit; IQR, Interquartile range.			

recommends that 'Systems should be in place to facilitate appropriate documentation about end-of-life care, and to reduce the burden of documentation and data collection when possible'.<sup>3</sup>

We conducted a QI project to test the hypothesis that the introduction of a pro forma record increased the capture of key components discussed in family meetings in our ICU. The use of a pro forma record combined with an education and sample training programme was associated with meaningful and statistically significant improvements in the recording of key information

discussed in family meetings (Table 2). The use of the electronic pro forma record also trended towards capturing more key components than alternative forms of documentation (Table 4).

Several studies have shown that a template can improve capture of data in documentation which improves qualities of documentation.<sup>13,14</sup> This QI project continues the theme that a template improves the quality of key components of documentation in family meetings within a critical care unit.<sup>15</sup> There may be additional education about key elements in a family meeting when physicians use the pro forma record. In

**Table 2.** Details of family meeting documentation components.

	Pre-intervention Nov '18 to Mar '19 N = 50	Post-intervention Aug '19 to Mar '20 N = 50	p value
Documented family meeting	46 (92%)	47 (94%)	0.70
Where was the meeting recorded			
Electronic in-house ICU software	34 (68%)	7 (14%)	<0.001
Electronic & handwritten	1 (2%)	0 (0%)	
Handwritten	11 (22%)	1 (2%)	
Millennium PowerChart	0 (0%)	39 (78%)	
Hospital admission date/time	3 (6%)	42 (84%)	<0.001
ICU admission date/time	33 (66%)	33 (66%)	0.87
Meeting location	7 (14%)	35 (70%)	<0.001
Attendees	43 (86%)	46 (92%)	0.30
Reason for patient absence	17 (34%)	36 (72%)	<0.001
MTDM	5 (10%)	22 (44%)	<0.001
Advance care plan	19 (38%)	23 (46%)	0.46
Patient's premorbid function			
Independent	5 (10%)	13 (26%)	0.085
Partially dependent	6 (12%)	10 (20%)	
Fully dependent	0 (0%)	1 (2%)	
Not recorded	35 (70%)	23 (46%)	
Problem list	39 (78%)	43 (86%)	0.32
Patient's prognosis			
Poor to fair	1 (2%)	1 (2%)	0.45
Poor	6 (12%)	12 (24%)	
Morbid to poor	11 (22%)	6 (12%)	
Morbid	27 (54%)	25 (50%)	
Not recorded	1 (2%)	3 (6%)	
Patient's resus status	11 (22%)	27 (54%)	<0.001
Treatment options discussed	39 (78%)	47 (94%)	0.005
Questions addressed	30 (60%)	37 (74%)	0.15
Conflict recorded	7 (14%)	9 (18%)	0.62
Lack of agreement with teams recorded	0 (0%)	2 (4%)	0.16
Family preference	32 (64%)	39 (78%)	0.13
Family understanding	44 (88%)	43 (86%)	0.41
Next steps	33 (66%)	40 (80%)	0.12
ICU, intensive care unit; MTDM, Medical Treatment Decision Maker.			

this context, repeated use of the pro forma record may act as a prompt to document elements discussed in future meetings or even as a discussion outline.

Of the patients who died during the project period, anticipation of death was documented in 86% and 92% of cases in the pre- and post-period



**Table 3.** Resuscitation status and end of life.

	Pre-intervention Nov '18 to Mar '19 N = 50	Post-intervention Aug '19 to Mar '20 N = 50	p value
Resus status at ICU admission			
For CPR	23 (46%)	21 (42%)	0.19
For Active Treatment Excluding CPR/Intubation	11 (22%)	16 (32%)	
For Comfort Care	5 (10%)	0 (0%)	
Not recorded	11 (22%)	13 (26%)	
Resus status after meeting			
For CPR	1 (2%)	1 (2%)	0.17
For Active Treatment Excluding CPR/Intubation	7 (14%)	10 (20%)	
For Comfort Care	36 (72%)	27 (54%)	
Not recorded	2 (4%)	9 (18%)	
Resus status at death			
For CPR	3 (6%)	0 (0%)	0.008
For Active Treatment Excluding CPR/Intubation	5 (10%)	15 (30%)	
For Comfort Care	42 (84%)	35 (70%)	
Death expected?	43 (86%)	46 (92%)	0.48
CPR performed?	3 (6%)	0 (0%)	0.079
Active or comfort measures			
Active	7 (14%)	7 (14%)	1.00
Comfort	43 (86%)	43 (86%)	
Hours from family meeting to comfort care, median (IQR)	4.5 (1, 24)	5.8 (0.8, 25.5)	0.86
Hours from comfort care to death, median (IQR)	1.0 (0.5, 4.0)	1.5 (0.5, 5.5)	0.58
CPR, cardiopulmonary resuscitation; ICU, intensive care unit; IQR, Interquartile range.			

respectively which is consistent with comparable units in Australia (85.7%).<sup>16</sup> In our project, documented family meeting discussions with the family occurred in 92% and 94% of examined records, compared with 90% which Bloomer *et al.*<sup>16</sup> reported in 2010.

One of the key findings showed a meaningful increase in the recording of the MTDM. This QI project was completed entirely after the commencement of the Medical Treatment Planning and Decisions Act 2016 (Vic) which outlines the legal

requirement of searching out MTDMs and ACPs.<sup>17</sup> The family meeting notes using the supplied pro forma record improved documentation of the MTDM and likely enhanced continuity of care for patient care; this potentially ensures better alignment between patient wishes, their documented goals of care and the subsequent clinical course.

Interestingly, although the documentation of resuscitation status was significantly improved with the pro forma record, there was no significant difference between resuscitation status of the

**Table 4.** Details of post-intervention group (Aug '19 to Mar '20) documentation by record location.

	<b>Millennium PowerChart N = 39</b>	<b>In-house ICU software N = 7</b>	<b>Handwritten N = 1</b>	<b>p value</b>
Hospital admission time/date	39 (100%)	3 (43%)	0 (0%)	<0.001
ICU admission time/date	26 (67%)	6 (86%)	1 (100%)	0.48
Meeting location	34 (87%)	1 (14%)	0 (0%)	<0.001
Attendees	39 (100%)	6 (86%)	1 (100%)	0.054
Reason for patient absence	34 (87%)	1 (14%)	1 (100%)	<0.001
MTDM identified	20 (51%)	1 (14%)	1 (100%)	0.11
Patient's ACP recorded	18 (46%)	4 (57%)	1 (100%)	0.51
Patient's premorbid function				
Independent	13 (33%)	0 (0%)	0 (0%)	<0.001
Partially dependent	9 (23%)	1 (14%)	0 (0%)	
Fully dependent	1 (3%)	0 (0%)	0 (0%)	
Not recorded	16 (41%)	6 (86%)	1 (100%)	
Problem list	37 (95%)	5 (71%)	1 (100%)	0.12
Patient's prognosis				
Poor to fair	1 (3%)	0 (0%)	0 (0%)	<0.001
Poor	10 (26%)	2 (29%)	0 (0%)	
Morbid to poor	4 (10%)	2 (29%)	0 (0%)	
Morbid	23 (59%)	2 (29%)	0 (0%)	
Not recorded	1 (3%)	1 (14%)	1 (100%)	
Treatment options discussed	39 (100%)	7 (100%)	1 (100%)	1.00
Questions answered	33 (85%)	4 (57%)	0 (0%)	0.040
Conflict recorded	8 (21%)	1 (14%)	0 (0%)	0.82
Lack of agreement with home teams recorded	2 (5%)	0 (0%)	0 (0%)	0.81
Family preferences	35 (90%)	3 (43%)	1 (100%)	0.009
Family understanding	38 (97%)	5 (71%)	0 (0%)	<0.001
Next steps	34 (87%)	5 (71%)	1 (100%)	0.51
ACP, Advance Care Plan; ICU, intensive care unit; MTDM, Medical Treatment Decision Maker.				

patients on arrival to ICU, after the family meeting or at death. It is likely these conversations regarding goals of care were occurring during family meetings throughout the pre and post intervention period, however the documentation of these important measures improved with the pro forma record (Table 2).

Strengths of this QI project include its simplicity and low-cost nature. The generalisability is limited by the use in a single clinical area of a single centre and the short intervention period. Although the documentation is completed by an intensive care physician including a physician in training in our institution, the standardised format of the pro



forma record would be amenable to completion by non-physician practitioner. The results only represent a single document with relatively small sample size. We reported minor differences in the baseline characteristics in the two cohorts including a lower average age and frequency of digestive disease in the pre-intervention group. It is unlikely that such differences would have influenced or modified documentation practices or could account for the improved documentation reported.

Further studies need to address whether improved documentation improves patient- or family-centred outcomes, and whether the improved documentation is sustainable. Following this project, further quality improvement cycles will need to be completed with further iteration and refinement of the pro forma record. During the intervention period the pro forma record was solely for use by the ICU department and had not been used by the rest of the hospital. Rollout and education to the rest of the hospital and then other ICUs will need to occur.

In conclusion, we found the implementation of a pro forma record for documenting end-of-life family meetings was associated with improved capture of key components of discussion in the medical record. Post-intervention documentation demonstrated an improvement in certain components of a family meeting note. Further studies are required to assess whether improvements to documentation quality are sustainable and whether there are any impacts to patient- or family-centred outcomes.

## Declarations

### *Ethics approval and consent to participate*

The QI project was submitted to the hospital Human Research Ethics Committee (HREC) at the project hospital for data collection and audit (approval number LNR/19/Austin/43). The project was a retrospective before and after intervention audit and did not collect any identifiable patient information, involved only the collection of information documented as part of routine care, and was not associated with any changes in patient care, which were completely at the discretion of the treating clinician. In accordance with local jurisdictional frameworks, the ethics committee considers such criteria to constitute audit

or quality improvement, and as such, informed written patient consent was not required and was waived by the committee.

### *Consent for publication*

Not applicable.

### *Author contributions*

**Aaron C. Kennedy:** Conceptualisation; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Validation; Visualisation; Writing – original draft; Writing – review & editing.

**Daryl A. Jones:** Conceptualisation; Formal analysis; Investigation; Methodology; Project administration; Supervision; Validation; Visualisation; Writing – original draft; Writing – review & editing.

**Glenn M. Eastwood:** Conceptualisation; Methodology; Project administration; Resources; Writing – review & editing.

**Duncan Wellington:** Conceptualisation; Project administration; Software; Writing – review & editing.

**Emily See:** Formal analysis; Writing – review & editing.

**Jane E. Lewis:** Conceptualisation; Formal analysis; Investigation; Methodology; Project administration; Supervision; Validation; Visualisation; Writing – original draft; Writing – review & editing.

### *Acknowledgements*

None.

### *Funding*

The authors received no financial support for the research, authorship, and/or publication of this article.

### *Competing interests*

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### *Availability of data and materials*

The data for this study are not available for sharing as under the HREC requirements for ethics approval, such data are only accessible by staff employed at our institution.

**ORCID iD**

Aaron C. Kennedy  <https://orcid.org/0000-0002-1824-4113>

**References**

1. Reed M and Harding KE. Do family meetings improve measurable outcomes for patients, carers, or health systems? A systematic review. *Aust Soc Work* 2015; 68: 244–258.
2. Gambhir HS, Goodrick S, Dhamoon A, *et al.* Impact of structured and scheduled family meetings on satisfaction in patients admitted to hospitalist service. *J Patient Exp* 2021; 8: 1–5.
3. Australian Commission on Safety Quality in Health Care. National consensus statement: essential elements for safe and high-quality end-of-life care, 2015, <https://www.safetyandquality.gov.au/sites/default/files/migrated/National-Consensus-Statement-Essential-Elements-for-safe-high-quality-end-of-life-care.pdf>
4. Nelson JE, Walker AS, Luhrs CA, *et al.* Family meetings made simpler: a toolkit for the intensive care unit. *J Crit Care* 2009; 24: 626.e7–626.e14.
5. Bernacki R, Hutchings M, Vick J, *et al.* Development of the serious illness care program: a randomised controlled trial of a palliative care communication intervention. *BMJ Open* 2015; 5: e009032.
6. Carlet J, Thijs LG, Antonelli M, *et al.* Challenges in end-of-life care in the ICU. Statement of the 5th International Consensus Conference in Critical Care: Brussels, Belgium, April 2003. *Intensive Care Med* 2004; 30: 770–784.
7. Pham TL and Garland A. Quality of end-of-life communication in 2 high-risk ICU cohorts: a retrospective cohort study. *CMAJ Open* 2021; 9: E570–E575.
8. Brooks LA, Manias E and Nicholson P. Barriers, enablers and challenges to initiating end-of-life care in an Australian intensive care unit context. *Aust Crit Care* 2017; 30: 161–166.
9. Kohen SA and Nair R. Improving hospital-based communication and decision-making about scope of treatment using a standard documentation tool. *BMJ Open Qual* 2019; 8: e000396.
10. Nelson JE, Bassett R, Boss RD, *et al.* Models for structuring a clinical initiative to enhance palliative care in the intensive care unit: a report from the IPAL-ICU Project (improving palliative care in the ICU). *Crit Care Med* 2010; 38: 1765–1772.
11. Zelko E, Ramsak Pajk J and Skvarc NK. An innovative approach for improving information exchange between palliative care providers in Slovenian primary health—a qualitative analysis of testing a new tool. *Healthcare* 2022; 10: 216.
12. Faiman B. Quality improvement projects and clinical research studies. *J Adv Pract Oncol* 2021; 12: 360–361.
13. Grogan EL, Speroff T, Deppen SA, *et al.* Improving documentation of patient acuity level using a progress note template1 1No competing interests declared. *J Am Coll Surg* 2004; 199: 468–475.
14. Lamba S, Berlin A, Goett R, *et al.* Assessing emotional suffering in palliative care: use of a structured note template to improve documentation. *J Pain Symptom Manage* 2016; 52: 1–7.
15. Pasricha V, Gorman D, Laothamatas K, *et al.* Use of the serious illness conversation guide to improve communication with surrogates of critically ill patients. A pilot study. *ATS Sch* 2020; 1: 119–133.
16. Bloomer MJ, Tiruvoipati R, Tsiripillis M, *et al.* End of life management of adult patients in an Australian metropolitan intensive care unit: a retrospective observational study. *Aust Crit Care* 2010; 23: 13–19.
17. Parliament of Victoria. Medical Treatment Planning and Decisions Act 2016; 2016, <https://www.health.vic.gov.au/patient-care/medical-treatment-planning-and-decisions-act-2016>