Australian Critical Care

A National Position Statement on Adult End-of-Life Care in Critical Care --Manuscript Draft--

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Corresponding Author:	Melissa J Bloomer, PhD, MN(Hons), MPET, MNP, Crit. Care Cert., BN, RN Deakin University Burwood, VIC AUSTRALIA	
First Author:	Melissa J Bloomer, PhD, MN(Hons), MPET, MNP, Crit. Care Cert., BN, RN	
Order of Authors:	Melissa J Bloomer, PhD, MN(Hons), MPET, MNP, Crit. Care Cert., BN, RN	
	Kristen Ranse, PhD	
	Ashleigh E Butler, PhD	
	Laura A Brooks, MN	
Abstract:	Patient death in critical care is not uncommon. Rather, the provision of end-of-life care is a core feature of critical care nursing, and yet not all nurses feel adequately prepared for their role in the provision of end-of-life care. For this reason, the Australiar College of Critical Care Nurses (ACCCN) supported the development of a position statement to provide nurses with clear practice recommendations to guide the provision of end-of-life care, and which reflect the most relevant evidence and information associated with end-of-life care for adult patients in Australian critical care settings. A systematic literature search was conducted between June and July, 2020 in CINAHL Complete, Medline and EMBASE databases to locate research evidence related to key elements of end-of-life care in critical care. Preference was given to the most recent Australian or Australasian research evidence, where available. Once the practice recommendations were drafted in accordance with the research evidence, a clinical expert review panel was established. The panel comprised of clinically-active ACCCN members with at least 12 months of clinical experience. The clinical expert review panel participated in an eDelphi process to provide face validity for practice recommendations, and a subsequent online meeting to suggest additional refinements and ensure the final practice recommendations were meaningful and practical for critical care nursing practice in Australia. ACCCN Board members also provided independent review of the position statement. This position statement is intended to provide practical guidance to critical care nurses in the provision of adult end-of-life care in Australian critical care settings.	
Response to Reviewers:	A 'Response to Reviewers' document has been uploaded as part of this revised submission	

27th May, 2021

Professor Marshall Editor in Chief Australian Critical Care

Dear Professor Marshall

Manuscript Number AUCC-D-21-00099

Thank you for the opportunity to review our submission titled **A National Position Statement on Adult End-of-Life Care in Critical Care** for consideration for publication in Australian Critical Care. We would like to thank the authors for their detailed feedback, which has been valuable in improving the manuscript.

The Position Statement has been reviewed and endorsed by the ACCCN Board, and published on the ACCCN website. On behalf of ACCCN, I have support from Rand Butcher, CEO to submit this version of the manuscript for publication in Australian Critical Care. This manuscript provides additional methodological detail, essential to understanding the process used in the development of the position statement.

This Position Statement is entirely the work of the named authors. The contribution of Board members and clinician experts has been acknowledged in the main document.

Kindest regards

dublamen

Dr Melissa J Bloomer Associate Professor of Nursing Deakin University m.bloomer@deakin.edu.au

Ph 03 9244 6080 or 0402 472 334

AUCC-D-21-00099: A National Position Statement on Adult End-of-Life Care in Critical Care Response to Reviewers

Reviewer 1 Authors' Response Thank you Reviewer #1: Thank you for the opportunity to review this manuscript. This is an important paper in terms of sharing the processes that led to the development of a national position statement for adult end-of-life care in Australian critical care settings as well as providing a set of 28 evidence-based practice recommendations. The publication of this position statement will be of relevance to the journal's readership and in particular to those nurse clinicians working in settings where best practice guidelines in this specialist area have been lacking.

There are, however, some improvements that can be made to enhance the scholarship of the paper, which I have outline below for consideration by the authors.

The sequencing of the paper does not in my view provide a coherent discussion about the staged processes used by which the evidencebased practice recommendations were identified. While the section 'Development Steps' outlines the four steps, only the literature review findings are discussed in detail. Seemingly, the four 'academic expert team' undertook the literature review that informed the draft Position Statement that was then emailed to the 'clinical expert panel' for the modified eDelphi survey. The manuscript, in its current form, fails to adequately address the strategies and procedures for identifying, recording and analysing the literature that underpinned the draft position statement - as well as the level of evidence upon which the recommendations where based. Vague terms used to describe the data collection such as 'most recent' research evidence was included and where 'newer' research evidence was unavailable 'older' research publications were used – did not provide a clear audit trail of the timeline parameters for the review. Further details regarding the method underpinning the evidence-based practice recommendations will enhance the strength of this national position statement.

Thank you for these thoughtful comments. Additional detail has been added to the Development Steps to better articulate the process from inception to completion. This includes providing detail about guidance provided by the ACCCN national board about the development steps, and justifying why critical care nurses participated in the process. For the 'clinical expert review panel' we have provided further clarification to explain that given that any nurse working in critical care may be required to care for a dying patient, irrespective of role, seniority or qualification, these nurses were considered expert. Further explanation has also been provided about the process of selection of papers for inclusion. Given our desire to prioritise Australian (or Australasian) evidence, we commenced the search by limiting to research evidence from the last ten years. Where evidence was sparse, we then included evidence from other countries until there was adequate evidence to inform the practice recommendations.

Whilst it is customary to undertake quality assessment for systematic reviews, this position statement was developed based on a literature review, for which quality assessment is not a routine feature. For this reason, and because we did not want to exclude any Australasian research on the basis of methodology, sample size or other similar factor, we chose not to undertake quality assessment.

Step 3 - the 'Establishment of clinical expert review panel' also needs further justification. Eligibility to participate on the panel was via an expression of interest and participants were required to be financial members of ACCCN, be working at least 0.5fte primarily in a clinical capacity (presumably in a critical care unit but this was not explicit) and have a minimum of 12 months critical care experience. I would have anticipated that for the establishment of a 'clinical expert panel' the criteria for participation would have been more rigorous for example the requirement of 5 years experience in a critical care setting and a post grad qualification in critical care (or equivalent). No descriptive demographic information was included about the panel, therefore it was difficult to determine if they met the generally accepted definition of 'expert' clinician (e.g. extensive knowledge, experience and qualification) that the term is usually applied to in the establishment of an expert panel in Delphi technique.

Additional detail has been provided to explain this. Whilst we acknowledge that the term 'expert' usually implies someone with higher-level knowledge and skills, in this case, the term was used to denote any ACCCN member with current clinical expertise. Given that any nurse working in critical care may be required to care for a dying patient, irrespective of role, seniority or qualification, any critical care nurse to meet the inclusion criteria was considered expert. Table 2 has now been included in the manuscript to describe members of the clinical expert review panel.

Can the authors revise the manuscript and provide greater clarity of the stages of this project that address the points provided above? Better linkages between sections of the paper will also assist readers to follow the iterative consensus-building approach used to develop this important position statement. The addition of a flow diagram of the method used to systematically review the literature and provide an audit trail of the technique used will also enhance the paper.

Thank you for this suggestion. Figure 1 has been created to demonstrate the process used in the development of this position statement

The authors might also wish to consider adding a discussion section outlining the gaps in current research evidence related to end-of-life care in critical care settings arising from their literature review. This would be of significant benefit for researchers with an interest in this area. Annotating references to the literature for each Practice Recommendation was a helpful addition for readers to track the literature supporting the recommendations.

Thank you for this suggestion. In response, we have added Discussion and Conclusion sections that accurately reflect the gaps in research evidence, and outcome of the position statement.

Clearly, the development of this position statement was a highly relevant and worthy project. It's translation to a manuscript, however, needs to be presented in a manner that would allow the readership to follow the logical decision trail of each phase - culminating in the position statement.

Thank you

Reviewer 2	Authors' response
A worthwhile piece of research that is	Thank you
contributing to knowledge translation: a	
position statement on Adult end-of-life care	
provides a care framework for critical care	
nurses to ensure that both patients and families	
receive optimal care during and after the dying	
process, and that the nurse's well-being is also	
considered.	
There are no issues with the paper's structure	
or bibliography. Comprehensive bibliography.	
The main criticism is with the paper's syntax -	Amended.
minor overall - some of the sentences are very	
long and either need breaking up or improved	
punctuation.	
Abstract:	
P1	
Line 12 - comma after 'core feature of critical	
care nursing, and yet not all nurses'	
Line 19 - 'to guide the provision of end-of-life	Amended.
care, and which reflects the most relevant'	
Lines 28/29 - End sentence after 'key elements	Amended.
of end-of-life care in critical care. Preference	
was given to'	
Line 33 - end sentence after 'a clinical expert	Amended.
panel was established. The panel comprised of	
clinically-active Clinical experience. This	
clinical expert review panel' Adda comma	
after 'practice recommendations, and a	
subsequent'	
P2	Amended.
Introduction	
Line 5 &8, word order - ie 'The purpose of this	
position statement is to provide critical care	
nurses specific practice recommendations to	
support the facilitation'	
Line 18 change 'related' to 'that relate to'	Amended.
Line 20/32 - This sentence is very long -	Amended.
consider removing 'end-of-life from	
'pharmacological management' and 'culturally	
sensitive communication and care' - already	
marked as end-of-life considerations from	
previous sentence.	
Line 35/37 -comma after 'informal role-	Amended.
modelling, as well as supported' and comma	
after 'individual readiness, are essential'.	
P3	Amended.
Line2/3 comma after 'body after their death,	
and typically'	

	T
Development steps	Amended.
1. Creation of a team	
Line 23/25 - insert was - 'and was also clinically	
relevant.' change last part of sentence to 'to	
guide its development.' - ie remove the Position	
Statement as already at the beginning of the	
sentence.	
P4 Establishment of clinical research panel Line	Amended.
26/28 - move 'was advertised in the ACCCN	
newsletter' to after 'part of a clinical expert	
research panel was advertised in the ACCCN	
newsletter, via an'	
Paragraph Lines 41-58 - should there be a	This has been amended to improve clarity.
definition for I-CVI? There is one for S-CVI - p5.	·
Line 53-57 - define the measure 0.80 - add 'at	
or above 0.80, the (measure/percentage, or	
other term) considered satisfactory for I-CVI'.	
P5	Amended.
Line 13/15 - change to 'asked to provide face	
validity, with suggested additions'	
Line 17/18 - word position in sentence - move	Amended.
'for discussion' - 'survey were presented for	7
discussion during the online meeting.'	
Review by ACCCN Board Members	Amended.
Lines 35/37 - change to 'review of the Position	, interrocear
Statement and provided recommendations'	
P6 Family-Centred Care	Amended.
Line 5/7 - change first to initially -	
'communication initially directed towards	
identified, open flexible visiting hours, specific	
consideration, and the provision'.	
Line 12 'care ensures that care is	Amended.
individualised'	
Line 17/17 - move 'to ensure accurate	Amended.
communication' - 'this includes the use of	
professional interpreters to ensure accurate	
communication where language barriers exist'.	
Line 24 - 'specific knowledge and skills that	Amended.
include highly-developed'	
Line 24/27 - delete 'This includes' Start	Amended.
sentence with Respect for diverse customs,	
values and beliefs is required in order to'	
Line 41 - comma after 'and non-verbal	Amended.
communication, are key features'	
Line 46 - delete 'to families' and divide into 2	Amended.
sentences - change sentence to - 'is important.	
It not only contributes to family satisfaction,	
but also provides'	
P7	Amended.
Line 7 - comma after 'memories, and aid family	/ included.
coping.'	
coping.	

	,
Line 12/17 - Delete 'Hence' 'The use of	Amended.
mementos, therefore, should be	
consideredand culture, and the timing of	
when'.	
Line 22/27 - 'over their young age, potential	Amended.
infection control issues'	
Line 27/34 - Delete 'However' - begin with	Amended.
'Being able to see their unwell family member,	
however, may help, reduce any	
misconceptions'	
Line 34/41 - This sentence is a bit clumsy with	Amended to aid clarity.
too many commas - could be reworded to	
strengthen point	
Line 46 - is the word 'developed' necessary	Amended.
here?	
Line 49 - Full stop after 'end-of-life care. It can	Amended.
be a significant source of stress'	
Line 56 - change 'feeling' to 'feel'	Amended.
Line 58 - delete 'Hence' - start sentence with 'It	Amended.
is important that' (P8)	
P8 Communication and Decision-making	Amended.
Line 8/10 - change word order - 'Effective	
communication and the provision of	
information are key components identified as	
critically important to end-of-life care'	
Is the use of 'key' needed here? The word	
features frequently in this section and reads as	
repetitious.	
Could it be 'Effective communication and the	
provision of information have been identified	
as critically important to end-of-life care'.	
Line 15 start sentence with 'Key for families is	Amended.
the desire advanced health directive.'	
Line 20 - change to 'Bedside communication	Amended.
with the family provides time for them to ask	
questions'	
Line 24/27 - confused sentence - not sure of	Amended.
meaning 'emphasising support and caring'.	
Line 37/39 - 'tailored to an individual family	Amended.
member's needs' or 'tailored to individual	
family members' needs' - 'and be accompanied	
by emotional support'.	
Line 39 - change 'was' to 'is'	Amended.
Line 45 - add 'also' to 'formal family meetings	Amended.
are also key to'	
Line 50/57 - commas after 'For family	Amended.
members, who may feel' 'the difficult nature	
of the conversations, and lack of'	
P9 Line 0/2 - change sentence structure ie.	Amended.
'Given critical care nurses establish a rapport	

	,
with families, their inclusion in family meetings	
is central to maintaining family support.'	
Line 15 - coma after 'hospice or home, and	Amended.
/or'	
Patient Comfort and Family Support	Amended.
Line 27 - add 'distress, through both	
pharmacological'	
Line 35 - Full stop after 'psychosocial support.'	Amended.
New sentence 'These are all considered	
essential'	
Line 37/47 - Too long a sentence -needs to be	Amended.
broken up for clarity and intent ie 'the	
patient's family. This will help to ensure a	
shared understanding of the plan of care,	
ascertain, whether or not the family wish to	
be present,for the family, and to encourage	
the family to personalise the space.'	
P10 Organ Donation	Amended.
Line 9/12 - change sentence order 'organ	
donation conversations, specifically-trained	
'organ donation coordinators will lead	
communication'	
Line 14 - 'organ donor continues and	Amended.
includes' Delate comma after 'information'	
'information that is communicated'	
Care after death	Amended.
Is it necessary to parenthesise 'before death'	
here - as this can be included in the section on	
cultural sensitivity	
P11, Line 7 - comma after 'self-care activities,	Amended.
such as exercise'	
Practice Recommendations	Amended.
Line 27 add 'and' - 'and in accordance with'	
P14	
Line 37/38 point 23 comma after 'procedures,	Amended.
eg. viewing'	
Line 51 - point 25 - comma after 'colleagues,	Amended.
including the'	
Line 56 - point 26 - comma after 'services, such	Amended.
as'	
	<u> </u>

Title

A National Position Statement on Adult End-of-Life Care in Critical Care

Authors

Melissa J Bloomer*^{1,2,3,4,5} PhD, MN(Hons), MPET, MNP, Crit. Care Cert., BN, RN ORCID ID 0000-0003-1170-3951

Kristen Ranse^{4,5,6,7} PhD, M(Crit. Care), Grad Dip (Crit. Care), BN(Hons), RN ORCID ID 0000-0003-0196-9529

Ashleigh Butler^{8,9} PhD, MN, Grad Cert (Crit. Care), BN, RN ORCID ID 0000-0001-8682-2854

Laura Brooks^{1,2,3,5} MN, BN, RN ORCID ID 0000-0002-5884-0366

- 1. School of Nursing and Midwifery, Deakin University, 1 Gheringhap Street, Geelong, Victoria, 3220, Australia
- 2. Centre for Quality and Patient Safety Research, Deakin University, 1 Gheringhap Street, Geelong, Victoria, 3220, Australia
- 3. Institute for Health Transformation, Deakin University, 1 Gheringhap Street, Geelong, VIC, 3220, Australia
- 4. Research Advisory Panel, Australian College of Critical Care Nurses, Surrey Hills, VIC, 3127, Australia
- 5. End of Life Advisory Panel, Australian College of Critical Care Nurses, Surrey Hills, VIC, 3127, Australia
- 6. School of Nursing and Midwifery, Griffith University, Queensland, Australia
- 7. Menzies Health Institute Queensland, Griffith University, Queensland, Australia
- 8. Austin Health Clinical School, School of Nursing and Midwifery, La Trobe University, Victoria, Australia
- 9. The Louis Dundas Centre for Children's Palliative Care, UCL Great Ormond Street Institute for Child Health, London, United Kingdom

*Corresponding Author Address: Building W, Deakin University, 221 Burwood Highway, Burwood, VIC, 3125, Australia

CRediT Author Statement

Melissa Bloomer: Conceptualisation, Methodology, Writing – Original Draft, Review and Editing, Supervision, Project Administration. Kristen Ranse: Conceptualisation, Methodology, Formal Analysis, Writing – Original Draft, Review and Editing. Ashleigh Butler: Conceptualisation, Methodology, Writing – Original Draft, Review and Editing. Laura Brooks: Conceptualisation, Methodology, Writing – Original Draft, Review and Editing

Table 1. Search Strateg	3)	1
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CCU bereav* child* Critical Care comfortDeath communicat* Dying End-of-Life cultur* "decision making" End-of-Life Care educat* ICU family **Intensive Care** family-cent*red AND Palliative Care grief keepsake memento "memory making" palliat* "place of death" presen* visit*

Table 2. Demographics – Clinical Expert Review Panel (N=10)

Variable	
	Mean (Range)
Years in Critical Care	9 (3-15)
Highest Qualification	n (%)
Master	4 (40)
Graduate Diploma	2 (20)
Graduate Certificate	4 (40)
Completed Postgraduate Critical Care training	
Yes	8 (80)
No	2 (20)
State	
Victoria	4 (40)
New South Wales	3 (30)
Queensland	2 (20)
Australian Capital Territory	1 (10)

Conflict of Interest

There are no competing/conflicts of interest

A NATIONAL POSITION STATEMENT ON ADULT END-OF-LIFE CARE IN CRITICAL CARE

ABSTRACT

Patient death in critical care is not uncommon. Rather, the provision of end-of-life care is a core feature of critical care nursing, and yet not all nurses feel adequately prepared for their role in the provision of end-of-life care. For this reason, the Australian College of Critical Care Nurses (ACCCN) supported the development of a position statement to provide nurses with clear practice recommendations to guide the provision of end-of-life care, and which reflect the most relevant evidence and information associated with end-of-life care for adult patients in Australian critical care settings. A systematic literature search was conducted between June and July, 2020 in CINAHL Complete, Medline and EMBASE databases to locate research evidence related to key elements of end-of-life care in critical care. Preference was given to the most recent Australian or Australasian research evidence, where available. Once the practice recommendations were drafted in accordance with the research evidence, a clinical expert review panel was established. The panel comprised of clinically-active ACCCN members with at least 12 months of clinical experience. The clinical expert review panel participated in an eDelphi process to provide face validity for practice recommendations, and a subsequent online meeting to suggest additional refinements and ensure the final practice recommendations were meaningful and practical for critical care nursing practice in Australia. ACCCN Board members also provided independent review of the position statement. This position statement is intended to provide practical guidance to critical care nurses in the provision of adult end-of-life care in Australian critical care settings.

Keywords: critical care; death; dying; end-of-life care; intensive care

INTRODUCTION

Death in critical care is not uncommon.¹ The provision of end-of-life care is a core feature of critical care nursing.² The purpose of this Position Statement is to provide critical care nurses with specific practice recommendations to support the facilitation of high-quality end-of-life care.

Having an educated and skilled nursing workforce is essential to providing high-quality end-of-life care.³ Given not all nurses are adequately prepared for their role in providing end-of-life care,^{4,5} clear practice recommendations are essential to guiding care. However, recommendations for practice must also be supported by ongoing targeted education programs for nurses, that relate to end-of-life care of the patient and the family.⁶ Education priorities include processes for withdrawing life-sustaining treatments,^{7,8} the use of supplemental oxygen, hydration and nutrition support, limb exercises and pharmacological management,² organ donation criteria, processes and supports for donor families,⁹ culturally-sensitive communication and care,^{4,5,10} the nature and scope of bereavement support measures for family,¹¹⁻¹³ nurse self-care^{14,15} and debriefing.⁷ In addition to theoretical education, opportunities for clinical support at the bedside and for nurses to learn through mentoring, formal and informal role modelling, ^{6,16,17} and supported clinical exposure to end-of-life care situations at a pace commensurate with the nurse's individual readiness, ¹⁸ are essential.

AIM

To develop a Position Statement that reflected the most relevant evidence and information related to end-of-life care for adult patients in Australian critical care practice settings.

Definitions and Terminology

For the purposes of this Position Statement, the term **critical care** will be used to refer to critical care and intensive care, a speciality and an area specifically staffed and equipped for the continuous care of critically ill patients.¹⁹ **End-of-life care** "includes physical, spiritual and psychosocial assessment,"

and care and treatment delivered by health professionals...includes support of families and carers, and care of the patient's body after their death", ²⁰ and typically refers to the last 12 months prior to death. ²¹ The term **family** is used to refer to "those who are closest to the patient in knowledge, care and affection. This may include the biological family, the family of acquisition (related by marriage or contract), and the family and friends of choice". ²² For this Position Statement, the term **nurse** is used to refer to all registered nurses working in critical care settings, including those with or without specialist critical care postgraduate education.

DEVELOPMENT STEPS

The Australian College of Critical Care Nurses (ACCCN) is a not for profit membership-based organisation representing critical care nurses across Australia.²³ The aims of ACCCN include the provision of leadership, representation, development and support for critical care nurses.²³ Inprinciple support was provided by the ACCCN National Board for the development of this Position Statement, with a request to involve ACCCN members with clinical currency as 'experts', as a way of ensuring the resultant Position Statement would be meaningful to practising critical care nurses, but also to provide a professional development opportunity for interested critical care nurses. The Position Statement was developed using a five step process.

1. Creation of academic expert team

In order to ensure the Position Statement was informed by research evidence and was also clinically relevant and meaningful, a staged process was used to guide its development. As a first step, ACCCN members with demonstrated expertise in end-of-life care research were invited to participate in the first stage of the Position Statement development. Four academics committed to undertaking a comprehensive review of the literature to guide the development of the Position Statement and practice recommendations.

2. Literature review

A literature search was conducted between June and July, 2020 in CINAHL Complete, Medline, and EMBASE to locate research evidence related to multiple key elements of end-of-life care in critical care. Medical Subject (MeSH) Headings or equivalent terms/phrases according to each database (e.g. CINAHL Subject Headings) for each element, and/or keywords were combined with 'critical care', 'intensive care', 'ICU', 'end-of-life care', 'palliative care', 'death', and 'dying' (Table 1). In addition to the papers retrieved in the original searches, a process of forward and backward chaining was undertaken to locate additional research evidence either cited by, and those citing papers retrieved in the original search.

(insert Table 1)

In developing this Position Statement, preference was given to Australian or Australasian research evidence from the last ten years, however older research publications were used where newer research evidence was not available or the newer evidence was insufficient on its own to inform practice recommendations. Similarly, international research publications were included where Australian or Australasian research evidence was sparse. Only research publications pertaining to adult populations, and published in English in peer-reviewed journals were included, and used to guide drafting of the practice recommendations. Publications were not assessed for quality; rather papers utilising any methodology and/or sample size were included, so long as the findings were considered to contribute to the development of practice recommendations. An a priori decision was made to not include other position statements and/or practice recommendations as in some cases, these are based wholly or in part on expert opinion or consensus, rather than research evidence.

3. Establishment of clinical expert review panel

An opportunity for critical care nurses to participate was advertised in the ACCCN newsletter, via an Expression of Interest process. To be eligible to participate, critical care nurses had to hold current financial membership of ACCCN, be working primarily in a clinical capacity (at least 0.5FTE), have a minimum of 12 months critical care experience, and experience with and interest in providing end-

of-life care. For the purposes of this process, given that any nurse working in critical care may be required to care for a dying patient, irrespective of role, seniority or qualification, these nurses were considered expert. A total of 11 applications were received, with ten applicants meeting the eligibility criteria. Participants had a mean of nine years (range 3-15 years) of experience in critical care, with eight of the ten participants reporting a postgraduate critical care qualification (Table 2)

The ten clinical experts were asked to commit to a two-stage process involving a modified eDelphi survey and online meeting. A copy of the draft Position Statement was sent via email, along with a link to a modified eDelphi survey, housed on the Qualtrics platform.²⁴ The purpose of the survey was to measure the relevance of each practice recommendation. A four-point scale was used, where 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant and 4 = highly relevant.²⁵⁻²⁸ Using the relevance ratings provided, the item-level content validity (I-CVI) of each practice recommendation was calculated by dividing the number of experts that rated the items as 3 or 4, by 10, the number of clinical experts. A I-CVI score at or above 0.80, considered satisfactory for I-CVI.^{27, 28} I-CVI ratings for the draft practice recommendations ranged from 0.70 to 1.00, with only two items scoring below 0.80.²⁶⁻²⁸ Overall content validity (S-CVI) was also determined by calculating the sum of I-CVI scores for all practice recommendations and then dividing by the total number of recommendations. The S-CVI for the practice recommendations was 0.94, with an S-CVI equal to or greater than 0.90 considered satisfactory.²⁶⁻²⁸

In both the eDelphi survey and online meeting, the clinical experts were asked to provide face validity, with suggested additions, deletions or modifications to the practice recommendations.

Results of the eDelphi survey were presented for discussion during the online meeting. The two practice recommendations that initially received an I-CVI of 0.70 were discussed and modified by consensus to achieve group agreement. This process ensured the final practice recommendations are meaningful and practical for critical care nursing practice in Australia.

4. Review by ACCCN Board Members

In order to ensure the Position Statement aligned with ACCCN objectives to provide practical and relevant guidance for critical care nurses, two members of the ACCCN National Board undertook an independent review of the Position Statement and provided recommendations for all sections of the Position Statement excluding the practice recommendations.

5. Approval by the ACCCN National Board

Feedback from the clinical expert review panel and ACCCN Board members was used to guide revision and refinement of the position statement, which was subsequently submitted to, and approved by the ACCCN National Board in February, 2021.

REVIEW OF THE LITERATURE

Critical care admissions account for 1.4% (or 161,000) of Australian hospital admissions every year,²⁹ and as many as 15% of these patients will die in critical care settings.³⁰ Patient death is most often the result of consensus regarding treatment futility,³¹ followed by a planned and deliberate withdrawal of life-sustaining treatment.³² Whilst a tension can exist between the provision of life-sustaining treatment in an environment with high mortality rates,³³ nurses are key to the provision of high-quality end-of-life care.⁸

Family-Centred Care

Family-centred care is widely accepted as an important component of patient care in critical care, and is of particular importance at the end of life.^{6,34} Family-centred care is demonstrated by timely, open and sensitive communication initially directed towards identified primary family spokespersons,⁵ open flexible visiting hours, specific consideration of family needs including facilities within or near the ICU, and the provision of bereavement supports.⁷

A patient and family-centred approach to end-of-life care ensures that care is individualised to respect the wishes of the patient and family, and is sensitive and adaptive to their cultural and religious customs, values and beliefs. To ensure accurate communication, this includes use of

professional interpreters where language barriers exist. ¹⁰ Given that culture and attitudes toward death and dying may differ between the critical care nurse, patient and family, ^{10,36} critical care nurses need specific knowledge and skills that include highly-developed intercultural communication skills. ^{10,37} Respect for diverse customs, values and beliefs³⁷ is required in order to provide culturally-sensitive care at the end of life. Cultural diversity, as it may pertain to clinicians as well as the patient and family, must also be considered during end-of-life care planning, decision making and physical care. ³⁶ Developing a relationship with, and caring for a dying patient's family is as important as caring for the patient. ³⁸⁻⁴² Sharing information about the patient's unique characteristics and personality as a way of emphasising personhood, ⁴³ the use of touch or physical presence, and alignment between verbal and non-verbal communication, are key features of the nurse-patient and nurse-family relationship. ^{39, 42, 44, 45} Ensuring family members are able to spend time at the bedside ⁴⁶ and hold vigil³⁸ is important and not only contributes to family satisfaction ⁴⁷ but also provides an opportunity for nurses to support and prepare family members for what may occur in the lead up to and after death. ³⁸ These actions contribute to family perceptions of a 'good death' ⁴² and satisfaction with care. ⁴⁷

The practice of collecting and creating mementos throughout a patient's stay in critical care, and after death⁴⁸⁻⁵⁰ aids family grieving, with one study suggesting that mementos are provided for up to 75% of all deceased patients in critical care settings.⁴⁹ Most mementos are provided to families by nursing staff after the patient has died⁴⁹ and can include patient photos, word clouds, ECG rhythm strips, patient diaries, handprints, locks of hair, and patient name bands.^{7,8,11,45,49-51} Mementos are thought to improve family understanding, create positive memories, and aid family coping.^{11,48-52} Yet not all families want or appreciate receiving mementos, as they may represent a negative memory or do not compare to other possessions of the deceased person.^{48,51,52} The use of mementos should be considered on an individual basis, with consideration of family dynamics and culture as well as the timing of when mementos are offered.^{51,52}

Consideration must also be given to the needs of child relatives of patients dying in critical care. Historically, child visitors in critical care units were discouraged due to concerns over their young age, potential infection control issues, and fears over the emotional and psychological impacts on the child's wellbeing. 53-57 Being able to see their unwell family member, however, may help to allay a child's imagined fears or anxieties, reduce any misconceptions about what is occurring, 57, 58 confirm their family member is safe, 56 provide an opportunity to talk to or touch their loved one, 57, 58 and decrease the child's feelings of helplessness and guilt. 55, 58 Where a child's visit to the ICU can be facilitated, preparing the child for what they might see and hear, and ensuring an opportunity for the child to ask questions and receive age-appropriate responses is key. 55, 59 Nurses can work with adult family members to support the visit and minimise distress. 55

For critical care nurses, the therapeutic relationship with family members of a dying patient can be a positive and rewarding aspect of end-of-life care. It can also be a significant source of stress and emotional distress. 38, 39, 41, 42, 60-62 For some nurses, managing family distress and grief and their own emotions 41 and disengaging from the relationship after the patient has died, can be difficult. 49 Many critical care nurses feel unprepared for this, 16 citing both a lack of guidelines and education to underpin the scope of the boundaries of their relationship with families. 16, 38, 39, 60 It is important that critical care nurses have access to opportunities for debriefing and counselling, where desired. 7

Communication and Decision-Making

Effective communication and the provision of information are identified as critically important to end-of-life care in critical care.^{5, 46, 63} Whilst talking with the patient should continue even when sedated or nearing death, nurses also communicate caring through the use of touch.⁶⁴ Key for families is the desire to be informed of what is going on and what to expect⁴⁶ and to have the opportunity to support the patient's previously expressed goals of care, even if not formally documented as part of an advance health directive. Bedside communication with family provides time for them to ask questions, seek clarification and understand what is going on and what to

expect.⁴⁶ In this way, communication may not only focus on explaining physiological changes in the patient but also on addressing family's information needs, demonstrating support for families.⁶⁶

With recognition that there is an 'art' to effective communication at the end of life, navigating family communication is a complex and multifaceted nursing activity.⁵ Verbal and nonverbal cues provide an indication of family readiness for information.⁵ Word choice and pace of communication should also be tailored to individual family member's needs and preferences,⁵ accompanied by emotional support.⁶⁷ Even when the news is bad, families can experience a sense of relief from receiving information that is sensitively delivered.⁴⁶

In addition to bedside communication, formal family meetings are also key to informing families about the patient's condition, prognosis⁶⁸ and goals of care.^{4,65} Most family meetings focus on the withdrawal or withholding of life-sustaining treatments.^{46,68,69} For family members, who may feel they know most about the patient's preferences, the opportunity to act as patient advocate in the discussions and decision-making process is important.⁴⁶ The timing of family meetings, the difficult nature of the conversations, and lack of consensus regarding treatment all pose challenges.⁷⁰ Given critical care nurses establish a rapport with families,⁶⁸ their inclusion in family meetings is central to supporting families.^{46,71}

More than 80% of deaths in ICUs are the result of a decision to withdraw or withhold life-sustaining treatment.⁷² Where family meetings include a decision to withdraw or withhold life-sustaining treatment, consideration for place of death is important. A single room in the critical care unit is preferred for family involvement and privacy.⁷³ However, consultation with the patient and family may include consideration of transfer to a ward, hospice or home. The proportion of transfer to a ward, hosp

Patient Comfort and Family Support

Promoting patient comfort is central to the nurse's role in the provision end-of-life care, ^{77, 78} and includes the management of pain, anxiety, dyspnoea, restlessness and psychological distress⁷⁷ through both pharmacological and non-pharmacological strategies. ¹⁸ Pharmacological strategies may include administration of antimuscarinics, analgesia and sedation ^{18, 42, 78} and/or use of oxygen. ⁴² Non-pharmacological strategies include removing unnecessary monitoring and equipment, repositioning, hygiene and psychosocial support. ^{18, 42} These are all considered essential aspects of providing a good death. ⁴²

In addition, nurses are able to act as a liaison between members of the interprofessional clinical team, the patient (where possible) and the patient's family. This will help to ensure a shared understanding of the plan of care⁸, ascertain preferences for the timing of withdrawal of life-sustaining treatment, whether family would like to be present in the lead up to patient death,⁷⁹ the provision, or at least perception of privacy for the family and encouraging family to personalise the space.⁴² It is also most important family members are prepared for what they may see or hear as the patient approaches death, such as changes to their breathing pattern or sounds, changes to level of consciousness, movement, temperature and colour.^{17,80}

Organ donation

In addition to caring for the dying patient and supporting their family, nurses have an essential role in supporting organ donation processes^{81, 82} whilst remaining impartial in relation to the donation decision.⁸³ Nurses may be involved in early assessment of patients for potential organ donation and liaison with organ donation teams.⁸¹ However given the potential for family distress associated with organ donation conversations,⁸¹ specifically trained organ donation coordinators will lead communication with family members. Nursing care for the potential organ donor continues, including ensuring adequate oxygenation and care for the person's organs, whilst also continuing to provide simple and clear information that is communicated with sensitivity at all times.⁸³

Care after death

After death, nursing care for the family continues. ^{12, 38} Nurses facilitate time for families to be with the deceased ^{12, 38} and perform or observe cultural and religious rituals before and after death. ^{10, 35, 37} Given that the psychological impact of death on family members is well recognised, ¹² supporting families in their immediate grief and bereavement is an essential component of care after death. ³⁸ One significant challenge in the provision of bereavement support is that clinicians may not feel adequately prepared to address the needs of bereaved families ³⁸ or be aware of the range of actions and services that can contribute to supporting family bereavement. Aside from brochures about external bereavement support services available to families after a death, ¹² bereavement support activities can also include a follow-up phone call to family members, a sympathy card sent on behalf of the critical care team, and memorial services run by the health service/hospital. ⁵² For those initiatives that involve making contact with bereaved family after death, the person who makes contact should be someone experienced with bereavement support. ⁵²

Nurse self-care

Whilst providing quality end-of-life care can be uniquely satisfying for nurses,⁷¹ this care does include a component of emotional work.¹³ The significance of death, and establishing and maintaining interpersonal relationships with family may be sources of emotional stress for the nurse.¹³ For this reason, self-care is essential for nurses to remain efficient and successful in their work.^{14,71} This includes processing their own feelings about providing end-of-life care, taking time to disconnect from the workplace grief and prioritising self-care activities, such as exercise and journaling.⁷¹ Seeking support from colleagues, reflecting, and participating in debriefing activities are recommended.^{14,71} Almost 90% of critical care nurses in Australia and New Zealand have access to formal debriefing opportunities after a death,⁸⁴ however this should be in addition to nurse leaders providing immediate support, responding to concerns for nurses, and ensuring that the time-intensive nature of providing end-of-life care is considered in unit workload allocation.⁷¹

PRACTICE RECOMMENDATIONS

The ACCCN endorse the following 28 end-of-life care practice recommendations aimed at ensuring optimal end-of-life care in critical care, and in accordance with local unit practice and resources, staffing and patient profiles.

To ensure family-centred care at the end of life, the nurse should:-

- Undertake and document an assessment of patient and/or family needs and preferences including:-
 - Ensuring key members of the patient's family, their relationship to the patient and contact details are documented⁵
 - Cultural preferences including cultural and religious beliefs and customs^{10, 35}
 - The need for social work or other support services to address additional family needs
 including those that may extend beyond the critical care unit e.g. family
 accommodation
 - Location of death e.g. remain in unit, transfer to hospice, ward, home⁷⁴ or on country⁷⁶
- 2. Orientate family to the critical care unit environment, available facilities and contact information⁷
- Seek family interest in and permission to involve religious/spiritual/cultural leaders for ongoing family support³⁷
- Seek family interest in the collection and provision of mementos throughout the critical care admission and after death^{11, 48, 49}
- 5. Facilitate privacy and space for the patient and/or family by offering to relocate the dying patient to a single room or larger bed space, where available 70
- 6. Support and facilitate the visit of children by working with parents to:-
 - Prepare children for what they might see, hear, feel, and smell^{55, 59}

 Encourage and support children to ask questions, with information given in a sensitive and age appropriate way^{55, 59}

To ensure optimal communication and decision-making, the nurse should:-

- 7. Undertake and document an assessment of patient and family needs and preferences including:-
 - Readiness for information through verbal and non-verbal cues⁵
 - Preferences for communication including provision of written material in addition to verbal information^{5, 46}
 - The need for professional interpreters¹⁰
- 8. Participate and contribute to family meetings for their allocated patient to:-
 - Advocate for the needs of the dying patient and family⁴⁶
 - Support family member's contribution to decision-making in accordance with patient's prior expressed goals of care⁶⁵ and family preferences^{46,85}
 - Provide immediate support for family, during and after family meetings⁶⁸
 - Comprehensively document family involvement, family perspectives and key outcomes of the family meeting^{69, 86}
- Acknowledge, communicate and document family concerns. This may include lack of concordance between family members and/or the treating teams and religious/cultural differences¹⁰

To ensure patient comfort and family support, the nurse should:-

- 10. Seek clear instruction to guide the process for withdrawal and withholding of life-sustaining treatment including:-
 - Reducing and/or ceasing life-sustaining drugs and treatment modalities (e.g. continuous renal replacement therapy)
 - Weaning ventilation, extubation⁷⁹ and oxygen therapy⁴²

- Use of sedation, analgesics, anticonvulsant and/or antimuscarinic drugs^{18, 42, 78}
- 11. Remove any unnecessary equipment and monitoring from the patient bedside, rationalising lines and equipment attached to the patient^{18, 42}
- 12. Seek a review of the patient's medication regimen, with a priority on pharmacological strategies that assist with relief of symptoms and distress, such as the use of analgesia and sedation^{18, 42, 78}
- 13. Monitor and assess the patient for signs of discomfort, including but not limited to pain, anxiety, dyspnoea, restlessness and psychological distress⁷⁷
- 14. Continue regular repositioning and hygiene 18, 42
- 15. Ascertain family preferences for the timing of withdrawal of treatment and communicate this to the treating team⁷⁹
- 16. Determine whether family would like to be present for withdrawal of treatment, and before and after death⁷⁹
- 17. Prepare and guide family for what they will see, hear and experience as death approaches^{17,}

In considering possible organ donation, the nurse should:-

- 18. Work collaboratively with organ donation coordinators and the treating team to ensure consistent communication with the family relating to potential organ donation⁸¹
- 19. Continue to provide high-quality patient care to maintain vital organs, prevent haemodynamic deterioration⁸⁷ and demonstrate ongoing respect for the patient.

To ensure optimal care after death, the nurse should:-

20. Facilitate continued privacy, time and space for family to spend time with the deceased patient^{12, 38}

- 21. With the consent of family members, source and arrange for hospital pastoral care personnel or cultural or religious officials/representatives from the community to enter the critical care unit to provide additional support¹⁰
- 22. With the consent of family members, refer to social work or other bereavement support service for ongoing support^{11, 12}
- 23. Provide additional written materials about post-death procedures, e.g. viewing the body, and community-based grief and bereavement support for families to read at a later time

To ensure optimal self-care, nurses should:-

- 24. Participate in formal structured in-unit debriefing, where available, after caring for a dying patient and their family^{14, 15}
- 25. Seek and participate in informal debriefing and support with colleagues, including the nurse-in-charge^{14, 15}
- 26. Make use of hospital-supported services, such as the Employee Assistance Program for ongoing support for emotions related to patient death
- 27. Engage in self-care practices, such as taking time to disconnect from the workplace grief, exercise, journaling, and debriefing with colleagues^{14,71}
- 28. Notify the nurse-in-charge in circumstances where they feel they are unable to care for a dying patient.

Discussion

In the development of this position statement, it was evident that several key areas that might be considered core to research and end-of-life care practice recommendations were absent or under-represented in the evidence. Whilst advance care planning is promoted,³ some studies have reported on their prevalence in critical care settings,^{88,89} but the relevance and meaningfulness of advance care planning in guiding end-of-life care decision-making in critical care is not widely reported or understood. Similarly, whilst nurse coping self-care and wellbeing after patient death is

acknowledged as important across practice settings, 90 evidence specifically pertaining to Australasian nurses in critical care nurses practice settings is sparse.

Conclusion

The purpose of this position statement was to provide specific evidence-based practice recommendations for critical care nurses to support the facilitation of high-quality end-of-life care.

The review of the literature, used to inform this position statement, coupled with the contribution of clinical experts and ACCCN board members, has resulted in 28 practice recommendations that are evidence-based, but also feasible and meaningful for critical care clinicians across Australia.

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