ARTICLE IN PRESS

Australian Critical Care xxx (xxxx) xxx



Contents lists available at ScienceDirect

Australian Critical Care

journal homepage: www.elsevier.com/locate/aucc



Research paper

Understanding the provision of goal-concordant care in the intensive care unit: A sequential two-phase qualitative descriptive study

Laurie A. Saffer, M Adv. N, BN, RN ^{a, b, *}, Anastasia F. Hutchinson, PhD, GDipClinEpi, RN ^{b, c}, Melissa J. Bloomer, PhD, MN(Hons), BN, RN ^{d, e, f}

^a Intensive Care Unit, Epworth HealthCare, Richmond, VIC, Australia; ^b School of Nursing and Midwifery, Deakin University, Geelong, VIC, Australia; ^c Centre for Quality and Patient Safety Research — Epworth HealthCare, Richmond, VIC, Australia; ^d School of Nursing and Midwifery, Griffith University, Nathan, QLD, Australia; ^e Intensive Care Unit, Princess Alexandra Hospital, Metro South Health, Woolloongabba, QLD, Australia; ^f Menzies Health Institute Queensland, Griffith University, Gold Coast, QLD, Australia

ARTICLE INFORMATION

Article history: Received 23 July 2023 Received in revised form 19 December 2023 Accepted 26 February 2024

Keywords:
Communication
Critical care
Critical care nursing
Decision making
Goals of care
Intensive care units
Interviews
Nursing
Qualitative research

ABSTRACT

Background: Goal-concordant care in intensive care is care that aligns with the patient's expressed goals, values, preferences and beliefs. Communication and shared decision-making are key to ensuring goal-concordant care.

Aims: The aims of his study were to explore (i) critical care clinicians' perspectives on how patient goals of care were communicated between clinicians, patients, and family in the intensive care unit; (ii) critical care nurses' role in this process; and (iii) how goals of care were used to guide care.

Method: Sequential two-phase qualitative descriptive design. Data were collected from February to June 2022 in a level-3 intensive care unit in a private hospital in Melbourne, Australia. In Phase One, individual interviews were conducted with critical care nurse participants (n=11). In Phase Two, the findings were presented to senior clinical leaders (n=2) to build a more comprehensive understanding. Data were analysed using Braun and Clarke's six step reflexive thematic analysis.

Findings: There was poor consensus on the term 'goals of care', with some participants referring to daily treatment goals or treatment limitations and others to patients' wishes and expectations beyond the ICU. Critical care nurses perceived themselves as information brokers and patient advocates responsible for ensuring patient goals of care were respected, but engaging in goals-of-care conversations was challenging. A lack of role clarity, poor team communication, and inadequate processes to communicate patient goals impeded goal-concordant care. Senior clinical leaders affirmed these views, emphasising the need to utilise critical care nurses' insight for practical solutions to improve patient care.

Conclusions: Clarity in both, the term 'goals of care' and the critical care nurses' role in these conversations, are the essential first steps to ensuring patients' values, preferences, and beliefs to guide shared-decision-making and goal-concordant care. Improved verbal and written communication that is inclusive of all members of the treating team is key to addressing these issues.

© 2024 Australian College of Critical Care Nurses Ltd. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Conversations about *goals of care* are essential for providing patient-centred care that aligns with an individual's preferences, yet ambiguity around the meaning and interpretation of the phrase 'goals of care' persists. In acute and critical care contexts, the phrase goals of care is used to describe development of plans in relation to managing clinical deterioration, ^{3,4} resuscitation status, and end-of-

* Corresponding author at: 89 Bridge Rd, Richmond, VIC 3121, Australia. *E-mail address*: Laurie.Saffer@epworth.org.au (L.A. Saffer). @AnaHDeakinQPS (L.A. Saffer), @@MelissaJBloomer (M.J. Bloomer) life decision-making.⁵ However, the phrase has also been used to denote the transition to palliative or comfort care, contributing to confusion around its meaning across practice settings.⁶

In the intensive care unit (ICU), in the absence of clear guidance from the patient, decisions about commencing, withdrawing, or withholding clinical treatments or interventions may be made, irrespective of potential physical or psychological consequences. Multiple studies have focussed on communication between clinicians, patients, and families in the context of serious illness. 8–11 Critical care nurses are integral to encouraging patient-centred communication and to supporting and advocating for patients. 12,13 Critical care nurses are also known for their ability to

https://doi.org/10.1016/j.aucc.2024.02.012

1036-7314/© 2024 Australian College of Critical Care Nurses Ltd. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Please cite this article as: Saffer LA et al., Understanding the provision of goal-concordant care in the intensive care unit: A sequential two-phase qualitative descriptive study, Australian Critical Care, https://doi.org/10.1016/j.aucc.2024.02.012

build rapport with families, seeking to understand family relationships, how this may influence communication and understanding, ¹⁴ patient and family culture, and values and beliefs ¹⁵ and using this understanding to inform and guide the multidisciplinary team. ^{16,17} Consequently, their insights are key to communication about patients' goals of care, which may influence treatment decision-making for critically ill patients. ^{18,19} Given critical care nurses' important role in communication, there is a need to better understand how 'goals of care' are used to inform the provision of goal-concordant care in the ICU.

1.1. Study aims

The study aims were to explore (i) critical care clinicians' perspectives on how patient goals of care were communicated between clinicians, patients, and family in the ICU; (ii) critical care nurses' role in this process; and (iii) how goals of care were used to guide care.

2. Design

A sequential two-phase qualitative descriptive design was used. This approach was taken because it is pragmatic, allowing participants' experiences to be explored in context, without the obligation to explain or theorise that is required with alternate approaches. This approach also enabled the researchers to stay close to the data, using broad 'free-form' methods in the description of participants' experiences. ²¹

Phase One involved use of semistructured interviews with critical care nurses. Findings from Phase One were then used to inform a Phase-Two focus-group interview. In contrast to individual interviews, the focus-group methodology is designed to encourage engagement and discussion amongst participants, where participants pick up on others' contributions and with the researcher taking on a moderator role. ²² In this case, the focus group was designed for senior clinical leaders with oversight and management of clinical care, to provide an alternate and complementary perspective on how goals of care were communicated, the critical care nurses' role in this process, and the potential implications for managing clinical care.

2.1. Setting

The study was conducted in a level-3 medical/surgical ICU with 26 beds in a metropolitan private hospital in Melbourne, Australia. The ICU provides almost 2500 admissions per year, with approximately 80% of patients admitted for postoperative monitoring and management.

2.2. Participants and recruitment

Purposive sampling was used to recruit participants for both phases of this study. In Phase One, critical care nurses, who were employed permanently at least 0.4 effective full-time equivalent to provide direct patient care, were eligible to participate. Potential participants were invited to participate via an invitation email sent on behalf of the research team by the nurse unit manager to all nursing staff, and a study flyer placed in nonclinical areas in the ICU. Nurses were asked to self-assess their eligibility according to the inclusion criteria and register their interest by sending an email to the lead researcher.

For Phase Two, the purpose was to build on the findings from Phase One with senior clinical leaders and consider potential practice implications in the ICU. Purposive sampling was used to recruit senior clinical leaders from any discipline, who had at least 6

months experience in a leadership or management position in the ICU, such as medical consultants or registrars, nurse managers and senior nurses who lead patient care, and guide and support staff. The ICU research nurse sent an invitation email to eligible participants for Phase Two. Given that it was possible for a critical care nurse to perform dual roles as a bedside clinician providing direct patient care and as a senior clinical leader, such as a nurse-incharge or an associate nurse manager, any critical care nurse who participated in Phase One was excluded from Phase Two to avoid bias in Phase Two and duplication of information. Potential participants were asked to self-assess their eligibility according to the inclusion criteria and opt-in by registering their interest in participating by sending an email to the lead researcher.

2.3. Ethical considerations

This research received ethical approval from the health service nominated Human Research Ethics Committee (RES-21-0000669L) and the University (Ref 80164) and subsequent governance approval at the health service. Respect and justice for participants was ensured by providing written and verbal information about the research, their rights, potential implications associated with participation, and ensuring that participants were free from coercion or exploitation.²³ Participants were also informed they could make contact with the lead researcher at any time if they wished to discuss the research in further detail. Whilst not paid for their participation, participants received a \$5 coffee card as a gesture of thanks.

The lead researcher was concurrently employed as a critical care nurse at the same time as leading this research. To address and/or minimise issues associated with the dual roles, potential participants were able to indicate a preference to be interviewed by another member of the research team; however, none did so. The opt-in process for participation also minimised risk of coercion. Participants were also assured that responses would remain anonymous in compliance with the core principles of ethically conducted research.²³ To ensure privacy and confidentiality, the researcher conducted interviews from a private and secluded space, and participants were encouraged to do likewise.

The researchers actively engaged in critical self-reflection through the process of reflexivity to minimise issues of researcher predispositions and bias. ²⁴ Working in the study ICU, the lead researcher actively monitored workplace relationships for potential signs of bias and maintained an open dialogue of reflection with the wider research team. Although complete elimination of bias was not possible, ²⁵ these steps were thought to help minimise this risk. Research merit was demonstrated through ensuring that the research was justified and conducted with integrity. ²³ In terms of beneficence, participants were informed of the skills of the interviewers. Participants were also informed that whilst there were potential benefits for future patient care, they were not likely to benefit directly from participation.

2.4. Data collection

For Phase One, individual semistructured interviews were conducted by the lead researcher (L.S.), who has foundational research training, supported by two senior, doctorally qualified researchers. Interviews were conducted between February and March 2022, commencing with the same opening question "Could you describe what the process is like when difficult decisions need to be made in the ICU about a patient's treatment options?" An aide memoire was used to guide the focus and order of subsequent questions, according to participants' responses. Interpretive judgement was used to determine the point, at which sufficient data were collected and

L.A. Saffer et al. / Australian Critical Care xxx (xxxx) xxx

further recruitment ceased.²⁶ The research team met regularly during this time for iterative debriefing and reflection.

The Phase Two focus-group interview was conducted by the lead researcher (L.S.) in June 2022, with another researcher (M.J.B.) as an observer, to help explain and build understanding of Phase-One findings and prompt discussion with senior clinical leaders about the potential implications. Following explanation of the ground rules associated with the focus-group interview, such as respect for others, the focus group commenced with the question "Could you describe the process when decisions need to be made about a patient's treatment options?" An aide memoire was used to guide subsequent questions and to promote group engagement and participation.

In accordance with COVID-19 guidelines at the time, data collection for both Phases was conducted online and recorded using the Zoom application,²⁷ allowing participants to join from their home or office.

2.5. Data analysis

Interview and focus-group recordings were transcribed with participant permission, with audio files and transcripts stored in a secure research repository supported by the university. Transcripts were deidentified, coded, and analysed by the lead researcher (L.S.) using reflexive thematic analysis. 28,29 involved listening to audio recordings and reading and re-reading transcripts to enable familiarisation with data. Interesting ideas and initial codes were then highlighted, followed by a mindmapping process to search for themes, which were then discussed and negotiated amongst the wider research team (L.S., A.F.H. and M.J.B.) until the final themes were determined. Due to the sequential nature of this study, Phase-One data were analysed first, with the findings used to inform Phase-Two data collection. Once Phase-Two data were analysed using the same process, findings from both phases were compared, explicating differences in perspectives between those providing care and those leading clinical care. Participants were provided with a lay summary of the findings, relevant to the phase in which they participated.

3. Findings

3.1. Phase-One interviews

Eleven critical care nurses participated in Phase One interviews, with interviews lasting 34–61 min (average 42 min). Three broad themes were evident from these interviews: (i) understanding of goals of care; (ii) the critical care nurse's role; and (iii) communication priorities, challenges, and opportunities. Participant responses are coded with P representing 'participant', with the subsequent number related to the order of interviews.

3.1.1. Understandings of goals of care

Across the interviews, participants were unanimous that goals of care indicated or represented "what the patient wants" (P6) and were generally understood to be "very individual ... very personal" (P7). For others, goals of care were to do with the patient's "values, spirituality, their ethics" (P1), or how they live their life, such as "are they an outside person? Do they live on a farm? Do they spend their life painting? Like, what did they do, who are they?" (P10). In general, goals of care were described as "... little goals or big goals" (P8), such as "there's the day-to-day stuff or then there's those really big discussions, like end of life" (P3). Participants described how big goals reflected what a patient may deem acceptable and "what [patients] define as good and healthy living" (P6) and essential to

determining "how hard to fight for [patients]" (P10). In this way, goals of care were perceived as essential to the provision of goal-concordant care.

3.1.2. The critical care nurse's role

Participants consistently spoke of the critical care nurse's role in understanding goals of care and how this contributes to the provision of goal-concordant care. They described themselves as information brokers, who acted as the "mediator in the middle" (P9) and as liaison "between the patient and the doctors ... to facilitate, communicate, and help plan" (P11), promoting mutual understanding and encouragement of collaborative, patient-centred care planning. Participants described prompting patients and families to talk about their concerns or questions with the medical team. In some instances, the critical care nurses' role as information broker changed outcomes for patients:

[A patient stated] 'I don't want to be resuscitated' and [I said], well, that's kind of important information. And I got the doctors to come in ... and talk to him and ask him about his NFR [not-for-resuscitation] status, and ... he said 'I don't want CPR [cardiopulmonary resuscitation], I don't want defib [defibrillation], let me die', and then, because we had that discussion, sure enough he ended up scoring an NFR form at the front of his folder. That wouldn't have happened if I didn't ask and bring up the whole topic. (P1)

Participants also described their role in advocating for patients in the ICU because "we will get patients who are so severely deteriorated that they cannot speak for themselves. We are their voice" (P2). Acting as advocate was especially relevant when it was perceived that care decisions or treatment did not align with patient preferences and values. When they perceived patient preferences and values were being insufficiently addressed, participants would "bring it up again ... sort of push. I don't just drop it because it's important; it's not like something trivial. Like if this is their goals of care, the person's life" (P1). One described having to "insert yourself into the conversation and say, look, what's going on, what's happening with the patient, where's this heading" (P6).

3.1.3. Communication priorities, challenges, and opportunities

Participants identified several communication priorities, with timing of particular importance. When goals of care were not addressed early in the admission process, this presented communication challenges, especially in the context of unpredictable clinical trajectories following high-risk surgeries or acute illness in the ICU.

I feel like we do a terrible job of having these conversations, early, and I think that we need to do better at it because I think it's something that really, we should do on everybody because you don't know what's going to happen. These conversations are really important. (P11)

A lack of clarity regarding critical care nurses' roles and responsibilities when communicating with patients and families impacted on how goals of care were determined, addressed, and incorporated into treatment care planning. Some participants described undertaking a more proactive approach to ascertaining patients' goals and preferences; for example, one participant stated: "I blatantly asked [the patient]: do you want to go back on the ventilator?" (P9). In contrast, others did not view active participation in goals of care discussions as part of their role.

Others indicated treatment-decision-making was ultimately the medical consultants' decision, but consultant variability meant there was a lack of clarity.

4

.... especially in long-term patients that are intubated and sedated. You'll often find that things are stalling, and then there's a change of consultant, and all of a sudden, everything that everyone's been wanting to do for the last three days, happens. (P3)

The lack of system processes and procedures in communication and documentation of patient goals further exacerbated goals of care discussions; "we have so many cracks in our system" (P10). Family misunderstanding of the patient's condition and an avoidance of conversations about patient preferences also sometimes meant that "what the patient wants and what the patient's family want are two very different things" (P9).

Communication opportunities included engaging families in discussion, family meetings, utilising specific communication techniques, bedside ward rounds, ICU consultant contributions, and utilising the nurse perspective. Participants perceived that families were a key resource for determining a patient's goals of care but that it was important to "make sure that the goals of care are what the patient really wants ... rather than what's in the best interest of the family" (P6). Family meetings were described as an opportunity to engage and support families to understand care and contribute to decision-making, which "really helps ... builds trust and rapport and also ensures that there's no mixed messages going on that may result in a mistreatment or misdiagnosis" (P7), so long as clinicians avoid being "too technical or ... giving them too much information" (P6).

Participants described opportunities to initiate conversations about goals of care. Given that one described how "consultants are pretty good at having a conversation at the bedside about the patient" (P2), the bedside ward round was "a good opportunity for the doctors to ... really hear what the nurses have to say" (P1) and for discussions about patient values and preferences. However, another questioned critical care nurses' role in goals of care conversations, suggesting a nurse's contribution depended on

... who's making that decision, and how well they appreciate the role of the bedside nurse or the nursing staff in general,... [When] our consultants ... see the value in keeping [nurses] informed ... making intentional effort to give us background". (P10)

3.2. Phase Two

Four senior clinical leaders volunteered to participate in the Phase-Two focus group, through which the findings from Phase One were presented for discussion. One was unable to participate due to emergent clinical priorities and another had technical issues in joining via Zoom. Due to scheduling challenges and their limited availability, a decision was made to proceed with two participants. Hence, the focus-group interview went ahead with two senior clinical leaders—an ICU doctor and a senior critical care nurse. Despite only two participants, the engagement and extensive conversation between participants meant the focus group lasted 46 min. Participant quotes are coded as FG for 'focus group' and according to their profession.

Senior clinical leaders acknowledged the diversity amongst nurses' understanding of goals of care. There was consensus that "when the nurses speak on behalf of the patients and reiterate the patient's story, the patient's preferences and patient's values ... It's really compelling" (FG doctor), but when talking specifically about goals of care, "nurses are often confused about it because it's such a broad thing" (FG nurse). More importantly, both participants agreed that "the patient should determine the goals of care, but whether the

treatment is likely to further those goals—it should be, is ultimately a medical determination" (FG doctor).

There was agreement that critical care nurses frequently act as information brokers in communication processes. Critical care nurses are uniquely positioned to have insight into patient values and preferences; "nurses often know what the goals of care are" (FG nurse), which at times, meant they could foresee when care did not align with patient values and preferences. In other words, they "can see the car crash coming" (FG doctor).

In considering the Phase-One findings, the senior clinical leaders agreed that communication amongst different members of the treating team was a key barrier to provision of goal-concordant care because "we're not eliciting and respecting patients' preferences and values" (FG doctor). Whilst "people, nurses included, doctors, are too scared to talk to the patient and family" (FG nurse), a lack of systems, processes, and procedures to support and promote communication and documentation of patient goals was also identified as part of the problem; "are [goals of care] even communicated amongst the team? I see a lot of time ... they're just not" (FG doctor). Consequently, there is "variability in care ... doctor-driven not patient-driven" (FG doctor). In the absence of clear direction regarding goals of care, especially in time-limited circumstances of acute critical illness, the focus defaults towards resuscitation and life-sustaining treatments because "that is absolutely the business of care" (FG doctor).

Both senior clinical leaders stressed "nurses ... we need to be able to empower them" (FG nurse) because "it's about how [nurses] could contribute to a shared understanding" (FG doctor) of goals of care. Formalising goals of care and documenting these would be invaluable in supporting shared decision-making, with the critical care nurses' role key to initiating the process through engaging in open communication and to "start filling in that paperwork without a doctor" (FG doctor).

4. Discussion

One of the fundamental challenges underpinning how critical care clinicians communicate patient goals of care as part of care planning and decision-making is the ambiguity associated with the term 'goals of care'. These findings demonstrate how the phrase was used to refer to patients' values, preferences and beliefs, their resuscitation status, and limits to life-prolonging intervention. Ambiguity in the way the term is referred to in the literature, ^{30,31} as well as how goals of care are used in treatment planning and decision-making, continues. ^{5,32,33}

Previous studies have reported on the lack of standardisation of communication and documentation of goals of care and the potential for care to be provided that is discordant with patient values and preferences. 32,34,35 Developing a common understanding of goals of care is key to ensuring goal-concordant care. Prior evidence indicates it is necessary to revisit patients' preferences and goals across the course of an admission to capture patient goals as situations evolve. 36 In addition, repeating goals-of-care discussions over time better ensures that clinicians accurately perceive patient goals. 37

The critical care nurse is uniquely positioned to understand, support, and advocate for patients and families. ^{12,13,16,17} In this study, emphasis on the value of the critical care nurse's role indicates greater scope for critical care nurse contribution to more routine goals of care conversations in practice. From the leadership perspective, focusing on strategies that empower critical care nurses to contribute to a shared understanding of patient goals could facilitate improved goal concordance. National standards determine that education for clinicians is expected to include training about how to have discussions on

L.A. Saffer et al. / Australian Critical Care xxx (xxxx) xxx

end-of-life care³⁸ and that specialist critical care nurses must act as patient advocates to actively contribute and lead these discussions with health professionals.³⁹ This study demonstrated that role ambiguities, particularly regarding the critical care nurse's contribution to goals of care discussions and involvement in shared decision-making made communication of goals complex.

From the perspective of the senior clinical leaders in the ICU, critical care nurses could contribute to development of a mutual understanding of goals by documenting patient goals and preferences in written paperwork. Education targeted at critical care nurses and improvements in documentation are two ways to potentially empower critical care nurses as patient advocates, in turn facilitating goal concordant care. Introduction of a formalised tool that includes a goals-of-care conversation template has been shown to improve documentation rates⁴⁰ and could be introduced to encourage increased engagement in discussions about patient values and preferences.

4.1. Strengths and limitations

To our knowledge, this was the first study to explore critical care nurses' understanding and interpretation of goals of care in an Australian context. The two-phase study design was advantageous because it explored the critical care nurses' perspective, and that of senior clinical leaders, adding depth and richness to the findings. The study was conducted in a single ICU in a metropolitan hospital in Victoria, Australia, which predominantly provides care for cardiac surgical patients. Hence, this may limit transferability of the findings to other ICU populations and settings. Purposive sampling and participant self-selection were used in this study, so the findings may be prone to bias. The lead researcher had an existing clinical relationship with study participants, potentially increasing the risk of bias or coercion. To address this and ensure objectivity, the other members of the researcher team, who were external to the ICU, oversaw the research process, and study recruitment was via an independent third party.

5. Conclusion

High-quality care in serious illness aligns treatment with patients' known goals and values, and communication between clinicians and patients enables provision of goal-concordant care. Patients should be equal partners in communication and decisionmaking processes at all levels of the healthcare system. However, shared decision-making in the ICU remains inconsistent, threatening goal concordance. As information brokers and patient advocates, critical care nurses can and should play a key role in facilitating goal-concordant care. It is essential to provide clarity on the meaning of 'goals of care' and eliminate ambiguity regarding the critical care nurse's role in goals-of care-conversations. Doing so would help overcome the challenges of how critical care nurses meaningfully share their insights about patients' goals and values and contribute to shared decision-making that best facilitates goal concordance. Improved verbal and written communication that is inclusive of all members of the treating team is key to addressing these issues.

Funding

This research was partially funded by the Peter and Angela Matkovic Scholarship from the Epworth Medical Foundation. The cost of providing participants with coffee cards, totalling \$65, was covered by the health service.

CRediT authorship contribution statement

Laurie A. Saffer: Conceptualisation, Methodology, Search conduct, Data collection, Data analysis and Writing lead. **Anastasia F. Hutchinson**: Conceptualisation, Methodology, Search conduct, Data analysis and Writing. **Melissa J. Bloomer**: Conceptualisation, Methodology, Search conduct, Data analysis and Writing.

Conflict of interest

There are no known or potential conflicts of interest with this work.

Data availability statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data are not available.

Acknowledgement

We wish to acknowledge the support of Ms Gabrielle Hanlon for this research.

References

- Australian commission on safety and quality in health care. National Safety and Quality Health Service Standards; 2017. https://www.safetyandquality. gov.au/standards/nsqhs-standards.
- [2] Australian Commission on Safety and Quality in Health Care. Implementing the Comprehensive Care Standard: a conceptual model for supporting comprehensive care delivery; 2018. https://www.safetyandquality.gov.au/publica tions-and-resources/resource-library/implementing-comprehensive-care-stan dard-conceptual-model-supporting-comprehensive-care-delivery.
- [3] Kruser JM, Benjamin BT, Gordon EJ, Michelson KN, Wunderink RG, Holl JL, et al. Patient and family engagement during treatment decisions in an ICU: a discourse analysis of the electronic health record. Crit Care Med 2019;47(6): 784–91. https://doi.org/10.1097/CCM.000000000003711.
- [4] Dignam C, Thomas J, Brown M, Thompson CH. The impact of language on the interpretation of resuscitation clinical care plans by doctors. A mixed methods study. PLoS One 2019;14(11):e0225338. https://doi.org/10.1371/journal.pone. 0225338
- [5] Secunda K, Wirpsa MJ, Neely KJ, Szmuilowicz E, Wood GJ, Panozzo E, et al. Use and meaning of "goals of care" in the healthcare literature: a systematic review and qualitative discourse analysis. J Gen Intern Med 2020;35(5): 1559–66. https://doi.org/10.1007/s11606-019-05446-0.
- [6] Bluck S, Mroz EL, Baron-Lee J. Providers' perspectives on palliative care in a neuromedicine-intensive care unit: end-of-life expertise and barriers to referral. J Palliat Med 2019;22(4):364–9. https://doi.org/10.1089/jpm.2018. 0282.
- [7] Turnbull AE, Sahetya SK, Needham DM. Aligning critical care interventions with patient goals: a modified Delphi study. Heart Lung 2016;45(6):517–24. https://doi.org/10.1016/j.hrtlng.2016.07.011.
- [8] Curtis JR, Treece PD, Nielsen EL, Gold J, Ciechanowski PS, Shannon SE, et al. Randomized trial of communication facilitators to reduce family distress and intensity of end-of-life care. Am J Respir Crit Care Med 2016;193(2):154–62. https://doi.org/10.1164/rccm.201505-09000C.
- [9] Hatler CW, Grove C, Strickland S, Barron S, White BD. The effect of completing a surrogacy information and decision-making tool upon admission to an intensive care unit on length of stay and charges. J Clin Ethics 2012;23(2): 129–38. https://doi.org/10.1086/JCE201223204.
- [10] Nelson JE, Hanson LC, Keller KL, Carson SS, Cox CE, Tulsky JA, et al. The voice of surrogate decision-makers: family responses to prognostic information in chronic critical illness. Am J Respir Crit Care Med 2017;196(7):864–72. https://doi.org/10.1164/rccm.201701-02010C.
- [11] White DB, Angus DC, Shields A-M, Buddadhumaruk P, Pidro C, Paner C, et al. A randomized trial of a family-support intervention in intensive care units. N Engl J Med 2018;378(25):2365-75. https://doi.org/10.1056/NEJMoa1802637.
- [12] Ahluwalia SC, Schreibeis-Baum H, Prendergast TJ, Reinke LF, Lorenz KA. Nurses as intermediaries: how critical care nurses perceive their role in family meetings. Am J Crit Care 2016;25(1):33–8. https://doi.org/10.4037/ ajcc2016653.
- [13] Noome M, Dijkstra BM, van Leeuwen E, Vloet LC. Exploring family experiences of nursing aspects of end-of-life care in the ICU: a qualitative study. Intens Crit Care Nurs 2016;33:56-64. https://doi.org/10.1016/j.iccn.2015.12.004.

- [14] Bloomer MJ, Endacott R, Ranse K, Coombs MA. Navigating communication with families during withdrawal of life-sustaining treatment in intensive care: a qualitative descriptive study in Australia and New Zealand. J Clin Nurs 2017;26(5-6):690-7. https://doi.org/10.1111/jocn.13585.
- [15] Brooks LA, Bloomer MJ, Manias E. Culturally sensitive communication at the end-of-life in the intensive care unit: a systematic review. Aust Crit Care 2019;32(6):516–23. https://doi.org/10.1016/j.aucc.2018.07.003.
- [16] Anderson WG, Puntillo K, Boyle D, Barbour S, Turner K, Cimino J, et al. ICU bedside nurses' involvement in palliative care communication: a multicenter survey. J Pain Sympt Manage 2016;51(3):589–96. https://doi.org/10.1016/ j.jpainsymman.2015.11.003.
- [17] Gallagher A, Bousso RS, McCarthy J, Kohlen H, Andrews T, Paganini MC, et al. Negotiated reorienting: a grounded theory of nurses' end-of-life decision-making in the intensive care unit. Int J Nurs Stud 2015;52(4):794–803. https://doi.org/10.1016/j.ijnurstu.2014.12.003.
- [18] Detsky ME, Harhay MO, Bayard DF, Delman AM, Buehler AE, Kent SA, et al. Discriminative accuracy of physician and nurse predictions for survival and functional outcomes 6 months after an ICU admission. J Am Med Assoc 2017;317(21):2187–95. https://doi.org/10.1001/jama.2017.4078.
- [19] Neville TH, Wiley JF, Yamamoto MC, Flitcraft M, Anderson B, Curtis JR, et al. Concordance of nurses and physicians on whether critical care patients are receiving futile treatment. Am J Crit Care 2015;24(5):403–10. https://doi.org/ 10.4037/ajcc2015476.
- [20] Lambert VA, Lambert CE. Qualitative descriptive research: an acceptable design. Pacific Rim Int J Nurs Res 2012;16(4):255–6.
- [21] Whitehead D, Disler R. Common qualitative methods. In: Whitehead D, Ferguson C, LoBiondo-Wood G, Haber J, editors. Nursing and midwifery research: methods and appraisal for evidence-based practice. 6th ed. Chatswood, NSW: Elsevier; 2018. p. 98–117.
- [22] Sim J, Waterfield J. Focus group methodology: some ethical challenges. Qual Quant 2019;53(6):3003–22.
- [23] National Health and Medical Research Council. National statement on ethical conduct in human research: Commonwealth of Australia. National Health and Medical Research Council; 2018. Available from: https://www.nhmrc.gov.au/ about-us/publications/national-statement-ethical-conduct-human-research-2007-updated-2018.
- [24] Holloway I, Galvin K. Qualitative research in nursing and healthcare. 4th ed. Wiley Blackwell: 2017.
- [25] Cypress BS. Rigor or reliability and validity in qualitative research: perspectives, strategies, reconceptualization, and recommendations. Dimens Crit Care Nurs 2017;36(4):253–63. https://doi.org/10.1097/DCC.00000000000000253.
- [26] Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. Qual Res Sport Exercise Health 2021;13(2):201–16.

- [27] Zoom video communications Inc. Zoom Version 5.6.1. 2021.
- [28] Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3(2):77-101. https://doi.org/10.1191/1478088706qp063oa.
- [29] Braun V, Clarke V. One size fits all? What counts as quality practice in (reflexive) thematic analysis? Oual Res Psychol 2021;18(3):328–52.
- [30] LeBlanc TW, Tulsky JA. Discussing goals of care. In: UpToDate [Internet]; 2020. Available from, https://www.uptodate.com/contents/discussing-goals-of-care?search=Discussing%20goals%20of%20care&source=search_result&selected Title=1~150&usage_type=default&display_rank=1.
- [31] Cook MR. Goals of care: understanding the outcomes that matter most. Surg Clin North Am 2019;99(5):833–47. https://doi.org/10.1016/j.suc.2019.
- [32] Berlin A. Goals of care and end of life in the ICU. Surg Clin North Am 2017;97(6):1275–90. https://doi.org/10.1016/j.suc.2017.07.005.
- [33] Stanek S. Goals of care: a concept clarification. J Adv Nurs 2017;73(6): 1302–14. https://doi.org/10.1111/jan.13243.
- [34] Bernacki RE, Block SD. Communication about serious illness care goals: a review and synthesis of best practices. JAMA Intern Med 2014;174(12):1994–2003. https://doi.org/10.1001/jamainternmed.2014.
- [35] Sanders JJ, Curtis JR, Tulsky JA. Achieving goal-concordant care: a conceptual model and approach to measuring serious illness communication and its impact. J Palliat Med 2018;21(S2):S17-27. https://doi.org/10.1089/jpm. 2017.0459
- [36] Perera N, Gold M, O'Driscoll L, Katz NT. Goals of care discussions over the course of a patient's end of life admission: a retrospective study. J Palliat Med 2022;39(6):652–8. https://doi.org/10.1177/104990912 11035322
- [37] Modes ME, Engelberg RA, Nielsen EL, Brumback LC, Neville TH, Walling AM, et al. Seriously ill patients' prioritized goals and their clinicians' perceptions of those goals. J Pain Symptom Manage 2022;64(4):410–8. https://doi.org/10.1016/j.jpainsymman.2022.06.004.
- [38] Australian commission on safety and quality in health care. National consensus statement: essential elements for safe and high-quality end-of-life-care. https://www.safetyandquality.gov.au/publications-and-resources/resourcelibrary/national-consensus-statement-essential-elements-safe-and-highquality-end-life-care; 2015.
- [39] Australian College of Critical Care Nurses. Practice standards for specialist critical care nurses. ACCCN; 2015. https://acccn.com.au/members/ standards/.
- [40] Cralley A, Madsen H, Robinson C, Platnick C, Madison S, Trabert T, et al. Sustainability of palliative care principles in the surgical intensive care unit using a multi-faceted integration model. J Palliat Care 2022;37(4):562–9. https://doi.org/10.1177/08258597221079438.