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Integration of Palliative Care in the Context of Rapid Response

A Report From The Improving Palliative Care in the ICU Advisory Board

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Rapid response teams (RRTs) can effectively foster discussions about appropriate goals of care and address other emergent palliative care needs of patients and families facing life-threatening illness on hospital wards. In this article, The Improving Palliative Care in the ICU (IPAL-ICU) Project brings together interdisciplinary expertise and existing data to address the following: special challenges for providing palliative care in the rapid response setting, knowledge and skills needed by RRTs for delivery of high-quality palliative care, and strategies for improving the integration of palliative care with rapid response critical care. We discuss key components of communication with patients, families, and primary clinicians to develop a goal-directed treatment approach during a rapid response event. We also highlight the need for RRT expertise to initiate symptom relief. Strategies including specific clinician training and system initiatives are then recommended for RRT care improvement. We conclude by suggesting that as evaluation of their impact on other outcomes continues, performance by RRTs in meeting palliative care needs of patients and families should also be measured and improved.

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ABBREVIATIONS: IPAL-ICU = Improving Palliative Care in the ICU; RRT = rapid response team

The rapid response team (RRT), also known as a medical emergency team, was conceived in the 1990s as a strategy to decrease in-hospital cardiac arrests, mortality, and morbidity through earlier identification and intervention when patients are deteriorating. Although impact on these outcomes remains in question,[1-3] the use of RRTs is widespread around the world.[4] RRT clinicians become involved in decision-making about life-supporting therapies and may be in a position to provide emergent

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palliative care. A series of reports suggests that RRTs can effectively foster discussions about appropriate goals of care and address other palliative care needs of patients and families facing life-threatening illness on hospital wards.[5-11] Just as integration of palliative care is increasingly accepted as part of day-to-day practice within ICUs, so also RRT clinicians and others who manage clinically deteriorating patients outside the ICU must consistently attend to communication about care goals, symptom control, family support, and other key palliative care components.

In this article, The Improving Palliative Care in the ICU (IPAL-ICU) Project[12] brings together expertise in critical care and palliative care along with existing data to address special challenges and practical strategies for the rapid response setting. We conducted a comprehensive review of English language articles using the term "rapid response team" or "medical emergency team" and "palliative care," "end-of-life care," "limitation of medical treatment [or life support]," "do not resuscitate," "not for resuscitation," "life support," "advance directive," "goals of care," or "symptom." Based on this literature and the experiences of our interdisciplinary advisory board, we focus on the following questions: (1) What are special challenges for the provision of palliative care by a rapid response team? (2) What knowledge and skills are needed to support the delivery of high-quality palliative care in the rapid response setting? (3) How can integration of palliative care and rapid response intensive care be improved?

What Are Special Challenges for the Provision of Palliative Care by an RRT?

The unique challenge for integration of palliative care in the rapid response context is time. The patient may have been living with serious illness for months or even years, and hospitalized with the present illness for days or at least hours, but now an assessment and plan, and delivery of appropriate care, are needed in minutes. Usually without any prior knowledge of the patient or clinical circumstances, and often relying only on recent entries in the medical record, the RRT must make crucial, complex decisions; for example: Is escalation with intensive care therapy likely to provide more benefit than burden? Is it appropriate in light of the patient's values, goals, and preferences?

As in the ICU, the deteriorating patient on the ward is typically unable to provide information or participate in decision-making. The surrogate decision-maker may not be immediately available and, for some patients, may not yet have been identified. The primary care clinician is often off-site, and the ward team may not be immediately available when the patient's condition triggers a rapid response. Some patients have advance directives, but documentation is not always readily accessible or clearly applicable to the situation at hand. The RRT must then formulate and implement an appropriate plan in the absence of input from either the patient or those with the most relevant knowledge and strongest relationship of trust with the patient and family.

Even if the patient has capacity or the family is available, it can still be difficult to make medical decisions in the midst of a crisis. Few patients and families can fully absorb and integrate information about serious illness in a short time, depending instead on a longer process of "cultivation of prognostic awareness"[13] that allows them to modulate their emotions and eventually face an uncertain or unfavorable future. Yet, although acute deterioration might have been predictable, this process may not have been initiated before the rapid response call. Even a very skilled clinician would find it challenging to communicate with a patient or family about life and death decisions in these circumstances, needing to condense what ideally is a series of incremental, face-to-face discussions led by a familiar primary care provider into a single, brief encounter with strangers under crisis conditions. Most clinicians lack the training or experience to master the necessary skills, and no program that is specifically designed to prepare clinicians for the unique challenges of communicating in the context of a rapid response has yet been disseminated. Some RRT clinicians may view communication about care goals as outside their role and responsibility.

RRT communication and decision-making are further complicated by the absence of tools to assist in prognostication with respect to either hospital or postdischarge outcomes. Sophisticated models have been developed to predict mortality from critical illness based on parameters measured during the first days in an ICU.[14-16] But no model involving rapid response events is available to be used in real time as an adjunct to clinical expertise and experience. Controversy continues about ICU admission criteria,[17-20] and decisions about escalation of care are influenced by a variety of factors at the system-, clinician-, and patient-level, including factors that clinicians may not recognize as affecting their judgments.[21,22] In addition, these decisions may present ethical challenges, a complex topic that is beyond the scope of this article. Further research is needed to clarify current practice

and optimal approaches for clinical decision-making in the context of rapid response.

What Knowledge and Skills Are Needed to Support the Delivery of High-Quality Palliative Care in the Rapid Response Setting?

Key components of palliative care in the ICU are shown in Table 1.[23,24] Each of these components is also part of care for critically ill patients outside the ICU and defines an area of expertise that is required for optimal performance by RRTs, as set forth in Table 2. Next we focus on communication about treatment in relation to care goals and address key issues for patient-focused medical decision-making, symptom control, and staff support.

Communication

While research and expert guidance have focused on approaches for family conferences by clinicians in the ICU[25-27] and for discussions with patients who are seriously ill but clinically stable,[13,28] evidence and specific recommendations for communicating with patients and families in the rapid response setting, which is distinctive, are lacking. The RRT clinician faces the initial challenge of determining whether the circumstances even allow for communication that would benefit the patient and family. The exigencies of the patient's situation and complexities involved in appropriate communication may warrant immediate medical intervention to be followed by a later discussion,[29] such as when the "emergency exception" to informed consent would apply (immediate treatment is required to prevent death or other serious harm to the patient).[30] Since life-sustaining therapies can be withdrawn as well as withheld (in most parts of the world), the RRT may initiate an urgent intervention or time-limited trial without an irrevocable commitment to continue. At times, for a patient triggering a rapid response, it may be appropriate to defer a definitive discussion of care goals until after immediate efforts toward stabilization.

TABLE 1] Key Components of Palliative Care in the ICU

Components
• Effective communication about current status of disease, prognosis, treatment options
• Formulation of care goals aligned with patient values
• Relief from distressing symptoms
• Support for families
• Continuity of care across settings
• Support for staff

Ideally, however, the RRT has an opportunity to communicate with the patient and/or family about use of intensive care therapy in light of realistic goals and obtain informed consent for the desired treatment plan. Existing evidence indicates that these discussions do occur, leading to documentation of new or updated preferences regarding life support after involvement of an RRT.[7-11,31] Although the optimal approach has not yet been defined by empirical research, strategies suggested by our clinical experience and data from other settings are summarized in Table 3.

The RRT must be able to immediately establish rapport, assess a family's needs, provide essential information and emotional support, and accomplish these tasks by telephone if direct discussion is impossible under the pressure of time. Whenever possible, the RRT should communicate first with the primary clinician to obtain information about the patient's condition and prognosis, insight about patient and family concerns, values, and preferences, and perspective based on the primary clinician's longer-term involvement. This step is crucial for building consensus for the treatment plan across the health-care team, maintaining collaborative relationships with colleagues, and promoting care continuity. If not during the rapid response, contact should be made with the primary clinician at the earliest opportunity.

Discussion with the patient or family should begin with introductions, identifying RRT clinicians and their roles as well as the relationship of surrogates to the patient. If no one present is the patient's legally-authorized medical decision-maker, a clinician may choose to continue the discussion (eg, the authorized decision-maker cannot be reached, time is of the essence, and the available person has a close relationship with that decision-maker and the patient) or to defer it (taking emergency action to stabilize the patient in the meantime, if necessary).

Since strong emotions affect family comprehension and decision-making,[32,33] clinicians should attend to such emotions even in brief communications during a crisis. The recommended approach is explicit and genuine expression of empathy,[28,32] which can be conveyed in comments like, "I know this must be a scary situation for you," and in "wish statements" such as, "I wish your wife hadn't taken this sudden turn for the worse." Empirical data confirm that clinicians' expressions of empathy are favorably received by patients and families,[34,35]

TABLE 2] Palliative Care in the Context of Rapid Response: Core Knowledge/Skills for RRT Clinicians

Core Knowledge and Skills
• Communication about benefits, risks, and alternative treatment approaches under emergent conditions
• Formulation of a rapid response plan based on patient preferences for resuscitation and life support
• Alleviation of dyspnea, pain, anxiety, and other symptoms in presence of physiologic instability
• Attention to immediate needs (emotional, spiritual, practical) of families in crisis
• Attention to the emotional needs of RRT and other staff

RRT = rapid response team.

and, in our experience, it is possible to accomplish this important communication task in a short time, if necessary.

If time is available, an important next step is to elicit the family's grasp of the patient's condition and prognosis. The "ask-tell-ask" approach is recommended: Ask family members their understanding, tell them the key medical information, and ask again to assess their comprehension.[36] However, if the patient or family is anxiously waiting for important new information from the clinicians, it may be inappropriate to begin by asking about their understanding of illness or prognosis. Thus, RRT members need to be skillful in assessing the communication needs of the patient or family, summarizing a complex medical situation, and providing recommendations about proposed interventions in layperson terms. In Table 4, we provide examples of such terms.

To obtain informed consent for an intervention, the rapid response clinician must be prepared to clearly and concisely discuss the potential risks and burdens as well as expected benefits and alternative approaches, including treatment that is focused exclusively on the patient's comfort. At no time should an RRT (or any other clinician) seek consent (eg, for an invasive procedure), without at least a brief update on the medical situation and other essential contextual information. An isolated request for consent (eg, an urgent phone call for permission to place a central venous catheter, intubate for mechanical ventilation, or rush the patient to surgery) can only exacerbate the family's stress and may inappropriately raise expectations about patient outcomes after intervention.[23]

Some patients and families choose to pursue life-prolonging therapies largely out of fear that limitation will be accompanied by patient suffering. For a patient who is already symptomatic at the time of a rapid response call, as from dyspnea associated with respiratory failure, or pain from acute decompensation of underlying advanced malignancy, such concerns will be heightened. It then becomes especially important for clinicians to provide assurance that the patient's comfort will be maintained whether the life-prolonging therapy (eg, mechanical ventilation) is initiated or limited.[37] Clinicians should avoid use of phrases like "withdrawal of care" and "nothing more we can do," which can contribute to family concerns about distress and abandonment.[38]

TABLE 3] Emergent Conference Between Clinician and Patient/Family to Discuss Goals of Care: Essential Steps

Essential Steps
• Introduce RRT clinicians/their roles and identify the relationship of surrogate(s) to patient
• Rapidly assess patient/family understanding of illness and prognosis
• Rapidly assess patient/family emotions and express support and empathy
• Update patient/family on medical condition
• Describe potential risks/burdens and benefits of proposed intervention, along with alternative options including, if appropriate, care focused exclusively on comfort
• Provide assurance that patient's symptoms and other needs will be fully addressed whether or not life-prolonging treatments are initiated
• Obtain input from full interdisciplinary RRT as well as bedside nurse and primary service, as able
• Elicit family questions and concerns
• Make a patient-focused treatment recommendation based on medical findings

See Table 2 legend for expansion of abbreviation.

TABLE 4] Layperson Terms Describing Selected Intensive Care Interventions

Intervention	Description
Intubation/mechanical ventilation	Tube through mouth or nose, attaching patient to breathing machine
CPR	CPR can be tried when a patient's heart and/or breathing stops. CPR includes pressing on the chest to attempt to restart circulation. Electric shocks (defibrillation) and drugs may also be given to try to restart the heart. A breathing machine may be used after placing a tube in the patient's mouth or nose to attach it.
Do not attempt resuscitation	Depending on the patient's situation and preferences, an attempt to perform CPR may not be appropriate. The patient's physician can then issue an order not to attempt CPR.
Vasopressors	Medications that are given by vein to help increase BP, typically used when a patient is in "shock"
Central line	Special IV placed in a large vein (usually near the neck or collar bone) to give fluids, medications, blood, and so forth
Dialysis	Does the work of the kidneys, which remove waste and fluid. This procedure requires a special IV that is placed in a large vein.

Instead, emphasis should be on achieving the patient's goals, alleviating patient distress, and providing family support.

Patient-Focused Decision-Making

The RRT must make every effort to determine the patient's preferences for treatment including life-supporting therapies, as expressed in a direct communication between the RRT and the patient, a formal advance care planning document, other medical record documentation of prior discussions with the patient, or information provided by the primary clinician or family surrogate. RRTs are often involved in the care of patients for whom an order limiting life support was already documented.[39] At least one member of the team should have responsibility to review the medical record for such documentation, consider the applicability of any advance directive, and contact the primary clinician/service, if possible, for verification. If an intervention is indicated and the patient is able and willing to make decisions about treatment, it is appropriate to discuss the intervention with the patient in the context of the current clinical situation and previously documented preferences that might now be revisited if time and circumstances permit. In the absence of such documentation or the ability to conduct such discussions contemporaneously, the rapid response call can be seen as a sentinel event and serve as a catalyst for dialogue with the patient about preferences for future care.[10] Preferences of a patient lacking capacity may be known by a surrogate appointed by the patient or designated under state law. The RRT should attempt to elicit the patient's preferences from either of these individuals, or alternatively, collaborate with them to formulate a plan that is consistent with the "substituted judgment" or "best interest" of the patient.[40] For each of these scenarios, a key skill for the RRT clinician is listening, which physicians, in particular, seem to find difficult even without the time pressure of a rapid response.[41] Another is to maintain focus on the patient's preferences with family members who may be influenced by self-regarding concerns such as fear or guilt. If decisions by a surrogate seem to diverge from preferences previously documented by the patient, or from what might reasonably be interpreted as the patient's substituted judgment or best interest, a careful evaluation of the surrogate's rationale and motivation is warranted. Involvement of an individual or team with expertise in biomedical ethics, as well as of the primary clinician/team, may be helpful in resolving such issues.

State, local, and institutional requirements provide a framework for decision-making about life-sustaining therapies and for implementation and documentation of these decisions in individual hospitals. Knowledge of these requirements is essential for RRT members, as is the ability to rapidly access all key components of the medical record and forms used to document discussions and decisions about treatment goals.

Symptom Control

Relief of distressing symptoms is a core component of palliative care for all patients with serious or critical illness. To our knowledge, no study to date has addressed patterns of or strategies for managing symptom distress during a rapid response, but research on patients in the ICU and our clinical experience indicate that dyspnea, pain, and anxiety are frequent sources of distress in this

context.[42,43] Specialists in pain management or palliative medicine may not be immediately available. Thus, the RRT must have sufficient expertise to initiate symptom relief. An observational study in a community teaching hospital found that one year after deployment of an RRT staffed by a critical care nurse, respiratory therapist, and second-year medical resident, significantly more dying patients received opioids and had lower pain scores and distress than in the pre-intervention study period.[8] In general, opioids will be most effective for control of dyspnea as well as pain, with lower starting doses for dyspnea.[42] Expert recommendations are available regarding use of noninvasive ventilation for symptom palliation, which should always be preceded by a discussion of care goals with criteria for success or failure in relation to those goals.[44] It may also be necessary to decide whether the potential benefit is sufficient to warrant transfer to an ICU or intermediate care setting, as some hospitals require for initiation of noninvasive ventilation. Further research is needed to guide management of anxiety, but guidelines for sedation of critically ill patients in ICUs have been updated.[45]

It is also important that team members have knowledge and skills to manage symptoms in the presence of physiologic instability. Although some clinicians are reluctant to administer appropriate symptom treatment because of concerns about respiratory depression, hypotension, and sedation, they should not defer such treatment as a way of increasing respiratory effort, BP, or responsiveness. If the patient is continuing to pursue all disease-directed and restorative therapies, including intensive care, then endotracheal intubation, mechanical ventilation, and vasopressor support may be indicated to allow effective relief of symptoms. On the other hand, even if death is hastened as an unintended consequence of analgesia or sedation for a patient whose care is focused exclusively on comfort, the doctrine of "double effect" allows treatment intended to control symptoms.[46] The RRT should involve the patient and family, if possible, as well as all members of its own interdisciplinary team to find the optimal combination of symptom relief and physiologic stability consistent with the patient's goals of care.

Staff Support

RRTs are responsible for attending to needs of colleagues as well as those of patients and families. The prevalence of professional caregivers' concerns about appropriateness of care for critically ill patients in ICUs is substantial.[47] Most commonly, care is perceived to be inappropriate when seen as excessive relative to the prognosis, that is, unlikely to benefit the patient or to be more burdensome than beneficial.[47] Perceptions of inappropriateness also arise with concern about unrelieved symptoms and insufficient communication for informed decision-making by families.[48] Family demands for care that clinicians consider futile create significant stress.[49] Often wishing to forego life-supporting therapies when patients or families wish to pursue them, clinicians may need support in understanding these differences and developing strategies to influence communication and decision-making.[50] Conversely, clinicians are at times concerned that potentially beneficial treatments are prematurely withheld or withdrawn. For staff feeling compelled by external factors to implement a care plan they perceive as inappropriate, the result may be moral distress, which is described not only in nurses but also among physicians, respiratory therapists, and members of other disciplines.[51,52] Staff caring for critically ill patients may also experience work-related emotional distress including burnout, depression, and posttraumatic stress disorder,[47,53-55] especially when routinely exposed to death and suffering perceived as preventable. RRTs with the requisite knowledge and skill, and sensitivity to the needs of staff, can help address these forms of distress. By striving to respond with a care plan based on realistic treatment goals and patient preferences, taking immediate steps to relieve patient suffering, and conveying both information and empathy to patients and families, the team will allay some of the concerns troubling their colleagues. In addition, staff can be directly supported by openly acknowledging the psychologic impact of caring for patients with high rates of mortality or long-term impairments and pausing at least briefly to recognize the loss of a patient who died either despite a maximal resuscitative effort or after a decision to limit life-prolonging therapy. The RRT can also take the lead in conducting a short debriefing session with those involved in a rapid response, not only addressing the technical aspects of the response but discussing the impact of these events on clinicians.

How Can Integration of Palliative With Rapid Response Intensive Care Be Improved?

We recommend several strategies, summarized in Table 5, as ways of improving the quality of palliative care in the rapid response context. Although palliative care specialists are available in an increasing number of hospitals, it is unlikely that they can participate in a large proportion of emergency calls, and even these specialists may not have the specific training or experience needed

TABLE 5] Strategies to Improve Integration of Palliative Care and Rapid Response Intensive Care

Strategies
• Develop an RRT-specific program of training on core palliative care knowledge/skills, in which clinicians must demonstrate competency (eg, skills for emergent discussion of care goals)
• Initiate an institutional effort to facilitate advance care planning and related documentation for hospitalized patients
• Identify an interprofessional group of individuals, including pastoral care and mental health clinicians, who can help the RRT address palliative care needs of patients and families
• Monitor and evaluate (with regular review and feedback of data) outcomes of RRT care and triage decision-making
• Engage the full RRT and representatives across all relevant fields in a data-driven, interdisciplinary improvement effort

See Table 2 legend for expansion of abbreviation.

for optimal integration of palliative care in rapid response critical care. In addition, palliative care at a generalist level is considered to be a core competency for critical care professionals as well as hospitalists and others who routinely care for seriously ill patients.[56,57] Thus, focused training is needed to prepare RRTs for unique challenges they face in providing palliative care. A study has evaluated an intervention to educate resident-level physicians in emergency medicine and surgery on how to conduct an emergent discussion with a family about whether to attempt resuscitation of a patient dying during a rapid response (D. R. Lustbader, MD, unpublished data, 2014). Like this intervention, programs should focus specifically on preparing clinicians to provide effective communication, symptom control, and other palliative care in the special context of a rapid response. Development of such programs should be a priority and an integral part of comprehensive training for RRTs. Palliative care specialists, when available, may be able to contribute to the training of critical care and hospitalist colleagues for components of the rapid response role.

Others, including pastoral care and mental health professionals, can also help prepare the RRT and directly support patients and families after, if not during, the emergent situation. To facilitate their engagement, a contact list of individuals who are on call to provide this kind of assistance should be carried by or otherwise immediately available to rapid response clinicians. Integration of palliative care by an RRT includes involvement of the full interprofessional team to address a range of important patient and family needs while optimizing use of resources.[11]

Patient-centered care and decision-making can be accomplished more effectively and efficiently if patients' preferences for use of life-sustaining therapies are documented before deterioration triggers a rapid response. Thus, institutional efforts to facilitate advance care planning by hospitalized patients, as reported in a randomized controlled trial in Australia, could enhance integration of palliative care by RRTs.[58] In that study, end-of-life care preferences were significantly more likely to be known and followed, bereaved family members had less psychologic distress, and satisfaction of patients and families was higher in the intervention group (who met with a trained advance care planning facilitator), compared with the usual care control. A measure of palliative care quality for ICUs, posted by the National Quality Measures Clearinghouse of the Agency for Health Care Research and Quality,[59] evaluates whether staff inquire upon admission if the patient has an advance directive. Ideally, such an inquiry would be initiated as a routine matter earlier in the hospitalization, with clear documentation of the result and support for patients to express preferences. When advance directives have been prepared, they must be readily accessible in medical records, along with contact information for both the designated surrogate decision-maker and primary care clinician, so that RRTs can immediately identify the patient's surrogate and determine preferences for intubation, resuscitation, and other life-prolonging interventions.

While further research to guide RRT triage is awaited, it is important to monitor and evaluate this process prospectively at individual institutions.[60] Ideally, review of RRT care will involve palliative care specialists if available and include data on frequency and timing of documentation regarding life-support preferences and on limitation of life support. Table 6 presents examples of data that can help inform ongoing quality improvement and better integration of palliative care. Although data like these have been published[5-10,60,61] and may help establish benchmarks, institution-specific data are needed to understand local practice, identify and prioritize opportunities for improvement, and develop local RRT practice guidelines. The frequencies of RRT calls for patients who previously expressed preferences not to receive intensive care therapies and for those close to an expected death from terminal disease are

TABLE 6] Assessment of Rapid Response With Respect to Palliative Care

Evaluation Elements
• RRT knowledge/skill in core competencies for RRT palliative care
• Documentation of effort to contact primary clinician/service
• Documentation of effort to contact surrogate medical decision-maker for patient lacking capacity
• Documentation of clinician-patient/family discussion of potential risks/burdens and benefits of proposed interventions, along with alternative options
• Documentation of preferences for CPR/life-supporting therapies: frequency, timing (before/after), content (including life-support limitation)
• Subsequent referral for specialty palliative care (if available) or hospice

See Table 2 legend for expansion of abbreviation.

informative, potentially indicating opportunities to improve discussions and/or documentation about goals of care.

Although the composition of RRTs varies, many involve nurses and/or respiratory therapists, and some teams are led by these professionals rather than physicians.[2] An RRT nurse can play many valuable roles in providing information and support to families deciding about use of life support,[29] as well as in eliciting the preferences of the patient, helping to control symptoms, promoting continuity, and supporting staff. Team members from other disciplines can make their own contributions. When decision-making is often value laden and emotionally difficult, as in deciding whether to initiate or withhold intensive care therapy, the interests of patients, families, and providers are best served by integration of interdisciplinary perspectives.[47] Collaboration with colleagues in such specialties as palliative care, pain management, clinical ethics, chaplaincy, and emergency medicine, can enhance the quality of integrated care delivered by RRTs, enabling the delivery of optimal critical care together with palliative care for clinically deteriorating patients needing emergent attention. Appropriate representatives across relevant specialties should be convened to help develop and implement educational and system interventions to improve rapid response care.

Conclusions

Recent research has focused attention on the role of RRTs in providing palliative care to hospitalized patients. Future studies are needed to establish an evidentiary foundation for optimal integration of palliative care in the rapid response context. Current efforts should focus on preparing RRT clinicians with knowledge and skills they need to communicate effectively in emergency situations about appropriate goals of care, match care planning with patient preferences, alleviate symptom distress, and support both families and colleagues. As the impact of RRTs continues to be evaluated, their performance in these roles should be studied and improved.

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