A Descriptive Study of Chaplains' Code Blue Responses

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Background Family presence during resuscitation is the compassionate practice of allowing a patient's family to witness treatment for cardiac or respiratory arrest (code blue event) when appropriate. Offering family presence during resuscitation as an interprofessional practice is consistent with patient- and family-centered care. In many institutions, the role of family facilitator is not formalized and may be performed by various staff members. At the large academic institution of this study, the family facilitator is a member of the chaplain staff.

Objectives To examine the frequency of family presence during code blue events and describe the role of chaplains as family facilitators.

Methods Chaplain staff documented information about their code responses daily from January 2012 through April 2020. They documented their response time, occurrence of patient death, presence of family at the event, and services they provided. A retrospective data review was performed.

Results Chaplains responded to 1971 code blue pages during this time frame. Family members were present at 53% of code blue events. Chaplains provided multiple services, including crisis support, compassionate presence, spiritual care, bereavement support, staff debriefing, and prayer with and for patients, families, and staff.

Conclusions Family members are frequently present during code blue events. Chaplains are available to respond to all such events and provide a variety of immediate and longitudinal services to patients, families, and members of the health care team. Their experience in crisis management, spiritual care, and bereavement support makes them ideally suited to serve as family facilitators during resuscitation events. (*American Journal of Critical Care.* 2021;30:419-425)

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doi:https://doi.org/10.4037/ajcc2021854

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Family presence during resuscitation (FPDR) is the practice of offering a patient's family access to witness resuscitation efforts provided at the time of a cardiac or respiratory arrest (code blue event). The option for family presence is supported by many leading health care organizations and is consistent with the patient- and family-centered care model.[1-3]

Family presence during resuscitation is not always appropriate or desired, but for family members who wish to be present with their loved one during a code blue event, FPDR has been shown to improve satisfaction with end-of-life care and to decrease rates of posttraumatic stress disorder and complicated grieving.[4-6] Multiple guidelines, recommendations, and policy statements published in recent years recognize the value in offering FPDR and the importance of providing a dedicated family advocate, who is often referred to as the family facilitator.[1,2,7,8]

Although every code blue resuscitation is unique in its context, a standardized approach to the dynamic process of FPDR can be used. In practice, a variety of staff members (nurses, social workers, chaplains, and family therapists) have served as family facilitators, but standardized training in the provision of this care for health care workers has been minimal.[2] The family facilitator should not be one who participates in the resuscitation efforts but instead dedicates their attention and care to the patient's family. The family facilitator is responsible for determining the family's ability to be safe observers, serving as a companion during the visit and throughout the crisis, and acting as a liaison between the family and the code team.[2] A growing number of hospitals have begun to implement FPDR policies.[9] However, the frequency of family presence during inpatient resuscitations has not been described previously in the literature.

The family facilitator is responsible for determining the family's ability to be safe observers, serving as a companion during the visit and throughout the crisis, and acting as a liaison between the family and the code team.

Our large academic hospital deploys chaplains who have expertise in spiritual care, existential crisis management, and grief support to serve as family facilitators during code blue events. This review describes more than 8 years of our chaplains' daily reports and resuscitation support services provided. The aim of this descriptive study is to measure the frequency of FPDR and describe the depth and variety of services provided by chaplains in the role of family facilitator.

Methods

At our institution, chaplains provide on-call coverage 24 hours a day, 7 days a week. Their on-call duties include collaborating with medical teams to provide emotional, spiritual, and practical support for patients, their loved ones, and staff members during existential crises. The on-call chaplain is responsible for responding to urgent consultations such as code blue events. Our institution has dedicated chaplain coverage on the intensive care units (ICUs) and the emergency department during the daytime, and chaplains are routinely called directly to a resuscitation event on their assigned unit. Events that occur outside ICUs and the emergency department trigger an automatic page to the on-call chaplain.

The on-call chaplains perform continuous assessments of family members' spiritual, emotional, and physical condition to address their needs and ensure the safety of the code blue scene. Chaplains are trained to understand that their scope of practice does not include being involved in resuscitation efforts or delivering medical information during events.[7] Chaplains document their interventions with the patient in the electronic medical record, and they also document a summary of the shift's codes, deaths, and referrals on a shift summary report (see Figure). This summary is presented and discussed with the chaplain team at a daily report session to ensure that proper internal referrals are made and to notify colleagues of activity that has taken place on their unit(s) in their absence.

The chaplain's daily report summary is given to an administrative assistant who transcribes the

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Chaplain Services and Education On-Call Summary Sheet

On-Call Date

CODE BLUES										
Location	Patient name	Chaplain	Time of page (AM/PM)	Response time (min)	Patient transfer (unit)	Death (Y/N)	Family (Y/N)	Ministry to	Time spent	Comments/details as needed

Figure Document that chaplains use to report participation in a code blue event.

Abbreviations: N, no; Y, yes.

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information into a database that is kept in a secure folder on a shared drive. The participating institutional review board approved this study before review.

Design and Setting

This study is a review of the quantitative and qualitative data reported for chaplain staff members' code responses from January 1, 2012, to April 30, 2020. Data were evaluated from June 2020 through October 2020. Chaplains documented the following information regarding their responses to each code blue event: the location of the event, their response time, the occurrence of patient death, and the presence of family members (see Figure). They also had the option to provide commentary regarding the event details and the services provided.

The study setting is a large academic medical center with 957 beds in the southeastern United States. This institution is accredited by the Association for Clinical Pastoral Education (ACPE) to provide training to CPE interns, residents, and certified educators. The institution employs 6 staff chaplains, 5 ACPE-certified educators, and 7 CPE residents. Data were collected before strict COVID-19 visitor restrictions went into place in 2020.

Data Collection and Analysis

The code blue response data were collected from the chaplain internal report summaries and downloaded into spreadsheet software (Microsoft Excel) for review. Entries that were missing data were not included in the frequency reports. With prior institutional review board approval, data were measured with descriptive statistics within the spreadsheet software and verified by 2 of the authors.

We reviewed the narrative comments by using conventional content analysis within the software. We selected conventional content analysis because this technique is suitable for exploring an area in which little is known and further description would be beneficial.[10] We used this strategy to identify concepts from the collated comments from the on-call summary sheets. We coded text into concept categories, systematically reviewed the data entries, and agreed on the concept associated with each comment. The completed on-call summary sheets included 607 comments; concepts that represent more than 30 comments are recognized and discussed in this article. We selected exact quotes that we felt expressed each concept to report in this article.

Results

Chaplains reported attending 1971 events within the study time frame. Chaplains reported responding to these events in a median time of 5 minutes (interquartile range, 4-8 minutes). When a chaplain was present at the onset of the code, the chaplain documented a response time of 0 minutes. Family members were present at 1044 of 1971 events (53%).

Chaplains provided care in 1216 (61.7%) of the code blue responses. When services were provided, chaplains documented the recipients of care. Recipients of chaplain care were identified as being in 1 of 3 groups: family, staff, and patients. The frequency of services provided was reported for each group (Table 1). Some entries documented services provided to individuals in more than 1 group. Most support provided by chaplains was to family members (n = 935; 76.9%).

> Families were present for more than half of the inpatient resuscitations reported.

Chaplains reported that death occurred in 371 of 1957 events (19%). No deaths were reported in the remaining 81% of code responses. When calculating the frequency of reported patient death, we

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Table 1
Chaplain care recipients during code responses (N=1216)

Recipient	No. (%)
Family	935 (76.9)
Staff	273 (22.5)
Patient	110 (9.0)

Table 2
Chaplains' narratives regarding services offered in response to cardiac arrest events

"Prayer, consult, ministry presence"

"Supported family over the phone"

"Sat and digested code scare with the family"

"Said a prayer with staff because multiple codes have happened in the unit recently"

"Transitioned patient to hospice"

"Long code, staff was shaken"

"Debriefed with staff"

"Stayed with daughter until she could be alone"

"Patient's code status was DNAR, waited for family to arrive"

"Assisted spouse watch the code"

Abbreviation: DNAR, do not attempt resuscitation.

excluded 11 responses because they were reported to be mock (training) codes, and we excluded 3 responses because of chaplain reporting error. Given that many of the variables measured by the daily report (see Figure) were still relevant, we included the mock code events in all data sets except for evaluation of occurrences of patient death.

Comments Describing Support

Commentary was not mandatory in the reporting system; however, 607 of 1971 entries (31%) contained a comment that described chaplain interventions with patients, family members, and staff (Table 2). Chaplains' code responses included facilitating FPDR, providing a compassionate presence, debriefing, and following up with patients and families (Table 3). Other types of support included listening carefully to family, staff, and patients; offering prayer; accompanying the family to the ICU; and facilitating communication with the medical team. Comments indicating a need for family support were included in the report summaries, for example, "The patient's 16-year-old granddaughter was in the room when the patient started coding and was shaken up," and "This was a large family, and the patient was 33 years old with 2 kids."

In 1971 code blue events, chaplains documented supporting FPDR, participating in debriefing, and providing longitudinal care for patients, staff, and family.

Chaplains' ongoing and follow-up care to families and staff was documented in 48 comments, including formal chaplain referrals for family support and communications with the oncoming shift regarding family and staff. Chaplains frequently reported that they had "checked back throughout the day" on the family and "made a number of visits during the night to visit family and follow up." The documentation indicated that the on-call chaplains made multiple visits to families outside of the initial event response. For example, chaplains noted having spent time with families during the code event but even more time after the event: "I spent 1 hour at the code followed by 2.5 hours with the spouse."

Patient death at a later time, after the chaplain's code blue response, was documented in 32 comments. Some chaplains noted that the patient underwent arrest multiple times outside of the initial code blue response. Others described medical instability before declaration of death (eg, "patient died 11 hours later" and "died later that night").

Chaplains described family members' actions during the resuscitation. Comments such as "spouse watched code" and "family stayed during code and procedure" indicated instances of direct family observation. Care of the hospital staff was mentioned as well. In many of the codes, the chaplain supported the resuscitation clinicians. For example, one chaplain wrote, "After patient was moved, I stayed and said a prayer with staff. Multiple codes have happened here recently [and] staff are affected." Other entries described supporting staff initially and then returning to pray with the family and participate in a staff debriefing.

Families were not present or provided with services at all code blue responses. The chaplains reported in 30 comments that families declined services. Some examples are "family declined care; provided care for nearby families that were worried," "not interested in pastoral services," and "declined care as they are waiting for their own minister."

Discussion

Family Presence During Resuscitation

Families were present for more than half of the inpatient resuscitations recorded. This frequency supports the need to standardize and define the role of the family facilitator and prepare staff to fill this important role. Institutional guidelines are

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recommended to standardize decision-making regarding FPDR and promote equitable and consistent opportunities for family presence.[1,2,7] Implementation of such guidelines should begin with a thorough needs assessment to evaluate the existing institutional culture. Some clinicians believe that FPDR events will be traumatic and harmful to families in all circumstances, a view that is not supported in the literature.[5,6]

In this descriptive study, chaplains provided multiple services to a variety of people, including staff members, during and after inpatient code blue events. They not only fulfilled the role of family facilitator but also spent time with patients and health care staff around the time of code blue events. Chaplain commentary confirmed that, consistent with the institution's code blue policy, family members were supported during direct observation of resuscitation efforts.

Our data highlight that chaplains in this setting routinely support families to manage feelings of loss, denial, and grief during health care crises. When chaplains were deployed as family facilitators, they provided longitudinal engagement. In such cases, the chaplain was able to provide continuity of care and comprehensive bereavement support to the family and staff after the patient's death.

The reported response time was well within the institution's expectation for rapid response. The lapse of time between code onset and the time of chaplain arrival is important because during this gap a different staff person must fill the family facilitator role. When visitors are present at the onset of a code blue event, they require immediate direction and support to ensure that the scene is safe and clear so that the patient receives therapies from the medical team quickly.[2,8] The brief lapse in coverage may indicate a need for nursing staff and the code team to quickly identify an interim family facilitator to support the family until the chaplain's arrival. This step would need to be incorporated into the institution's code blue training.

Unfortunately, chaplains are not a ubiquitous resource and some hospitals worldwide do not or cannot employ a qualified health care chaplain. In those settings, the question arises as to who should accompany family members during resuscitation events. In institutions and hospitals that do not employ chaplains, FPDR guidelines could be a helpful resource that defines and standardizes the family facilitator role. Guidelines can also be used to train other staff members for this role. In our institution, chaplains are ideal team members to serve in the family facilitator role because of their skill set and their training in crisis management and support and in spiritual and emotional counseling. Using chaplains as family facilitators is a demonstrably feasible model to provide FPDR.

Table 3
Chaplain care for patients, families, and staff during resuscitation responses

Type of care
Patients
Offer prayer
Provide compassionate presence with recovered patient
Support patients receiving religious rituals
Communicate needs of the patient to the health care team
Follow up with surviving patients to provide spiritual, emotional, and existential support after code event
Collaborate with patient's clergy
Provide continuity of care; transfer patient to ICU chaplain when appropriate
Families
Offer prayer
Provide compassionate presence
Provide referral to ICU chaplain
Facilitate family presence during resuscitation
Facilitate communication with code team
Facilitate family speaking to their loved one during and after code event
Facilitate collaboration with family's clergy
Provide crisis support
Provide support via phone conversations
Coordinate and escort families as they move to new patient care unit
Support family in information gathering
Provide referral to specific faith resources
Provide bereavement services
Staff
Offer prayer
Provide compassionate presence
Assist with communication/difficult conversations with family
Participate in debriefing
Follow up with staff well-being in settings with frequent critical events
Participate in mock codes
Manage multiple events and consultations simultaneously

Abbreviation: ICU, intensive care unit.

Implications for Critical Care Staff

Clinicians caring for critically ill patients experience high patient mortality as well as challenging daily workloads and ethical dilemmas, which can lead to excessive stress and high rates of burnout.[11] At our institution, chaplains documented multiple instances of recognizing stress and grief in the health care staff and intervening with therapeutic presence and conversation. Given chaplains' skills in therapeutic presence, communication, and empathy, we hypothesize that chaplain presence is a meaningful intervention to improve workplace resiliency and reduce burnout.[12] These data provide a window into the broad scope of care that chaplains can provide, particularly in high-intensity environments.

This descriptive study invites critical care staff to become aware of the frequency and scope of chaplain services provided when a patient survives a code

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blue event. Table 3 describes interventions to support patients emotionally and spiritually after the resuscitation experience, which can provoke stress and existential crisis. Chaplains documented that their role included facilitating and enhancing communication between the patient, family, and medical team. Critical care staff can use these communication skills when discussing patients' ethical beliefs and concerns surrounding decisions about resuscitation attempts and life support. These data support the integration of chaplains into the multidisciplinary team to provide holistic care to critically ill patients (and their families) who have experienced a code blue event.

The COVID-19 pandemic has affected numerous clinical practices since these data were collected. Because of the pandemic, our institution has had various levels of visitor restriction since March 2020, resulting in fewer visitors present at the time of code blue events. In addition, the family's position directly at the bedside of a patient with COVID-19 is contraindicated given the airborne precautions. The chaplain staff have found solutions to continue communication and companionship in this difficult time. Virtual communications by teleconference and telephone have notably increased. Our institution now has a systemwide initiative to provide chaplains and unit staff with tablet computers to include families in video discussions. Family members of patients with COVID-19 are offered virtual interaction or observation facilitated by the chaplain in the patient's anteroom. In a few cases, the chaplain has actively communicated with family members by telephone or tablet during a code blue event. Virtual family facilitation is becoming more of a reality in the COVID-19 era, and more research is warranted to determine a best practice.

This institution has created an FPDR training experience for chaplains that includes didactic and interprofessional simulation components.

Limitations

These data from a single center have limitations. First, the code responses do not correlate directly to hospital code blue data because chaplains are automatically paged to code blue events that occur outside the ICUs and emergency department. Code blue responses in the ICUs and emergency department are managed by dedicated ICU chaplains during the day and the on-call chaplain during the night shift. The response times were self-reported and therefore susceptible to bias. Narrative commentary was not required or standardized, so the occurrence of comments did not indicate an absolute frequency. Mock code events that were documented in this database demonstrate chaplain response times but affect the accuracy of data that pertain to FPDR because these were simulated events.

Future Work

At our institution, this review provides the basis for creating formal institutional guidelines to standardize and define the responsibilities of the chaplain as family facilitator at inpatient code blue events. Creation and implementation of these guidelines will be an interprofessional and collaborative initiative. Chaplain leaders are creating a rigorous code blue training experience that includes both didactic and simulation components for novice chaplains. The institution will continue efforts to engage chaplains in all hospital code blue events and to increase institutional awareness of the health care chaplain's skill set beyond sacramental or religious care during death and bereavement. Data will be collected to quantify chaplains' time spent on code blue–related care.

The data collection tool will be modified to strengthen future research findings with increased precision. The improved reporting system will capture the detailed nature of services provided to staff and measure the impact of chaplain services on patients, families, and staff. This review has also provided the opportunity to explore how else we might change our reporting structure and data collection for mock and test codes. We are interested in investigating services that benefit patients who survive a resuscitation and the role of the chaplain during code blue debriefing sessions. Other observational studies should explore strategies to enhance code team dynamics and communication with the family facilitator.

Conclusion

Health care chaplains are a pivotal part of family support during inpatient resuscitation and are fully integrated into the interdisciplinary team. They provide crisis management and support, spiritual and emotional guidance, and a compassionate presence to patients, family members, and health care staff. In this retrospective review, family members were present at 53% of the code blue events to which chaplains responded. On-call chaplains responded quickly to support patients, families, and staff in the code blue setting. Critical care providers should consider deploying chaplains as family facilitators when writing protocols or guidelines and developing

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proficiency standards for the code blue team. Further studies are warranted to examine the impact on patient and family experience, staff resilience, and team dynamics when the chaplain serves as family facilitator.

FINANCIAL DISCLOSURES
None reported.

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