Family-centered care is widely regarded as best practice for intensive care unit (ICU) patients, but restricted visitation due to Covid-19 posed a major obstacle to engaging and supporting families. In response to this need, Atrium Health developed and iteratively adapted a Family Engagement Navigator program to promote family-centered care, which has supported 70 ICU patients over 12 weeks from May through July 2020. The authors describe key lessons gained from their experience and program evaluation.

Family-centered care — which incorporates family members into a collaborative team including patients, families, and health care teams — is a key component of high-quality ICU care.1 However, restricted visitation policies associated with the Covid-19 pandemic inhibits the ability to provide family-centered care,2 and reports from centers experiencing early surges describe family communication as “complex and fragmented.”3 Novel implementation strategies for delivering family-centered care with during times of restricted visitation are urgently needed.2 One approach involves leveraging skills of persons outside of the clinical team as Family Engagement Navigators to provide additional support to families.2,4 This strategy is supported by evidence demonstrating the success of communication facilitators in other settings.5,6 At Atrium Health’s Carolinas Medical Center, Charlotte, North Carolina, we rapidly developed a novel program utilizing medical students from University of North Carolina at Chapel Hill School of Medicine to promote family-centered care for ICU patients who were not allowed visitors due to the pandemic.
Program Description: Bridging the Gap

The program was designed so that each navigator would provide three primary needs: i) facilitate communication between the patient’s care team and the family member, ii) promote humanization of the patient, and iii) provide emotional support to the family.

“We began by piloting the program with a rapid analysis formative evaluation using implementation science principles. From the initial idea in late March 2020, the foundation of the program was designed by week one, then the formative evaluation and pilot process occurred by week three. Based on these results, we designed an operational workflow by week four (Figure 1).”
FIGURE 1

Framework of Navigator Activities and Tools Used to Facilitate Family-centered Care

The navigators’ operational workflow was designed and informed by a rapid pre-implementation evaluation using qualitative data collected from physician, nurse, and medical student stakeholders. In addition to the daily contacts, the navigator also meets before and after decision-making family meetings between clinicians and all family members. The navigator helps prepare families to get the most out of the meeting, and again to debrief and offer support.

Navigator-Guided Ancillary Tools for Family Members
- Atrium Health Resource Hub: assistance with food, housing, utilities/Internet, mental health
- Empathetic support toolkit
- Video conferencing technological support
- Family journal/diary
- Question log for clinical team
- Get to know me template
- Power of attorney and advance directive forms

Source: The authors
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

After the medical students received about 4 hours of initial training in critical care and respiratory support and empathetic listening and support, they would be available to serve as Family Engagement Navigators. Each new ICU patient was assigned to a navigator on the first day of admission. Navigators familiarized themselves with the patient’s hospital course by reviewing the electronic health record. Navigators identified a primary contact for the family, helped the family determine the best platform for communication (phone, videoconferencing application, etc.) and assisted in overcoming any barriers to accessing communication platforms, including designating preferred timing of contact from clinical team. Navigators facilitated communication as needed, such as helping families keep a list of questions to ask the clinical team. Navigators used a Get To Know Me template (Appendix, Exhibit 1) to obtain humanizing, personal information about patients from their loved ones. Finally, navigators assessed the need for and provided emotional support to families, allowing them to process their fears, anxieties, and stress related to their loved one’s illness.
The three core program objectives of the program — communication facilitation, empathetic support, and patient humanization — are addressed through specific interventions performed by the Family Engagement Navigators (Figure 2).

FIGURE 2

**Intervention Activities Mapped to the Three Core Program Objectives**

The three core objectives of the program — communication facilitation, empathetic support, and patient humanization — are addressed through specific interventions performed by the Family Engagement Navigators.

Initially, the Family Engagement Navigator program was offered for course credit during a period when medical students were furloughed from direct patient care. At that time, medical student navigators were recruited as volunteers via email and word of mouth. The navigator workforce ranged from 4 to 12 students who supported 70 families over 12 weeks between May and July 2020; the families were associated with patients from Atrium Health’s 900-bed quaternary care hospital, which has 111 ICU beds and a 35-bed Covid-designated ICU.

Alongside our implementation of the Family Engagement Navigator program, we assessed implementation outcomes using qualitative data from the electronic health record and quantitative data collection from navigators, clinical staff, and families to capture important themes and contextual factors related to the impact of the program (Appendix, Exhibit 2). Based on our
experience and the results of these assessments, we describe seven principles to consider in the implementation a Family Engagement Navigator model to support ICUs when visitation is restricted:

**Principle 1: Supporting families’ communication and emotional needs is time-intensive.**

Family members experienced considerable distress due to inability to visit their critically ill loved one. Many expressed significant stressors, fears, and grief and desired to receive emotional support from the navigators. Additionally, many family members faced significant barriers to communication with ICU teams and with their critically ill loved one. Providing this support took time for navigators. The average call length between navigator and family member was 25 minutes and most families preferred to be contacted once daily, although some requested more frequent check-ins. On average, navigators reported spending more than 1 hour per patient each day to accomplish the necessary tasks; over time, this increased to nearly 2 hours per patient per day as the program continued and we accumulated patients with long-lasting critical illness. This is important to consider for resource allocation to the program and highlights the relative advantage of this model over the traditional model relying on clinical team members to complete family engagement tasks while encumbered by overwhelming bedside duties.

"On average, navigators reported spending more than 1 hour per patient each day to accomplish the necessary tasks; over time, this increased to nearly 2 hours per patient per day as the program continued and we accumulated patients with long-lasting critical illness."

**Principle 2: Family Engagement Navigators should augment, not substitute, regular communication with the care team.**

This theme emerged in our pre-implementation evaluation and re-emerged during the implementation evaluation. As they are not part of the bedside clinical team, navigators did not provide clinical information to family members. However, family members did frequently ask navigators for clinical updates and prognostic information. It was vital to explicitly address role definitions with families, navigators, and clinicians and reiterate roles with each family contact. Our program education to bedside clinicians emphasized that clinical updates, prognosis, and decision-making should continue to occur at regular intervals. We reinforced the distinct roles of navigator and clinician by having the navigators help families keep a “question journal” to log questions they want to ask the clinical care team about their loved one’s care.
Principle 3: Navigators need support in terms on upfront training and ongoing access to resources.

In our model, third- and fourth-year medical students served as Family Engagement Navigators. As such, there were knowledge limitations, for example, of critical care interventions and differential experience in providing emotional support. The faculty leader conducted an initial orientation session to familiarize navigators with information about respiratory support interventions and provided training on emotional support augmented by relevant resources. The faculty leader was available around the clock for ad hoc support of the navigators. It is important to note that intimately sharing the experiences of distressed families was emotionally straining for navigators. Peer and faculty support at weekly debriefing sessions were vital to managing this extraordinarily challenging work.

Principle 4: Family needs and engagement are variable, requiring flexible processes.

We initially developed detailed scripts and workflows to guide each family interaction but quickly discovered that families rarely followed consistent paths in terms of needs and engagement. Some families were primarily interested in arranging communication with the care team, and others were primarily interested in receiving emotional support. Some just needed a listening ear, and others wanted prompt solutions to specific concerns. In response to this, we adapted our navigator’s workflow to be flexible and gave navigators autonomy to tailor the support provided to individual needs of each family.

Principle 5: Hard-to-reach families may actually need extra support.

One discovery from this program was that hard-to-reach families were not necessarily disengaged families. Instead, these were often the families that needed extra communication facilitation and emotional support. We experienced several cases in which the clinical team reported that family was uninvolved or not responsive when, in fact, navigators discovered barriers that were impeding communication, such as inflexible work hours, overwhelming caregiving responsibilities, lack of telecommunications resources, or extreme emotional distress. With dedicated time to find family members and address these barriers, navigators were able to facilitate engagement between these families and their loved one’s care team. To the extent that barriers are disproportionately distributed among disadvantaged subgroups, a Family Engagement Navigator program may help reduce disparities in the provision of family-centered care.

“One discovery from this program was that hard-to-reach families were not necessarily disengaged families. Instead, these were often the families that needed extra communication facilitation and emotional support.”
**Principle 6: Humanizing patients is an incredibly meaningful experience for families, and grounding for clinicians.**

We learned from our pre-implementation evaluation that loss of humanization was a major threat to patients in the setting of restricted visitation. We responded by having navigators complete a Get to Know Me Board comprising personal information obtained from the family about the patient (e.g., work history, hobbies, favorite foods, personality nuances) that was then documented in the medical record and posted in the patient’s room. Families responded intensely positively to this component of the program, feeling reassured that their loved one’s personhood was valued. Bedside clinicians reported this being a highlight of the program, as well, helping them feel connected to patients and increasing the sense of value in their work.

**Principle 7: Family Engagement Navigator program has 360-degree benefits for families, patients, clinicians, and navigators.**

Overall satisfaction was high for all roles touched by the program. Through a convenience sample of family members selected for interviews, one family member said, “we weren’t worried because [the navigator] called twice per day. We felt connected even though we couldn’t be together.” Another relayed, “this is the first time someone called to see how I was doing and how I was making it,” and “It helped calm me down to have a familiar person calling every day checking in.” Finally, one family member reported, “I thought it was the nicest thing. I couldn’t imagine going through this time without [the navigator].” Similarly, clinical teams endorsed high satisfaction, reporting that the navigator program increased family engagement and that support for family communication allowed them to apportion more time to pressing bedside duties. Participating in the program had immense value to navigators as well, in this case talented medical students eager to use their skills to benefit patients and families during a global health crisis. During weekly debriefing sessions, navigators shared deeply meaningful experiences connecting intimately with families during this vulnerable time in their lives.

**Maintenance and Evolution of the Family Engagement Navigator Program**

As medical students return to direct clinical care, new challenges arise for staffing a Family Engagement Navigator program. We currently use medical student volunteers to staff the program but continue to seek opportunities to create a more sustainable staffing solution, including leveraging the skill sets of additional multidisciplinary team members such as social workers, nurses or nursing students, and pastoral care providers who are also experiencing significant role modification due to Covid-19. Further, in anticipation of subsequent surges, we intentionally designed our medical student course as a platform curriculum to allow new cohorts of students to enter or exit the program as needed based on need and availability (Figure 3).
Another unresolved matter includes lifting of visitation restrictions, but it is likely that some form of restriction on visitation for Covid-19-positive patients will challenge family-centered care in the ICU for the foreseeable future.

Our Family Engagement Navigator program provided immensely valuable support to families of critically-ill Covid19 patients affected by restricted visitation. Our implementation evaluation
and program assessment found that the multicomponent family support model was successful in i) facilitating communication between families and care teams, ii) humanizing patients, and iii) emotionally supporting families. Although restricting visitation of loved ones to critically ill patients is one of the devastating realities of the pandemic, we are encouraged that novel strategies to facilitate family-centered care can be effective and provide value for all involved.

Appendix

Elements of the Family Engagement Navigator Program

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Disclosures: Stephanie Taylor, Robert Short, Anthony Asher, Pranavi Sanka, and Rashmi Muthukkumar have nothing to disclose.

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