Patient- and family-centered care (PFCC) is a healthcare approach that engages patients and their families to make care and management decisions in collaboration with healthcare professionals. PFCC incorporates dignity and respect, active participation and collaboration, and information sharing. According to the Institute for Patient- and Family-Centered Care, it’s a useful strategy for redesigning subpar quality and safety practices.

Organizations that embrace technology and innovation can change patient and family experiences and support a PFCC model. Using technology to deliver healthcare, health information, and education can enhance PFCC and nurture a positive collaborative partnership with families and healthcare providers.

One example of family participation in care is family attendance at neonatal intensive care unit (NICU) interdisciplinary rounds. However, daily work obligations, transportation concerns, and financial constraints can all contribute to a family’s inability to attend. Virtual rounding provides a solution. It empowers patients and families to participate in decision-making, eliminates barriers to receiving in-person medical information in real time, and establishes a trusting relationship between the healthcare team and the family.

Virtual rounding in the NICU

Virtual rounding in the NICU became part of our organization’s PFCC as a result of the evening I received a baby transported 2 hours by ambulance. She needed specialized services, which required that she stay in the hospital for several weeks or months. During this extended stay, her parents couldn’t visit as frequently as they wished because of the long distance from their home. Parental interaction is critical to establishing a plan of care that benefits the patient, family, and healthcare team.

I sought a way for the parents to participate in their child’s care even though physical presence wasn’t possible. I landed on the idea of virtual rounding, which was already offered in other units at our organization. Virtual rounding allows loved ones who can’t be present at the bedside to be involved with planning, treatment, and care updates. It also provides an opportunity for interaction and emotional comfort for both the patient and family.

Implementing virtual rounding required collaboration among nursing, hospital administration, and telehealth staff. Working closely with a colleague, I discussed the idea with our nurse manager, unit educator, and the attending physician, which put the wheels in motion to virtually connect families with their healthcare team. Our telehealth department prepared hospital tablets...
with the necessary software and educated selected nurses on scheduling the virtual rounding sessions.

**How virtual rounding works**
Successful implementation of virtual rounding requires collaboration between the patient’s loved ones, the interdisciplinary care team, and the nurse facilitator of the virtual rounding session. For each session, we use a cloud-based virtual meeting platform that’s compliant with the Health Insurance Portability and Accountability Act. This platform supports up to 25 participants, enabling transmission of information to all team members.

First, the scheduling nurse establishes family interest in virtual rounding, obtains consent to participate, and requests an email address and cell phone number, which are saved in the application for scheduling each session. The family then downloads the meeting platform to an internet-connected computer or WiFi-enabled cell phone or tablet with a camera and microphone. For each virtual visit, the nurse emails a hyperlink confirmation to the meeting participants. The hyperlink information includes the meeting topic as well as the time, date, and duration of the session. A text message is sent to the family’s cell phone 15 minutes before the rounding session begins.

In the hospital, we conduct all virtual rounding sessions on a hospital-specified tablet to ensure a secure password-protected WiFi connection. The family enters the virtual rounding session via the emailed confirmation hyperlink. The process is similar to joining a webinar online. During the session, the family’s faces are visible at the bottom half of the screen and audio and video capabilities are enabled. Family members can participate in both morning and evening rounds.

**Family reaction**
Virtual rounding quickly proved to be effective for engaging and empowering families in patient care. After only a handful of sessions, parents praised the initiative, contributed during the rounding session, and expressed overall satisfaction with virtual rounding using an internet-based meeting platform.

To get a clearer sense of the impact of virtual rounding, we developed a post-survey parental questionnaire, which includes demographic questions and a Likert scale to determine family satisfaction; we also ask for positive and negative feedback. Other questionnaire topics include communication, connection issues, parents’ feelings, and ideas for improvement. Moving forward, questionnaires will be given to parents after each virtual rounding session.

**Challenges**
We identified both internal and external challenges to our virtual rounding initiative. Shortly after unveiling virtual rounds, the telehealth department changed our cloud-based meeting platform. The transition halted the rounding program until training was completed. The new platform is now functioning and all staff have been trained in its use.

We also experienced some staff resistance, which is common with any change in routine. Some providers and nurses felt that adding a virtual rounding session would prolong rounds. Indeed, poor internet connectivity and unforeseen accessibility issues did delay some sessions. When we experienced poor audio or connection problems, we called families to troubleshoot the problem and reestablish the meeting. If the issue couldn’t be fixed easily, the care team scheduled a future virtual visit with the family and called with an update at the end of rounds for the day. Our new virtual meeting platform, which initially created some delays, provides an effective and more secure connection that has reduced disruptions in daily workflow.

**Implications for the future**
We plan to expand this technology to include virtual visitation. Pairing families with an innovative and effective alternative to in-person visitation will help loved ones support patients and provide families with the comfort and reassurance they need during lengthy hospital stays.

**Problems lead to solutions**
Virtual rounding on our unit started with a problem encountered during patient care. Because of that one transport, more parents now have the opportunity to participate in virtual rounding and remain close to their children, even when they’re far away.

Nothing speaks louder to our virtual rounding service than a family’s gratitude and warmhearted appreciation. Virtual rounding empowers patients and families, improves communication, and nurtures the coordination of care to improve clinical outcomes.

**Selected references**