

Transforming the Surgical Journey: Enhancing Patient and Family Experience Through Human-Centered Design and Perianesthesia Practice Innovation

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Abstract Background Information: Surgical procedures are stressful for patients and families. To improve the perioperative experience, Mayo Clinic launched the Surgery Patient and Family Experience Project. Using human-centered design, the team addressed communication gaps, waiting room flow, expectations, and belongings management. Early efforts focused on admissions, piloting staggered queues and mobile pre-registration. Additional interventions included “Ready-to-Room” texting, improved postoperative updates, redesigned waiting boards, and automation pilots. These changes reflect a system-wide commitment to compassionate, efficient, and personalized surgical care.

Objectives of Project: The project aims to improve the perioperative journey by addressing key stressors and inefficiencies. Objectives include:

- Enhancing communication to reduce anxiety and build trust.
- Streamlining admissions via mobile pre-registration and staggered arrivals.
- Improving privacy and belongings management through automation.
- Applying human-centered design to guide sustainable, patient-focused solutions.

Process of Implementation: The project used a phased, multidisciplinary approach grounded in human-centered design. Pain points were identified through research and interviews, guiding interventions across preadmission, preoperative, and postoperative phases. Solutions included staggered queues, mobile pre-registration, “Ready-to-Room” texting, and belongings management. Implementation relied on pilots, feedback loops, and collaboration across IT, Patient Experience, Revenue Cycle, and Nursing. Experience Design insights informed scalable changes like Epic integration and automation pilots, supported by governance to ensure sustainability across surgical sites.

Statement of Successful Practice: The project successfully transformed perioperative care through human-centered design and cross-functional collaboration. Targeted interventions—such as “Ready-to-Room” text messaging, redesigned waiting room boards, and improved belongings management—enhanced communication, reduced anxiety, and streamlined workflows. Expanding registration functionality and introducing pre-registration workflows eased congestion at the admissions desk. Supported by strong stakeholder engagement, the initiative improved operational efficiency and patient satisfaction, offering a scalable model for advancing perianesthesia practice through empathy, innovation, and system-level thinking.

Implications for Advancing the Practice of Perianesthesia Nursing: This initiative shows how human-centered design and collaboration can elevate perianesthesia nursing by aligning workflows with patient and family needs. Enhancements like “Ready-to-Room” texting, expanded pre-check-in, and redesigned waiting boards empower nurses to deliver more efficient, compassionate care. Nurses played a key role in shaping the experience through streamlined processes, proactive updates, and improved belongings

management. These scalable interventions position nurses as co-designers of care and offer a model for advancing perianesthesia practice through empathy, innovation, and system-level leadership.