

STATISTICS IMPROVES HEALTHCARE

STATISTICAL

SIGNIFICANCE

The decision between a patient and their physician to undergo surgery initiates multiple processes involving numerous teams that must all coordinate together to provide the best possible care for the patient. Statistics aid healthcare systems to accurately plan for current and future patients by improving operational efficiencies and ensuring more optimal utilization of scarce physical and human resources.

Surgical Operations

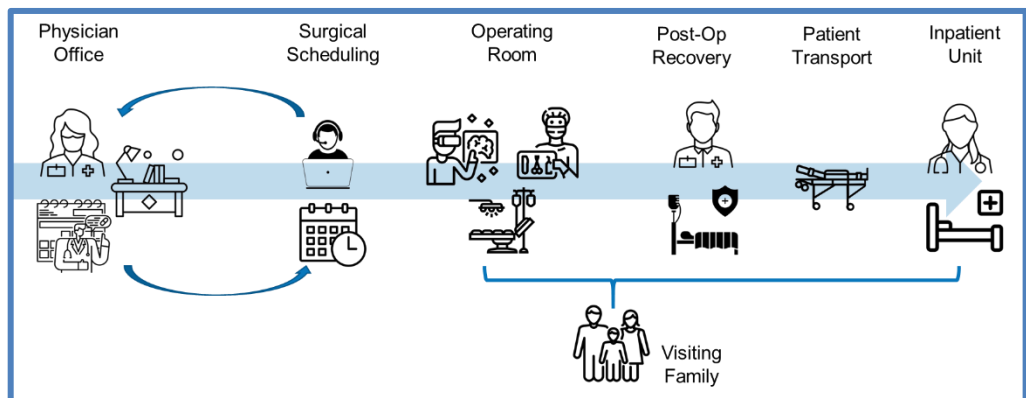
'WHEN DO WE EXPECT THE PATIENT TO ARRIVE?': This is the fundamental question asked by each care team from the initial decision to undergo surgery through every stage of the patient journey in the hospital. Each administrative and clinical member has a different role to play, and statistics aid them caring for their current patients and anticipating their next patient.

SURGICAL OPERATIONS: Many surgeons practice at a hospital. After they meet with their patient and decide to undergo surgery, the next step is to select a date and time to place the patient on the surgical schedule with an estimated duration. The hospital has a centralized operations team that aids in consolidating all the scheduling requests and ensures the proper operating room, necessary equipment, and surgical team will be available for the planned surgery.

ANTICIPATING THE SURGICAL SCHEDULE: The surgical schedule is a 'living' plan that often sees changes nearly every day. Changes can result from adding new surgeries, cancellations, emergencies, patients needing to delay surgery, staffing availability, and/or facility availability.

When changes occur, the surgical operations team alerts surgeons about new opportunities to add cases or potentially move surgeries up on the calendar. Improving surgery duration predictions to better account for differences in surgeries and differences in patient's unique clinical factors provides better information for planning. The estimates give

the size of schedule opportunities, identify which surgery(s) could be moved into that opening, and highlight potential risks for surgical delay when one surgery may not complete before the next scheduled surgery is planned to begin.



TEAM OF TEAMS: Accurate surgical duration estimates are important to care after surgery. Postop recovery units and subsequent inpatient units can anticipate when they will be receiving patients and manage their volumes. Requests for patient transportation are made more efficient so the transporter arrives when the patient is ready to move to an inpatient unit. Nursing, housekeeping, and even food services staff are prepared for the patient's arrival on a unit; and most importantly, communication to patient families about their loved one is improved.

IMPACTS AND SIGNIFICANCE: Surgical care is complex. Hospital processes are complex. However, we estimate a 1% improvement in adding cases to the surgical schedule would equate to approximately 8,000 additional patients in a year. Statistics can aid in anticipating and caring for patients through improved planning, better care team coordination, reduced waste of resources and time, better patient outcomes, improved patient and family experience, and improved access for future patients.