

## **Improving First Case Surgical Start Times by Improving Wayfinding**

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**Introduction:** Wayfinding refers to a process of navigating from one space to another. On the day of surgery, patients can be confused and nervous. These stressors affect their ability to process information. This project examined ways to improve wayfinding in a large hospital.

**Identification of the problem:** First case surgical delays are costly when the Operating Room (OR) stands idle waiting for the patient. Late first cases may cause late starts for the rest of the surgical day resulting in staff overtime and patient dissatisfaction.

**QI question/Purpose of the study:** Through two Plan, Do, Study, Act (PDSA) cycles, we identified ways to reduce late starts. The first PDSA cycle question: "In the patient's path of travel from hospital door entry to OR transfer, what are causes of delay?" It was found that patients got lost from hospital entry to preoperative area (Preop). The second PDSA question was "With additional temporary signage will start time delays be reduced?"

**Methods:** PDSA 1: student nurses observed 30 patients' pathways from hospital entry to OR transfer and documented time spent at key stopping points. Their observations were compared to times documented in the electronic medical record (EMR) and confirmed that manual time observations matched EMR times. Signs were added between PDSA1 and PDSA2. PDSA 2 consisted of an EMR review of 200 cases: 100 pre-signage cases and 100 post-signage cases.

**Outcomes/Results:** PDSA1 findings: 28 cases were used in the final analysis. 9 of 16 first case starts were delayed. One reason for delay was time spent finding preop (33minutes). Temporary signage was placed at strategic points noted to cause patient confusion. PDSA2 findings: The 100 pre-signage cases averaged 36.5 min to preop-checkin while the 100 post-signage cases averaged 21.5 minutes (-41.1% change).

**Discussion:** PDSA1 helped to identify wayfinding from front door to Preop as a delay. PDSA1 also verified EMR use for looking at larger case numbers. PDSA2 demonstrated strategically placed signs reduced patient confusion in wayfinding.

**Conclusion:** Viewing the wayfinding from the patients' perspective as well as functional and aesthetic design is important.

**Implications for perianesthesia nurses and future research:** In large hospitals, wayfinding should be studied more. Understanding path of travel is important in Perianesthesia nursing for both inpatient and outpatient surgeries.