

Enhancing Ophthalmology competency through structured orientation simulations

Ellie Jun, DNP, RN, CCRN; Rachel L. Cipolli, RN, BSN, MSN, CCRN, CPHQ; Sara T. Ostensen, BSN, RN; Lauren McMahon, MSN, RN, CNOR; Yvonne Maxino, MSN, RN

Identification of the Problem

Newly established Ambulatory Surgery Centers face challenges in preparing perioperative nurses for ophthalmology-specific surgical care. Limited exposure to ophthalmic procedures and instrumentation during traditional orientation can result in knowledge gaps, reduced confidence, and potential risks to patient safety and surgical efficiency.

Project Team

A multidisciplinary team consisting of perioperative leadership, nursing professional development specialists, ophthalmology surgeons, and experienced perioperative nurses collaborated to design a specialty-specific orientation program aligned with real-world ophthalmology practice.

Preparation and Planning

An **eight-week structured orientation and simulation program** was developed to address identified gaps in ophthalmology competency.

The program is integrated:

- Ophthalmology-focused didactic education
- Hands-on simulation and skills practice
- Supervised clinical experiences
- Mock operating room scenarios

Content included ophthalmic anatomy, instrumentation, procedural workflows, patient positioning, and emergency response. Pre-orientation assessments identified **limited ophthalmology knowledge and low confidence**, guiding targeted educational priorities.

Implementation

The structured orientation and simulation program was implemented using:

- Weekly ophthalmology-specific didactic sessions
- Hands-on simulations replicating routine and emergent ophthalmic procedures
- Competency checklists for validation and progression
- Post-orientation clinical support by experienced ophthalmology nurses
- Multidisciplinary mock operating room simulations involving surgeons, anesthesia, and nursing staff

Result

Post-implementation evaluation demonstrated improvement in both **objective skill validation** and **perceived competency**.

- **40% increase in validated ophthalmology competencies** (Checklist-based competency validation)

Validated Ophthalmology Competencies



40%

- **23% improvement in overall ophthalmology competency scores** (Aggregated pre- and post-orientation assessment)

Overall Ophthalmology Competency Scores



23%

Notable improvements in:

- Ophthalmic instrumentation readiness
 - Procedural anticipation and clinical judgment
 - Communication and confidence in the operating room
- Surgeons reported improved operating room preparedness, enhanced procedural efficiency, and safer ophthalmic instrumentation setup.

Discussion

Four key factors drove improvement:



Implications for Perioperative Nursing

- Strengthens specialty-specific nursing competency
- Supports patient safety and operating room efficiency
- Replicable across surgical specialties and ASC settings
- Aligns with **AORN standards for competency-based education**

Replicable Practice Model

This structured, simulation-based orientation framework can be adapted to:

- Other surgical specialties
- Newly opened ASCs
- Specialty onboarding and competency validation programs

Minimal resources required; scalable across perioperative settings.

References



For more information, please contact:
Elie Jun, DNP, RN, CCRN elliejun@nyp.org