

Designing ORs for Teaching Hospitals: What Architects & Planners Overlook

by Editorial Team



Operating rooms in teaching hospitals serve a dual purpose: they must deliver clinical excellence while enabling real-time education. However, architectural and planning teams often prioritize infrastructure, HVAC, and equipment placement, leaving critical AV integration as an afterthought.

In this article, we explore the design oversights and how systems like **CREA** solve for them from day one.

The Education Imperative in Teaching ORs

In addition to clinical functionality, teaching hospitals must support:

- Real-time observation by students or peer professionals
- Multi-angle video capture
- Audio integration for live commentary
- Media archiving for case reviews and curriculum inclusion

When ORs are designed without this foresight, institutions either compromise on safety by crowding observers—or require expensive retrofitting post-commissioning.

Common Design Gaps

1. No Planning for AV Cabling or Camera Mounts

Architectural plans rarely include overhead booms or wall-mount points for PTZ cameras or display monitors.

2. Inadequate Network Bandwidth and Access Points

High-quality video streaming requires robust networking infrastructure—often missing in the original specs.

3. No Integration with LMS or Teaching Tools

Most ORs aren't built with plug-and-play streaming to classrooms or automated recording workflows.

4. Limited Space for Mobile AV Equipment

Without flexible designs or cabling routes, using carts like CREA Cart becomes difficult.

How CREA Bridges the Gap

CREA offers multiple deployment options tailored for teaching hospitals:

- CREA Custom: Full-suite AV design in sync with architectural drawings, including camera mount placement, speaker-mic setup, and secure data routing.
- CREA Intermediate: Seamless video capture and multi-display streaming with optional LMS and PACS integration.
- CREA UCP: Web-based Unified Communications Platform with recording, tagging, and real-time classroom streaming.
- CREA Cart: Perfect for ORs that weren't originally designed for education – offers full-function mobility without structural changes.

Best Practices for Planners & Hospital Admins

- Involve your AV integration partner (like Esbee Dynamed) during pre-construction.
- Allocate ceiling and wall real estate for future mounting.
- Plan LAN and Wi-Fi architecture to support real-time video.
- Consider use cases: Robotic surgery streaming? Post-op reviews? Student interaction?

CREA supports all of these without locking you into proprietary formats or workflows.

Final Thoughts

A teaching hospital's OR should never compromise between performance and pedagogy. By aligning architectural planning with AV integration needs early on, you create a surgical environment that empowers both care and learning. CREA makes this possible—whether you're designing from scratch or upgrading an existing setup.

Schedule a Consultation

Want to evaluate AV-readiness in your new or upcoming OR project?

Reach out to our team at Esbee Dynamed to explore CREA-based recommendations customized for teaching hospitals.

Esbee Dynamed specialises in OR integration and connected surgical instrument tracking solutions. To learn how we can support your operating theatre, contact our team.

Write to us at info@esbeedynamed.com for more info.