

# Rethinking the hospital's operating room

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An operating room (OR) that has medical imaging, catheter-based interventions and surgery may sound farfetched as these disciplines have traditionally been in separate spaces, but as hospitals are discovering new and more efficient methods and technologies of delivering patient care, they are bringing these processes together.

Commonly referred to as a hybrid operating room, it allows surgeons to use the tools they need to not only see inside the body, but make repairs at the same time. Older and standard operating rooms can be inefficient and overcrowded, not integrating patient data and increasing turnover time between cases. The hybrid approach brings a new meaning to the term operating room. However, this shift in room design requires a shift in thinking.

Traditional operating rooms are 400 square feet in size. Now, to accommodate all the machines, room sizes are increasing to 600-800 square feet. Figuring out the logistics of the room design can be overwhelming as equipment takes up most of the room while only maneuverable in certain ways, plus space for the team of technicians to run the machines needs to be accounted for as well, either in an adjoining room or behind protective glass. Not just highly technological components are required for enhanced healthcare though, quality team work, communication and preparedness are all essential as well.

These sophisticated operating rooms not only allow surgeons, physicians and the rest of the healthcare team to perform a multitude of procedures in the same setting, but at the same time delivering a new kind of patient experience. At Yale-New Haven, their pediatric hybrid OR offers color-changing LEDs as well as frameless frosted glass which lines the walls, giving control of the environment to the patient. This sense of autonomy aids in making patients feel calmer, and as a result, less anesthesia is required. Instead of wheeling machines in or not having accommodating equipment such as proper lighting and a moveable table, hybrid ORs provide all the tools in one place giving patients the highest degree of comfort and safety.

Travis Air Force Base in California knows the benefits of a hybrid OR first hand as they've implemented a new world class operating room that's double the size of any standard one. Designed especially for cardiac and vascular surgeries, the OR contains radiology and cardiac catheterization labs. Two impressive advantages are the convenience and collaboration that the room facilitates. Instead of carting the patient off to the intensive care unit after heart surgery, the cardiologist can be on-hand and have the proper tools to do everything he needs right inside the OR. Should the cardiologist find something wrong, he can inform the surgeon on the spot, rather than a scheduling a second surgery.

Hybrid operating rooms offer medical practitioners, surgeons, and patients and their families a new approach to surgical procedures that's less invasive, more patient centric, and at the same time fosters collaboration making for a highly efficient and safe environment.