

The Heart Center of the Future: Elements of Cost-Effective Facility Design

By Ross Swanson

Competition for patients in the cardiovascular (CV) arena continues to be fueled by new entrants in the market, despite hard economic times. As hospitals compete for CV patients, **facility design is now being seen as a strategic initiative** and not simply the provision of additional beds or the replacement of aging buildings. Corazon believes that facility design can be a key differentiating factor for heart and vascular service lines, especially as program success increasingly relies on the whole patient experience, which is often ultimately determined by design.

Multiple driving forces within the cardiovascular specialty must be considered in designing a heart center for the future, especially in the context of economic hardship. The below design elements are most critical when evaluating cost-effective facility design:

Flexible Layout

The *acuity adaptable* inpatient room, equipped with the appropriate cardiac care technology and capable of handling varying acuity, is becoming more common. This design can be implemented using the universal bed care delivery model, wherein nursing ratios and technology are adjusted to match the changing needs of the patient.

Recently, the concept of a *modality-adaptable* procedure room that promotes flexibility with a design that accommodates a variety of equipment and maximizes staffing with a universal recovery space has been utilized. Over time, the major function of the procedural room can change without much retro-fitting, accommodating the shift from major surgery to less-invasive therapies without additional cost. Flexibility and interchangeability in terms of procedure rooms, support space, and prep/recovery areas allow for program growth with minimal impact on the bottom line, while also supporting an evolving care paradigm.

Consumer-Driven Technology

The consumer experience (patients, physicians, staff, families) is often the main focus of planned facility changes. Strategically, improvements in technology are a must for programs committed to providing leading-edge high-quality care and attracting and retaining skilled physicians. However, a significant challenge remains: technology is changing at a rapid pace, and often comes with a hefty price tag.

Corazon advocates that hospitals employ a distinct strategic planning and budgeting process related to available new technologies to ensure that the utilization of these technologies produces a positive return on investment.

Using technology to improve the patient admission/registration process and patient flow through the program is crucial, especially for the cardiovascular patient population, as this procedural setting is among the highest priced real estate in a hospital. Furthermore, CV procedures have the potential to bring significant revenue; thus, these areas must be as “operationally” efficient as possible.

Patient-Centered Unit Design

Within the nursing unit are multiple design elements that can support staff in their daily work. The goal is to assure that care remains not only patient-centered, but efficient as well. Facility considerations, such as lifts built-into ceilings and bathroom proximity to beds, allow patients to be easily mobilized and monitored.

Small nurse workstations placed in between rooms enhance visibility of the patient and reduce walking when documentation is required. These flexibly-designed nursing stations also allow for charting closer to the patient via a decentralized model. Larger workstations are used for staff collaboration and are more effective as patients recover.

Overall, strategic facility design should not be based around old, outdated processes; rather, an updated facility should be created in parallel to a reengineered care model.

Corazon is typically paired with architects to drive changes in care delivery and support a culture of change that is often more critical to new design implementation than the “bricks and sticks” facility itself.

In order to be successful in strategic facility design efforts as a means to grow program volume and revenue, hospitals must understand the direction and impact of the most critical design elements, and the benefits and challenges of implementing them. By designing a ‘flexible’ building that will accommodate the needs of the cardiovascular patient into the future, and supporting a care reengineering mindset, hospitals will be best positioned to weather the economic challenges that inevitably lie ahead.



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