The shaky economy and industry upheaval of the past three years didn’t stop some health systems from strategically delivering major new hospital campuses.

By Richard Galling

Since 2008, uncertainty regarding healthcare reform and the lingering effects of the recession have taken their toll on many sectors of the healthcare industry, including hospital development. Yet not all providers put large-scale hospital projects on hold, as several major new campuses came online in 2011.

This is the story of four providers that persevered and of four new hospitals - totaling $1.7 billion in investment, more than 1,000 beds and more than 2.6 million square feet - that were completed last year, ahead of schedule and under budget:

- Virtua Voorhees, Voorhees, N.J.
- Elmhurst Memorial Hospital, Elmhurst, Ill.
- St. Anthony Hospital, Lakewood, Colo.
- Swedish Medical Center Issaquah, Issaquah, Wash.

The four new hospital campuses were completed by four different health systems in four different regions of the country, and each executive team had its own specific objectives. Yet the common characteristic was that all four systems embraced a collaborative project management process that was less preoccupied with design and construction than it was with simply arriving at the right solutions.

Challenges and Solutions

These four hospital projects faced unique challenges. Three were replacements; one was new. Three of them started before the recession; one during. There were distinct differences in the sites, local market conditions, mix of healthcare services and organizational cultures.

Yet there were also many similarities. All four were going out to new service areas, and speed to market was paramount. On time and on budget was a given. However, before the financial crisis, hospital executives were bolder about what they did and how they did it. Today, more than ever, they are challenging themselves in advance to make sure that whatever they do is well-grounded in their market and makes sense financially. Above all, they need assistance with effective leadership and direction to steer the projects on the right course. That involves up-front planning, listening, challenging and bringing the right resources to get the provider to the right project in the right market, both operationally and functionally.
Taking a closer look at each project, it is interesting to see how each project team employed those various strategies.

At **Virtua Voorhees**, the challenge was to replace an older hospital 3.5 miles away that had reached its capacity, both geographically and technologically. Before pencil was put to paper on design, user groups redefined more than 180 processes to achieve the hospital’s goal of an environment that combines sophisticated, advanced medicine and healing, naturally beautiful surroundings. The design of the hospital incorporates provision of family space, access to natural light, healing gardens, walking paths and meditation spaces, as well as 40 acres of preserved wetlands around the campus.

“**This state-of-the-art, all-digital ‘hospital of the future’ has transformed healthcare in southern New Jersey,**” says Michael S. Kotzen, vice president and chief operating officer of Virtua Voorhees. “**Simply managing a project of this magnitude - the largest of its kind in seven years - was a major challenge, yet the project team went above and beyond that, serving as our trusted advisor from the early planning stages all the way through completion, never losing sight of our long-term strategy.**”

The **Elmhurst Memorial Hospital** project was a greenfield replacement, where the hospital’s desire was to reinvent and redefine the patient experience. It marked the first time that all of the team members had worked together on the same project.

Six months were spent up front with multi-task user groups focusing on both the big picture and the fine points. Using the tenets of the Planetree philosophy of patient-centered healthcare design the project team mapped a dozen different experiences, always from the perspective and experience of the patient at the center, paying close attention to how patients, family, staff, physicians and materials flowed through the building. The team dealt from the ideal, following up all perspectives, sharing ideas and knowledge among all stakeholders. Co-location of complementary services was a priority, with sterile processing next to surgery, for example, and every single aspect has a what/why relationship.

“Our goal was to develop a hospital that supports the provision of high-quality, compassionate healthcare at a technologically advanced, patient- and staff-friendly facility,” says W. Peter Daniels, president/chief executive officer of Elmhurst Memorial Healthcare. “Because of the development team’s intensive and thoughtful planning, each entity - whether it is the patient, the family, staff or the physician - feels as though the building was designed especially for them.”

**St. Anthony Hospital** posed several unique challenges. The original facility was 100 years old. To accommodate the desire of the hospital to maintain and expand on its status as the Trauma Center of the Rocky Mountain Region, and because its joint venture orthopedic hospital had to be in a particular market area, the project was relocated from its original home in downtown Denver to Lakewood, a southwestern suburb. In addition, the land, procured from the federal government and part of the Denver Federal Center, had a number of hazardous materials issues. To further complicate matters, construction began in 2008, just as the economy entered the stress of the financial crisis.

The project team was involved in the cleanup of the land, then on to design and construction. Key hospital leadership was involved initially; then, department managers reached out to the actual end users - physicians, nurses and housekeeping staff - and came back with recommendations. Once a detailed budget was established with multiple priced alternatives, the project team sat down with top leadership to identify “must-have” program elements from a macro level; then worked backward, closely examining each component of the facility to see what was affordable. The luxury elements fell aside, and $500 million in programs was whittled down to $432 million, while maintaining key revenue generators and clinical components.

Blocking and stacking resulted in an efficient skeleton of the hospital where no beds were lost despite very tight budget constraints. Medical equipment was closely scrutinized, including equipment from the old hospital that could be reused. Even with the economic downturn, construction was never stopped. Close coordination with the construction manager allowed corresponding adjustments of the budget.
and schedule when necessary without affecting the delivery date.

“A lot of care, thought and diligence went into this new campus,” says St. Anthony Hospital’s chief financial officer, David Thompson. “Because of that planning we are able to provide our patients with the most advanced healthcare technology, world-class medicine and extraordinary healthcare at an environmentally responsible facility.”

Starting a project during the financial crisis didn’t stop Swedish Health Services from realizing what it saw as a great opportunity: establishing its brand outside of the downtown Seattle area by developing a new greenfield campus in Issaquah, an affluent growth suburb 15 to 20 miles away – and accomplishing a new way of defining the delivery of healthcare in the process. Wellness orientation was the system’s goal. Its vision for the future was to create a community center of excellence that is ambulatory-focused. To pull this off, the team was kept small and nimble. All members understood collaboration.

As far as design, Swedish Medical Center Issaquah is not your parents’ hospital. The first thing you see is an outpatient medical office building (MOB). The entire medical center is inviting to the public, easy to navigate, and provides a sense of community and a focus on wellness.

Co-locating team players during the construction process was key; they worked hand-in-hand during the design process and construction. Several elements were prefabricated off-site, including bed headwalls, utility racks and exterior panels of the building, which helped to mitigate problematic winter weather conditions.

“The architecture of this facility drives culture. There is also a strong focus on energy efficiency,” says Kevin Brown, chief executive officer of Swedish Issaquah. “As a result, a progressive and superlative healthcare facility was delivered that is also user-friendly, sustainable, cost-effective and community-focused.”

To sum up the formula that contributed to the success of these four projects, it took leadership, direction and a collaborative team approach, integrating across-the-board user experiences to create environments that are healing yet functional, and an asset to their communities. As far as navigating through the uncertainties of a tough economy, these four examples help debunk the myth that facilities of this quality are financially unattainable these days. These hospitals prove otherwise.

Richard Galling is the president and chief operating officer of Hammes Company. Hammes Company served as project manager for all four projects described in this article. For more information, please visit www.hammesco.com.
Virtua Voorhees, Voorhees, New Jersey
Total Size: 680,000 square feet on 125 acres of land (40 acres of wetlands)
Number of Beds: 368 (all private rooms)
Project Manager: Hammes Company
Architect: Hammel Green & Abrahamson (HGA)
Construction Management: Turner Construction Co.
Opened: May 2011

Elmhurst Memorial Hospital, Elmhurst, Illinois
Total Size: 860,000 square feet on 50 acres of land
Number of Beds: 259
Project Manager: Hammes Company
Architect: Albert Kahn Associates
Exterior Design, enclosure, public spacing: Pratt Design Studio
Mechanical/Electrical Engineering: Korda/Nemeth
Construction Manager: Gilbane Building Co.
Civil Engineers: V3 Companies Ltd
Landscape Architect: Mariani Landscape
Opened: June 2011

St. Anthony Hospital, Lakewood, Colorado
Total Size: 560,000 square feet on 50 acres of land
Number of Beds: 270
Project Manager: Hammes Company/Romani Group Inc. (joint venture)
Architect: Earl Swenson and Associates (ESA)
General Contractor: GE Johnson
Opened: Orthopedic specialty hospital opened June 2010 (cut three months out of the schedule to accommodate healthcare reform legislation). The rest of the hospital opened June 2011.

Swedish Medical Center Issaquah, Issaquah, Washington
Total Size: 550,000 square feet on 18 acres of land (including 5-story medical office building)
Number of Beds: 175
Project Manager: Hammes Company
Architect: CollinsWoerman
General Contractor: Sellen Construction Co.
Opened: November 2011 (3-4 months ahead of schedule)