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November 2007

**Dear Healthcare Finance Professional:**

Which strategy works best in the face of growing physician competition? What influence will new technologies have on construction planning? How might the changing role of the patient as consumer influence provision of care?

Anticipating the forces most likely to shape facility planning efforts is no easy task. Yet for today’s healthcare financial professional, it’s one of the most important roles they can fulfill for their organizations. Staying abreast of the day’s top trends is key to balancing an organization’s mission with its financial resources—and keeping the organization well on the path to a bright future.

In this spirit, HFMA brings to you its first special section devoted exclusively to examining healthcare real estate planning and construction trends. Based on interviews with architects, providers, construction consultants, and other facility planning experts, this section helps you stay ahead of the curve on the demanding issues involved with building, design, construction, and financing. The discussion that follows not only highlights what should be on leadership’s radar, but also provides tips to help your organization best prepare.

As one of the industry experts noted, organizations in the planning stages of construction projects can only “build for maximum flexibility and keep a watchful eye on the environment, looking out for signposts such as the rate of change in technology and in healthcare policy.”

We hope this section proves to be a useful signpost for guiding your way.

Sincerely,

Robert Fromberg
Editor-in-Chief

Sarah M. Loeffler
Product Manager, Custom Publishing
Healthcare Financial Management Association
Success finds a way.

We create our own climate of success. This is Ventas financing — the fastest-growing force in healthcare REITs. With senior talent, unmatched industry experience, and the strength that comes from an enterprise value of about $9 billion, we know how to adapt solutions to your environment. And find opportunities that surmount obstacles. Whether you want to leverage equity or monetize your property assets, this is a superior species of financing. Opportunity is at hand.

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8 Top Trends In Healthcare Facility Design and Planning

Forget, for a moment, that you’re in hospital finance and pretend you’re just a person with a rash. You’re in a Rite Aid store in Boise, Idaho, looking for some of those tiny toiletries to take on your next plane trip, and you keep itching and thinking what is that rash, anyway. It keeps coming back. I really should have it checked out. And suddenly, there’s Saint Alphonsus—not the hospital, of course, but a little structure with the same colors and logo, and it’s got the same curved roofline that you’ve watched take shape on the hospital’s new patient tower. “Saint Alphonsus Express Care,” it says. “Quick and Affordable. Quality Care. No Appointment Necessary.” Well, as long as you’re there…

Welcome to one of the hottest new trends in healthcare real estate design and planning: retail. It may be an ambulatory surgery center with an internet café as well as a pharmacy in it, or a women’s cancer boutique in a cancer center in line with the trend toward specialization, or a bank in a medical office building (MOB)—or that express care kiosk in a drugstore. More than ever, providers are seeking opportunities to use their facilities to cater to employees along with consumers.

This trend, along with the others described below, reflects the tremendous dynamism driving healthcare construction these days, as the industry tries to catch up with capital projects postponed in the Clinton years—and keep up with the demands of consumerism.

Trend #1. Increasing Interest by Institutional Investors

Murray Wolf, publisher and founding editor of Healthcare Real Estate Insights, has been tracking the interest of institutional investors in healthcare facilities, and says it’s definitely on the rise. The reason is that, over the past several years, real estate in general has become a more accepted type of investment; demand is increasing and supply—although it’s growing—is not keeping up.

“And so we’re seeing major insurance companies, REITs [real estate investment trusts], and pension funds, which in the past may have only considered mainstream types of commercial real estate, willing to look at financing or owning an MOB or a long-term acute care hospital.”

This is true even for not-for-profit hospitals, says Wolf. “Even though they have a community mission, at the end of the day they can’t lose money continually. If they can sell their MOBs, all of a sudden there’s a lot of cash to subsidize some of the less profitable things they’re doing on the inpatient side.”

Trend #2. Revitalization of Physician Joint Ventures

Having slowed down for a while, these kinds of real estate partnerships have begun to ramp back up again, as physicians realize that a for-profit MOB is a good alternative to the stock market, according to Fred Campobasso, president of AMDC, a Navigant company. “If they’re going to rent there and practice there, then why not participate in the ownership structure?”

In response, not-for-profit systems are starting to create new, for-profit entities so they can joint venture with physicians, says James Young, Lillibridge’s vice president for business development. “One good way to do this is with an
When your day is filled with the demands of managing your hospital, taking on the responsibilities of coordinating the financing, leasing and construction of a medical office building can turn work days into long nights. Or worse, sleepless nights. So why risk it by doing something that is not your core competency? Developing medical office buildings and solving financial, leasing and project management problems is our specialty. From site assessment and arms-length physician lease negotiations to design and construction administration and third-party ownership, nobody works more effectively to minimize your risk and maximize your investment than Irgens. And what doctor wouldn’t recommend that? To learn more, visit us online or call toll-free.
operating lease that uses taxable funds, where the real estate is owned by a third party,” he says. “It’s important to build flexibility into the lease, so that down the road the hospital can pay us off and do something different with the property.”

By the way, in case you were wondering if we weren’t approaching a slowdown in the construction of MOBs, Wolf says there’s no end in sight. “One reason is that some of the existing facilities are not designed to accommodate today’s health care. It might be that the ceiling isn’t high enough for a piece of equipment that requires a large boom, or that the electrical system isn’t up to spec.”

In addition, he points out that a new building can be an important marketing tool with physicians and consumers alike.

### Trend #3. Integrated Business Plans

Regardless of where the money comes from, says Campobasso, hospitals and health systems have to be able to prioritize their capital spend. The two largest spends? Construction and technology. The two greatest risks? Construction and technology.

“You need an integrated strategic and financial model to determine which projects will give you the greatest ROI,” he says. “Too often, planning is done on a fragmented, linear basis: Hospitals look at facility solutions far too early in the process, simply because everyone is graphically oriented and stimulated by architectural design. Further, the design work gets ahead of developing an operational plan for the new facility and then somebody asks the question, “Will the new facility require more FTEs than our current facility?”

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### Picking the Right Financing Option

Retrofit or replace? On campus or off? Core or non-core? Short-term asset or long-term? These key decisions will determine which financing options are available to you, and right for the project.

For example, says Therese L. Wareham, partner, Kaufman, Hall & Associates, Inc., a financial and strategic consulting firm based outside of Chicago. “It’s hard to do standalone financing for an asset that’s sitting right next to or attached to your hospital, such as an ambulatory care building that will function essentially as a hospital department. Because a lender will look at that building and say, “Who else is going to buy it if it goes belly up?’ You can’t turn a hospital into condos. So in that case, you use tax-exempt bonds that have parity with your existing debt.

“On the other hand,” she continues, “if you’re building a medical office building and plan to occupy three of six floors and rent the rest of it to private practice physicians, you would need to find a taxable alternative. There are plenty of developers out there who will build the building and then lease the space to you and to the physicians. That way, you don’t use any of your credit capacity.”

What if it’s off-campus and combined with retail? “You have to use taxable money,” says Wareham, unless the provider pursues a “condo” strategy, breaking the building into pieces and financing the tax-exempt part of it with tax-exempt debt and the non-exempt portion with taxable debt. “There is an advantage to doing this from a cost-of-capital standpoint; obviously, half a building with tax-exempt debt is lower cost than a whole building with taxable debt,” she says. The problem is that the piece of the building financed with tax-exempt debt has to then be used for an exempt purpose for as long as the debt is outstanding, so the provider loses some flexibility there. “That’s why off-campus buildings are often financed with taxable debt or cash, so you don’t have those use constraints in the future,” she says.

The point is that you need to think long and hard about goals and objectives upfront, so you can select the right financing structure and not get caught in a costly remediation situation.

“You can always find a piece of debt that will work,” says Wareham. “The question is whether it’s the right one for the purpose – and how much it will cost you to unwind if need be.” She cites the example of a swap being marketed by an investment banker as the lowest cost of capital. “And it is, but there’s no free lunch. If you want to get out of it at some point, maybe to form a joint venture, you’re subject to the market value of that swap. In a fixed payer swap, if interest rates have gone up, you gain. But if they’ve gone down... it’s a risk.”
It doesn’t have to be this way, he continues. “We’re currently deploying a program management delivery approach for major construction initiatives that integrates operational planning, technology planning, and facility design, which can achieve 4 percent to 6 percent labor and non-labor operational efficiencies.”

Going forward, he says, you’re going to see a greater link between facility planning and design, operational, and financial planning. “You have to put together a business plan in a very integrated and synthesized manner, looking at all the variables simultaneously—strategy, operations, facilities, and financial. This is critical.”

**Trend #4. Comprehensive Ambulatory Care Facilities, Often in Secondary Locations**

What many business plans are pointing to these days are ambulatory care facilities that are bigger and farther out. “We’re mainly seeing projects that are combinations of medical offices and outpatient services,” says Young.

“When we used to have 50,000- or 60,000-square-foot buildings, the typical request now is 100,000 to 120,000 square feet,” he says. “In general, hospitals are looking to take anything outpatient off the campus, so they can expand or reconfigure the main hospital. We’re moving toward the bedless hospital or the distributed hospital model, where everything except medical-surgical gets pushed out closer to where the population lives and is aggregated in one big box or on one campus—physicians offices, imaging, ambulatory surgery, diagnostics, urgent care.”

When Sharp Memorial Hospital in San Diego opened its new, 125,000-square-foot outpatient pavilion in 2003, which is on campus, the primary concern was to make the facility comprehensive, according to Dan Gross, executive vice president, Sharp HealthCare. “Instead of having single specialty centers here and there,” he says, “we wanted to have all outpatient services together for convenience, including endoscopy, diagnostics, imaging, outpatient surgery, a pain program, an eye program, and a community care resource center that includes a wellness program, patient education classrooms, and a health library.”

This one-stop shopping approach is not only about patient convenience, says Gross; it can also enhance the quality of care. For example, Sharp’s oncology care center, located in the pavilion, includes surgical and medical oncology, an infusion center, radiation center, and breast care management. “Cancer patients are very ill. It doesn’t make sense for them to have to go from one site to see their oncologist, to another site to see their surgeon, and still to another site to see their radiologist.”

More and more often, says Wolf, ambulatory care facilities are being built in what typically would be a retail location, “a heavily trafficked intersection or an interstate off-ramp, usually out in the suburbs.” The strategy can make the site more expensive, he notes, because sometimes hospitals are literally competing with big box retailers for the same property.

At the far end of this spectrum, Campobasso says, some healthcare providers are starting to look at a healthcare village mixed-use development concept. “We just finished one in
Vendors Speak Out on Planning for Future Real Estate Challenges

We asked some of our advertisers to offer their response to one key question about healthcare real estate: How can hospitals best ensure that their facility construction activities are able to meet the needs of patients and caregivers long into the future?

Here is what they told us.

“Development concepts: Optimize acute care resources by housing outpatient services; connect with local communities and expand your influence; engage outpatients with ‘one-stop shops’; bond with physicians and enhance recruitment; embrace physician entrepreneurial interests; benefit from economic viability.

Design concepts: Integrate patient-focused healing environments; maximize visibility and ease of access; implement ‘smart building’ practices; optimize patient flow accessibility to and through the facility; blend medical technology with building technology; and consolidate provider operational resources.”

—Todd W. Lillibridge, Chairman and CEO, Lillibridge Healthcare Services

“Hospitals need to begin planning their infrastructure now for the needs of the first wave of baby boomers, who will be turning 65 in 2010. These capital-intensive projects will require hospitals to tap new sources of funding, such as for-profit joint ventures and sale leasebacks. Hospitals that develop creative capital plans will be able to develop state-of-the-art infrastructure that will make them the provider and employer of choice in their market.”

—Raymond J. Lewis, Chief Investment Officer, Ventas, Inc.

“Research and collaborative ‘visioning’ sessions conducted with an interdisciplinary team of patients, care providers, administrators, developers, design professionals, and maintenance staff are paramount to create a master plan. Technology, architecture, and furnishings must be flexible and mobile to adapt to constant change. With such rapid technological advances, even new buildings are being retrofitted; therefore, new facilities must be designed to fit the precise needs of the use, while maintaining flexibility and low construction costs.”

—Glenn E. Hodge, Senior Vice President, Development, BremnerDuke Healthcare Real Estate
Grand Rapids, Mich., in which the hospital is an anchor or gateway to a new planned unit development in a suburban area where there’s a major population explosion. It includes some commercial business—hotel and retail—along with the acute care component of the hospital, wellness and prevention, ambulatory care, and medical office buildings.”

It’s an interesting business model, he says. “The hospital initially owned all of the land and controlled the use. They have parcelled it off now, under different ownership structures, with the assistance of a master developer.”

**Trend #5. Building in Efficiency**

Five years after opening its new outpatient pavilion, Sharp Memorial is getting ready to open its new inpatient tower next spring.

A lot of the building’s design, says Dan Gross, focuses on efficiency, primarily in how clinicians assess and diagnose. As an example, he cites the inclusion of a 64-slice computed tomography scanner in the emergency department (ED), so patients won’t have to traverse the organization to get to the radiology department, sit in a queue, get scanned, and then be brought back to the ED. “This means fewer steps for staff and faster determination of treatment,” he says.

For the same reason, he says, accommodations have been made in patient’s rooms. “We’ve built all of our support services to be very close to the patient care providers,” he says. “Within each patient care room, there are three specific zones: the patient, family, and the healthcare worker. “Within the latter,” he says, “we have things...
like built-in laundry hampers, which can be moved when they’re full, so staff don’t have to constantly carry linen out of the room and down the hall. We put a lot of controls—for lights, for automated window shades, etc.—right at the entrance to the room, so nurses don’t have to walk over to the window. And we put computers just outside each room.”

In the name of efficiency, more and more hospitals are using a hybrid design that combines the best features of centralized and decentralized nursing. At Sharp Memorial, each wing contains two nurse stations, two medical prep rooms, two soiled utilities and two clean utilities, and so forth so nurses don’t have as far to walk.

In the new Center for Advanced Healing, opening soon at Saint Alphonsus in Boise, either end of each clinical floor has an identical 16-bed pod with similar duplication of nursing and support services, including pharmacy. In the middle of this “bowtie” design are elevator shafts, waiting rooms, staff lounges, and connecting corridors, according to Daryl Fugate, director of facilities.

**Trend #6. Building in Flexibility**

Both Saint Alphonsus and Sharp Memorial have built with an eye toward a future they know they can’t entirely predict, especially in terms of technology and, to a lesser extent, volume. This means maximum flexibility and versatility, which in many cases means bigger spaces: At Sharp Memorial, the patient rooms are close to 300 square feet—“large enough so that their function can change over time,” says Gross.

“We made sure our new ED is sized a little bigger than our capacity predictions would dictate, so that we have growth opportunities,” he says. “And we have a section for ED observation that can be converted into ED bays and suites, as needed. In our master site planning, we also focused closely on where we could build contiguous patient care space and buildings, so that this new tower could be integrated into another building in the future.”

---

**The Hospital of the Future**

All of the software models, flexible floor plates, and integrated floor plans in the world can only take today’s hospitals and health systems so far. Squint hard enough at the horizon, and eventually things become a blur of miniaturization, robotics, and gene therapy—even organ regeneration.

Asked by a client to conceptualize the hospital of the future, Toffler Associates wisely went beyond bricks and mortar, and came up with three basic drivers that will reshape healthcare delivery. Managing partner Deborah Westphal explains:

- **Means and nodes.** Thanks to IT, including broadband technology, health care will be a net-centric organism, delivered in a wide variety of settings all wired together, including the home. Westphal points out that Japan already has advanced toilets that analyze urine and send the information to the provider. Precision targeting by providers—think specialty centers for specific types of cancer—will increase competition, further segmenting the market.

- **Integrated wellness.** In a convergence of Eastern and Western medicine, individuals and organizations will adopt “for life” wellness plans and programs, extending to spas and sabbaticals. Innovative payment plans will offer incentives for staying well.

- **Enabled presumption.** The consumer becomes the producer, helping to design and apply highly personalized products and services. Westphal cites the real-life example of an engineer with liver disease who, frustrated by the guessing game of experimental medicine, started plotting his own responses to certain medications and combinations of medications. Today he delivers that information to his physicians, who may rotate throughout the hospital every 30 days and generally don’t have time to do that kind of analysis. It may start with consumers going online to research their own treatment options, she says, but as we break the genetic code, it will end with the industry producing very precisely targeted and delivered treatments for a specific individual.

Instead of using parts of buildings for different purposes over time, we’ll design parts that can be disassembled, reconfigured, and moved to a different location in a disaster. Instead of using colors that are known to promote faster healing, we’ll use materials that can change color, so that patients can be surrounded by the shade that they personally respond to best.

Or will we? Organizations in the planning stages of construction projects today, says Westphal, can only “build for maximum flexibility and keep a watchful eye on the environment, looking out for signposts such as the rate of change in technology and in healthcare policy.”
The bigger-is-more-flexible philosophy is especially prominent in operating rooms. At Saint Alphonsus, this was the strategy pursued. “We tried to look as far forward as we could in our research when we were designing the building to allow enough space to accommodate more technology as it comes along,” says Fugate. “In our main operating theater, we have two rooms with a 900-square-foot footprint, beefed-up flooring, and a control room for interventional surgeries, even though they won’t be outfitted for this purpose today.”

Likewise, all medical-surgical rooms in the new building are outfitted with a complement of medical gases that could accommodate ventilators in the future. “We know the standardized room concept, where patients are admitted to and discharged from the same room, is gaining in popularity, so even though we’re not deploying that model when we open, we have that capability.”

In addition to larger rooms, hospitals are integrating convertible floor plates and larger conduit lines into their new construction.

**Trend #7. Integrated Construction Teams**

Once you know what you’re going to build, managing the project risks is a major issue, says Fred Campobasso. “Boards and C-suites are becoming more sensitive to what kinds of project controls—scope, budget, and schedule...
controls—are put in place, and rightly so. The ratings agencies and capital markets are starting to ask questions like, ‘How are you going to manage the risks associated with the project to avoid cost overruns?’”

One strategy gaining steam is the use of integrated teams representing the architect, the contractor, and the project owner. Lillibridge’s James Young describes a new contract method in which all three parties sign a single contract agreement, which allows for risk sharing and brings focus to the team. “They become foxhole partners—if the project fails, they all fail,” he says.

Right now, says Young, on a typical hospital project, escalation can eat up about $1.5 million as prices go up. “On a $200 million project at 8 percent (which is the building industry average right now), that’s $16 million a year,” he says. “The big driver is client decision making—tough decisions that need to be made as early as possible. With an integrated team, the work processes of the contractor and the architect are put together on the same timeline, so that everybody gets the right information at just the right time, which allows the client to make those tough decisions early in the process—so the project gets done on time.”

**Trend #8. BIM Software**

Another tool that is helping project owners get and keep control of major projects is a very powerful software model called the building information model (BIM), which enables designers to build an entire building as a three-dimensional object instead of as a bunch of flat drawings. BIM is so precise, says Young, that the contractors can build their work flows around it, with the whole team adding information as the project goes along.

“In the end, the owner gets all of the information about the building in one electronic model, which is then used to maintain the building during its life cycle,” he says. “The preventive maintenance people end up with a schedule for replacing each component in the building, which allows them to budget their routine capital spend. And then each time the building is changed or added onto, the model gets changed, so they always have current information on their physical plant.”
The Opportunity
Take a project where implementing an adapted master plan by others was proving to be an impossible task. The development process of that plan was resulting in less than desirable departments with questionable relationships. As solutions to their difficulties were pursued, the price-value relation seemed ever more difficult to justify.

The Solution
Find a fully integrated solution in lieu of the proposed umbilical cord attached addition that forced the hospital to accept fragmented departments and resulting inefficient staffing.

The Result
By using creative engineering - both mechanical and structural - the design created sizable integrated areas that allowed for a design that met contemporary design criteria and the hospital program.

Partner in this effort: HBE

PS. McLaren Health Care was so pleased with HBE’s work, they engaged HBE on projects for three additional hospitals in their system in the Michigan cities of Bay City, Flint and Lapeer. All four projects are scheduled for completion in 2008.

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A beneficial outcome.

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