The Rules Are Changing: Healthcare Is Reinventing Itself

Abstract  |  Article

Many traditional rules of thumb in healthcare planning are changing. Land values, financial assumptions, operational costs, new government regulations, standards of care, and competition have altered the healthcare landscape over the last decade. The heightened expectations of the approaching boomer patient wave will further redefine the way healthcare providers, administrators, and CFOs plan for and modify their offerings. What once was an accepted rule of thumb can now be the wrong course for healthcare institutions looking to compete and succeed in the marketplace.

Some of the following traditional rules of thumb may no longer hold true today:

- It is more cost-effective to renovate an existing ancillary department than to embark on new construction.
- It is better to use obsolete buildings for nonpatient care functions than to tear them down.
- It is a good strategy to provide future vertical expansion capacity in new hospital construction.
- Acquire only the required acreage for new healthcare campuses.
- The majority of departmental spaces should produce revenue.
- Nursing units should be specialized.
- All beds are created equal.
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The traditional rules of thumb in healthcare planning have changed. Skyrocketing land values, rising operational costs, new government regulations, revised standards of care, and intense competition have altered the healthcare landscape over the last decade. The once-accepted rules of thumb in facility planning and design can now be the wrong course for healthcare institutions looking to maintain and grow their competitive position in the marketplace.

Whether in urban settings or on greenfield sites, sticker shock is the new rule when it comes to development costs for new facilities. Rising real estate values for in-town neighborhoods surrounding hospital campuses have made land acquisition more costly and have forced many institutions to look inward—at rearranging existing facilities or at a selective strategy of tearing down and rebuilding. Even in the countryside, where land is generally plentiful, the ideal greenfield site is a vanishing commodity. Additionally, facility operating costs have gone through the smokestack. The cost of operating complex healthcare environments and the need for uninterruptible power sources and upgraded information-system technology have caused operating costs to escalate.

As government regulations tighten and standards of care become more reliant on sophisticated data and medical equipment, the nonpersonnel costs of medical institution operations also are rising rapidly. In many states, competition among hospitals also has spawned a whole generation of satellite and referral standalone clinics and one-focus care facilities. Cancer care, orthopedic, ambulatory, women’s health, and cardiac facilities have proliferated.

Finally, over the next three decades, the approaching wave of baby-boomer patients—with their heightened expectations for quality care and plush surroundings—is changing how planners, designers, and hospital administrators approach facility decisions.

Some traditional rules of thumb today must be examined carefully in light of these societal, economic, and social changes. Health facility planners, administrators, and CFOs may need to recalibrate their pro formas or revisit their strategic thinking about future facility changes and expansions.
So what rules of thumb should an institution rethink when undertaking a strategy facility master planning exercise? Here are a few changes that have affected hospitals the most.

**Plan for more than one patient entrance**
The rule of thumb mandating one entrance and lobby (and often an adjacent emergency department [ED]) is no longer valid. Each primary specialty needs its own entrance, image, and identity. Like the retail industry, which has moved from aisles of merchandise to numerous mini-boutiques within departments, hospitals are moving away from the image of the monolithic medical provider where all healthcare is under one roof. Hospitals are touting their specialties, boutique practices, and star physicians. Differentiation, repositioning, and branding have entered the healthcare provider's lexicon with a vengeance. As a result, facility planning rules have responded. Technology and the interconnectivity of registration systems have made that easy. Entrance planning has become a discussion about "entrance zones," with identification and branding important considerations.

The new cardiac and vascular care center at the St. Francis Hospital Indianapolis campus required a separate entry for patient flow while also creating an identity for the relocated cardiac programs.

**Facilities become increasingly decentralized**
While macro decentralization (siting standalone ambulatory care and specialty facilities as satellites) has been a strong
trend in the last decade, micro decentralization within facilities is an emerging trend. Radiology is a good example of this creeping decentralization. The old rule of thumb placed radiology adjacent to the ED. Now separate radiology rooms are increasingly designed as an integral part of the ED. Look for similar inroads into other units such as surgery.

The centralized/decentralized debate has affected laboratory and rehabilitation services as well. Many hospitals have centralized their lab functions—often taking them off site. Yet, there is a movement toward decentralized stat labs so that specimens can be taken locally and then evaluated remotely. Look to point-of-care testing as the new paradigm in laboratory services. Rehab services are also making the move to point-of-care locations. The rule of thumb now is to bring these sorts of services, spaces, and equipment to the patient—not roll the patient to the service.

The new Clarian consolidated laboratory in Indianapolis is a large-scale example of this concept. The consolidated lab serves three major medical institutions: Methodist Hospital, Riley Children’s Hospital, and Indiana University Hospital. These three facilities are approximately three miles from one another and use a pneumatic tube system located on the structural underside of a people-mover (monorail) system.

Build new or renovate?
Some rules of thumb must be altered when considering whether to renovate existing facilities or embark on new construction. The old rule of thumb was that expansion of departments into adjacent areas was the most cost-effective alternative. The new rule of thumb is that new construction is often the best solution. In fact, new construction occurs in 50 percent of cases involving primary outpatient and ancillary departments and nursing units.
Memorial Medical Center in Springfield, Ill., needed a major ED expansion. During the planning and programming phase it was determined that none of the conceptual solutions was practical or feasible. These conceptual solutions required that the existing entrances for ambulatory and ambulance-driven patients had to be closed, with temporary entrances needed for long periods. In addition, the extensive renovation of the ED would result in loss of revenue for an extended period. As a result, the solution developed and implemented was to construct an entire ED in a new addition. This was the most cost-effective solution based on patient, staff, and physician satisfaction; quality of care; departmental utilization; and duration of construction.

More space and acres are better
Higher land values and inefficient older buildings with poor
layouts have caused many institutions to embark on demolition and to build replacement facilities with the latest in technological systems and consumer-focused amenities. Institutions are also increasingly building more space than they need when possible, realizing that it is more cost-effective to finish shell space once demand or new services require it.

Even in rural areas, hospitals are acquiring more land than they need for projected facilities. Many have found that siting a hospital in a greenfield location attracts other healthcare-related development and, in some cases, becomes a market for various senior care facilities. By acquiring additional acreage, they can strategically sell off some “outlots” for economic gain and keep control over the quality and type of development that will surround them. Some new hospital facilities built on greenfield sites now opt to acquire 100-plus acres when they may initially only need 30 to 40 acres.

Who is in what bed?
In many hospitals patients are taking up the wrong beds. For example, 23-hour observation patients are scattered throughout the hospital, often taking up space for incoming patients and time away from nurses who must tend to sicker patients. It makes sense to set aside a unit designed for this patient cohort. Do they really need a room with all the bells and whistles? A unit with appropriately designed rooms and specially trained caregivers may be the answer. It will also alleviate backups from the ED and other surgery-related bottlenecks.

Another example of bed musical chairs often occurs in community hospitals where pediatric care has become a
subsidized service line. The ebb and flow of pediatric admissions in routine or non-life-threatening emergency situations frequently result in either unused beds or an overflow situation to other areas of the hospital where care staff are less prepared to work with pediatric patients.

For better staff and spatial efficiencies, pediatric bedded care and emergency services should be consolidated near the ED with a cross-trained staff. This results in less staff downtime, a staff equipped to handle both emergency and inpatient pediatric cases, and conversion of larger patient units into income-producing medical and surgical beds.

Finally, another major change under way: geographic separation of medical and surgical patients within a hospital. Hospitals have long spun off surgical centers to accommodate day-surgery patients. As hospitals expand and build new patient towers within an existing campus, consideration should be given to separating healthier surgical patients from medical patients.
Hospitals may find themselves with a mix of medical and surgical patients on the same nursing unit. The skill set is different for each of these patient populations. The best-trained staff often may be caring for patients who need a different type of care. This is suboptimal. So here’s a final rule of thumb that needs to be reevaluated: It’s not just about bed count anymore; it’s about who occupies the bed.

These rules of thumb, and others not addressed, will continue to evolve and change. In addition, performance-based design principles will be used to provide measurements for improved operational outcomes based on facility improvements. Not all rules will have relevance at every institution. Knowing which ones are important and which have changed is key to any hospital’s ongoing facility planning—an important component to every project, large or small. A periodic master planning exercise that addresses and challenges rules of thumb (aka conventional wisdom) can provide the information and thinking needed to rejuvenate and repurpose healthcare institutions.

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The Academy Journal is published by the AIA Academy of Architecture for Health (AAH). The Journal is the official publication of the AAH and explores subjects of interest to AIA-AAH members and to others involved in the fields of healthcare architecture, planning, design and construction. www.aia.org/aah

This article originally appeared in The Academy Journal, published by the AIA Academy of Architecture for Healthcare (Volume 9 – October 2006).