

STRATEGY & PLANNING

What to Do When There's No Room to Expand

Hospital Campus Planning

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What do you do when the last empty plot of land on campus is gone and there's no more room to build?

This is a pressing question for many health systems facing the challenge of growing their facilities without the luxury of open space on their existing campus. As patient volumes increase and services expand, the need for additional space becomes critical. But with vacant land scarce or prohibitively expensive, health-care organizations must find innovative solutions to optimize their existing spaces and explore alternative growth strategies.

Understanding the multifaceted impact of space constraints is the first step in developing effective strategies to address them. In this article, we will delve into strategic and tactical approaches to overcoming these space constraints, ensuring that hospitals can continue to provide exceptional care and meet the evolving needs of their communities. ►

Understanding the Space Constraint Challenge

A hospital's physical space is one of its most valuable assets. As services expand and patient numbers grow, the demand for additional facilities and resources becomes inevitable. However, many hospitals find themselves with no open spot on their site for new construction. This space constraint challenge can have far-reaching implications.

OPERATIONAL IMPACT

Without room to expand, hospitals may struggle to introduce new services or scale existing ones, leading to overcrowding and inefficiencies. Emergency rooms, outpatient clinics, and specialty care units may experience increased wait times and suffer from antiquated, dysfunctional layouts, directly impacting the quality of care provided.

STAFF EFFICIENCY AND MORALE

Space constraints can also affect the working environment for healthcare professionals. Overcrowded workspaces and inadequate facilities can diminish staff productivity and morale. Providing a conducive environment is essential for retaining skilled professionals and maintaining high standards of care.

PATIENT CARE AND EXPERIENCE

The patient experience can be significantly impacted by space limitations. Overcrowded waiting areas, lack of privacy, and extended wait times can lead to dissatisfaction and potentially affect patient outcomes. Ensuring that the physical environment supports patient comfort and efficient care delivery is crucial.

FUTURE GROWTH AND INNOVATION

The inability to expand physically can stifle innovation and future growth. Hospitals need to continuously evolve and adopt new technologies and treatment modalities. Space constraints can limit the ability to implement new programs, invest in advanced medical equipment, and conduct research initiatives.

Assessing Current Capacity and Future Needs

In our experience, health systems often rush into new construction projects without fully understanding the latent capacity within their existing facilities. This can lead to building the wrong type of space or even building unnecessarily.

Before embarking on any strategic plan to address space constraints, it is crucial for health systems to conduct a comprehensive assessment of their current capacity and future needs. This evaluation provides a clear understanding of how existing spaces are utilized and identifies areas for improvement or expansion. Here are the key steps involved in this process:

CURRENT-STATE ANALYSIS

- **Space Utilization Audit:** Conduct a detailed audit of how space is currently used across the facility. This includes examining patient care areas, administrative offices, support services, and common areas. Identifying underutilized or inefficiently used spaces can reveal opportunities for reallocation or repurposing. When we work with health systems, we often identify substantial underutilization based on scheduling practices or staff availability.
- **Workflow Evaluation:** Analyze workflows and patient flow patterns to identify bottlenecks and inefficiencies. Understanding how patients and staff move through the facility can highlight areas where space reconfiguration could improve efficiency and service delivery. As an example, most clients we've worked with who perceive a capacity issue in their emergency department actually have a bed shortage, making the ER feel up to 25% too small in some cases.
- **Facility Condition Assessment:** Assess the physical condition of existing buildings and infrastructure. This helps determine whether renovations or upgrades are needed to optimize space utilization and extend the life of the facilities.

GROWTH PROJECTIONS

- **Demographic Trends:** Analyze demographic data to forecast future patient volumes and service demands. Consider factors such as population growth, aging populations, and the prevalence of chronic diseases that could impact the need for healthcare services.

- **Service Line Expansion:** Evaluate current service lines and identify potential areas for expanding or introducing new services. Anticipating future needs helps ensure the facility can accommodate growth in specialized care areas.
- **Technological Advancements:** Stay informed about emerging technologies and medical advancements that could impact space requirements. For example, the adoption of telemedicine or new diagnostic equipment may necessitate changes in space allocation.
- **Site-of-Care Shifts:** Monitor changes in where care is delivered, such as the movement from inpatient to outpatient settings or the increased use of home-based care. Shifts in care settings can influence the need for different types of facilities and space configurations.

STRATEGIC PLANNING

- **Scenario Planning:** Develop multiple scenarios based on different growth projections and potential changes in healthcare delivery models. This helps organizations identify flexible solutions that can adapt to changing needs.
- **Stakeholder Engagement:** Involve key stakeholders, including clinical staff, administrative personnel, and patients, in the assessment process. Their insights and feedback are invaluable in understanding the practical implications of space constraints and potential solutions. This is a critical input that too often is not considered until well into the implementation phase, which can cause rework and delays. Stakeholder engagement needs to be front-loaded in any capacity improvement project.
- **Data-Driven Decision-Making:** Use data analytics to support decision-making. Advanced analytics can provide predictive insights and optimize space planning by accounting for patient flow, utilization rates, and financial impacts.

Assessing current capacity and forecasting future needs lays the groundwork for developing effective strategies to manage space constraints. By understanding the present state and anticipating future demands, hospitals and health systems can create a roadmap for sustainable growth and improved patient care. ►

Strategic Solutions for Addressing Growth

Space constraints don't have to be roadblocks to growth; they can be catalysts for innovation. Here are several approaches that can help optimize existing space, expand within constraints, and explore off-site solutions.

OPTIMIZING EXISTING SPACE

- **Space Reallocation:** One of the most effective strategies is to reallocate underutilized areas. This involves identifying spaces that are not being used to their full potential and repurposing them for high-demand services. For example, convert administrative offices into patient care areas or redesign storage spaces to accommodate clinical functions.
- **Flexible Workspaces:** Implementing flexible workspaces, such as hot desking and shared office environments, can maximize the use of available space. By creating multipurpose areas that can be easily adapted to different needs, hospitals can ensure their facilities are used more efficiently.
- **Remote Work Options:** Encouraging remote work for administrative and support staff can reduce the need for physical office space. This not only addresses space constraints but also gives employees greater flexibility, potentially improving job satisfaction and productivity.

EXPANDING WITHIN CONSTRAINTS

- **Vertical Expansion:** When there is no room to expand horizontally, building upwards can be a viable solution. Adding floors to existing structures or utilizing rooftop spaces for new construction can increase capacity without requiring new land. This will involve structural assessments and careful planning to ensure the stability and functionality of the expanded building.
- **Modular Construction:** While modular construction is not typically seen as a long-term solution for patient care, it can be an effective interim measure. Prefabricated modules can be quickly assembled on site to create temporary patient rooms, clinics, or administrative offices. This method is particularly useful in emergency situations or during major renovations when traditional construction is not feasible. It provides a flexible, cost-effective option to bridge the gap until more permanent structures can be built.

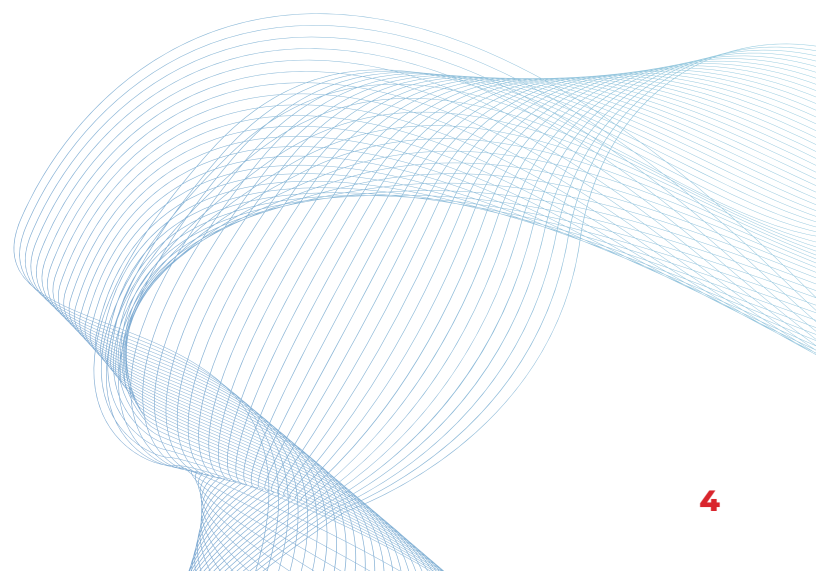
OFF-SITE SOLUTIONS

- **Satellite Campuses:** Establishing satellite campuses can significantly alleviate space constraints on the main hospital site. By relocating outpatient clinics, diagnostic centers, or administrative offices to nearby facilities, hospitals can free up critical space for core functions. Satellite campuses can also serve as centers of excellence for specialized care, attracting patients who seek high-quality, focused treatment.
- **Wholesale Campus Relocation:** In some cases, the best long-term solution may involve relocating the entire hospital campus to a new site with more space for growth. This is a complex and costly undertaking, but it can provide a comprehensive solution to space constraints. A new site can be designed with future expansion in mind, incorporating the latest in health-care design and technology to create a state-of-the-art facility. This approach can also involve selling or repurposing the existing campus to offset some of the costs of relocation.

Implementing these strategic solutions requires a clear understanding of the hospital's long-term vision, thorough planning, and effective stakeholder engagement. By considering vertical expansion, leveraging modular construction where appropriate, and exploring off-site solutions such as satellite campuses or wholesale relocation, health systems can overcome space constraints and ensure sustainable growth.

Case Study

When an esteemed academic medical center (AMC) in the eastern United States faced the daunting challenge of needing to expand with limited space on its campus, it turned to ECG for strategic guidance. The AMC had three options: build on the last available space on its existing campus, adopt a split-campus model, or relocate to a new, larger site. Each option had its share of benefits and drawbacks: ►

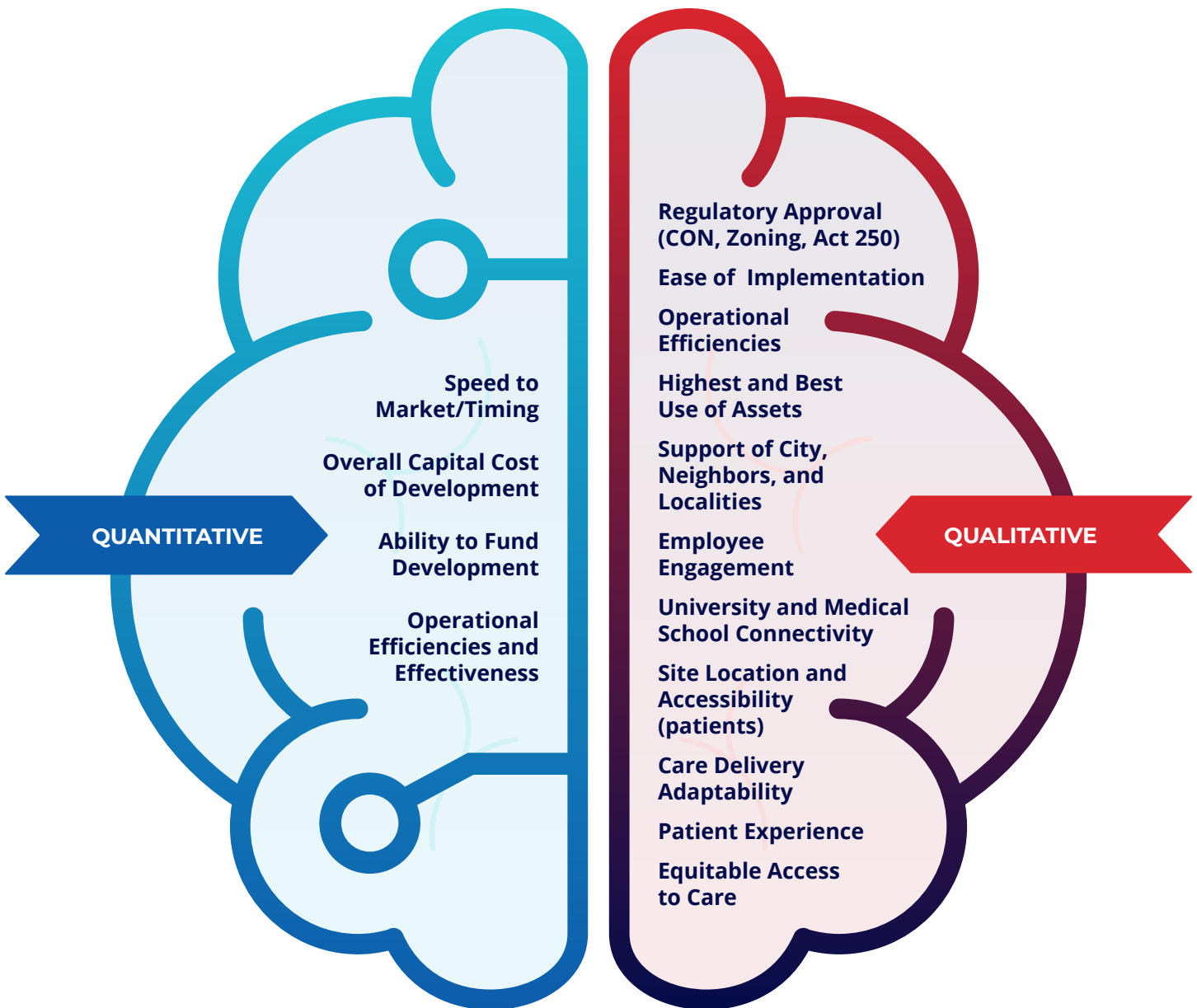


- Utilizing the last available space on the existing campus—which could be made available with the demolition of an old parking garage—would mean a complex construction/phasing plan, regulatory hurdles, and imperfect final facility solutions. Further, longer-term expansion strategies beyond that plan (e.g., 20+ years) would be uncertain.
- Establishing a satellite campus to move select inpatient and outpatient services was a reasonable option, as it would alleviate space constraints on the main campus. Still, it carried with it many of the same challenges as building on the last available space.

- Relocating the entire medical center to a new, larger site would allow for comprehensive growth and modernization. But it would also mean losing the direct adjacency to the university and medical school.

Evaluation Criteria

We assessed roughly 20 quantitative and qualitative evaluative criteria to determine the best path forward. These criteria broadly encompassed operations, strategy, state and local regulations, and finance. ►



Criteria for Scenario Comparison

Decision and Outcome

Our team helped the AMC make an informed, strategic decision that supported its growth and continued excellence in patient care. The process clearly eliminated the option for relocating the entire medical center—which, while attractive, was cost prohibitive and ultimately not right for the organization. Instead, we guided the AMC toward a phased approach in which the initial steps for both staying on campus and adopting a split-campus model overlapped. The strategy allowed the organization to address its immediate needs while maintaining flexibility to pivot should circumstances change, ensuring progress without locking into a single, irreversible option.

Charting a Path Forward

Navigating the challenges of space constraints is a critical issue for hospitals seeking to expand their facilities and improve patient care. When there is no room to build on the existing campus, health systems must explore innovative strategies to continue their growth trajectory. From vertical expansions and modular construction to establishing satellite campuses and considering wholesale relocations, there are multiple paths forward and they are not mutually exclusive.

As the healthcare landscape continues to evolve, it is imperative for hospital leaders to proactively address space constraints and plan for sustainable growth. By adopting flexible, innovative solutions and engaging stakeholders throughout the process, healthcare organizations can ensure they are well positioned to meet the demands of the future and continue providing exceptional care to their communities. ■

ABOUT ECG

With knowledge and expertise built over the course of 50-plus years, ECG is a national consulting firm that is redefining healthcare together with its clients. ECG offers a broad range of strategic, financial, operational, and technology-related consulting services. ECG is an industry leader, offering specialized expertise to hospitals, health systems, medical groups, academic medical centers, children's hospitals, ambulatory surgery centers, investors, and payers/health plans. As an affiliated partner of Siemens Healthineers, ECG's subject matter experts have a proven track record of delivering results fueled by top talent and technology.

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