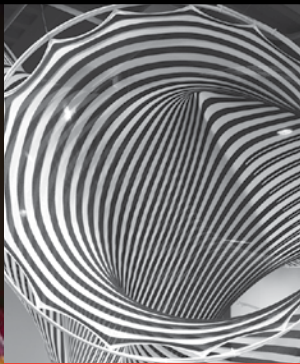


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AIA Knowledge Community
Academy of Architecture for Health

Mission of the *Academy Journal*

As the official journal of the AIA Academy of Architecture for Health (AAH), this publication explores subjects of interest to AAH members and others involved in the fields of healthcare architecture, planning, design, and construction. The goal is to promote awareness, educational exchange, and advancement of the overall project delivery process and building products.

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AAH currently consists of approximately 6,954 members. Its mission is to improve both the quality of healthcare design and the design of healthy communities by developing, documenting, and disseminating knowledge; educating design practitioners and other related constituencies; advancing the practice of architecture; and affiliating and advocating with others that share these priorities.

Please visit our website at aia.org/aah for more about our activities. Please direct any inquiries to aah@aia.org.



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Academy Journal 2016

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Should We Build It? And Will They Come?

Lessons in Pediatric Satellite Campus Planning

Sandy McElligott, MBA, RN, NE-BC, Senior Consultant for FKP

ABSTRACT

Providing healthcare today is a tricky business. The ability to support the overall organizational strategy while simultaneously creating value for patients and the organization alike is an unfamiliar and untested business model for many hospitals. Factor in the costly investment in bricks and mortar, and healthcare organizations can become paralyzed trying to navigate forward. Some hospitals have moved boldly ahead, making substantial capital investments in the form of satellite campuses. United under one name yet differing in many ways, these additional locations have proven to yield great success for many hospital systems that recognize specific medical needs in their surrounding communities. The satellite campus strategy is relatively new in the pediatric marketplace; the changing healthcare landscape is shaping how providers plan, operate, and evaluate satellites. This article explores the business forces behind this trend and shows how three hospitals leveraged industry research and outcomes to evolve their care delivery models.

Why a satellite campus: Local and regional forces

Over the past 10 years, FKP has assisted eight hospitals in various phases of satellite campus master planning, design, and development. The firm is currently working with three other top children's hospitals as they explore whether a satellite campus is a strategy to pursue. Lessons learned, combined with ongoing research, is extremely beneficial for healthcare providers during satellite campus planning; from comprehensive needs assessment, to market analysis and viability, to planning and design and post-occupancy evaluation, each step yields critical information to help make the decision about moving forward.

Common drivers that bring hospitals to the drawing board include:

- Responding to growing needs for expert pediatric care
- Providing convenient, accessible care close to home
- Increasing market share
- Attracting the commercial payer mix
- Achieving cost efficiencies by consolidating existing community programs and services into a new facility
- Decanting original campus volume
- Capturing the opportunity for future expansion



FIGURE 1. Children's Hospital Colorado-South Campus. Architect: Davis Partnership Architecture | Image credit: Brad Feinknopf

Strategic planning considerations: Beyond the bricks and mortar

The foundation of the planning process is to determine the role of a satellite and its greater role within the organizational strategy. The broad considerations that should be addressed require involvement of hospital administrators, medical staff, and board members to get a holistic view of how a satellite might function on day 1, day 1000, and beyond.

- What leadership structure will be most effective: An extension of the original campus, the creation of a more corporate structure with system executive leaders and satellite campus executive leaders, or a full or partial matrix structure?
- What is the culture of the satellite campus to ensure success in the community: A new culture, transferred culture from the original campus, or a hybrid?

- What is the appropriate level of autonomy of the satellite campus?
- What level of patient acuity will be cared for at the satellite campus: Low acuity or high acuity with intensive care? Does the acuity increase over time?
- What will the provider model look like: Pure private, pure academic, or a hybrid?
- If it's an academic institution, will learners be at the satellite campus?
- What are expectations of the satellite to contribute to system-wide growth?
- What metrics will demonstrate impact and value?

Getting into the satellite business: Funding now and later

Buildings are expensive to build, operate, and maintain. The equation becomes trickier when allocating funds between multiple locations united under one name and

striving to maintain profitability. What are the financial considerations?

- Overhead allocation: Will it be shared or maintained individually?
- Dean's tax allocation: What will the percentage be for academic institutions?
- Staff salaries: How will the satellite salaries compare to those of the original campus, factoring in items such as varied commutes and quality of life?
- Cost model: Must it be consistent between campuses, especially if patient classifications are different?
- What is the payer mix: Commercial vs. Medicaid and Medicaid-managed care?
- Contribution margin: Will it be calculated with direct patient care revenue and expenses individually?

FIGURE 2. Children's Health Children's Medical Center—Plano Campus. Architect: Page in association with ZGF | Image credit: Robert Canfield/ Robert Canfield Photography

Facility details when it opened:

- 155 acre campus
- 300,000 BGSF hospital
- 126,000 BGSF ambulatory care pavilion
- 27 emergency center exam rooms
- 24 bed inpatient unit (currently 72 beds, including 6 PICU and 12 eating disorders)
- 350 full-time staff





- Space availability: Will open space be leased to community providers?
- What services can be outsourced? Food services? Environmental services?
- What support services should be developed within a system provider mindset?

Managing to the margin holds true for both the original campus and satellite campus—if one facility is doing well and the other is not, everyone needs to help “the system.”

**Pediatric satellite pioneers:
Three organizations charting new courses**

Children’s Health Children’s Medical Center, Texas Children’s Hospital, and Children’s Hospital Colorado all blazed new paths in their communities. The valuable outcomes of these projects are presented here. These organizations recognized that patients and families would not access care in the same way they have historically; they seized the opportunity to not only innovate but also differentiate themselves in the marketplace

FIGURE 3. Texas Children’s Hospital—West Campus. Architect: Page | Image credit: Allen S. Kramer/Texas Children’s Hospital

Facility details when it opened:

- 55 acre campus
- 364,000 DGSF
- 141,000 DGSF shell
- 18 subspecialty clinics
- 24 emergency center exam rooms
- 24 bed inpatient unit (8 PICU beds since added)
- 264 full-time staff (added 169 within the first three years of operation)



FIGURE 4. Children's Hospital Colorado-South Campus. Architect: Davis Partnership Architecture | Image credit: Brad Feinknopf

Facility details when opened:

- 22 acre campus
- 180,000 sq. ft.
- Site can accommodate four additional buildings
- 28 subspecialty clinics
- 22 urgent care beds
- 12 bed inpatient unit
- 3 sleep study rooms
- 10 bed infusion center

by offering their patients a dramatically different care model.

Pioneering results

These pioneering children's hospitals began their journeys at various times, the earliest in 1993. Amid the monumental changes ushered in by the Affordable Care Act, these satellite campuses individually have achieved significant positive results. Results differ among the three organizations and their respective campuses. Highlights include:

- Commercial payer mix was 12% higher than original campus.
- Contributed 29% to the system's bottom line.
- Expense per adjusted patient days was significantly less compared to original campus.
- 10% favorable ED patient satisfaction scores compared to original campus.

- Almost 40,000 new patients accessed services since opening within the first three years of operations.
- Supported system growth with 14% increase in market share.
- Selected as a top children's hospital by the Leapfrog Group.
- Outpatient imaging 95% favorable to budget.
- Specialty clinic visits 46% favorable to prior year.
- Nearly doubled the rate of inpatient market share.
- Activity and growth: Timing of opening and seasonality may affect volume trends. Strategically place sufficient shell space for future growth.
- Leadership: Determine whether the matrix management structure is right for the organization and whether the leadership has the skills to be successful in such a structure. Lower acuity does not mean less complexity—leaders must be proactive, resourceful, and creative.

Pioneering operationalization

Operationalization is the initial strategic planning put into motion. From scaling capacity and services to addressing cultural differences between campuses, maintaining a clear view of the satellite campus role guided these hospitals through opening and eventual growth.

- Dedicated providers increase referring physician satisfaction and thus faster growth.
- Census fluctuation due to seasonality is challenging; adding programs with less seasonality eases staffing issues.
- Cross-training all segments of staff is advisable.
- Adding ICU beds increases activity levels hospital wide.
- All sites use same charge master as original campus and same salary structure.
- Some level of autonomy is needed to manage satellite successfully.
- Satellite becomes an easier place to test system change and other process improvement initiatives.
- Family space needs may be less than at original campus.
- Satellites are providing very limited learner opportunities.
- Operate satellite as an “Ambulatory Surgery Center.”
- Urgent Care billing model is confusing for providers and families.

Pioneering lessons learned

When put through the paces of census volatility, staffing considerations, and, ultimately, patient needs, these pioneers were able to navigate the course and proceed. While every satellite campus is as unique as the community it serves, several common themes emerged upon completion and occupancy of the satellite locations.

- Vision and scope: Stay focused and develop a process to change course.
- Physician engagement: Be creative in engaging private physicians.

Pioneering the future

It is not a question of whether healthcare will continue to evolve; it is a matter of timing and magnitude. Providers must remain nimble. As top children's hospital providers, Children's Health Children's Medical Center, Texas Children's Hospital, and Children's Hospital Colorado are always looking to the future. Some of the initiatives on the horizon for them include:

- Expanding scope and complexity of services
- Increasing number of dedicated providers
- Growing programs
- Planning and designing a second satellite campus
- Understanding operational efficiencies and facility costs as compared to the original campus setting

Providing care at a satellite campus creates value for both the patient and the organization through increased access and enhanced patient experience, all while benefiting the bottom line. Organizations that rethink how they deliver health care will certainly position themselves more strongly for the future.

Satellite spotlight

Texas Children's Hospital: Vision, trust, excellence

Vision has been at the core of Texas Children's Hospital (TCH) in Houston since it opened in 1953. From unprecedented approaches like allowing a parent to stay with a hospitalized child, to pioneering procedures like separating twins conjoined at the chest, TCH has always set out to be a leader in pediatric care. The hospital more than doubled in size within 15 years of opening and, by the early 1980s, leadership outlined plans to make TCH the largest freestanding pediatric hospital in the US. TCH engaged FKP for the new campus master plan and went on to complete several small projects beginning in 1994.

By 2002, work was complete on one new TCH building and two large expansions. With 456 beds and nearly 50 medical and surgical outpatient services, TCH

achieved its goal to be the largest US pediatric hospital. TCH immediately began additional work on Vision2010, an extraordinary \$1.5 billion expansion plan.

Vision2010 yielded the TCH West Campus in response to Houston's projected population shift to the western suburbs. FKP completed initial site feasibility studies and master planning for the satellite campus, factoring in future growth capabilities. TCH West Campus opened in 2010 and, within three years, has added 12 emergency center exam rooms, an 8-bed PICU, five additional subspecialty clinics, an MRI suite, and 169 additional employees. Build out is done for an additional 24 inpatient beds when the need arises.

The TCH West Campus set a good template for a second TCH satellite in The Woodlands, 35 miles north of the original TCH campus. TCH has had a presence in The Woodlands for many years, offering primary and secondary care as well as managing inpatient pediatric care within an adult hospital. In late 2012, the exploding population growth of The Woodlands prompted a feasibility study for a full-service satellite campus that could provide the quality of pediatric specialty care an adult facility couldn't. The study outcome led TCH to pursue a multiphased care service and building approach. Work to identify projected patient volumes was completed in summer 2013, which was used to develop a comprehensive space analysis. The analysis accounted for site development and department zoning to optimize facility efficiency during build-out.

Design is underway for the new satellite. Phase one will include a full service hospital, dedicated ambulatory clinic building, central plant, and 1000-car garage. A two-stage opening is planned; the outpatient clinic building will open in fall 2016 and the inpatient hospital building is set to open in spring 2017. Unlike the West Campus, which added services later, The Woodlands Campus will open with pediatric intensive care, sports medicine, an orthopedic clinic, and expanded emergency and radiology services. The campus will also open with full-time, hospital-based physicians.

FIGURE 5. Texas Children's Hospital—The Woodlands.
Architect : FKP | Image credit: Edward Chang/Dawn Digital Development Company, LTD







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