Hospitals of Providence's 40,000-sf microhospital in the El Paso suburb of Horizon City will serve a market whose population has exploded despite being nearly an hour's drive from the nearest full-size hospital.

COURTESY THE HOSPITALS OF PROVIDENCE

MICROHOSPITALS

HEALTHCARE'S NEWEST PATIENT ACCESS POINT

Last September, The Hospitals of Providence, a leading healthcare provider in El Paso, Texas, broke ground for a new medical campus on 10 acres in suburban Horizon City, 20 miles east of El Paso. There they will build a 40,000-sf "microhospital" to house an emergency department, a laboratory, imaging services, and 10 to 12 inpatient beds. The campus will also have 50,000 sf of office space for physicians and staff.

Microhospitals are acute care facilities that are smaller than the typical acute care hospital. They leave complex surgeries to the big guys, but are larger and provide more comprehensive services than

MICRO HOSPITALS BY THE NUMBERS

>50
Estimated number of microhospitals in U.S. (2016)

8–15
Number of inpatient beds (average: 8–10)

30–100
Number of patients/day

75–100
Staff size, including physicians

One of the nation's first microhospitals is Baptist Emergency Hospital Thousand Oaks, which opened in San Antonio in 2011. It includes private and semiprivate inpatient beds, lab testing, and imaging services.

©MICHAEL JOHNSON

the typical urgent care or outpatient center. They range in size from 10,000 sf to 60,000 sf.

Microhospitals offer the full services of a hospital emergency department and have labs that provide rapid clinical diagnostics and x-ray, CT, and ultrasound imaging. According to healthcare consultant Advisory Board, microhospitals can meet up to 90% of the healthcare needs of the communities they serve. And they never close.

Like urgi-centers and outpatient clinics, microhospitals generally treat patients with low-acuity medical problems. Unlike urgent care and outpatient facilities, they have inpatient beds (typically anywhere from eight to 15) and can support overnight observation of patients who require low-acuity hospital services.

The Horizon City microhospital, which will employ 75 clinical and nonclinical staff when it opens in September, will fill a gap

LEARNING OBJECTIVES

After reading this article, you should be able to:

- **DISCUSS the business, marketing, and patient-care rationales behind most healthcare systems' efforts to develop and build microhospitals.**
- **DESCRIBE the principal design and construction parameters of the 50+ microhospitals currently operating in the U.S.—square footage, number of inpatient beds, etc.**
- **LIST at least three patient services offered by most microhospitals in the U.S.**
- **COMPARE and contrast the key design and service features of microhospitals versus urgent care centers in the U.S.**

10,000–60,000
Gross sf per microhospital (average: 16,000–40,000 gsf)

1.75–3.00
Typical site acreage

$7,000,000–$35,000,000
Construction cost per microhospital

12–14
Typical construction time (months)

in the availability of hospital-level services for Horizon City (2013 population: 18,997), whose area population has ballooned 180% over the past 16 years. "Initially, we had planned to go with a freestanding ED with imaging functions, but we took a step back and concluded that wouldn't be enough," says Sally Hurt-Deitch, Hospitals of Providence's Market CEO. Hospitals of Providence has plans to open at least two more microhospital facilities.

'THE DAYS OF US BUILDING 200,000-SF HOSPITALS ARE OVER.'

— ISAAC PALMER, CEO, CHRISTUS HEALTH

Microhospitals are the latest twist in "population health," as healthcare systems search for ways to bring quality care to demographic markets that can't support full-size hospitals and offer such care closer to where people live and work.

"The days of us building 200,000-sf hospitals are over," proclaims Isaac Palmer, CEO of Christus Health. Next fall, Christus will open the first microhospital in Louisiana, a 10,000-sf facility in Shreveport-Bossier with six short-stay inpatient beds. "It's kind of a souped-up doctor's office," says Palmer.

"We're moving toward microhospitals to enhance our integrated delivery network," says Laura Hennum, Chief Strategy Officer at Dignity Health. "It's all about population health and one-stop shopping for consumers."

At the close of 2016, there were at least 50 microhospitals operating in the U.S., according to Environments for Health (E4H) Architecture, which has designed a dozen of them. Micros are particularly popular in parts of the Midwest and certain western states, notably Arizona, Colorado, Nevada, and Texas. Most of the microhospitals in operation or under construction are located in states that don't have certificate of need programs aimed at controlling overbuilding of healthcare facilities.

"This is a new concept," says Chris DiGiusto, Corporate Vice President of Ambulatory Services with Franciscan Alliance, Indianapolis. The 14-hospital system will break ground on a 20,000-sf, $12 million microhospital with 12 emergency exam rooms and eight inpatient

URGENT CARE CENTERS: TRUE PIONEERS OF RETAIL HEALTHCARE DELIVERY

The nearly 7,100 urgent care centers operating in the U.S. see nearly 160 million patients a year, according to the latest estimate by the Urgent Care Association of America (UCAOA). To say the competition for these patients is fierce would be an understatement: Urgent care is about as close to retail as healthcare gets.

According to the UCAOA's 2015 "Benchmarking Survey," urgi-centers are open an average 4,100 hours a year (equivalent to about 12 hours a day); 96% are open seven days a week. One-third (34.1%) are located in shopping centers or strip malls; another third (33.2%) are in freestanding buildings. The rest are in medical office buildings (19.1%) and mixed-used facilities (13.6%). Physician groups and investors own the greatest share of urgi-clinics, nearly 40%.

For-profit retail chains predominate, led by the Concentra division of Select Medical (300 urgi-centers in 40 states) and U.S. HealthWorks Medical Group (174 centers, 21 states). Corporate and non-physician investors control 23% of urgi-clinics, according to the UCAOA.

Health systems have been developing their own networks of urgent care clinics. Hospitals, either individually or in joint ventures, run 37% of U.S. urgent care centers. Ted Matson, Vice President of Strategy for Sutter Health, which operates 24 urgent cares in Sacramento, Calif., recently compared these clinics to retail shopping centers because they provide lower cost and faster service compared to visiting a doctor's office.

Other health systems with multiple urgent care centers in their portfolios: Dignity Health, which operates 41 urgi-clinics under its banner, with eight more planned for this year (in 2013, Dignity acquired U.S. HealthWorks, which operates more than 200 occupational health and urgent care centers in 22 states); Centra Care – Florida, Maryland, and Kansas (38); Aurora Health Care – Wisconsin (34); Intermountain Health Care – Utah (32, plus six co-located pediatric urgent care centers); and Carolinas HealthCare System – North Carolina (29).

beds next month. "It's like a tiny house: the essentials and nothing else," he says.

DiGiusto admits that competition entered into Franciscan's decision to plug a micro into the larger $50 million medical complex it's building. St. Vincent Health, a 20-hospital system, has announced plans to build eight microhospitals in central Indiana, each with eight beds. DiGiusto says that St. Vincent's first micro "will be right in Franciscan's [patient] catchment area."

CHEAPER AND QUICKER TO BUILD

Hospital admissions have declined in recent years, as patients have chosen to patronize clinics in pharmacies, urgent care centers, freestanding outpatient facilities, ambulatory procedure operations, and independent emergency care centers. Microhospitals have become service bridges between EDs and hospitals, especially in markets that lack convenient patient access to large hospitals.

"Some clients look at micros as an alternative to investing huge amounts of money in larger healthcare facilities," says Catherine Corbin, Principal and Chicago Health Practice Leader for CannonDesign, which has prepared a so-called "tactical report" on "Microhospitals: Inpatient Services with Outpatient Convenience" (http://bit.ly/2jjKmya). Corbin says that health systems also see micros as a way of "planting their flag in new communities" and expanding their services outside of urban areas.

Microhospitals have been around for at least a decade, but they're starting to proliferate. They're cheaper to build than giant regional hospitals, averaging between $7 million and $35 million in construction costs, with much shorter build times—about 12 to 14 months,

Jackson Health System in Miami recently opened a 4,100-sf UHealth Jackson urgent care center, its first, in Country Walk Plaza in southeast Miami-Dade County. The system expects to have at least six urgent cares open in 2017, all cobranded with the University of Miami Health System.

BARRY GROSS PHOTOGRAPHY

"Design is now focused on branding," says Luis Cano, AIA, LEED AP, EDAC, NCARB, Principal and Senior Vice President in the Miami office of Gresham Smith and Partners.

GS&P designed its first urgent care center 14 years ago. Since then its healthcare work has been exclusively for hospitals, which see urgent care as a way to "project their influence into geographic areas where they otherwise wouldn't be," says Cano. Architecturally, he says, the brand "perpetuates the cohesiveness of the healthcare system."

GS&P's hospital clients don't usually come in with preconceived ideas for the design of their clinics, but they do know what works for them, says Cano. "They listen to us, and what we come up with could be a different solution for each client," he says.

GS&P is the architect on two urgent care centers for Jackson Health System, which last September opened its first UHealth Jackson Urgent Care center, a 4,100-sf facility in Miami's Country Walk Plaza. In 2017, Jackson Health System plans to open urgicinics in North Miami, Doral, and Cutler Bay, and at its existing North Dade Health Center, Miami Gardens.

Other AEC firms involved in UHealth Jackson projects: MGE Architects, G&G Engineering Group, Gartek Engineering, RC Construction, Harbour Construction, and BDI Construction.

Brian Martin, AIA, LEED AP, EDAC, Senior Designer in SmithGroupJJR's Healthcare Studio, in Washington, D.C., is also seeing urgent care centers popping up in local retail spaces. "We have to design them for the specific needs of their locations," which he says limits his firm's leeway over the design.

Urgent care centers are considered ambulatory construction, using a B-plus business occupancy standard. Their construction budgets are bare bones. "They are not intended to be flagships," says Martin.

Martin believes the Walmartization of healthcare at the retail level will continue. His firm has worked with one of the nation's biggest healthcare systems, Kaiser Permanente, to develop what could be a template for urgent care centers. "The providers are realizing cost efficiencies on their own," he says. *—John Caulfield*

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The 14-story Josie Robertson Surgery Center in New York City, part of the Memorial Sloan Kettering Cancer Center, is situated on land that allowed for only an 11,500-sf floor plate. Vertical construction required new thinking about operations and patient management.

NYC CANCER HOSPITAL RISES TO THE OCCASION

Memorial Sloan Kettering Cancer Center, one of the premier cancer treatment hospitals in the world, had a problem. A recent analysis of patient volumes showed that it would run out of space for new construction at its Upper East Side campus in Manhattan in just a few years. It did own a site at East 61st Street and York Avenue, near the East River and seven blocks from its main campus at 1275 York. But the parcel was only 100 by 115 feet. On top of that, it was also within a floodplain.

MSK had never built on such a small site. "We realized that we would be developing a new paradigm," says Suzen L. Heeley, IIDA, LEED AP, MSK's Executive Director of Design and Construction. The design would have to take into account all support services and staff needs, since staff would be in the building for their entire shift.

The solution: go vertical. The result, devised by MSK and its architect, Perkins Eastman, is the 179,000-sf, 16-story Josie Robertson Surgery Center, which opened in December 2015.

Perkins Eastman addressed the floodplain problem by moving the mechanical systems to higher floors, "hardening" the building against flooding, says Jeffrey Brand, AIA, EDAC, Principal. Several variances were also required, including one for the surgical program, which called for uninterrupted floor plates. Operating rooms were stacked vertically on three floors, with care areas designed for specialty procedures.

Accommodating three elevators (one each for the public, patients, and service staff) reduced the floor plate to about 8,000 sf, forcing the hospital and its Building Team to come up with what Heeley calls "a new architectural and operational model."

A key goal of the center is to limit patient stays to a few days, so encouraging patient mobility is important. (Only a small percentage of the surgery center's patients get admitted to MSK's main hospital.) The recovery area includes a figure-eight corridor to encourage patients to move around. They have to leave their beds to get breakfast.

The patient experience has been enhanced from admission to release, says Heeley. The waiting area features The Beehive, a reception kiosk for checking in. Patients are assigned a designated caregiver and given a location badge, which tracks their movements throughout the stay in real time. In the first six months of operation, the badges (from HealthLoop) recorded 248,000 patient touch points.

The waiting area also has "campsites," where patients and families can gather without having to move a lot of furniture. Brand says these areas are like living rooms, with a food bar, a business center, a library, and places where children can play Wii.

Staff comforts were not ignored. The design infuses plenty of daylight throughout the core of the building. The staff-only top floor, known as The Mixing Bowl, provides food service, conference and business areas, and spaces where clinical staff can mingle informally. Other rooms include The Soap Box (for dining and meeting) and places for computer workstations.

The building has become so popular with staff members that there's currently a waiting list of employees who want to work there.

Josie Robertson borrows many of its design and construction ideas from the hospitality sector. Perkins Eastman collaborated with the New York–based interior design firm iCrave—known primarily for its restaurant and airport work—to make the interior spaces emulate a home-recovery experience.

The walkways in the post-anesthesia care floors are filled with artwork. There's room for patients to exercise and socialize. Wood finishes, with their soothing, organic texture, are prevalent throughout.

"We wanted something different," says Heeley. She admits that MSK's leadership was nervous about bringing in iCrave, but felt confident that Perkins Eastman, which has been designing for MSK for decades, had the healthcare chops to keep the project on track. Controlling the budget did take some "curating," she says, when it came to choosing lighting, furniture, and flooring.

Heeley says that elements of the Josie Robertson concept will inevitably find their way into future MSK projects, including the 750,000-sf Robert Koch Center for ambulatory care. "We're designing in a flexible way to be able to make changes quickly," she says. —*John Caulfield*

according to AEC industry sources.

They can also bill patients at the same rate as acute care hospitals. Their reimbursement from private insurers and Medicare and Medicaid is generally higher than for freestanding EDs or urgent care, outpatient, and freestanding surgical centers.

"For a freestanding ED to get maximum reimbursement, it either needs to be tethered to the mother ship or it has to build its own hospital," says Rod Booze, AIA, ACHA, NCARB, Principal, E4H Architecture.

GOING OUTSIDE THE SYSTEM

So far, most microhospitals have been developed, constructed, and operated by third-party management companies through joint-venture agreements with health systems. They can be pretty secretive about their business models and facility designs.

Embree Asset Group, Georgetown, Texas—whose partners include Indiana's St. Vincent Health and St. Luke's Health System, based in Kansas City, Mo.—would not identify AEC firms it has worked with. Texas-based Adeptus Health, which reportedly operates a few micros, wasn't available for comment.

The clear leader among microhospital management companies is Emerus Holdings, Woodlands, Texas, which was launched in 2006 by a group of emergency-care physicians. At the end of 2016 Emerus was operating 22 micros with more than 1,500 employees for various healthcare systems across the country. Emerus intends to triple its complement of facilities and systems partners and quadruple the number of states in which it operates by 2020.

'MICROHOSPITALS PROVIDE A CONSUMER-FRIENDLY ACCESS POINT ALONG THE CONTINUUM OF CARE.'

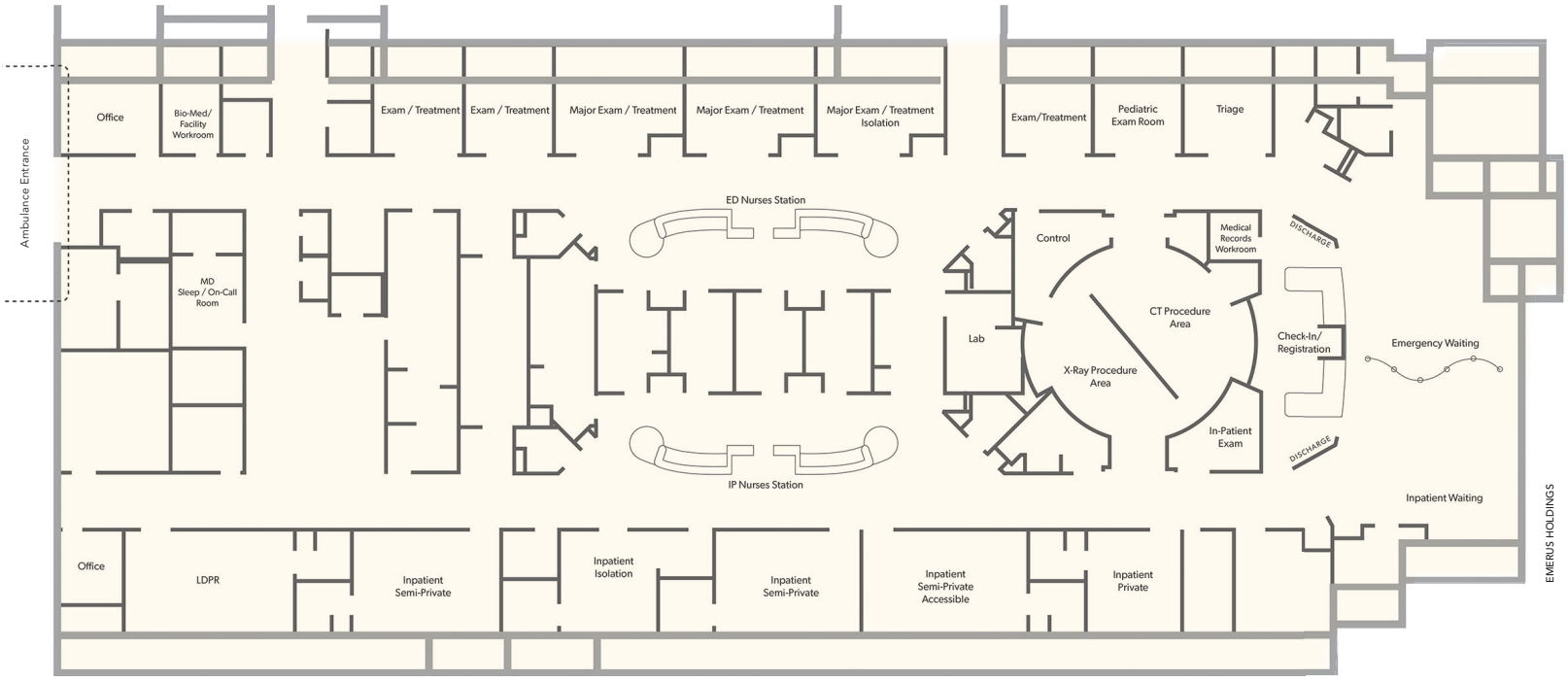
— LISA DISANTO, SG2 HEALTHCARE CONSULTANCY

Emerus's prototype delivery model can be adapted to meet the needs of specific communities and patient demographic niches, says Dudley Carpenter, the company's Senior Vice President of Real Estate.

Emerus prefers building from the ground up, typically on three acres; the company finds "little value" in retrofitting existing buildings, he says. The nurses' stations have been designed to optimize sightlines and accessibility. CT and x-ray rooms emphasize patient comfort. Some of its micros have staffed surgical suites with

KEY PLAYERS IN THE MICROHOSPITAL GAME

HEALTHCARE PROVIDER	HEADQUARTERS CITY	
Baptist Health System	San Antonio, Texas	Operates six "emergency hospitals" with inpatient services in San Antonio.
Baylor Scott & White Health	Temple, Texas	Recently opened its seventh Baylor Emergency Medical Center hospital in Colleyville, Texas: 20,000 sf, seven ED beds, eight inpatient beds, laboratory, and diagnostic imaging. Next location: Grand Prairie, Texas.
Christus Health	Irving, Texas	Shreveport-Bossier micro (40,000 sf), set to open this fall—the first micro in Louisiana.
Dignity Health	San Francisco, Calif.	Planning a second "neighborhood" hospital in Phoenix and another four in Las Vegas. First Las Vegas micro slated to open May 11.
Franciscan Alliance	Indianapolis, Ind.	Breaking ground next month on a $50 million, 85,000-sf medical complex that will have a 20,000-sf, $12 million microhospital: 12 emergency exam rooms, eight inpatient beds, full-service pharmacy and lab, full CT and MRI imaging, and its own morgue.
Hospitals of Providence	El Paso, Texas	Building a 40,000-sf micro in Horizon City, Texas: 10–12 inpatient beds, ED, lab, imaging services.
Integris Health	Oklahoma City, Okla.	Recently announced plans to open at least four micros in the next two years, one in each quadrant of Oklahoma City: 8–10 beds, 8–10 emergency room treatment bays in each micro.
SCL Health	Broomfield, Colo.	Has opened three "community hospitals" in the Denver area in the last 15 months; a fourth is scheduled to open in Aurora, Colo., in January. Northglenn, Colo., micro (60,000 sf) opened in November: eight inpatient beds, ED with surgical capabilities, imaging center, ambulatory services, and medical offices for the Heart Institute of Colorado–North, Community Foot & Ankle Clinics, and Gastroenterology of the Rockies. Typical SCL micro size: around 38,000 sf.
St. Luke's Health System	Kansas City, Mo.	Planning at least four micros to augment its nine existing full-scale hospitals. The first micro, in Overland Park, Kan., will be 17,140 sf with eight inpatient beds, according to a special permit submitted by developer Embree Asset Group.
St. Vincent Health	Indianapolis, Ind.	Twenty-hospital system has announced plans to build eight microhospitals in central Indiana, each with eight inpatient beds.



FIRST FLOOR

These floor plans for the 37,080-sf SCL Health Community Hospital in Westminster, Colo., illustrate how microhospitals are organized for maximum operational efficiency in tight quarters.

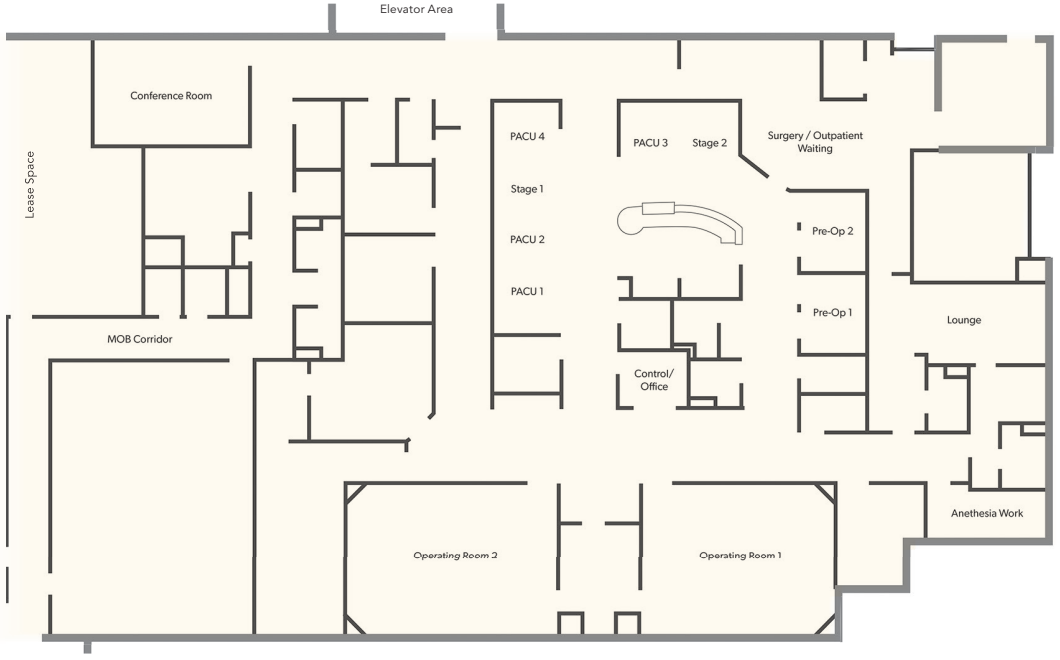
anesthesia, post-operative care, and pain control capability.

"The bottom line comes from the square footage," says Carpenter. "We are a hospital but it's not a footprint with 100 or more beds. We bring that down to about 20,000 sf." That also lessens the burden on local communities' power and water resources, he notes.

The health systems with which Emerus partners are the "established brands" that confer legitimacy to the micros, says Carpenter. Sources at those systems respect Emerus's track record. "Emerus is an organization that has executed microhospitals successfully," says Hospitals of Providence's Hurt-Deitch. "They fit our model." She explains that micros can support the larger system without requiring the same manpower as a full-scale hospital. In some cases they can actually share staff and professionals with the acute care hospital.

SECOND FLOOR

PhiloWilke Partnership designed this micro, which provides emergency medical care, labor and delivery services, inpatient care, and a diverse range of surgical procedures available in two state-of-the-art operating rooms. Among other comprehensive services, the facility offers on-site laboratory and radiology work. SCL was slated to open its fourth micro, in Aurora, Colo., in January.



COURTESY OF EMERUS HOLDINGS

A huge ceiling mural in its imaging space helps put patients at ease at Baptist Emergency Hospital Thousand Oaks in Texas. Commercial contractor F.A. Nunnelly developed this microhospital, which PhiloWilke designed. Baptist current operates seven micros, all in the San Antonio market.

Micros can also be more patient-friendly than other delivery formats. Dignity Health's Hennum notes that the average admission-to-discharge time for all healthcare facilities in Nevada is 154 minutes; at Emerus-operated facilities, it's less than half that: 74 minutes.

'MICROS ARE PART OF THE LARGER DECENTRALIZATION TREND THAT IS TRANSFORMING THE HEALTHCARE SECTOR.'

— BARBARA WAGNER, SENIOR VICE PRESIDENT, CLARK CONSTRUCTION

Franciscan is among the holdouts that have chosen to develop and operate microhospitals on their own. "We couldn't get the math to work out right" by using a third-party management partner, says DiGiusto. "The margins were too thin."

DiGiusto also wasn't overly impressed with other micros he's looked at. "They're basically urgent cares open 24 hours a day with CT scanners. We didn't think they'd meet our quality standards."

MICROHOSPITAL OPPORTUNITIES OPENING UP FOR CONTRACTORS

Only a few AEC firms have engaged in microhospital projects. The Building Team on Franciscan's complex, for example, includes Arc Design (architect and designer), KJWW (MEP), Crossroads Engineering (CE), Mader Design (landscape), and Tonn & Blank (GC).

Emerus has had a long-standing relationship with Houston-based architecture firm PhiloWilke Partnership. The first micro that PhiloWilke designed for Emerus was a retrofit and expansion of an 8,000-sf ED in a strip mall in Sugar Land, Texas. The facility had two inpatient rooms, eight exam rooms, a dietary department, and some imaging capability, all squeezed into 13,000 sf. That was a test run for Emerus's first official microhospital, which opened in Tomball, Texas, in 2006.

After taking a timeout to refine its prototype and business model, Emerus built five micros in San Antonio in 2010, one of which was a converted 26,000-sf shoe store. Since then, PhiloWilke has developed several microhospital prototypes for Emerus, says Kevin TenBrook, AIA, LEED AP, a Partner at the design firm.

Emerus's first-generation micros had a footprint of about 20,000 sf with a second floor (and sometimes a third) for office space. There was also a single-story model for tight plots. The second generation is three floors in a 13,000-sf footprint.

TenBrook says his firm's microhospital designs for Emerus "have as much space for patients as full-size hospitals." Over the years, PhiloWilke has been able to get construction costs down to 60% of the original prototype. It is now exploring what kind of micro could be built on a half acre.

PhiloWilke's designs, says TenBrook, fall within the "spirit" of guidelines for hospitals put forth by the Facilities Guidelines Institute, the independent nonprofit that provides guidelines for the design of medical facilities. FGI does not have specific requirements for microhospitals and has yet to address differences between microhospitals and critical access hospitals, says FGI spokesperson Douglas Erickson.

While PhiloWilke has captured the lion's share of Emerus's design work, Emerus and its healthcare partners are drawing from a wide pool of contractors for microhospital construction. In Dallas, Baylor Health Care System favors Medco Construction. In San Antonio, Gilbane, Vaughn Construction, and F.A. Nunnelly have built or are building micros for other health systems. S.R. Construction and Martin Harris

The 4,236-sf Golden Gate Urgent Care Clinic in Mill Valley, Calif., which opened in January 2015, was the first unit in this chain to be located within a shopping center, and had to be adapted to branding standards of previous clinics into a space vastly different in size and volume. The Building Team: SmithGroup JJR (architect), Lefler Engineering (M/P engineer), Susana Van Leuven (EE), Estructure (SE), and Crux Builders (GC).

have been used in Las Vegas, Kiewit Building Group in Colorado, and Anderson Construction in Idaho.

ARE MICROS A SUSTAINABLE TREND, OR JUST ANOTHER FLASH IN THE PAN?

TenBrook is convinced that Emerus has created a viable product that "makes sense from an investment point of view." He points to Baptist Emergency Hospital's recently opened 38,500-sf micro at Zarzamora, in South San Antonio—once a "healthcare desert," he claims—that has been handling twice the average patient load than was originally projected. (Depending on the market, microhospitals expect to see anywhere from 30 to 100 patients a day.)

Dignity Health plans to include medical office spaces and wellness centers in its micros and is considering leasing space for physical therapy and ambulatory surgery centers, says Hennum. Dignity will measure three variables—market demand, patient experience, and clinical outcomes—to determine whether its microhospitals are working, to decide if it will build more of them. Hennum says Dignity is looking into opening micros in California.

But healthcare construction trends come and go. It wasn't too long ago that experts thought there were no limits to the growth of medical office buildings; in many markets, MOBs now seem passé, as patients choose other types of care facilities that fit their medical needs and tight wallets better.

Then there's the cautionary tale of Adeptus Health, the nation's largest ED operator, which lost $11.7 million in Q3/2016 and saw its stock price plummet by 88.4% from May 16 to $7.43 on December 22. Is Adeptus's precipitous decline a signal that its business model, which relies heavily on non-hospital-affiliated emergency departments and on charging patients "facility fees" to cover its overhead, might not be sustainable?

(Emerus Senior Vice President Jason Liscovitz says his company has avoided Adeptus's financial problems by using in-network services.)

There's also no consensus about how quickly or broadly microhospitals might spread. Franciscan's board has given DiGiusto approval to explore replicating the micro model at other Franciscan facilities: "We need to take some pressure off of our hospitals, which are regularly out of beds," he says. But he doesn't foresee micros having anywhere near the same growth trajectory of, say, urgent care centers. "You need special circumstances," he says, especially regarding location: Micros only work in communities that don't have ready access to a large acute care hospital.

CannonDesign's Corbin says interest in microhospitals could last another five years, but she also expects states to tighten their reins on what kinds of healthcare facilities they allow. She says some investors already view the investment cycle of micros as being closer to medical office buildings (10–15 years) than full-size acute care hospitals (50 years).

PhiloWilke's TenBrook says the only thing keeping microhospitals from becoming more mainstream is state regulations that are, in his view, "out of sync with the idea of a small hospital." To meet one state's code, he says, his firm had to produce a design template showing four janitors' closets in every micro, when one or two would have been more than sufficient.

E4H's Booze says the precariousness of the Affordable Care Act, which spurred healthcare growth over the past five years, makes predicting hazardous. He says one client in the Northeast that he would not name views microhospitals as "a growth instrument in a nongrowth market."

Booze believes that as long as healthcare providers and private developers see micros as a real estate infill play, some day there could be up to 250 microhospitals dotting America's countryside.+

+EDITOR'S NOTE

This completes the reading for this course. To earn 1.0 AIA CES HSW learning units, study the article carefully and take the exam posted at **www.BDCnetwork.com/HealthFacilities2017**