NBBJ helped Banner Health take their centralized approach to care to the next level—proving that speed to market, craft and quality care can go hand in hand.
Following the success of their prototype “Hospital for the Future,” Banner Health rolled out their first franchise hospital in Gilbert, one of Arizona’s fastest growing cities. With a design framework already established, nBBJ set out to adapt the acute-care prototype to fit a community “well-care” hospital and deliver the project in record time without sacrificing quality.

The prototype model enabled a fast-tracked schedule where separate packages were used for Shell and Core and Tenant Improvements (Tis). This allowed construction to begin only eight months after the start of programming. Since Tis were moved off the critical path, nBBJ could work with the hospital to tailor the programs to need, without delaying the schedule.

The hospital design and construction was completed in 28 months—eight months faster than its prototype. While the team adjusted the design to programmatic and site-specific needs, the franchise model’s key elements—technology, operational and clinical excellence, future adaptability and a healing environment—were maintained.

Building upon a tested prototype frees up time to focus on design execution. This can lead to speed to market as well as the competitive advantage of a relevant, thoughtful and efficient facility design that enhances the experience of patients, visitors and staff.
Banner Gateway is the first roll-out facility of the Banner Health franchise model, a concept that started at their prototype hospital, Banner Estrella, in Phoenix. Built around the idea of transforming the health system’s care delivery and attending to the current and future needs of growing communities, the franchise model aims to carry forward Banner Health’s best practices to future campuses.

Gilbert, Arizona is among the top ten fastest growing cities in America and is comprised of a young, affluent demographic. Rather than a program focused on acute care, as at Banner Estrella, the 380,000-square-foot Banner Gateway is a community hospital focused on prevention and wellness, with services in obstetrics, pediatrics, outpatient care, general surgery and an emergency department. Like the Estrella prototype, Gateway’s patient tower and diagnostic areas are organized around a central circulation spine, which contains the hospital’s infrastructure.

The franchise model concept is about managing flow—the logistical movement of staff, patients and materials necessary to sustain 24/7 hospital services. As Gilbert’s population grows, the hospital can grow with it by adding two towers and more treatment areas along the spine with minimal cost and disruptions to the existing facility. The hospital can expand to accommodate more than triple the number of private rooms, from 165 to 536, when needed.

CARRYING FORWARD BEST PRACTICES

FOLLOWING THE MODEL AT ESTRELLA, NBBJ MADE improvements to the design process that allowed for a faster and cheaper delivery of Gateway. Infrastructure and design elements considered best practice were carried forward from the Estrella prototype, while key programmatic components were adapted to the more community-focused birthing and pediatric facility at the Gilbert, Arizona facility.
Driven by the client’s desire to be first-to-market, Banner Gateway needed to be designed and constructed faster than any project the owner, the contractor or NBBJ had ever worked on. By developing a unique, collaborative approach with the contractor, McCarthy Construction, the design team fast-tracked the schedule using five separate bid packages and four separate permit packages. This integrated process allowed construction to begin just eight months after the start of programming with occupancy occurring just 28 months after design was initiated. All of this was achieved with zero change orders—any necessary changes came out of a previously established owner’s contingency fund.
IMPROVING PATIENT OUTCOMES, SAFETY AND SATISFACTION

Despite programmatic differences, the design of Banner Gateway still adheres to best practices established at Estrella. Electronic medical records and computerized physician order entries have replaced paper records and forms, reducing medical errors and storage costs. The completely electronic environment also provides new tools for caregivers that can enhance the quality of care with electronic prompts and quality control systems.

All patient rooms are private and are organized into distinct zones for family, patient and caregiver. Zones of care allow maximum space efficiency for staff and therefore more efficient use of their time.

Private rooms reduce transfer rates, increase continuity of care, reduce infection and improve patient satisfaction. Rooms are designed to accommodate family members staying overnight to encourage family involvement in the caregiving process. Large picture windows offer views of the outdoors and lots of sunlight. Windows between rooms and caregiver stations, just above charting areas, allow caregivers to record electronic medical records while keeping their patients in sight.
The design concept was to create a place that draws life to it, similar to the ecosystem of a river canyon in a desert environment.

The canyon “form” creates an organizing structure to the hospital with a centralized circulation system arranged along an interconnecting spine.

The more traditional, institutional model of a straight spine with predictable sightlines was modified by intersecting forms through the “canyon” to create separate zones for the amenity spaces, meditative garden and chapel.

The main circulation is organized into zones of experience with exterior gardens serving as extensions of interior spaces.

Patients and staff have a constant view of the “canyon,” providing easy orientation.

Amenity spaces, gardens and water features are placed centrally along the circulation spine.
Water features and garden spaces along the central spine of the hospital, including a garden deck, evoke a resort-like tranquility while providing places of respite. Patients, families and staff can enjoy outdoor seating, or a view through floor-to-ceiling windows along the interior corridor and stairwells.
The serenity of the outdoor space is accentuated by the chapel, which is tucked into a corner of the courtyard and adjacent to a meditation garden.

“This project reflects the degree to which architecture can transform human experience. The extensive use of daylight, the relationship of interior and exterior spaces, and the powerful public spaces offer a direct reward to people at a time of tremendous stress.” — SEATTLE AIA JURY COMMENTS
Weathered COR-TEN® steel eliminates the need for painting and is reminiscent of the rich iron oxide walls of a canyon.

Masonry patterns change throughout the day as the sun tracks around the façades, emulating the striated look of canyon rock.

COR-TEN® steel is applied in a simple, shingle-style construction, and stands in stark contrast to the light concrete masonry walls.

Inspired by the desert canyon metaphor, the design allows natural light to filter deep into the stairwells and building interior.

Materials used on the exterior of the building are found on the interior as well, blurring the lines between inside and outside.

By experimenting with locally sourced, humble materials, the design team created a unique visual experience on a tight budget.
REGIONALLY INSPIRED, SUSTAINABLE DESIGN

The design team took a simple and cost-effective approach to sustainability, relying on local resources and knowledge of designing in desert climates. Long-life, low-maintenance materials were used throughout the building. COR-TEN® metal and CMU façades were applied as self-ventilating rain screens with a radiant barrier membrane to help keep the building cool during the hot Arizona summer.

Glazing was maximized to both the north and south—where sun control could most easily be achieved—offering distant views of the Red and Usery mountains and intimate views of the gardens on site. Day lighting was used extensively throughout the building, particularly in public areas.

Interior spaces deep within the building (image 2) were lit naturally by reflected sunlight, and sun shades (image 4) were used on the bed towers to reduce glare and heat gain in the patient rooms.

Drought-tolerant and indigenous plantings, many of which have medicinal properties, were selected for landscaping (image 1) and numerous exterior water features brought evaporative cooling strategies to the gardens, which were also shaded by the building’s “canyon” walls to provide comfortable moments of respite (image 3).
“The initial feedback from patients, which was taken within days of opening, was that close to 90% would recommend our services to their friends and family. I attribute that response to the healing environment, outstanding amenities, and the quality preparation of the staff and physicians.”

– BECKY KUHN, CEO, BANNER HEALTH
ABOUT NBBJ

NBBJ is an award-winning global design and architecture firm focused on helping clients capitalize on the relationship between people and the design of physical space to enhance organizational performance.

The world’s leading healthcare providers trust NBBJ to deliver measurable and sustainable improvement in performance and care. Our teams have partnered with some of the leading healthcare institutions worldwide, including nine of the top 14 U.S. News and World Report Honor Roll hospitals. Within the architecture industry, NBBJ has been hailed as “Most Admired” by peers in Interior Design’s annual Healthcare Giants survey, and ranked as the second largest healthcare design practice in the world by BD World Architecture.

NBBJ’s network of offices enables us to deliver quality projects that are regionally and locally appropriate. It allows us to act as a single creative force, leveraging the latest thinking from our NBBJ colleagues in other locations, bringing a rich blend of expertise to each project.

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