

Seattle Daily Journal of Commerce

HEALTH CARE

DESIGN & CONSTRUCTION



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BEST PRACTICES IN HEALTH CARE DEVELOPMENT AND DELIVERY

Designers focus on collaboration, insights and transparency to build success.



BY MICHAEL RECHNITZ & ELLEN MULVANNY
CLARK CONSTRUCTION

ates seamlessly and enables the health professionals to provide the highest level of patient care requires a collaborative approach with key hospital leaders and end-users to understand their needs and priorities. Integrated project delivery fosters early collaboration among the builder, designer, engineers, select trade partners, the owner and other essential stakeholders to ensure the best possible result.

An approach grounded in proven processes and methodologies is imperative. But having the tools and experience at our disposal aren't the only keys to success; flexibility and adaptability are also crucial as no two projects are alike. With that in mind, here are four best practices in project development and delivery that will help drive collaboration, informed decision making and the certainty of a successful project outcome:

LEAD WITH HUMILITY

Humility as your first action is

incredibly important, especially in health care design and construction. Understanding that you are not the authority on all things and practicing active listening are essential to delivering a facility that achieves the end-users' goals and serves the long-term needs of the community. From doctors to the chief financial officer, the clinical resource nurse and IT professionals, there are traditionally more stakeholders involved in health care projects than we see in other product types. These constituents all bring valued perspectives that carry equal weight and authority and are essential to designing a modern, efficient and highly functional medical facility.

TRANSPARENT COST DETAILS

It is difficult for an integrated team to do their best work with little visibility into the project's budget. Providing detailed budget reports and analysis adds transparency, reduces risk and

Successful health care needs key hospital leaders and end-users to understand their needs. Clark Construction built VA Puget Sound, pictured here.



PHOTO COURTESY OF CLARK CONSTRUCTION

protects everyone in the long run. Through a shared cost model, we are able to provide complete transparency into how decisions affect the project's budget in real time, which helps stakeholders prioritize their needs and wants. Creating a short and frequent feedback loop enables everyone involved to make informed decisions and safeguards against

cost or schedule impacts. While the PDCA (plan do check adjust) model is intensive, and requires resources, the investment yields significant dividends that far outweigh the cost.

Recently, during a weekly budget review meeting on a local project, our team discovered a

BEST PRACTICES — PAGE 7

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HOW FLEXIBLE DESIGN SERVED OHSU DURING THE PANDEMIC

OHSU expanded to a previously undeveloped waterfront site just south of the main campus on Marquam Hill.

When the coronavirus pandemic spread to the United States in early 2020, Oregon Health & Science University was just beginning to see the benefits of its new Multispecialty Procedural Unit — a three-level, integrated procedural and surgical platform in the Center for Health & Healing Building 2 (CHH2). The 14-story ambulatory tower in Portland houses several multi-specialty clinics, a first-of-its-kind extended stay unit, the Knight Cancer Institute Outpatient Clinic, Infusion & Clinical Trials Unit, a laboratory, pharmacy, phlebotomy services and more.



BY SOLVEI NEIGER
ZGF

When CHH2 opened in 2019, the project's approach to collocating three similar yet disparate procedural and perioperative services in the MSPU — endoscopy, cardiology and interventional radiology — resulted in a 20% increase in surgical volumes the first year of operations, an improved patient experience, and a new way of working as an integrated care team. What the team wouldn't realize until later was that the building's flexible, forward-thinking design would also position OHSU to effectively respond to COVID and enable the MSPU to safely resume full operations in less than two months.

CAMPUS CONTEXT

OHSU is the only academic medical center in Oregon, one of only two designated Level 1 trauma centers in Oregon, and the main tertiary care and referral center for the central West Coast. Like many medical centers in constrained urban areas, OHSU's acute care and critical care units were consistently at 95% to 98% capacity — or exceeding capacity — limiting its ability to accept high acuity transfers from community hospitals.

With an eye toward the future, OHSU expanded to a previously undeveloped waterfront site just south of the main campus on Marquam Hill. Leadership saw the ZGF-designed CHH2 and Rood Family Pavilion project as an opportunity to move outpatient services from "The Hill," freeing up space for critical inpatient care on the main campus while providing guest housing for patients and families with access to Marquam Hill via the

tram. Doing so would optimize space, efficiency, and improve the patient and staff experience.

A NEW WAY

From the start, shifting patients from The Hill to this new site eliminated a host of issues. But planning and designing it the same way — with each department in their own silo, as they had been previously — was not the solution and required a new way of thinking. During the integrated design process, ZGF used value stream mapping as a tool to identify and visualize the sequence of steps for typical patients and providers. Once the doctors and nurses saw the similarities in what they do and when they do it, they realized the possibilities of coming together as an integrated unit.

The resulting program stacks the MSPU, clinical support functions and outpatient surgery on levels two, three and four, respectively. These floors have standardized circulation patterns, patient care, and staff spaces to support the same flows on each floor, along with central sterile processing, a clean core and shared elevators.

INITIAL OUTCOMES

Early on, the MSPU team began collecting data to measure how the new space performed against the project goals. They measured patient and staff experience, surgical and procedural volumes, room and staff utilization, and more. This enabled leadership to under-

stand what was working well, identify areas for improvement, and continue pushing the operational approach for the building.

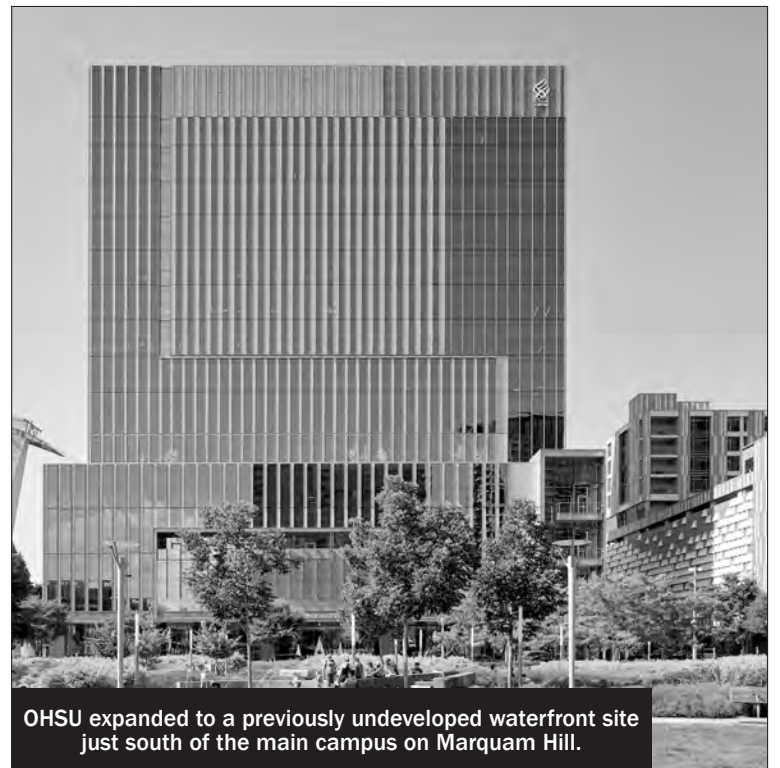
The first year of data showed that from its opening in April 2019 to March 2020 — just before the first COVID surge in Oregon — operating as one integrated unit offered benefits on many levels: improved efficiency by consolidating staffing and resources, enhanced flow and throughput, increased on-time starts and decreased overtime, improved utilization, reduced turnover time, and better patient and staff experience.

Several new MSPU programs and services came online or expanded throughout the year as part of a continuous effort to move complex procedures out of the main campus operating rooms.

BRACE FOR IMPACT

Then, in April 2020, COVID disrupted all OHSU operations. The MSPU faced an operational crisis due to capacity constraints, and all non-urgent and elective procedures were canceled. Meanwhile, the main campus faced a shortage of inpatient beds and risked not being able to meet patient demand in the OR.

Fortunately, CHH2 was granted a temporary license of inpatient waiver to utilize the Overnight Care Unit (OCU) for inpatient use. This resulted in a 20% increase in utilization as inpatient surgical cases from the main campus operating rooms moved to the OCU for recovery.



OHSU expanded to a previously undeveloped waterfront site just south of the main campus on Marquam Hill.

PHOTO COURTESY OF BRUCE DAMONTE

By May 1, an executive order from the Oregon Health Authority permitted hospitals to gradually resume elective or non-urgent procedures if delay was deemed to cause significant impact on patient health, livelihood, or quality of life, and as long as OHSU met all federal and CDC conditions for reopening, which it did.

KEY TAKEAWAYS

Because of its forward-thinking design, CHH2 was the first OHSU building to ramp back up to 100% operations during the peak of this global crisis. There are many lessons to be learned, but these three takeaways can

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ON THE COVER

More neighborhood clinics are opening, such as Tacoma Women's Imaging Center (TRA Medical Imaging). Turn to page 5 to learn about the shifting need for design in health care services.

PHOTO BY NATHANIEL WILLSON

2021 HEALTH CARE TEAM

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AGGREGATION WILL DRIVE A NEW HYBRID SCIENCE SPACE

Hospitality has taught us that a space can and should instantaneously transform how you feel.

Clients in the sciences industry have the power to change the trajectory of human life. To cultivate work environments that enable our sciences clients to develop effective vaccines, life-saving



BY CHAD
YOSHINOBU
GENSLER

therapies, and innovative products and technologies, we must look beyond traditional conventions of buildings and workspaces as places that optimize performance.

Buildings and spaces are now about elevating connectivity with people. That connectivity builds trust, which in turn leads to collaboration and elevates culture — all leading to more idea generation. To create a new hybrid sciences workplace that empowers people to connect and collaborate, where innovation can thrive, we must design space with an entirely different mindset — a mindset around aggregation.

POWER OF AGGREGATION

We believe that the future is about blending science with unexpected influences that haven't been merged before. Imagine what comes about when you infuse a science lab with the collaborative elements of tech workplaces, which are masterful at creating synergies between people. Blend in hospitality's experiential attributes, which evoke how space makes your people feel, beyond just how it works. The incorporation of brand design, which celebrates who you are and, more importantly, what you believe in. Lastly, storytelling as the glue that fuses all three influences with science to tell the world how your people altered the outlook of human life.

LEAD WITH HEART

Our tech workplace experience taught us that creating a heart within a space — a central hub and destination for connection — is how you form community. It's where a company's culture, mission and purpose are felt. The heart should be a synergistic



The new hybrid sciences office will blend tech workplace, hospitality, brand design and storytelling, as seen at the Johnson & Johnson Innovation JLABS in Shanghai, designed by Gensler.

PHOTO COURTESY OF AI QING

space where people see, meet and build relationships with one another. What if we coupled this idea with the lab, the heart of any research organization? Doing this puts the science on display, allowing your potential recruits and future investors to feel the heart and soul of your organization. It puts your culture, your people and your science together, thereby creating a grav-

ity point for your organization.

HOW IT FEELS

Hospitality has taught us that a space can and should instantaneously transform how you feel. It should put a smile on your face and induce wonderment. We call this "experience," and it is the caretaker of how we need to think about space moving for-

ward. As we unpack hybrid and work-from-home scenarios, we must also rethink the reasons why someone wants to come into the office.

In our U.S. Workplace Survey 2020, conducted in the summer and fall of last year, 65% of sciences employees surveyed still said they wanted to return to

AGGREGATION — PAGE 8

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EvergreenHealth Lee Johnson Family Intensive Care Unit, Kirkland, WA
photo credit Francis Zera

We build facilities and partnerships that strengthen the health of our community.

Congratulations and thank you to EvergreenHealth and KMD Architects for your support in completing this new intensive care unit. We are proud to help bring state-of-the-art critical care to Puget Sound families!

THE SHIFTING NEED FOR DESIGN IN HEALTH CARE SERVICES

Hospitals and health care providers are continually seeking the best ways to serve their communities to deliver equitable services to all.

As the COVID-19 pandemic diminishes, architects, more than ever before, are working with building owners and operators tasked with creating healthy, equitable spaces for delivery of health care services.



BY R. DAVID FRUM
DLR GROUP | SALUS

Meanwhile, society is coming to terms with the reality that the frequency of pandemics may increase. According to the World Economic Forum, new pandemics will continue to spread due to increased populations, mobilization, and an easily accessible global society.

The current measures and demand to limit the spread of viruses are here to stay. And organizations are accommodating that demand by shifting the way they allocate space, services and resources. The following key factors are impacting the way we

design for health care delivery.

EQUITABLE SERVICES

The health care industry must balance personalized in-person care with virtual care options. In-person meetings develop trust between the provider and the client/patient needed for successful diagnosis and treatments. Hospitals and health care providers are continually seeking the best ways to serve their communities to deliver equitable services to all.

The pandemic has accelerated that need to quickly access services with the least amount of risk. This has resulted in shifting certain spaces and services beyond the hospital walls and out into outpatient facilities, clinics, ambulatory surgical centers and rehabilitation facilities. Not only do these outpatient services reduce costs, compared to the high cost of hospital services, but this allows health care agencies to allocate space into a variety of neighborhoods reaching more individuals. Careful and intentional long-term plan-

Tacoma Women's Imaging Center (TRA Medical Imaging) was designed by DLR Group | Salus.



PHOTO COURTESY OF NATHANIEL WILLSON

ning and programming with an architect will help avoid quick-fix solutions that end up costing a health care provider more than if they had invested in a long-term plan with built-in flexibility.

RIGHT-SIZING

While telehealth has been around for several years, 2020 made it a practice that will stay and help in reducing medical

costs for many. Telehealth, combined with the trend to decentralize services, is allowing designers to work with health

NEED FOR DESIGN — PAGE 8

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Mary Bridge Children's Outpatient Center, Federal Way

HEALTHCARE CONSTRUCTION
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EVIDENCE-BASED DESIGN IMPROVES DIALYSIS TREATMENT EXPERIENCE

The new Rainier Beach Kidney Center brings critical care to the nearly 100 patients living within one mile of the project.

We have long known that our physical environment plays a key role in determining our health and wellness. More recently, we have come to the collective realization that our systems of development perpetuate deeply engrained patterns of discrimination against the most vulnerable populations within our community — a fact laid bare locally by the concentration of high-risk populations in our South Seattle neighborhoods.



BY PJ BAUSER
MAHLUM
ARCHITECTS

Seeking to revolutionize dialysis care and address systemic inequities with its first ground-up construction, Northwest Kidney Centers and the Mahlum design team developed a new patient-centric clinical model, built around the concept of connecting patients and staff directly with nature.

The new Rainier Beach Kidney Center brings critical care to the nearly 100 patients living within one mile of the project site who, like the 500,000-some other Americans living with chronic kidney disease, had previously been spending 16 hours each week undergoing dialysis treatments in outpatient clinics which could feel chaotic, crowded and institutional. For many, this dehumanizing in-clinic experience was akin to flying from Seattle to Chicago three times weekly in the middle seat of coach. In addition, these patients were spending up to another full hour each way commuting to the closest kidney dialysis center in downtown Seattle.

Transforming an urban site previously used as a storage yard for tires, industrial scrap and derelict vehicles into a community amenity that offers biophilic healing through lush garden spaces, the placement of the patient-centric clinic, adjacent to transit and within the heart of the Rainier Beach neighborhood, removes barriers to care that have disproportionately affected the elderly and people of color, while also lessening CO2 emissions of patient transit.

Premised on the hypothesis that direct views to nature from patient care areas would increase participation with treat-

Bird habitats and pollinator-attracting plants provide opportunities for non-rhythmic movements to redirect patient, visitor and staff attention towards the garden landscape, shown to reduce pain and discomfort through distraction therapy.



PHOTO BY BENJAMIN BENSCHNEIDER

ment regimens and improve health outcomes resulting in decreased morbidity and mortality rates, the clinic is organized to provide patients with direct views to nature while maintaining sightlines and workflows essential to clinical safety. Courtyards punctuate the clinic floor and feature biodiverse, seasonal plantings that lower stress, and bird habitats within pollinator-friendly plantings that encourage distraction therapy for pain management. The planning pairs technicians in small community groupings that support efficient clinical functions while reducing the scale and institutional feel of the care environment.

Built upon an evidence-based design approach, the project leverages research in biophilic design and environmental psychology, balancing refuge for patients with dynamic views to the layered courtyards and prospect to the community beyond. These biophilic design strategies woven throughout the clinic create an immersive and restorative environment that encourages both patient treatment compliance and staff satisfaction.

Solid walls at the patients' backs provide a sense of refuge and direct, equitable views into native landscapes. Windows across from all patients provide views to seasonally dynamic plantings, plentiful daylighting for anchoring circadian rhythms, and opportunities for observing

stochastic movement of birds and pollinators to serve as distraction therapy for patients during treatment.

Natural, warm material palettes are used throughout the facility to help lower heart rates and create a welcoming, non-institutional feel. Integration of the biophilic design patterns of prospect and mystery in the landscape design provide a balance between visual intrigue and privacy for patients to optimize their comfort and wellness.

While essential to the healing nature of the clinical environment, the internal and external garden courtyards also restore the natural habitat of the former scrapyards and link to existing greenbelts surrounding the urban site. Biodiverse, native vegetation such as ferns, fountain grasses and vine maple provide a lush habitat for local pollinators and songbirds while extending the biophilic design benefits beyond the building occupants and into the surrounding Rainier Beach community. A balanced mix between perennial and evergreen plantings ensure a dynamic, layered landscape that changes with the seasons while also serving as screening elements to provide a sense of privacy and enclosure.

The assortment of biodiverse plantings creates visual interest throughout the seasons with a variety of colors, textures and layers of deciduous plantings

balanced with evergreen to create visual balance and allow occupants to connect with seasonal changes more deeply. The courtyard plantings and configuration encourage the momentary and non-rhythmic movement of birds and pollinators as a calming and welcome distraction from the clinical environment and directs patients' attention towards the garden landscape. This form of distraction therapy has been shown to reduce patient pain and discomfort by capturing patients' attention through non-rhythmic sensory stimuli.

In a community that is seeing rapid change and development, the biophilic design strategies utilized across the project restore and protect native ecosystems and provide amenities for the building occupants and surrounding community through prominent, public-facing garden spaces.

At the heart of all dialysis clinics is the water supply, constantly pumped through the reverse osmosis equipment to each patient's dialysis machine and playing an essential role in cleaning the kidneys of the patients in their treatment. Applying similar rigor to the design of the systems that sustain the clinic as to the spaces the patients occupy, the design team found that this process equipment load represents over 95% of the water use for the facility and studied various

options for water use reduction and reuse. The decision to move from a traditional chemical sterilization system to a heat disinfection system that cleans and recycles the clinic's process water has delivered water usage savings of over 2 million gallons annually — a 65% reduction from baseline.

In connecting patients, staff and the broader community to the healing power of nature, the Rainier Beach Clinic is creating a new paradigm for dialysis care delivery. Operational for nearly 18 months now, the clinic is beloved by staff and patients for bringing this restorative and innovative care directly to the community which it serves and has been nationally recognized with both an AIA COTE (Committee on the Environment) Top Ten Award and an AIA Healthcare Design Award. The Rainier Beach Clinic invites us all to imagine a future with more holistically restorative health care environments.

As the leader of Mahlum's health care studio with 16 years of architectural experience, PJ Bauser brings a knowledge of creating healthful environments and a passion for using design to serve vulnerable populations.

BEST PRACTICES

CONTINUED FROM PAGE 2

major jump in cost due to supply chain disruption and material availability. Because of the budgeting process our team established, this increase was identified early and resolved through a quick huddle with the project architect and engineers, bringing the project's budget back in line. Without weekly cost reporting, the budget increase would not have been discovered until a milestone review, making adjustments far more complicated. Developing and leveraging a weekly dashboard to share real-time budget feedback is also beneficial and enables project leaders to bring forward potential value-added recommendations, identify cost efficiencies, and, at the end of the day, deliver a fully optimized health care facility.

INFORMED DECISIONS

Thousands of decisions are made throughout the design and development phase of any project. Having a thorough understanding of stakeholder priorities and "choosing by advantages" ensures a facility is best suited to meet the long-term needs of myriad constituents. Every facet of a project must be evaluated — from the flooring materials to the paving in the parking lot to the landscaping options — to enable the owner to better prioritize needs and wants and make informed decisions about their future facility.

This exercise isn't solely designed to cut costs but rather to maximize value and ensure the facility is designed to serve the needs of the health system. Starting with the minimum requirements, seek to understand the cost advantage, the life cycle advantage, the efficient advantage, and then highlight the possible advantages of exceeding the mandated criteria. Through this approach, we can distill complicated information in a manner that enables a large body of authority to understand it and gain consensus.

LEVERAGE DIGITAL INSIGHTS

Starting each project with a full understanding of the site conditions provides actionable insights that help eliminate

risk and ensure a smooth start to construction. Leveraging Clark's digital construction affiliate Coda, we conduct an underground investigation of risk, which includes different data points of the site, such as test pits, site surveys, historical soil reports, excavation and water tables, and convert that information into a multi-dimensional model to analyze the site. The data collected during this process enables us to confirm knowns and unknowns, adapt to existing conditions, and transition into construction with confidence.

Laser scanning technology is another means to gain insights and achieve greater certainty on health care facility renovation or expansion projects. This tool provides us with a detailed understanding of existing conditions, such as the location of columns, ducts, slabs and other building elements, and how they will interface with new construction. By running a series of computational scripts to check the design documents and virtual project model for integrity issues, we can further mitigate the risk of design or code compliance issues.

Through these and other technology solutions, we can gain actionable insights at the earliest stage of project development, eliminate potential risks and achieve cross discipline alignment, all before construction begins.

In conclusion, building environments that aid the healing and wellness process are part of a region's infrastructure. Working in partnership with private health care systems, academic medical centers and public providers to build hospital campuses, behavior health centers and research facilities each require very specific insights.

All health care projects are innately complex, but by addressing challenges early, and head on, with humility, transparency, insights, experience, and, most importantly collaboration, we can achieve exceptional outcomes. This is the future of health care.

Michael Rechnitz, project executive, and Ellen Mulvanny, senior design manager, are responsible for leading Clark's active design-build health care work in the Seattle market.

FLEXIBLE DESIGN

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be applied to other health care projects going forward:

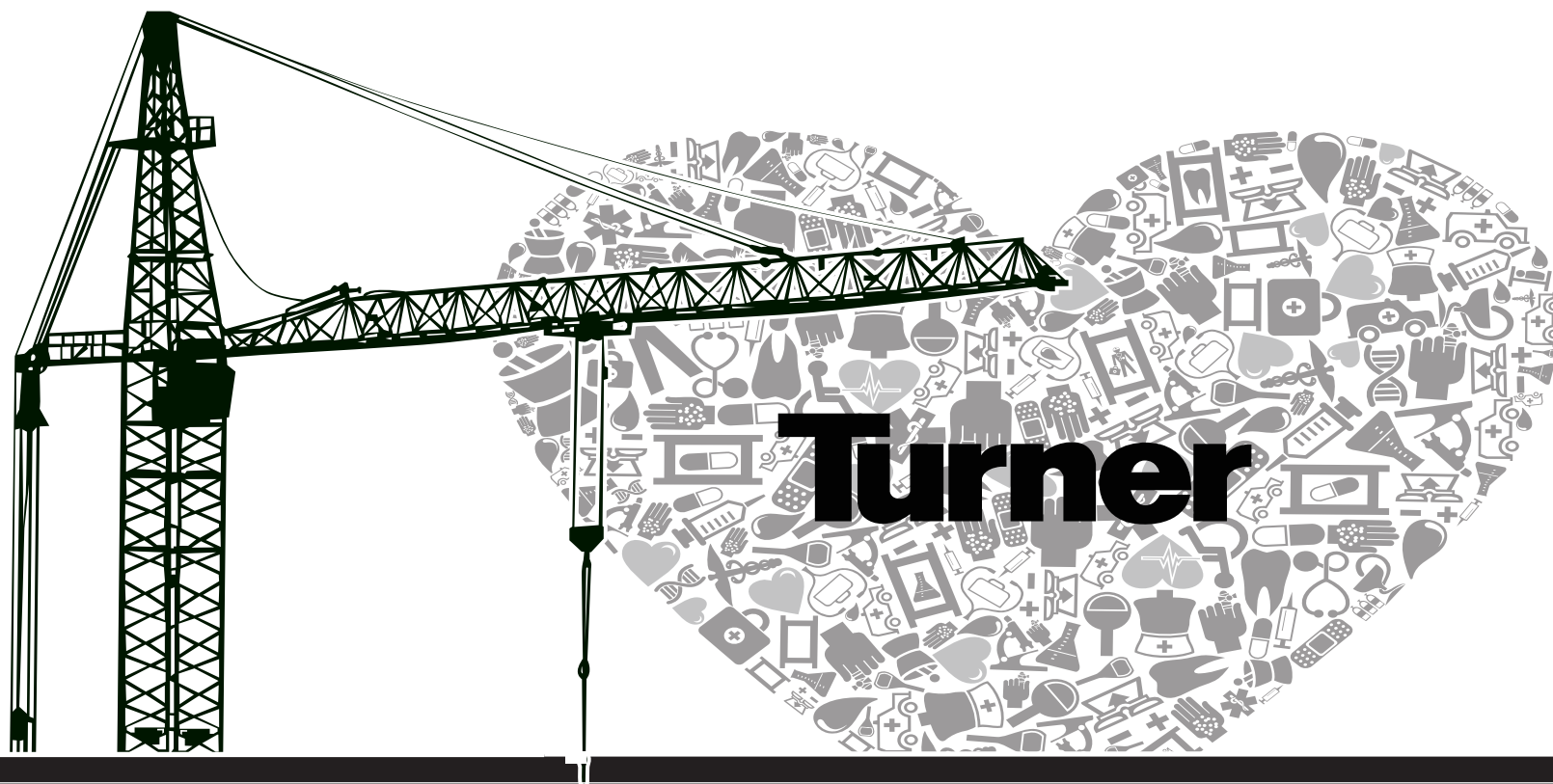
- **Adequate space.** Simply having more space — that was also better-organized and located near the main campus — was key. CHH2's large patient care spaces and wide corridors accommodated physical distancing and one-way circulation. Conference rooms and waiting rooms on the main campus were turned into staff lounges, but at CHH2 there was adequate indoor staff spaces and access to outdoor spaces, like balconies, for fresh air and respite.

- **Built-in flexibility.** All-private pre- and post-procedural rooms enabled higher volumes once capacity constraints eased. Caregiver "perches" and windows into patient rooms allowed for observation with minimal direct contact. Utilizing the Overnight Care Unit for inpatient surgery recovery also helped address a lack of beds on the main campus.

- **Standardization.** Standardized processes and protocols in the MSPU ensured patient and staff safety while maintaining efficiency, volume and growth. Staff were comforted in knowing that CHH2 was a COVID-free environment because every patient getting a procedure was tested, and if they were positive or inconclusive, they were rescheduled.

While it's difficult to say that what worked in one pandemic will work the same way during future ones, there's one thing to be sure of: the value of flexibility cannot be overstated. Nor can we truly gauge the efficacy of health care facilities we are entrusted to design and build without careful measurement and verification.

Solvei Neiger is a partner at ZGF Architects leading the firm's health care practice.



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care agencies to realign services, reducing space requirements. For instance, with many patients being seen using virtual meetings, we are able to reduce the typical number of exam rooms in clinics. This reduction in size of the larger clinics allows for more neighborhood centers to open throughout a community. In the current dense urban and suburban areas, it is easier to obtain smaller spaces where such centers can be located, such as the Tacoma Women's Imaging Center (TRA Medical Imaging).

When equipment needs to be replaced, increased imaging room size also requires additional increases to adjacent support service rooms for power, data, HVAC, medical gases, etc. And the need for staff participation in designing these rooms for highest efficiencies increases as the room now serves multiple purposes.

SHIFTING METHODS

While some telemedicine can be conducted from a provider's residence, small conveniently located telehealth

centers are supporting health care providers with better technology, acoustical separation, and necessary support and administrative services. These centers can be located independent of the clinic/hospital or attached to them. More complex diagnostic and treatment spaces need to remain in the hospital for efficiency of operation. Less intensive diagnostics can be located within the neighborhood centers for imaging, labs, infusion, etc. And finally, with the advancement of wearable and personal health technologies that can monitor vital signs and physical activity, greater portions of health care are moving toward less physical contact.

Changes in delivering and accessing health care will continue to impact the industry. And planners and designers will continue to meet the shifting need with more efficient spaces for equitable services delivered through the built environment.

Principal R. David Frum is a health care leader with DLR Group | Salus in Seattle.

AGGREGATION

CONTINUED FROM PAGE 4

their workplaces three to five days per week post-COVID — or double the average across all industries. Many sciences workers clearly find value in their workplace. What matters now is how the workplace attracts the other 35%.

Recall your last memorable trip: remember how it made you feel, how your every need was taken care of, how choice was abundant for you to play, be inside, be outside, be in respite spaces, be in loud spaces, to interact with others, or to be secluded to focus. Tactically, a hospitality-driven experience such as this one is no different than what a science building or workspace can offer. The difference is that it is steeped in experience without feeling too formal or corporate. Today's science workers are under an immense deal of stress with the significance of the high stakes outcomes. The layering of hospitality into the workplace can ease and calm, creating a sense of serenity to balance their substantial objectives.

CONVEYING A BRAND MESSAGE

For sciences companies, physical space is a critical tool to tell

a story about what you believe in, what you stand for, or how your innovations are changing the world. For many sciences spaces, brand design is an underutilized tool that has been limited to a logo in a lobby or a sign on a building. What if we took a different approach and merged brand design with the physical design of your other spaces?

As people circulate the space, they learn about your organization from these messages; it infuses purposeful color, vibrancy and inspiration throughout the space. Spaces should not be just about walls and function; they should speak to your people, your guests, your recruits and your partners about why your organization matters.

SCIENCE WHISPERER

Speaking of speaking to your people, let's talk about storytelling. Sciences workers are highly mission-driven; they are proud of what they do and invent. That's why they joined your company in the first place. Their discovery today impacts someone's life tomorrow. When done right, storytelling can convey the gravity of your organization's transformational mission and purpose

that your people deliver upon every day.

Employee engagement is correlated as a driver of innovation. Celebrating the impact of your people and their work heightens that engagement. What if we utilized the power of storytelling to vocalize the testimonials from the actual people you have helped, or share stories around your progress towards that next cure? Imagine how many stories you could tell. Imagine if those stories were amplified in your space and buildings every day. Imagine how that would make your people feel — not only about why your company matters, but why they matter.

By leading with human experience and aggregating the best ideas from the tech workplace, hospitality, brand design and storytelling, we can reinvent the traditional workplace paradigm to create a new hybrid science workplace that evolves buildings and spaces for the next generation of researchers and scientists to push the boundaries in a purposeful space.

Chad Yoshinobu is a principal and global leader of the sciences practice for Gensler.

WHY WE DESIGN

designed to
inspire

Our goal is to meet patients and providers where they are - in the community and on their wellness journey. Informed by multiple markets, we design agile healthcare environments that enhance the patient and staff experience and provide pathways to healing.



Island County Stabilization Center

ALTERNATIVE DELIVERY BENEFITS HEALTH CARE IN WASHINGTON

Soaring prices of providing and receiving care challenge how facilities are built, operated and maintained.

Health care is at the forefront of local and national discussion more than ever before. Growth of the health care industry has accelerated and is in a constant state of flux due to rapid advancements in technology, medical equipment and evolving discussions surrounding care equity. While community and public health is vital to our survival, the soaring prices of providing and receiving care present numerous challenges in how facilities are built, operated and maintained.



BY CALLUM
ROXBOROUGH
OAC

and designers are engaged as a team. These unique methods are used to accelerate project delivery by allowing the contractor to provide feedback during the design phase before the start of construction. Through early investigating of existing conditions, estimating various design options, and working directly with the health care system's facility engineers, IT professionals, environmental controls staff, materials management, nurses, medical planners and others, the general contractor and architect can provide a more accurate budget, design and overall experience.

OAC Services shows a passion for health care by using alternative delivery methods that cultivate relationships between the owner, contractor and design team early on — which OAC believes is the best way to improve project delivery. Through more collaborative teaming practices, OAC is able to streamline design and construction, identify and mitigate risk, and deliver environments that aid in patient recovery.

OAC Services shows a passion for health care by using alternative delivery methods that cultivate relationships between the owner, contractor and design team early on — which OAC believes is the best way to improve project delivery. Through more collaborative teaming practices, OAC is able to streamline design and construction, identify and mitigate risk, and deliver environments that aid in patient recovery.

Given the specialized nature of health care design and construction, alternative delivery is truly an ideal contracting method. By following state of Washington statutes (RCW 39.10), a public building owner can apply to use design-build and general contractor/construction manager (GC/CM) contracting methods that the private sector has been deploying successfully for years. In lieu of awarding public works contracts in lump sum to the lowest responsible bidder, owners may elect to follow RCW 39.10 and proceed with a more collaborative method that engages the design team and builder early in the process.

Health care owners can work with an alternative delivery expert, like OAC Services, to publicly procure an architect and general contractor to design to a target budget, phase and plan; and execute work that implements the most stringent infection control standards, prevents impacts to ongoing operations, and ensures patient, staff and caregiver satisfaction.

Alternative delivery methods thrive when owner, contractor



Mason Health Clinic in Shelton is connected to Mason General Hospital.

PHOTO BY BARTA PICTURES

and designers are engaged as a team. These unique methods are used to accelerate project delivery by allowing the contractor to provide feedback during the design phase before the start of construction. Through early investigating of existing conditions, estimating various design options, and working directly with the health care system's facility engineers, IT professionals, environmental controls staff, materials management, nurses, medical planners and others, the general contractor and architect can provide a more accurate budget, design and overall experience.

OAC has provided guidance to owners on 47 GC/CM projects and 27 design-build projects, totaling more than \$2 billion. Over the years, OAC has helped improve project delivery by serving on the Washington Project Review Committee from its inception in 2007. OAC has found the design-build and GC/CM delivery methods have been the most effective on several of its recent health care projects.

"The GC/CM method allows public owners to bypass many of the pitfalls and challenges associated with the traditional design-bid-build delivery method," said Brent Wilcox, OAC's senior project manager on the newly constructed Mason Health Clinic at Mason General Hospital in Shelton.

"The complex nature of the Mason Health Clinic, being connected to the hospital on two levels, was made easier through the GC/CM being brought on early in the process," he said. "Doing so allowed the hospital to plan for this connection and phase the work in a way that would minimize disruptions to ongoing operations."

The project included a new 60,000-square-foot medical office building and significant

site improvements, including expanding the south main parking lot and two newly developed parking lots on the campus's north side. OAC guided MGH through the GC/CM application and approval process, which allowed the contractor to be brought on earlier and saved over \$2 million in project costs. The project's success, combined with the collaborative culture

that exists at Mason General, resulted in Mason General's pursuit and approval of Public Body Agency Certification, which enables the health care system to utilize GC/CM contracting on future projects without having to regain approval from the state's Capital Projects Advisory Review Board.

Word of the collaborative nature of the Mason General

project spread over to Port Townsend's Jefferson Healthcare. Much like MGH, Jefferson Healthcare is looking to expand and tie into an existing 24/7 hospital. OAC was engaged to support and guide the Jefferson team through progressive design-build approval with the

ALTERNATE DELIVERY — PAGE 15



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COMPOUNDING PHARMACIES PROVIDE COMMUNITY RESOURCE

Recently opened Harbor Health and Apothecary is the only 503A compounding pharmacy of its kind in the south Puget Sound.

In recent years, a growing movement of people have started turning from large commercial pharmacies to apothecaries or compounding pharmacies.



BY DARRIN FILAND
FI ARCHITECTURE

These smaller, often independently operated pharmacies offer a greater degree of personalization than retail pharmacies, including customized dosages based on age, height, weight, as well as choice of medication form — pill, liquid or powder.

These and other forms of supplements are all made on site, using the highest quality ingredients, and are tested for potency and purity. Compounding pharmacies can include specialized spaces such as high-tech sterile labs, treatment rooms and retail.

Gig Harbor recently experienced the opening of Harbor Health and Apothecary, a locally owned compounding pharmacy in the historic downtown core, inside a former bank building. Gig Harbor based fi architecture designed the renovation, which transformed the 60-year-old structure into a state-of-the-art pharmacy that meets rigorous federal standards for sterile and non-sterile compounding labs.

“The Washington State Department of Health said that Harbor Health and Apothecary is one of the best designed facilities with one of the most robust written protocols they have ever seen,” said co-founder and CEO Conrad Esser.

It was clear from the project’s start that both Esser and co-founder and chief pharmacy officer Nicholas Wyatt wanted a facility that was more welcoming and visible to the community. They wanted to put the process of compounding on display. By working closely with Esser, Wyatt and a specialty HVAC engineer, fi architecture was able to balance the adaptive reuse of the building with the functionality of the pharmacy, while creating an inviting and transparent open space for customers.

MODERN LABS

Harbor Health is the only sterile and non-sterile 503A compounding facility in the South Puget Sound. Each prescription is tailor made to an individual, rather than bulk produced like at other pharmacies. At the center of the building is the main pharmacy suite, composed of a general pharmacy, two sterile



The main pharmacy at Harbor Health and Apothecary is completely transparent through large glass partitions.

PHOTOS COURTESY OF FI ARCHITECTURE

labs, one non-sterile lab and associated rooms for gowning and prep.

“All of Harbor Health’s lab spaces were designed to exceed current and future state and federal regulatory standards, which ensures patients and providers are working with a pharmacy that has longevity,” said Wyatt.

The main pharmacy is completely transparent through large glass partitions, allowing patrons to see the pharmacists at work using the wide variety of specialty equipment. Custom designed and built casework was utilized to provide sufficient storage of materials and efficient work layout. Just off the main pharmacy are anterooms that connect to two smaller sterile labs where the most sensitive of ingredients are processed. With eight pass-through chambers in the partition walls, pharmacists can transfer sterile products between spaces.

TREATMENT ROOMS

Harbor Health also includes small treatment rooms where the pharmacists can have private consultations with patients. These rooms are equipped similar to a doctor’s exam room allowing for shots and IV treatments to be administered on site. Professional providers can also lease these treatment rooms. At Harbor Health, these rooms are entered through a foyer to the side of the main entry, ensuring they are discreet.

SPECIALTY MECHANICAL

Certified sterile lab spaces have extensive technical requirements, the most challenging of which is maintaining very high levels of indoor air quality, which means dedicated ductwork, increased rates of air exchange, and medical-grade HEPA filters.

The former bank vault is now used for supply storage.



“The day-to-day operations at Harbor Health place a heavy demand on mechanical systems, and the specialized certifications of the lab spaces required very specific design elements,” said fi architecture senior project manager Stephen Black. “Everything had to coordinate well on the project, for example the size of the HVAC units were significant in regard to the building’s profile.”

Not only were the lab HVAC units larger than standard units, they needed to be located away from public spaces to minimize noise. In addition, the project had to meet city of Gig Harbor design guidelines while respecting the building’s original mid-century roofline. We realized the solution was to locate the units on the lid of the existing concrete bank vault, which was 18 inches thick and located underneath the existing roof structure. By placing the units here, only 4 feet in height was needed above the original roof line, plus the concrete serves to dampen the noise and vibration.

RETAIL AREA

The building’s history as a bank meant that except for a few columns the building’s interior was relatively open. This allowed for the retail and waiting areas to have unobstructed views into the lab space. The retail area displays the supplements that are being made in the lab. Low shelving was utilized to keep the feeling of openness.

The waiting area features a gas fireplace alongside comfortable couches. You can also see the remains of the night drop from the building’s days as a bank. Bookshelves showcase resources for customers as well as historic photos of the building and surrounding area.

COMMUNITY ASSET

Harbor Health occupies most of the 5,000 square feet, but there was extra space adjacent to the old bank drive-thru. The fi architecture team brainstormed with Esser, and they came up with the idea to create a taproom. Hop Pharm Taproom turned the original drive-thru into a beautiful outdoor covered

seating area, selling craft beer, cider and wine. This keeps the building buzzing hours after the pharmacy closes.

“We were able to create a beautiful community green area with sidewalks and open space, taking a vacant property and reinvigorating it,” said fi architecture senior architectural associate Jennifer Butler. “Harbor Health and Hop Pharm turned a high traffic corner into a destination for the community to gather.”

Harbor Health and Apothecary has only been open for a few short months, but the pharmacy is already welcoming business from doctors, naturopaths, veterinarians, nutritionists and more in the South Sound. As compounding pharmacies continue to gain popularity, Harbor Health is poised to expand on its current successes, especially with its exceptional team in an innovative facility.

Darrin Filand is a member of the city of Gig Harbor design review board since 2006 and is founder and senior principal at fi architecture.

NEXT-GEN HEALTH CARE: BUILDING HEALTHIER COMMUNITIES, ECONOMIES

Telehealth Libraries will increase access to health care and improve outcomes.

What if the future of health care is operated primarily by people without advanced degrees? And a clinic is not so much a clinic as we think of it today, but rather more



BY SARA BENSON

B+H ARCHITECTS

like a distribution center with community connections?

In the United States, access to health care most often requires the ability to secure health insurance, yet

globally, even in countries with nationally funded health systems, income remains one of the strongest predictors of health outcomes. In the U.S., zip code is the single most relevant indicator of population health.

There are three critical barriers to access:

- Physical distance and poor transit connections.
- Awareness.
- The digital divide.

DOCTOR SHORTAGES

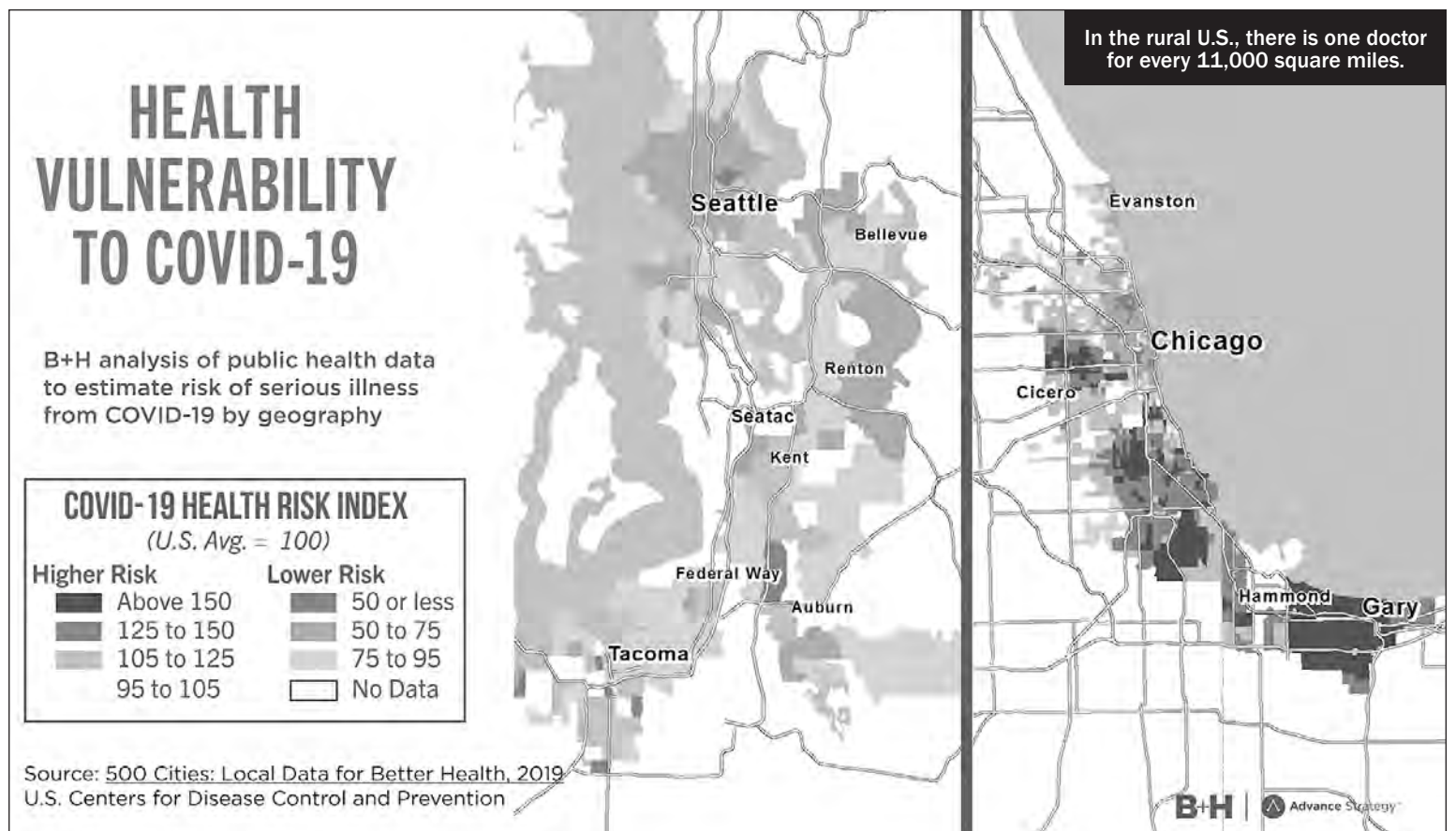
In the rural U.S., there is one doctor for every 11,000 square miles. Geographically speaking that's the equivalent of 23 doctors in the whole of France. Eighty percent of the rural population is medically underserved.

LACK OF AWARENESS

But even access to health care does not guarantee good health outcomes. One Medicaid study that tracked Medicaid patients who were placed into affordable housing found that the cost of delivering care to these residents decreased by 12% overall and, most significantly, that they experienced a 38% increase in the quality of their health. A critical factor in this success was the location of services such as free transportation to clinics or on-site support staff. The study demonstrated that many Medicaid recipients are unaware of the availability of care.

THE DIGITAL DIVIDE

COVID-19 changed the way we access health care, almost overnight. In February 2020, 0.1% of primary care visits among Medicare patients were conducted virtually; by April 2020, that number had risen to 43%. For many this digital evolution



increases access to health care. Yet, 42 million Americans, nearly all in rural and already underserved populations, could not access the internet even if they could afford it as the infrastructure simply does not exist.

Is the solution more advanced medical facilities and greater numbers of providers? We think part of the solution may be much simpler than that.

If physical space and economic health are intertwined, then shouldn't we be thinking about creating economic opportunity and addressing social inequity as part of a public health strategy?

Imagine what might change if a retail manager with two children could stop on the way home from school pickup for a checkup with her lifelong provider at a place where her kids can start on their schoolwork and she can attend night classes? What if a fisherman could jump off the boat in any port, meet with their family doctor and the specialist for their rotator cuff injury, and check in on plans for their family reunion?

What if the future of health care isn't a new kind of clinic, but a resource center with community connection and virtual workspace?

TELEHEALTH LIBRARIES

To increase access to health care and improve outcomes, we propose Telehealth Libraries. These facilities would provide access to virtual doctors, lend at-home health diagnostic and monitoring equipment, and access to internet and workspaces. The on-site operation could be staffed largely by people who focus on customer experience and do not require an advanced formal education.

What kind of services would a Telehealth Library provide?

- Equipment lending.
- Telemedicine access.
- Customer service/basic health advice/help with technology.
- Workstations/high-speed internet.
- Flexible hours that accommodate workers on night shift or people working two jobs.
- Educational resources about nutrition, diabetes care, exercise, etc.
- Access to mental health counseling via virtual consultation rooms.
- Guided mediation space (access to services such as Headspace or Calm).

What does the Telehealth Library look like?

- Communal/approachable with privacy nooks.
- Private telemedicine consultation rooms.
- Lounge workstations for open use.
- A welcoming, service-oriented environment.
- Device desk, home health equipment lending "library."
- A soothing, calming environment with biophilic elements.
- Universal design to accommodate all mobility needs.

Where should Telehealth Libraries be located?

- The libraries could be located in areas that are already essential destinations for the populations they serve. They would be noticeable and raise awareness of health needs while making it easy for people to access.
- In or near community spaces.
 - Next to public transit.
 - In or near a school.
 - Places of convenience such as gas stations or grocery stores.

In suburban and rural America, most roads eventually lead to a mall. These locations are ideal for reinvention and already have much of the necessary infrastructure to support a Telehealth

Library.

With all the trials and tragedy the COVID era has brought, one of the bright spots is that it's given us space and time to think about what works and what doesn't in our society. Health care is certainly in the top three. By embracing the potential of technology and changes in people's behavior, these libraries could create a center for community and well-being in neighborhoods and rural areas that have a history of disinvestment and disenfranchisement. Imagine the Telehealth Library as a catalyst for more equitable economic development across the globe. We have the opportunity to invest in building healthier communities which will, in rapid succession, lead to healthier economies.

Sara Benson is a senior strategist at B+H Architects.



MICRO HOSPITALS OFFER THE RIGHT PRESCRIPTION

There is a proliferation of micro and critical access hospitals across the country to improve access.



BY BRAD HINTHORNE & MARIE HENSON
PERKINS & WILL



IMAGE FROM PERKINS & WILL

Health care systems are facing continued pressure to control costs, especially coming out of the pandemic, as volumes and associated revenues have not yet caught up to pre-pandemic levels. Providers must deliver a wide range of complex treatments in the most appropriate and cost-effective settings to a diverse and growing population while also focusing on prevention and wellness.

Traditional hospitals remain vitally important, but out of economic necessity they must focus on the highest patients and needs such as complex

surgeries, intensive care, trauma centers — any medical needs requiring specialized physicians, nurses, technology and equipment. The familiar large medical centers are typically based in much more urban centers where expenses for real estate, rent, labor and facility management are at a premium.

As an alternative to large medical campuses, and the services that are most appropriately pro-

vided in those settings, we are seeing a proliferation of micro and critical access hospitals across the country to improve access, increase efficiency and contain costs. There are many services and procedures that don't require a visit to the hospital and the relative cost of these facilities is significantly less.

Micro hospitals are increasingly becoming part of the solution as they provide highly efficient

care, just-in-time delivery, convenience and importantly, cost savings. We are all getting more comfortable with telehealth services and urgent care centers — both of which meet their needs without setting foot in a major hospital or medical center. And micro hospitals offer more than an emergency room as they have both inpatient and outpatient services.

There will continue to be a real

need to build new, modern facilities in areas with growing populations. All providers and systems are wrestling with the challenge of how to deliver health care economically to serve today's needs. Micro hospitals make access to care much more feasible as patients seeking routine medical services don't have to travel as far from their homes. And provid-

MICRO HOSPITALS — PAGE 15

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THE SHAPE-SHIFTING NEEDS OF THE HEALTH CARE INDUSTRY

Health care professionals showed us the true meaning of heroism and resiliency.



BY KEVIN MCCAIN & JOSE SAMA
SPECIAL TO THE JOURNAL

Every industry manages facility change to some degree. Few industries, however, are as dynamic as health care. Even in the most stable of times, health care systems face the challenge of 24/7 operations, constant adaptation to new discoveries in care, shifting funding methods and the corollary space and design needs they create. Then came 2020. As we all know, the health care industry had to adapt quickly to the pandemic, a massive influx in high-acuity patients and the fallout that resulted in fewer preventive care appointments and elective procedures.

Health care professionals in the Puget Sound area and indeed around the nation showed us the true meaning of heroism and resiliency. They are rightfully seen as heroes for their extraordinary efforts in these challenging times. Thankfully, it appears that the worst may be behind us.

Resiliency and flexibility have played a leading role in determining the scope of construction and renovation projects in health care for decades. That trend will continue as future projects are developed and lessons learned from the pandemic — the increased need for fresh air, isolation/negative pressure rooms, specialty ingress/egress, temporary screening areas and spaces for caregivers to decompress, to name a few — are applied to drive better outcomes for patients, professionals and institutions.

Skanska and NBBJ have been jointly collaborating with our health care clients to deliver complex urban health care projects throughout the country for more than 25 years. As we reflect on the pandemic and the challenges health care institutions have faced this past year, it's a good reminder that strong, collaborative partnerships between owners, designers and builders can help overcome even the most difficult situations.

Montlake Tower expansion UW Medical Center

Boxed in on all sides by either buildings or roads, we were tasked with building a new

patient tower over an active roadway while connecting with all levels of the active hospital towers. We began to think of these junctions as three-dimensional zippers.

Using 3D scanning technology to gather essential details, we were able to identify where an aluminum cover plate on a third floor window extended an inch too far when we could not be off by a single inch over a distance of 500 feet apart.

Another challenge was maintaining the existing intake air system during construction. To optimize the program, we needed to bisect the existing building's primary air intake shaft, cutting off clean air to building occupants. Together, we conceptualized and built what we affectionately called "The Snorkel," a five-story tall (with a one-story horizontal jog) air filtration system. The system was built high enough and included filters to clean the air to ensure continuous operations of the hospital during active construction.

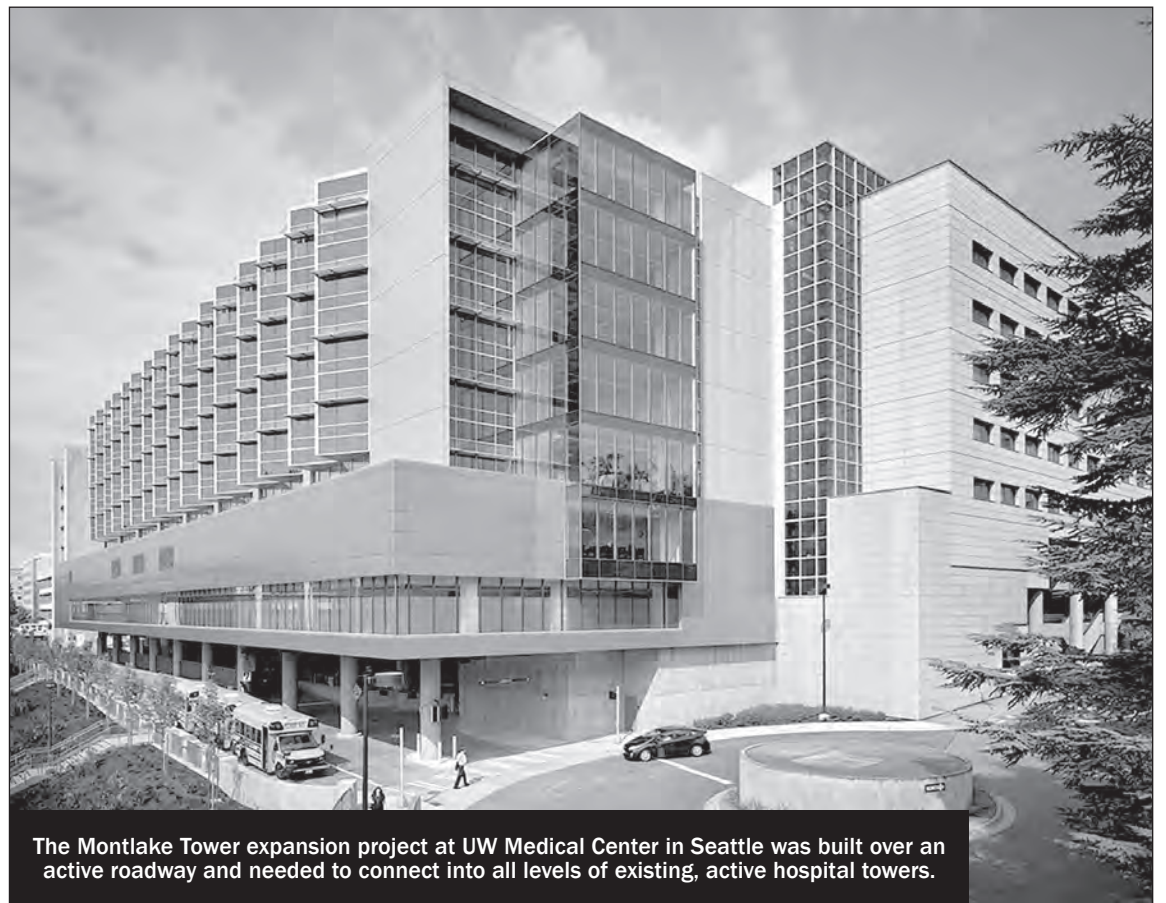
Our collaborative team judiciously managed change and the budget throughout the design and construction phases. We regularly discussed the owner's entire project investment, including soft cost in conjunction with the project's "risk register," a process often occurring now as part of progressive design-build projects. We examined each potential risk along with how the remaining contingency would be affected. Through proactive management of the owner's entire investment, the team was able to add a beautiful fourth-floor courtyard, a project betterment that more than 50% of patient rooms now enjoy. We also recognized an opportunity created by changing market conditions, giving UWMC the option to add three floors to the building after construction had already started on the base scope. This was all accomplished with minimum impact to the construction schedule.

We learned that creativity — whether in use of technology, ways to look at budgets or how to overcome a five-story air intake problem — is one of the best problem-solving tools any collaborative team can have.

University Medical Center LSU

Our team effort in New Orleans was to design and build a large health care campus that included replacing the famed Charity Hospital destroyed by Hurricane Katrina. This campus provides the only Level 1 Trauma Center in South Louisiana.

SHAPE-SHIFTING NEEDS — PAGE 15



The Montlake Tower expansion project at UW Medical Center in Seattle was built over an active roadway and needed to connect into all levels of existing, active hospital towers.

PHOTO BY BENJAMIN BENSCHNEIDER

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MICRO HOSPITALS

CONTINUED FROM PAGE 12

ers can relocate less expensive treatments to a location that can be built and operated at greatly reduced costs while delivering the desired efficiencies and cost effectiveness.

As an example, we are working on a project in the Midwest that is a completely different model. There is such a great need for services in that community that we are expediting the design process with a developer to deliver the building as quickly as possible. A consultant is analyzing the medical needs of the region to maximize the ideal throughput that is informing our design.

We are all working to create an asset for the community. Many include meeting rooms

that can be used as gathering spaces, including wellness clinics to bring people together and improve their overall health.

Once you commit to a micro hospital, it must be right — the right services in right amount of space in right place for the right reasons. Projects take a long time to conceive, justify, define, re-justify, build and operate. The building also must be flexible and adaptable over time — flexible to accommodate multiple potential uses in same space, and adaptable to accommodate different uses over time.

From the outset of the design process, we consider the appropriate services in appropriate facilities to optimize the outcomes most cost effectively.

The care must be exemplary, meeting the highest of possible expectations as lives depend on it. But the buildings must deliver the best quality at the lowest price. And it's always important to understand the design of the facility will aid in recruiting and retaining staff and physicians.

There is always a balance:

- **Consolidated and dispersed.** Trends toward consolidation of highest acuity versus distribution of lowest acuity. In other words, people to the care versus care to the people.

- **Expensive and affordable.** High acuity services cost more and require larger investments in technology and specialist. Outpatient services can be done in lower cost facilities,

requiring less infrastructure, more flexible space, and cross trained staff.

- **Performance and prosperity.** Preservation of resources, both natural and financial.

- **Clinical and comfortable.** Creating an environment where everyone feels safe knowing they have everything they need to get outstanding care.

We will absolutely continue to see expansions of inpatient and diagnostic facilities to alleviate the pressures within the complicated health care system. Providers can't afford not to do it.

Look around our region. Every major institution and system is building new facilities — UW Medicine, Harborview, Swedish, Providence, Kaiser Perma-

nente, Peace Health, Overlake, Evergreen, SCCA and Seattle Children's. Part of it is driven by growth and an aging population, but part of it is outdated facilities. We have a tangible need for consolidation to handle increasingly complex cases and that will take an organized network of health care facilities that prioritize what can and should be treated and where. In some cases, micro hospitals offer just the right prescription.

Brad Hinthorne works on health care, higher education, mixed-use and multifamily developments. Maria Henson has dedicated her career to health care spaces.

SHAPE-SHIFTING NEEDS

CONTINUED FROM PAGE 13

The campus incorporates more than 15 city blocks of compressive soils subject to settling with the whole of the city. Mitigation to ensure site and structure longevity included import of hundreds of thousands of pounds of Mississippi-dredged sand providing up to 6 feet of overburden across the entire site, and a network of wicks and pumps to expedite dewatering and compression of the soils. Coupled with eight pile driving rigs, this allowed timely placement of thousands of 45-foot-deep piles.

Working in a joint venture with MAPP, the team built the hospital, ambulatory care building and the central utility plant, raising all critical functions 22 feet above sea level — well above the FEMA base flood level and the Katrina flood. The elevated critical facilities include the entire

emergency department, all HVAC and electrical equipment, and six emergency generators. We also built extensive storm-proofing to provide a shelter in place and seven-day islanded operations plan.

We learned that affective collaboration from planning to construction phasing could deliver a project exceeding expectations on time and on budget.

Jones Pavilion Virginia Mason Medical Center

For the Jones Pavilion at Virginia Mason, our team confronted many challenges of an urban health care expansion. The project was built right next to surgery suites, and the surgical air intake was right in the middle of our excavation zone and required unique, temporary solutions to protect the clean air entering the building. Additionally, there was

a challenge related to the floors in the existing facility not aligning with the necessary floor heights in the new building, which gave the team a unique opportunity to find a solution that would also be of valuable benefit to the hospital. Finally, the facility needed to be self-sustaining for 96 hours and built to withstand a once-in-a-century earthquake.

To overcome these challenges, the team developed a communication method and protocol with surgical nurses so that we could stop work at a moment's notice so as not to have noise, vibrations or thumping disturb surgeons during procedures. We created new interstitial spaces that allow for independent floor-by-floor HVAC systems for maximum flexibility and isolation, when needed. We also designed the systems and infrastructure of the new building

to be able to feed and support or replace infrastructure that was becoming outdated in the existing facility. The result was a brand-new hospital tower and an existing facility with a new lease on life thanks to the infrastructure support from the new tower systems.

This project reaffirmed our collective belief that challenges are just opportunities to innovate and think differently.

Whether it's these three projects or others, such as Miami Valley Hospital in Dayton, Ohio, or Palo Alto Medical Foundation in San Carlos, California, we have learned a lot about how collaborative teams can bring value to projects. From overcoming extensive soil remediation challenges, to using hinge joints to allow buildings to flex during earthquakes, to renting warehouse space hosting multi-

trade prefabrication at scale to save time and money, the ability for design and build teams to reliably adapt quickly is critical when what we're building is where people will save lives.

We have found that a true partnership built on respect, trust and finding creative solutions together with our clients delivers the best outcomes for everyone. As health care institutions continue to evolve and as today's challenges manifest themselves in new projects, adaptation, resiliency and collaboration will no doubt remain as core needs to both the health care construction process and health care in general.

Kevin McCain is executive vice president and general manager at Skanska USA Building in Seattle. Jose Sama is a health care partner at NBBJ.

ALTERNATE DELIVERY

CONTINUED FROM PAGE 9

PRC.

"We are submitting our application in August and look forward to a presentation in late September," said OAC senior project manager Patrick Miller. "This will be Jefferson Healthcare's first DB project and they are really looking forward to a more positive project experience than traditional design-bid-build."

OAC encourages owners to align themselves with a true partner for their contractor, someone who understands their needs and challenges, and will help guide them through the process as an advocate. Bringing on a contractor earlier has multiple benefits over the traditional DBB method. It allows public owners to make more informed deci-

sions early on, reduces waste, reduces change orders, and is far superior from a scheduling standpoint.

Early general contractor engagement can also result in early procurement, mock-up coordination, prefabrication opportunities, and fewer change orders. On projects with intricate phasing or complexities, the value of having the contractor on board during design cannot be overstated. Design-bid-build projects often have little to no preconstruction phase with a contractor, meaning no time to plan.

OAC recently worked with King County to gain progressive design-build approval on the county's upcoming Harborview

Medical Center Maleng Building project.

"This progressive method will allow the complex ownership team to engage a design-builder through a public process that evaluates the team based on qualifications, best value and best fit," said Melissa Teichman, OAC Services vice president of health care. "Once selected, the DB partner will immediately engage in collaborative partnering and programming sessions with the owner to solidify team goals and desired outcomes."

Teichman also noted a success story at EvergreenHealth on a GC/CM project in EvergreenHealth's Family Maternity Center.

"Aldrich + Associates, our GC/

CM, was able to get in early to investigate existing systems and utility routings and create detailed phasing documents in their bid packages," she said. "This enabled greater accuracy during budgeting and bidding, which will lead to efficient communication, quality control, and safety during construction. All of this benefits the community at large as we can maintain ongoing operations and offer the best possible patient care at EvergreenHealth's Kirkland campus."

The moral of the story is that we cannot afford to waste time. The old adage that time is money certainly rings true — but in the case of health care, time could save a life. Alternative delivery is

not a passing fad and the word collaboration is something we should all strive to honor. We encourage you all to research your state's procurement regulations and talk to an owner, design professional, or contractor and ask how much they enjoyed their last project. Was it successful or was it painful? What does success look like to you?

Callum Roxborough is a journalist by heart and AEC marketing specialist by day; with over a decade in the industry and a passion for community improvement, he is helping OAC improve the experience of building while OAC's clients improve lives.

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