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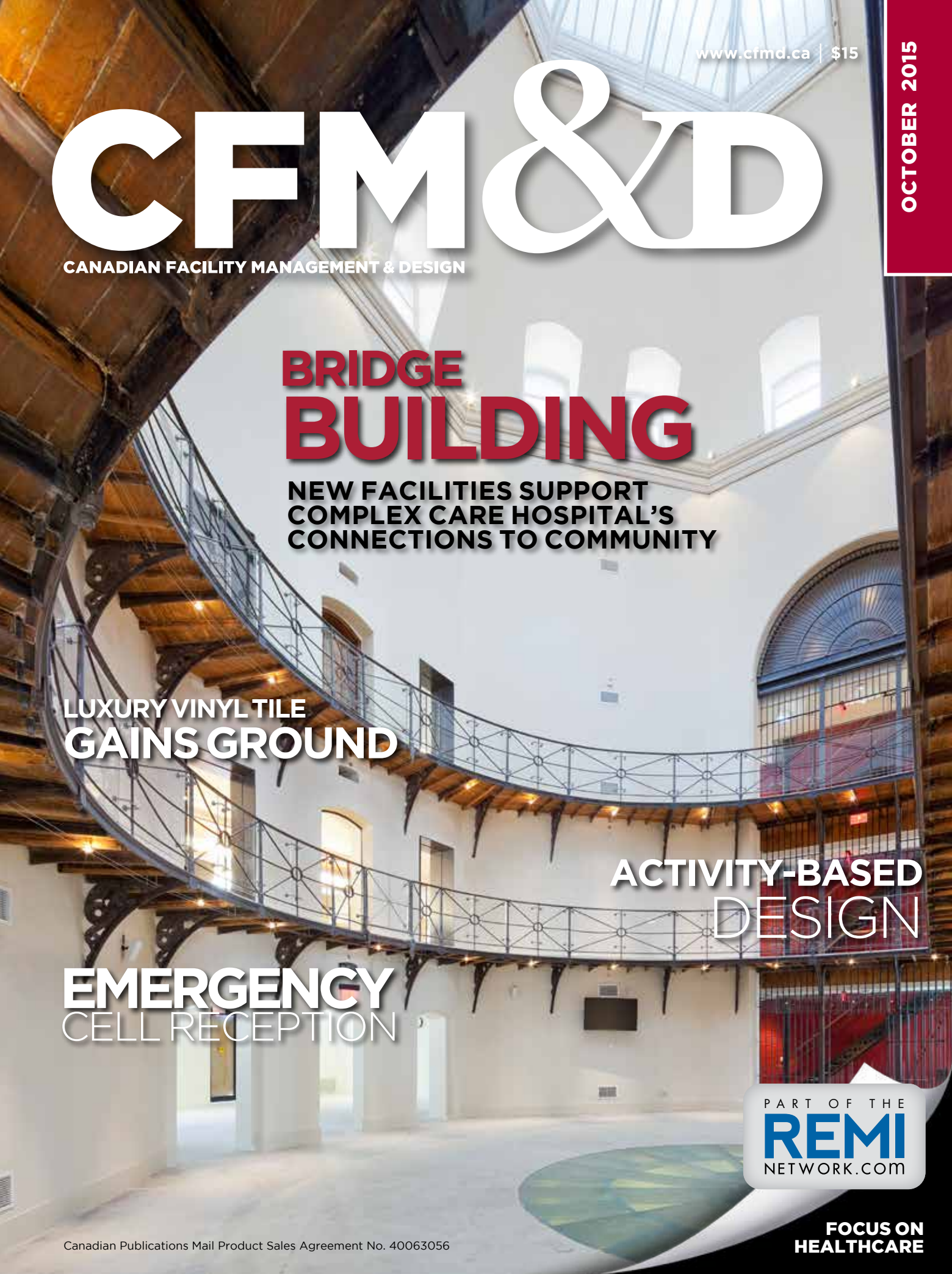

BRIDGE BUILDING

NEW FACILITIES SUPPORT COMPLEX CARE HOSPITAL'S CONNECTIONS TO COMMUNITY

LUXURY VINYL TILE GAINS GROUND

ACTIVITY-BASED DESIGN

EMERGENCY CELL RECEPTION

FOCUS ON HEALTHCARE

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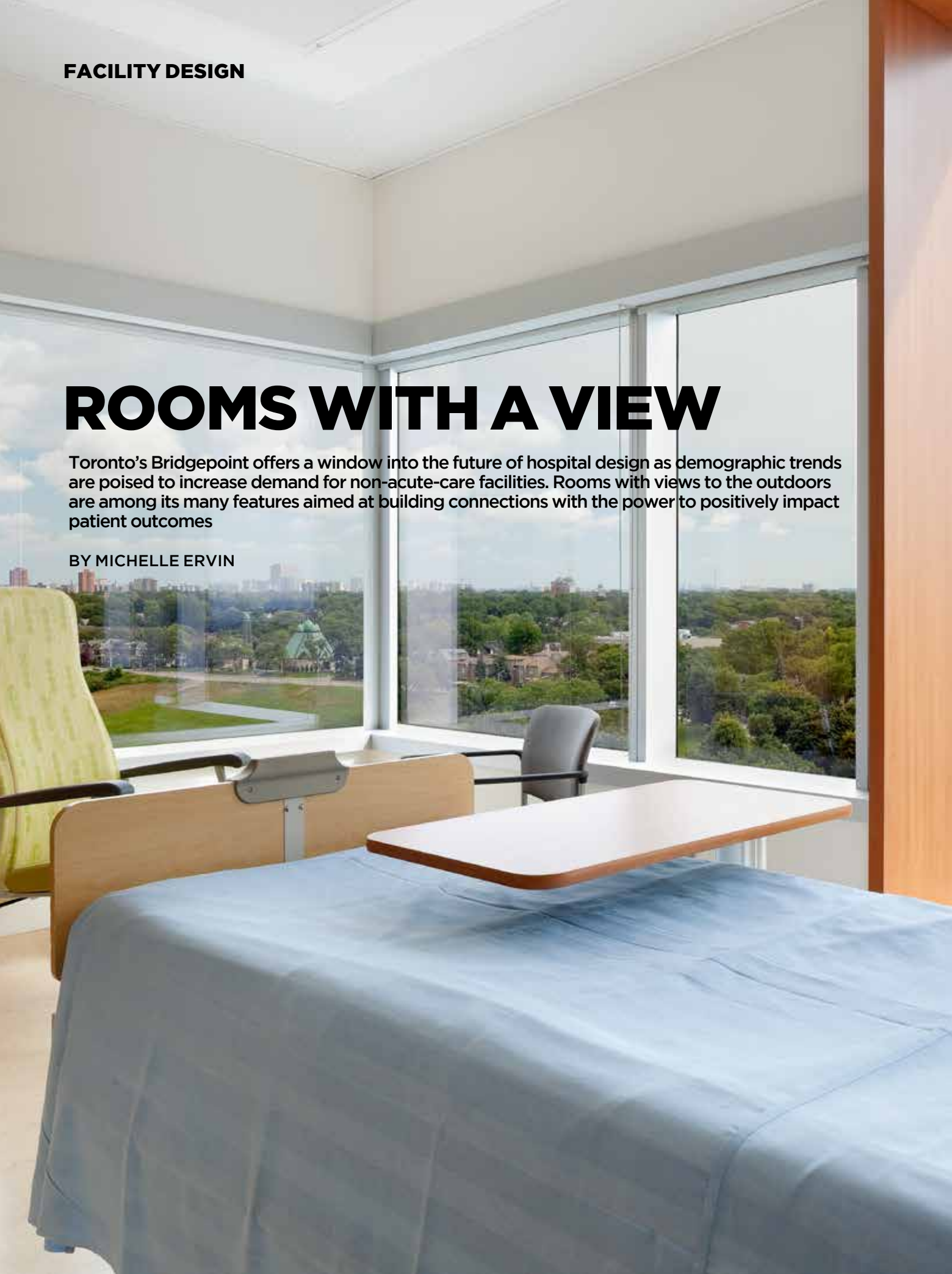
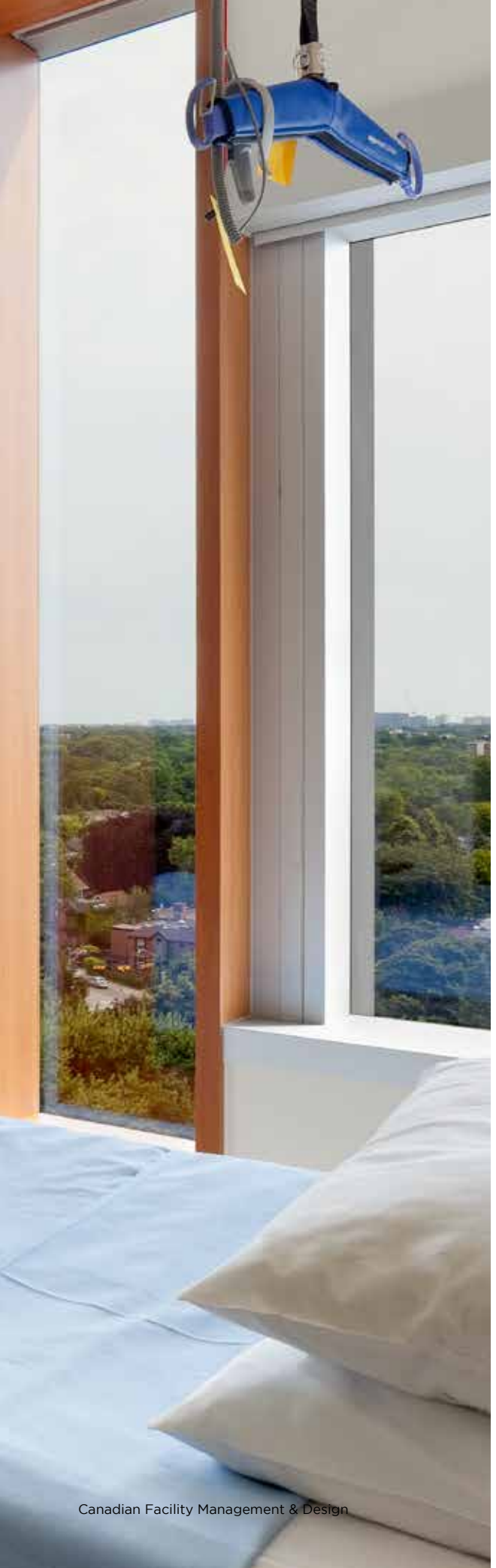


ROOMS WITH A VIEW

Toronto's Bridgepoint offers a window into the future of hospital design as demographic trends are poised to increase demand for non-acute-care facilities. Rooms with views to the outdoors are among its many features aimed at building connections with the power to positively impact patient outcomes

BY MICHELLE ERVIN



PHOTOS BY TOM ARBAN

Three-dimensional vertical strips of window dance irregularly from floor to floor across the façade of Bridgepoint Active Healthcare. Externally, they represent a patient. Internally, they represent the patient journey. The facility's distinguishing feature is but one of many aimed at building connections — between patient and public, community and city, and ultimately, from ailment to health.

Completed and occupied in April 2013, Bridgepoint's new 10-storey, 680,000-square-foot complex care and rehab hospital was more than a decade in the making. But the now multi-award-winning project nearly never got off the ground.

During its four-year mandate, from 1996 to 2000, Ontario's Health Services Restructuring Commission marked Riverdale Hospital, as it was then known, for closure. But the institution's leaders successfully campaigned to keep its doors open, arguing that no one else was positioned to step in and deliver the unique services it provides.

The non-acute-care hospital specializes in rehab, palliative care and treating patients with three or more co-occurring chronic diseases, such as cancer, diabetes and renal failure.

After the institution's leaders convinced the province that it should stay in operation, Bridgepoint received approval to develop a master plan that would have seen the original hospital, built circa 1963, renovated and expanded. It was around that time that Ian Sinclair, now vice president of operations for the Sinai Health System, joined the Bridgepoint team as vice president of planning and capital redevelopment.

He says it quickly became clear that, for the cost of upgrading the facilities, the institution could build a completely new hospital. The original 'half-round' building curved in a semi-circle footprint, which raised a whole host of challenges. Most notably, the curve posed an obstacle to patients in motorized wheelchairs, impeded the straight sightlines of nurses, and resulted in inefficient, trapezoidal-shaped rooms, which were large on the semi-circle's outer ring and small on its inner ring.

Armed with numbers, Sinclair says, Bridgepoint went back to the province, which encouraged the institution to develop a comprehensive site master plan for a new hospital. The plan looked past what he describes as the 'postage stamp-sized' parcel of land it leased from the city and zeroed in on an adjacent plot that would, among other things, give the facility a clear front entrance from the street — a feature its existing building lacked. It also proposed to adaptively reuse the former Don Jail next door for its administrative functions.

Bridgepoint was about to apply for project funding under the Ontario government's former capital funding model, Sinclair recalls, when the province introduced its alternative financing and procurement model (i.e. P3). The project would go on to be realized through a design-build-finance-maintain (DBFM) contract with the consortium led by Plenary Health.

The 3D vertical windows that define Bridgepoint's façade represent patients; a glass wall allows clinicians to observe how rehab patients are moving in the therapy pool.

Stantec Architecture and KPMB Architects acted as the planning, design and compliance (PDC) architects.

One of the big challenges, says Mitchell Hall, principal, KPMB Architects, was negotiating how to balance preserving the historic Don Jail's architecture and renovating its spaces for functionality.

"Heritage wanted us to maintain a lot more than we ended up maintaining," Hall notes. "For obvious reasons — how do you build something that's forward-looking and leave all the bars on the window?"

A handful of the 'hammock cells,' so-called for their deep and narrow dimensions, were among the features retained as reminders of the building's past.

Linked to the admin building by glass corridor are Bridgepoint's new hospital facilities, which were inspired by the vision of CEO Marian Walsh (now associate CEO and chief transformation officer of the Sinai Health System) that the very architecture of the building would encourage wellness.

Material specifications for features such as the low-iron windows would be critical to bringing this idea to life; so was the positioning of a first-floor therapeutic pool overlooking the park.

"The location of the pool was set because it was about the whole concept of letting the landscape sort of come up into the building, the building expand into that landscape," says Stuart Elgie, principal, Stantec Architecture.

After the PDC architects had established a detailed design exemplar, HDR Architecture and Diamond Schmitt Architects stepped in as the DBFM architects, with the teams meeting regularly as the project was carried through to completion.

Antra Roze, associate, Diamond Schmitt Architects, echoes Elgie, speaking to how the design connects indoors with outdoors with permeability and views.

"The idea started upstairs, that you can get out of the elevator and look down either corridor and see light at the end," she explains.

A rooftop terrace outfitted with wind barriers offers a unique view of the city.

This element of the design helps with wayfinding in the fully accessible facility; so does signage, which bears intuitive visual cues. Green guides occupants north toward Riverdale Park, while blue guides occupants south toward Lake Ontario.

The covered main entrance opens into the ambulatory care centre, which provides outpatient services ranging from a total joint replacement rehab program to a mindfulness-based stress reduction program. From the ground floor, a signature staircase opens out onto the main floor, taking occupants past an LED-lit donor recognition wall.

From the third floor upward, Roze likens the layout to a pinwheel, with two blocks of patient rooms flanking nursing stations centralized in the core.

Patient rooms are either singles or doubles — a departure from the four-bed rooms in the previous facility that reflects changes in the Ministry of Health's standards. The trend is more pronounced in the U.S., says Sinclair, where the insurance industry is driving a move toward private rooms only in response to issues of infection control.

The PDC architects had also resisted the Ministry standards to some extent, making the case for more double rooms based on the benefits of social interaction for patients who would be at Bridgepoint for long-term stays.

The rooms are configured so that each patient gets their own vertical window that remains unobstructed — even if a patient in a two-bed room draws his or her curtain, Roze points out. All the bathrooms feature sliding doors and meet current accessibility standards for measurements such as turning radius. And each bed is outfitted with a ceiling-mounted lift to minimize nurse injuries, which Sinclair notes were a regular, and costly, occurrence at the former facility.

The nursing stations, which all have a dedicated quiet space, enjoy borrowed daylight pulled into the central core using clerestory windows. Also in the core are meeting rooms large and small.

"That juxtaposition is really critical," says Sinclair. "Nurses go to a report room at shift change to talk about the patients, and that's where highest risk happens in healthcare — at transition points — so the more you can enhance that connectivity, the lower the risk is."

Accent colours offset the whites and wood finishes, denoting focal points such as the nursing stations with a cheerful purple and the patient room door surrounds with a refreshing green. Corian surface runs below the facility's metal handrails, protecting the drywall from damage caused by contact with carts and wheelchairs.

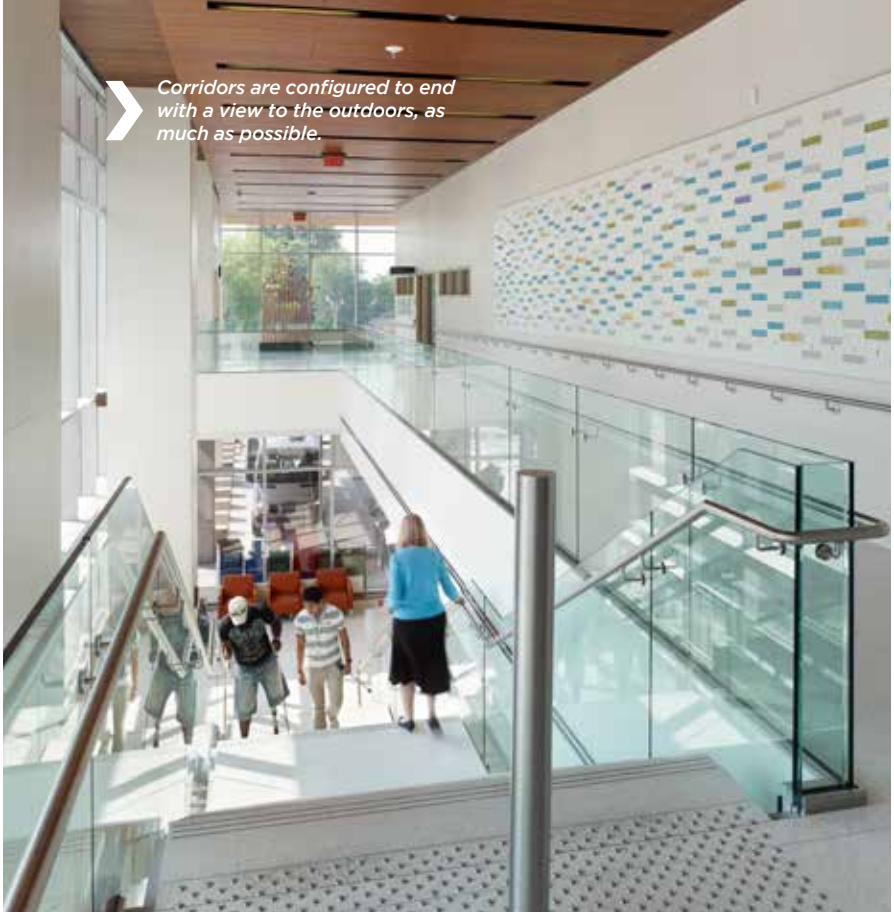
It's a more expensive finish, says Sinclair, but one that will reduce maintenance costs in the long term. There was also a budget for asset control, which allows furniture to be returned to its rightful home, adds Roze.

"Everything has a barcode on it, and all of the exterior doors and the outdoors to the terrace have readers on them, so if you take a chair from your room, out the door, we'll know where it is," she says.

The facility is designed equally to support patients in place, with dining and therapy rooms on each floor, and to encourage their movement through the building and its varied spaces. One of the most popular spots is the 10th-floor garden terrace with a green roof, which offers a unique view of the city.

The publicly accessible space even attracts members of the local community — effectively erasing an invisible barrier between patients and their city. Shedding the site's image as the historic home of a small pox hospital and jail was an important aspect of the project, says Sinclair.

"It was that place across the river, the east end of the city, where you put nasty things away from folks," he says.



Corridors are configured to end with a view to the outdoors, as much as possible.

"We needed to normalize the site and reintroduce it to the community."

Since moving into the new facility, Bridgepoint's internal metrics have shown that the average discharge time for rehab patients has dropped from 32 days to 28, Sinclair reports, which positively affects its provincial funding. What's more, the LEED Silver-certified project has earned wide accolades, most recently getting recognized with a 2015 American Institute of Architects National Healthcare Design Award in the category of built project with a construction cost of more than $25 million.

With its salutogenic approach, the facility may prove to be an important template for future hospitals. In a preliminary report on its pre- and post-occupancy evaluation, the Bridgepoint Collaboratory for Research and Innovation cites complex chronic disease as one of the greatest healthcare challenges facing this generation. As baby boomers enter their senior years, the report states, they will drive non-acute-care demand in a province whose hospital infrastructure is largely based on the acute-care model.

Among the Collaboratory's preliminary findings was the importance of the strategically placed windows that give the healthcare facility's façade its definition:

"It is recommended that future hospitals be designed following the Bridgepoint model, where each patient … be positioned to ensure a direct sightline to the outdoors." | **CFM&D**

PROJECT TEAM (SELECT CREDITS)

Developer and equity investor: Plenary Group; **Master plan:** Urban Strategies Inc.; **Structural and electrical engineer PDC:** Stantec Consulting Ltd.; **Structural engineer DBFM:** Halsall and Associates; **Mechanical PDC:** The Mitchell Partnership Inc.; **Mechanical/electrical engineer DBFM:** Smith + Anderson; **Landscape architect PDC:** PFS; **Landscape architect DBFM:** The MBTW Group; **Civil engineers:** A.M. Candaras Associates; **Energy efficiency and sustainable design PDC:** Stantec Consulting Ltd.; **Sustainability DBFM:** Halsall and Associates; **Heritage PDC:** E.R.A. Architects; **Heritage DBFM:** The Ventin Group; **Building envelope consultant:** Brook Van Dalen & Associates Ltd.; **Acoustical consultant:** J.E. Coulter Associates Ltd.; **Specifications:** Brian Ballantyne Specifications; **Curtainwall consultant:** SOTA Glazing Inc.; **Facilities management:** Johnson Controls; **Furniture and equipment:** RCG; **Contractor:** PCL Constructors Canada Inc.