



BC's first Care Coordination Centre

Providence Health Care will have another first for BC — and it's a game changer. It's powerful, smart technology, and more, which our hospitals will use to get site-wide insights of beds, capacity, bottlenecks, patient status, and what needs attention — in real-time and 24/7.

Hi-tech 'traffic' control

A new Care Coordination Centre will be Providence's version of an air traffic control tower. As the behind-the-scenes smart technology for our hospitals, it's a high-tech approach for coordinating the thousands of steps and decisions happening daily as patients arrive, are admitted, have tests, treatments or surgery, receive care and are discharged home or to their community. It's also new capability, processes and workflows to help our teams expedite actions and transform care.

The smart technology uses real-time analytics to enable teams to quickly and easily access essential information about patient care activities happening every minute across their hospital and on their Units. This helps Emergency, Surgery, Critical Care, Medicine and other areas to work together coordinating, with fine-tuned precision, each patient's journey.

Working in partnership with GE HealthCare, we'll be Canada's third full-scale implementation of this technology. GE HealthCare pioneered this 'command center' technology in 2015, and today over 300 hospitals worldwide use it.

At Providence this is another step in modernizing our information technology to help us deliver exceptional people-centred care. The software will be used by St. Paul's Hospital, Mount Saint Joseph Hospital and Holy Family Hospital.

Smoother patient journeys

The Care Coordination Centre technology makes it easy for site operations, inpatient units and support teams to access useful information and act on it. The software works by aggregating data from multiple existing systems, including the Cerner electronic medical record, and applying AI and analytics to it to produce relevant insights in a single view which busy staff can digest easily. The technology will be available on mobile devices and workstations for use during daily work such as rounds, huddles, and shift handovers.

This hospital-wide-to-bedside visibility of what's happening 24/7 and minute by minute facilitates collaboration, transparency and efficiency. It will help teams across each hospital understand bed availability, which inpatients and patient journey activities need immediate attention, where care coordination across departments may be out of sync, and pinpoints opportunities to streamline care and expedite potential delays, bottlenecks and barriers which are holding up care for inpatients. And it gives site leaders real-time awareness of capacity pressures across the hospital so they can get support to the teams that need it most.

The analytics suggest what's going to happen in the coming hours and next day so teams can spot potential issues before they happen and proactively intervene. For example, when a unit is predicted to be fully occupied by midnight and has two patients at high risk of clinical deterioration, we might adjust our planned patient bed assignments or avoid admitting additional patients to that particular unit in order to mitigate pressure on staff.

The result is smoother inpatient journeys, faster, safer patient care and improved patient outcomes.





Actionable bedside insights

The Care Coordination Centre technology will provide actionable insights to care teams who work at the bedside, so they can focus more on delivering patient care and less on coordinating care.

Here are just a few of the many benefits the technology provides to staff and patients:

- **It will flag inpatients at a high risk of deterioration** and indicate the contributing clinical factors so staff and physicians can make adjustments in care.
- **It will reduce the time staff spend ‘hunting and gathering’ info related to the status of beds or the inpatient’s journey.** The technology automates and consolidates information clinicians and other teams routinely use throughout the day.
- **For patients being admitted, the technology will use a bed matching algorithm to quickly identify inpatient beds which may meet their needs.** The site operations, Emergency and inpatient teams can all see when the patient was admitted, whether a bed has been assigned, if the bed is dirty or clean, and if the inpatient unit has taken the patient’s report from Emergency. This can accelerate bed assignment, room cleaning, portering and nurse hand off, resulting in a shorter time between an admission order and the patient being transferred to their bed.
- **To expedite care and get inpatients home sooner, the software will pinpoint patients with delayed care activities,** for example if an order for a CT Scan is approaching ‘overdue’ status. Unit leads, site operational leaders, and leaders in the lab, imaging or other areas can then prioritize the outstanding activities so care progresses and these patients can go home or back to their community sooner.
- **It will flag which patients have complex discharge needs** so our teams can start planning the patient’s discharge care early and avoid longer lengths of stay than necessary.

Coming by 2025

We’ll implement GE HealthCare’s software at three Providence sites: St. Paul’s Hospital, Mount Saint Joseph Hospital, and Holy Family Hospital.

In summer 2023, we’ll launch analytics with insights for capacity and staffing to better manage pressing challenges related to bed availability and to staffing workloads and deficits. Then by summer 2024, we’ll implement insights to support access, flow, clinical quality and safety.

Opening in 2027

When the new St. Paul’s Hospital opens in 2027, we’ll take this technology to the next level by adding a 2,800 ft² physical space called the Mr. and Mrs. P. A. Woodward’s Foundation Care Coordination Centre. It’s where the site’s operational leaders will work together expediting access and flows while enhancing quality and safety. One impressive feature will be a video wall filled with screens displaying the real-time status of beds, inpatients and care delivery activities, including activities which are out of sync or at risk, so the team can quickly assess and act.

Transforming-care technology

This innovative technology is a great example of how we’re making changes in every area to transform the way we deliver care, improve quality, and make our system more effective for everybody — we call this transformation Health System Redesign. Bringing the power of data and analytics to our teams will help them deliver the right care, in the right place, at the right time improving the people experience for patients and staff.

The Care Coordination Centre will be invisible to patients but will bring big benefits to everyone who steps inside our hospitals, by working behind the scenes to support staff and patients.

