

Interior Heart and Surgical Centre



Americas

Health

The new, three-storey facility houses the pre- and post-operating patient areas, a cardiac intensive care unit and the central sterilization and reprocessing department. The Centre provides clinical space for up to 600 open heart procedures per year.

The building is LEED® Gold Certified and showcases the use of BC timber products in a health care setting, in accordance with BC's Wood First Act.

Project facts

Location

Kelowna, British Columbia, Canada

Client

Interior Health Authority

Value (NPV)

C\$95 million

Consortium

Plenary Health

Plenary Americas' role

Project sponsor

Equity investor

Financial arranger

Builder

PCL Constructors Canada

Architect

CEI Architecture Interiors, HOK

Services

Johnson Controls

Financial close date

June 2012

Completion date

March 2015

Contract terms

32.75 years, DBFM

Awards

- LEED® Gold Certification
- Award of Excellence in Buildings, 2017 Canadian Design-Build Institute

Project website

www.buildingpatient-care.ca/interior-heart-and-surgical-centre-project/project-overview/

The Interior Heart and Surgical Centre also houses the central medical device sterilization/reprocessing functions for the entire Kelowna General Hospital campus, providing efficient, safe and effective sterilization services to patients and staff in every department.



Design features

Wellness environmental and evidence-based design

The Interior Heart and Surgical Centre's design focuses on creating a warm, welcoming healing space for patients, staff and the community.

Plenary Health incorporated Evidence-Based Design features such as:

- direct access to natural light and outdoor spaces for patients, staff and families
- a holistic interior design philosophy that features the use of wood that is elder and pediatric-friendly
- provide patients with the ability to control their environment
- distraction-free environments that emphasize visual and acoustic privacy.

Optimized clinical utilization

The Centre has been designed to provide the best possible clinical outcomes by providing:

- centralized, fully-enclosed, same-handed medication rooms
- reduced travel distances between and within clinical departments
- clear segregation of patient, public, staff and logistics travel flows.

Adaptable, flexible design

Every aspect of the design, from clinical layouts to structural grids has been developed with future flexibility in mind. The interiors have been structured so that the building can be reconfigured to adjust to evolving demographics and clinical best practices. In addition, the facility has been designed to accommodate an additional floor, which will add a 32 bed inpatient unit.

Energy efficient

Plenary Health has provided the Authority for a 30-year energy guarantee for the Interior Heart and Surgical Centre. By integrating the architectural, mechanical and electrical designs with our long-term operations plan, the Centre assists the Authority in meeting its long term sustainability objectives.

Innovations

Geotechnical solution

In addition to the clinical design innovations, Plenary's design also considered innovations outside of the clinical and architectural features of the building. The geotechnical conditions in Kelowna are challenging, with unstable silty ground conditions the norm.



Drawing from the expertise of our structural and geotechnical engineers, the team developed a truly innovative ground preparation strategy that allowed the building to be completed nine months earlier than initially expected. This solution delivered both financial and clinical benefits for the hospital.

Local economic impacts

The project helped to provide economic stimulus by creating and supporting hundreds of jobs with labour largely being drawn from the Okanagan Area. At the peak of construction, it was estimated that 180 workers were on site daily.