

MAY 5TH

**CASE STUDY: PLANNING FOR UNIVERSITY HOSPITAL
OF NORTHERN BRITISH COLUMBIA**



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Case Study: Planning for the University Hospital of Northern British Columbia

The image shows a large, modern hospital building with a mix of white and light-colored panels and a prominent vertical brick tower. The building is surrounded by a paved area with some parked cars and a signpost. The signpost has three sections: 'UNIVERSITY HOSPITAL OF NORTHERN BC' at the top, 'EMERGENCY' with a red arrow pointing right in the middle, and 'MAIN ENTRANCE' and 'NORTHERN INTERIOR HEALTH UNIT' with a blue arrow pointing right at the bottom. The sky is clear and blue.

Speakers



Sherri Tillotson – ALT -
NH



Ronald B McIntyre – ALT -
DNOP

Land Acknowledgement

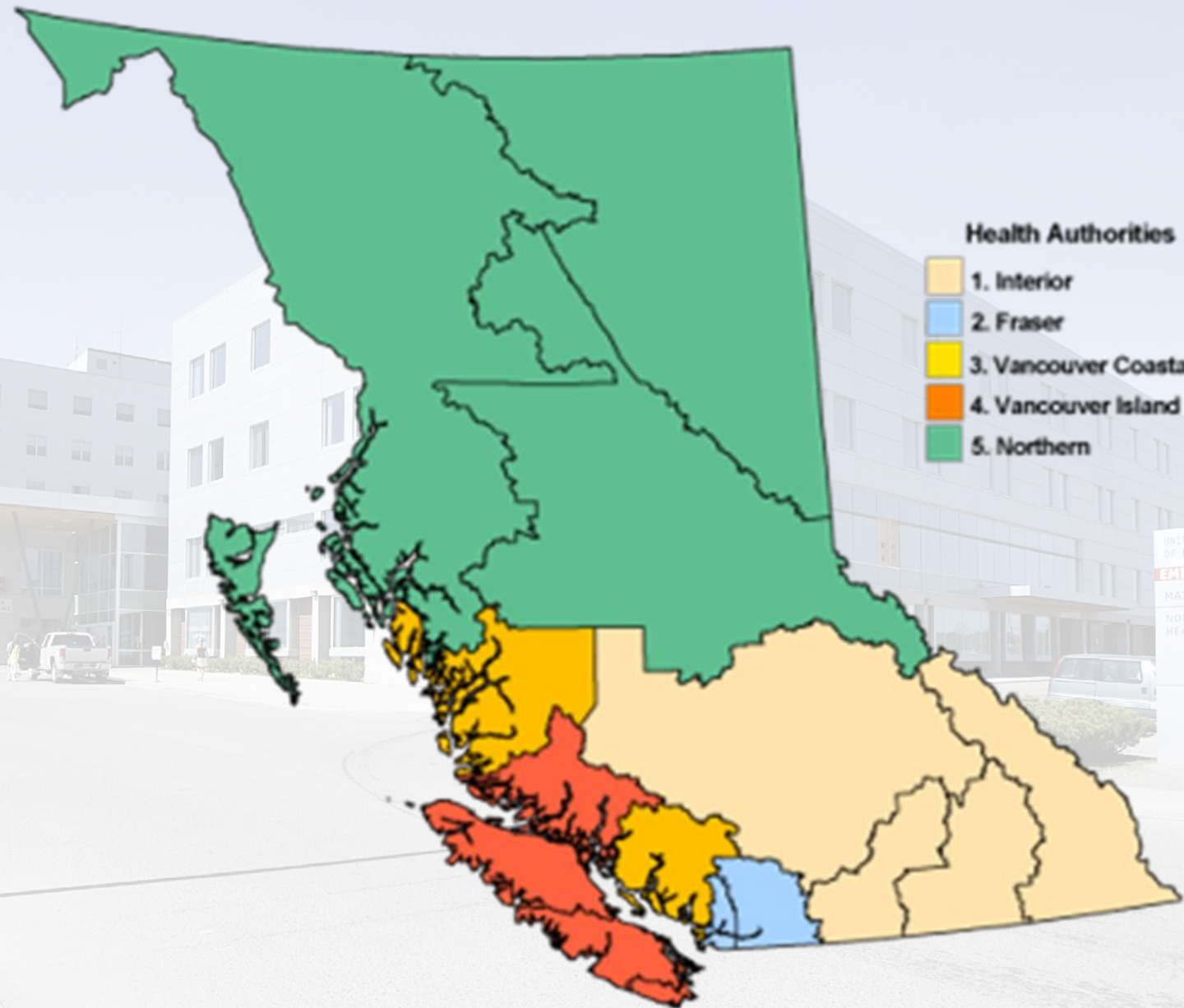


Topics for Discussion

The background image shows a large, modern hospital building with a mix of light-colored panels and brickwork. A prominent sign in the foreground on the right side of the building reads "UNIVERSITY HOSPITAL OF NORTHERN BC" at the top, followed by "EMERGENCY" with a red arrow pointing right, "MAIN ENTRANCE" with a red arrow pointing right, and "NORTHERN INTERIOR HEALTH UNIT" with a blue arrow pointing right. The scene is set outdoors with a clear sky and some parked cars and people visible in the distance.

- Context
- Planning Around Clinical & Patient Flows
- Operational Readiness as Key Design Driver
- Workforce Aligned Challenges
- Integrating Digital Technology Opportunities
- The Opportunity of the Alliance

Context



Context

Key Components of Acute Care Tower Project

- Surgical Services
- Cardiac Services
- Mental Health & Substance Use
- Materiel Management
- Food Services

Program components based on highest clinical/support services need on campus

Context

Key Components of Acute Care Tower Project

Surgical Services

- 102 bed Surgical Patient Care Units
- Medical Devices Reprocessing Department
- 12 Operating Rooms
- Anaesthetic Care Unit

- Current Operating Rooms date back to 1978
- UHNBC routinely over census due to shortage of beds
- MDRD does not meet contemporary needs (1978)

Context

Think about this....

The first laparoscopic appendectomy was performed by Semm on 13 September 1980 at the department of obstetrics and gynecology, University of Kiel ([5](#), [9](#), [10](#)). It was an absolute rarity and an international sensation at the time. As a gynecologist and trained toolmaker, Semm revolutionized the course of traditional surgery. However, he aroused the criticism of many of his colleagues in gynecology and surgery. In his words, the medical world at the time reacted with the most violent hostility and opposition he had experienced during his entire career ([9](#)): “Both surgeons and gynecologists were angry with me, they virtually stoned me. All my initial attempts to publish a report on laparoscopic appendectomy were rejected with the comment that such non-sense does not, and will never, belong in general surgery.” Thus his first report on laparoscopic appendectomy was published no earlier than 1983 ([10](#)). In an interview, his close colleague Liselotte Mettler (born in 1939) said that Semm was summoned from the operating room and had to undergo a computed tomography **investigation of his skull in order to prove that he was in good health.**

Context

Key Components of Acute Care Tower Project

Cardiac Services

- Cardiac Diagnostic Services and Clinics
- 6 bed Cardiac Care Unit
- 20 bed Cardiac Step-Down Unit
- 2 Cardiac Cath Labs & 1 Cardiac Hybrid Procedure Room
- New program introducing Cardiac Cath Labs, Cardiac Care Unit and Step-Down Unit to serve Northern Health

Context

Think about this....

... Patients in Northern Health collectively wait an aggregate of 10 years to receive cardiac care – care that patients in the Lower Mainland routinely receive in minutes/hours....

Context

Key Components of Acute Care Tower Project

Mental Health and Substance Use

- 11 bed Adolescent Psychiatric Assessment Unit
 - 36 bed Adult Psychiatric Unit
 - 4 bed Brief Intervention Unit
 - 6 Bed Psychiatric Intensive Care Unit
 - 32 bed Withdrawal Management Unit
- UHNBC provides the only inpatient adolescent program in NH
 - Redevelopment will create an integrated BIU, PICU and Adult Psych program

Context

Think about this....

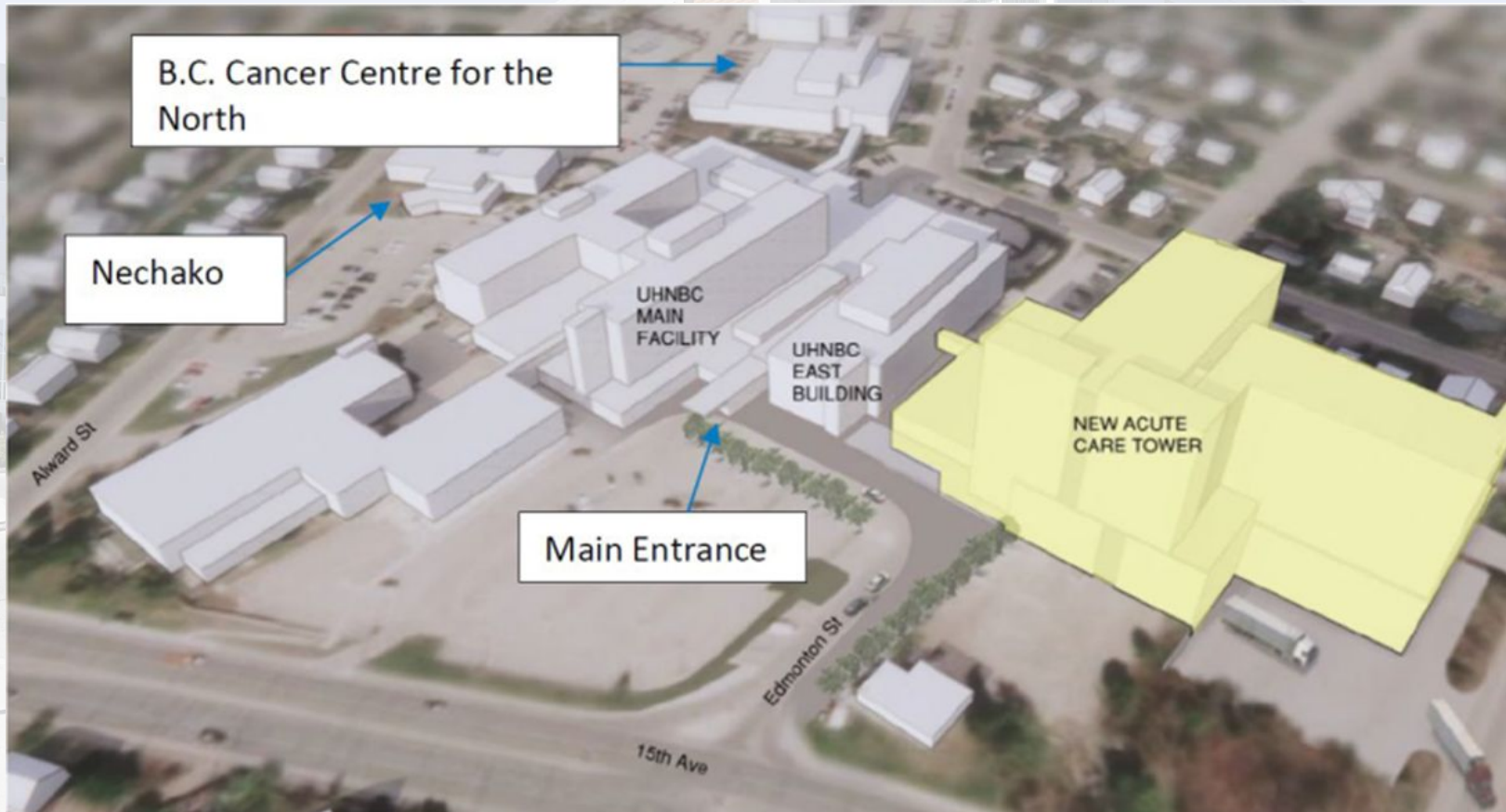
Only youth inpatient psychiatric service for all of Northern Health...
Atlin to Prince George is 1600 km approximately 20 hours to drive

25% of psychiatry populations are not from Prince George

Substance use in the North - 3X higher substance use admissions relative
BC and Canada

Planning around Clinical & Patient Flows

Project will integrate four generations of the UHNBC campus...



Planning around Clinical & Patient Flows

Critical flows that must tie back into the existing campus fabric include:

- Emergency/DI to Surgical Services
- Emergency/DI to Interventional Cardiac Services
- Maternity Services to Surgical Services
- Public flows throughout campus
- Service flows throughout campus

Operational Readiness as Key Design Driver

Alliance place particular emphasis on Operational Excellence:

- Maximize energy efficiency, reduce greenhouse gas emission, and optimize maintenance and operations costs of the facility.
- Maximize the operational efficiency and integration of clinical and support services.

Embedded as Key Result Area #1 weighted at 25% of Performance

Incentives

Workforce Aligned Challenges

Reality

- Northern Health is challenged with current key staffing vacancy rates over 20%...
- Physician recruitment and retention is an ongoing challenge
- The Redevelopment will add approximately **xx** new positions (planned in business case)

Challenge and Opportunity

- How do we link staffing realities into the design of the facility – consistently overlaying operational models as the design evolves

Integrating Digital Technology Opportunities

Recognizing the challenges of an immense geography catchment area how does the Alliance leverage the redevelopment to:

- Look for opportunities to deliver virtual care;
- Link other NH community hospital sites to UHNBC to improve access to care close to home;
- Leverage technology to truly do more with less...

The Opportunity of the Alliance

Integrating six organizations (Northern Health, Infrastructure BC, DNOP, CNOP, MNOP & ENOP) to:

- Leverage the thinking of an immense group of experienced people (135+ and counting at day 120);
- Operational thinking directly linked and parallel to design and construction thinking;
- One Team culture...
- Yes and yes if culture...

The Opportunity of the Alliance

UHNBC Alliance Team Charter

- Our hospital authentically reflects the communities, clinicians and staff it serves.
- We have created lasting opportunities for cross-disciplinary learning, innovation, and professional and personal growth across the Alliance.
- Patients and families experience care in a modern, healing environment that meaningfully improves health outcomes and quality of life across our communities.
- Our Alliance team feels proud to have contributed to something bigger than themselves and in doing so, feels deeply connected, empowered and safe.
- The new hospital is delivered at or below the Target Outturn Cost while meeting or exceeding all Key Result Areas.
- We have helped redefine the design and construction industry by setting a new standard for collaboration, one that attracts and retains talent, builds capability, and champions a safe, diverse, equitable and inclusive culture.

The Opportunity of the Alliance



What's Next...

- Our Project Proposal... December 15, 2026

Stay tuned....

Questions?

