

Clinical Program Renewal

During initial planning and need study analysis, it was identified that Stanton's clinical program needed updates:

- Advancements in technology force new methodologies.
- Changes in Codes and Standards, including CSA Z317 and CSA Z8000 encourage new applications and design.
- Single inpatient bedrooms are standard in new health care facilities.
- Increased focus on ambulatory care: diagnostic imaging, day surgery, endoscopy, dialysis and medical day care.
- Areas in need of new space included: Emergency, Laboratory, and Biomedical Engineering.



- A need for increased airborne isolation capacity.

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Technical Briefing:
Stanton Territorial Hospital Project

Standing Committee on Accountability and Oversight
February 11, 2020

Government of
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Soft Service Outsourcing

Stanton Soft Services were already outsourced in the Legacy Hospital, including:

- Cafeteria
- Dietary
- Housekeeping
- Laundry

Key decision during project planning was to include Soft Services as an outsourced component of the P3.



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STANTON TERRITORIAL HOSPITAL – NEED FOR RENEWAL TO THE CLINICAL PROGRAM



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BUILDING ACCEPTANCE BEFORE OCCUPANCY



Clinical Program Renewal Benefits

The Renewal provided equipment and system improvements:

- Single inpatient rooms
- State-of-the art Intensive Care, Dialysis and Chemotherapy
- Increase space in Emergency, Laboratory, Operating Rooms and Diagnostic Imaging
- Endoscopic and laparoscopic video solutions in procedure rooms
- Dedicated endoscopy suites
- Updated implementation of infusion pumps, telemetry, hand held communication devices and other technologies



Quality Assurance - Design and Construction

Boreal Health Partnership accountability:

- Compliance with:
 - Codes, Standards and Laws
 - City of Yellowknife and GNWT Safety processes, approvals and permitting.
 - Project Agreement technical requirements
- Inspections and material testing
- Defect identification and resolution
- System and Equipment Commissioning and Verification
- Architect (Kasian) and Engineers of Record (Crossey) liable for final reviews and approval that the Facility is fit-for-use.



Clinical Program Renewal Benefits

The Renewal provided Organizational and Support Services improvements:

- Additional Behavioural Health Workers and patient-centred approach to safety and security
- Traditional foods coordinator for the traditional foods program
- Full-time resident elder
- More and bigger staff rooms
- Improved cafeteria and outdoor spaces
- Pneumatic tube delivery system between departments



Building Acceptance - Service Commencement

The Independent Certifier was responsible to confirm that all party's obligations for Service Commencement were achieved:

- Receipt of final consultant Schedules
- Medical Gas Certified by 3rd party
- Receipt of an Occupancy Permit
- Owner / Service Provider training completed
- Service Provider start-up activities completed
- O&M Manuals provided by the Design-Builder
- Building Automation Systems are ready for operations
- No Disputes or claims are proposed by Project Co



Quality Assurance - Design and Construction

GNWT responsibilities:

- Design reviews for compliance with Project Agreement technical requirements
- Participate in BHP's monthly reviews:
 - Defect identification
 - Multidisciplinary Team for Infection Prevention and Control (IPAC)
 - Safety inspections
- Participate in as-and-when-needed reviews:
 - Medical Gas
 - System start-ups
- IMIT System installation and integration with BHP systems.



ISSUES EXPERIENCED SINCE FIRST PATIENT DAY



Quality Assurance - Design and Construction

Independent Certifier responsibilities:

- Monthly site progress reviews, including:
 - Review of Construction Schedule and progress
 - Quantity survey of work performed
 - Review of communication and inquiry status
 - Review of Change progress
- Certification of quarterly Construction Payments
- Certification of IRW Payments
- Certification of Service Commencement

Project Co's Lenders also have their own certifier, called the Lender's Technical Advisor.



Issue - Housekeeping

During the initial months after opening, Housekeeping had concerns with:

- Long times to clean rooms between patients
- Low volumes of clean linen
- Garbage not being emptied regularly

In order to resolve these issues, Dexterra has:

- Increased housekeeping staff
- Dedicated staff to specific departments: Operating Rooms, Emergency, OBS, Pediatrics



Issues

Since opening on May 26, 2019, the following issues have been raised and focused on by the Media:

- Food services issues
- Housekeeping issues
- Intermittent low hot water pressure
- Toilet overflows
- Water leaks
- Interior air temperature during extreme cold weather



Issue - Hot Water

During the initial months after opening, hot water pressure on the 5th floor was intermittently low and high. Water temperatures throughout the building were either too hot or too cold at handwashing sinks:

- Sinks on 5th floor intermittently took a long time to warm up.

In order to resolve these issues, Dexterra has:

- Hired a plumber and brought in contractors to review.
- Removed restrictions in the hot water system to increase hot water supply.
- Ordered two new pumps for install in Spring 2020.



Issue - Food Services

During the initial months after opening, Food Services had concerns with:

- Food textures
- Food ordering and delivering
- Dietary requirements

In order to resolve these issues, Dexterra has:

- Contracted local dietician for menu development.
- Further developed the food ordering software to ensure dietary requirements and textures are available.
- Increased supervisors to ensure accuracy of food leaving the kitchen.



Issue - Cold Air

During the extreme cold weather in December 2019 and January 2020, the building was not maintaining temperatures in parts of the building:

- Cold air was being sucked into the building.
- Metal doors on exterior of building were frosting.

In order to resolve these issues, Dexterra:

- Investigated and resolved Supply Air issues.
- Additional investigation is scheduled for Spring 2020.
- Additional heater was added in Emergency entrance.
- Re-sequenced the two sets of sliding doors.



Issue - Toilet Overflows

Toilet back-ups and overflows have been reported throughout the building, with various root causes:

- Inappropriate material flushed including rags, cleaning wipes
- Construction debris such as rocks/gravel
- No slope and back-sloped drains

In order to resolve these issues, Dexterra:

- Contracted consulting services to investigate and document root causes.
- Repaired no-slope and back-sloped drains.
- Added new drain clean outs.
- Hired contractors to video scope and clear out drain pipes.
- Placed signage at toilets.



Repairs

- Facility issues have, and will be for the next 30 years, repaired by Project Co.
- The GNWT is responsible for repair costs resulting from any misuse or negligent act of the Staff or Facility Users, otherwise repairs are completed at no cost to the Authority.



Issue - Water Leaks

35 water leaks were reported by the end of January 2020 with various root causes, most had minimal impact to operations:

- Includes toilet and drain backups
- One roof penetration not 100% sealed
- Pipe connection failure

In order to resolve these issues, Dexterra has:

- Continued to work with Bird-Clark Joint Venture to repair roof penetrations. Full inspection is scheduled for Spring.
- Hired a staff plumber to address leaks and backups
- Completed repairs to materials damaged by leaks.
- Remediated mould caused by leaks.



Service Performance Monitoring

Boreal Health Partnership responsibilities:

- Self monitoring and reporting
- Tracking of Help Desk tickets
- Delivery of the monthly Performance Monitoring Report (“PMR”) and Payment Adjustment Report (“PAR”)
- Reduction of Payments based on PMR and PAR
- Energy consumption tracking
- Delivery of the Utility Report and Energy Consumption Certificate, outlining consumption metrics and percentage use of Utilities



SERVICE PERFORMANCE MONITORING



Service Performance Monitoring

GNWT responsibilities:

- Oversight and monitoring of BHP’s responsibilities
- Review and respond to monthly Performance Monitoring Report (“PMR”) and Payment Adjustment Report (“PAR”)
- Apply reduction to Service Payments based on PMR and PAR



Project Agreement Services

Boreal Health Partnership responsibilities:

- Delivery of the Services in accordance with Schedule 4 and its Appendices:
 - 4A: General Management Services
 - 4B: Help Desk Services
 - 4C: Plant Services
 - 4D: Housekeeping and Waste Management Services
 - 4E: Utility Management Services
 - 4F: Roads, Grounds and Landscape Maintenance
 - 4G: Parking Management Services
 - 4H: Environmental and Sustainability Services
 - 4I: Pest Control Services
 - 4J: Security and Surveillance Services
 - 4K: Laundry and Linen Services
 - 4L: Catering Services
 - 4M: Lifecycle Schedule



Going Forward

To work collaborative with Boreal Health Partnership and Dexterra, the GNWT has:

- Convened regular committees with BHP and Dexterra to review and address issues
- Moved patients from impacted rooms to alternative rooms while issues are resolved.
- Provided assistance from the Department of Infrastructure to investigate issues and offer suggestions to resolve.
- Established a senior executive committee with representation from GNWT internal partners, meeting regularly to review resources and commercial issues.



Room Availability

In addition to Performance Monitoring failures, BHP can be assessed Unavailability Event deductions for rooms that cannot be used to their full capacity and as per the Design Specifications:

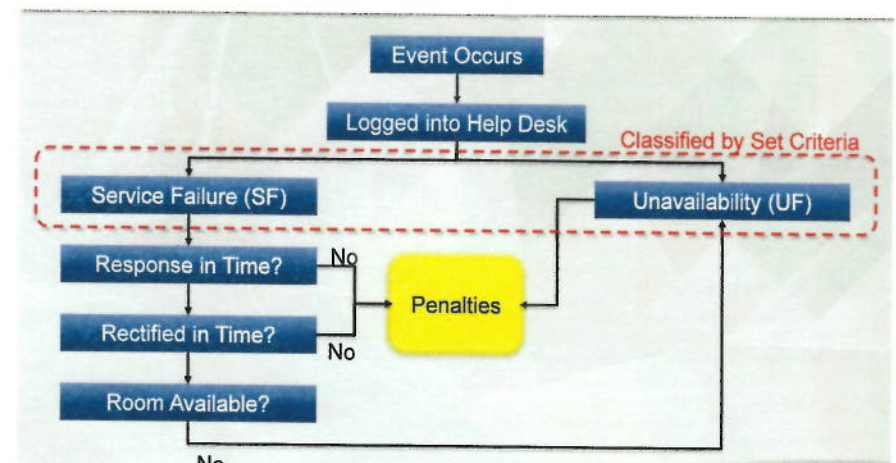
- Typically resulting from maintenance Events
- Penalty amounts are tied to importance of rooms
- Groups of rooms can become unavailable if linked by function
- Penalties are reduced if the room is still used, either for the intended purpose or a modified use.
- Penalty is the greater of the accumulated penalty or \$100 per event.



Emergency Entrance



Failure Logic Chart





Q&A: Stanton Territorial Hospital Facility Issues

What are the key issues?

The key issues that have been encountered since the hospital opened are related to water leaks, plumbing, and heating. There have also been more minor issues related to elevator power and wireless connectivity for a remote patient monitoring system.

What is the being done to address these issues?

The Boreal Health Partnership (BHP), including the facility maintenance provider Dexterra, are working to resolve the issues in collaboration with the Northwest Territories Health and Social Services Authority (NTHSSA), the Department of Health and Social Services, and the Department of Infrastructure.

Actions taken to date include:

- Committees formed to meet regularly and address issues related to housekeeping, building issues, food services, etc. These committees provide a collaborative venue for Stanton staff and Dexterra to problem solve together.
- Patients impacted by any facility issues are transferred to alternative rooms while issues are resolved.
- Dexterra has hired a staff plumber to be on site to troubleshoot and fix issues related to plumbing systems. Dexterra has also retained a contractor to complete examinations of drainage and plumbing systems using remote camera equipment in some areas.
- The Department of Infrastructure technical staff have provided assistance to Dexterra with building troubleshooting. Department of Infrastructure technical staff have considerable experience in fine tuning building systems during the adjustment period for new facilities in our northern environment.
- A senior executive committee with representation from all GNWT internal partners has been created to regularly meet and ensure appropriate resources are in place to address any issues related to the Stanton facility.

Is it normal for a new building to have this many issues?

Yes, it is normal for any new building to have a “bedding-in” period during which issues are identified. This adjustment period usually lasts longer the more complex the building and systems involved are. Stanton is one of the most complex buildings in the Northwest Territories and we continue to work with Dexterra to adjust building systems and processes.

What are some of the improvements and benefits resulting from the new Stanton Territorial Hospital?

Considerable focus has been put on issues related to the new hospital; at the same time, there have been a number of successes with significant benefits to patients:

Facility, equipment and systems improvement

- All patient rooms are now single rooms with private washrooms, providing space to support family visits as well as improved infection control and privacy.
- State-of-the-art Intensive Care, Dialysis and Chemotherapy units. In the old facility, these programs were all operated out of converted patient rooms and had issues with privacy and infection control.
- Increased space in the Emergency Department, Laboratory, Operating Rooms, and Diagnostic Imaging.
- Enhanced endoscopic and laparoscopic video solutions in all operating theatres.
- Increased flexibility in operating theatres and procedure rooms using booms.
- Dedicated endoscopy suites.
- Dedicated staff and patient elevators to assist with improved privacy for patients and increased efficiency.
- Completion of a rigorous, system-wide accreditation, during which Stanton Territorial Hospital underwent a survey to check operations against industry best practices.
- Successful implementation of a new pharmacy information system.
- Implementation of updated infusion pumps across the facility, with significant improvements in technology and usability.
- Expanded use of telemetry (patient vital sign monitoring) equipment throughout the hospital.
- Implemented the use of handheld communications devices.

Organizational and support services

- Addition of Behavioural Health Workers to provide a patient-centred approach to safety and security, ensuring non-violent crisis intervention is available throughout the facility.
- Addition of a traditional foods coordinator for the traditional foods program.
- Creation of a full time resident elder position.
- Significant efforts and successes in building relationships with the new building services provider, Dexterra, to collaborate and address issues as they arise.
- Creation of a joint committee between Stanton and Dexterra to proactively address issues related to services delivered under the P3 Project Agreement.

What benefits did the P3 process bring to the redevelopment of Stanton hospital?

There are two areas of benefit to the GNWT from redeveloping Stanton hospital using a P3 model: risk protection and innovation.

Risk

- Projects of this size are complex and have significant risks regardless of the form of contracting. For Stanton, the GNWT has much better protection under a P3 contract.
- Boreal Health Partnership (BHP), the P3 partner, is incentivized through the Project Agreement to ensure Stanton was built well, is maintained on time and to defined standards, and that any issues that arise are dealt with quickly and completely.
- At the end of the 30 year period of the Project Agreement the building is required to be handed back to the GNWT in a prescribed state, this means it is in BHP's best interest to construct and maintain a facility that is high quality and resilient over its lifecycle.

Innovation

- Redevelopment of Stanton was originally envisioned as a complex, 7-phase redevelopment that would have been very challenging to implement and would have been limited by the physical constraints of the existing building.
- The P3 process leveraged an "output" specification, rather than prescribing a specific design, and the evaluation process was structured to reward innovation. Ultimately, this led to a team thinking outside the box and proposing a brand-new hospital along with complementary usage for the existing building.
- The new hospital was purpose-built for the defined program and will lead to enhanced long term clinical outcomes. The existing building will help to address the critical shortage of available space in Yellowknife to accommodate complementary services, with the added benefit of being on the same site as the hospital.

What oversight was in place during the construction phase of the project to ensure the facility was built properly?

All construction work undertaken was subject to sign-off by an Independent Certifier.

The Department of Infrastructure (INF) provided project delivery services on behalf of the GNWT, including contract administration and technical oversight during the planning, design, construction, and warranty phases of the project. This included retaining consultant services for inspections, certifications, and compliance in accordance with applicable standards. Ultimately, BHP's (Project Co) Design-Build team (Bird-Clark) along with Dexterra are contractually responsible to complete required design and operational items that are identified over the term of the agreement. INF technical staff will continue to provide assistance only when necessary recognizing the responsibilities as part of the agreement.

What measures are in place to ensure building maintenance and other services provided by Dexterra are being delivered appropriately?

The Project Agreement (PA) has performance specifications that require Dexterra to respond to and rectify issues within a certain timeframe and to a certain condition, in order to meet defined quality standards and performance outcomes. Compliance is tracked, with non-compliance or underperformance leading to financial penalties.

Penalties are assessed based on the following:

- Unavailability
 - All rooms/units in the hospital need to meet standards in terms of being fit for purpose, clean, etc. Otherwise, Dexterra needs to respond and rectify the situation within defined timeframes. Surpassing the defined timeframe may lead to deductions.
 - Functional units in the hospital are weighted by importance, with unavailability of rooms/units with greater impact to patients and clinical outcomes generally associated with higher penalties.
- Service Failures
 - A range of other service obligations are defined in the PA addressing quality and timeliness of services. These are all linked to potential deductions if key measures are not met.

Together, this framework aims to align incentives over the long term and drive Boreal Health Partnership (BHP) and Dexterra to perform, given that they have returns at stake.

Additionally, the following oversight groups and regular meetings have been put in place to monitor and adjust operations, and deal with issues as quickly as possible:

- **Operating Joint Committee** – Chaired by Boreal Health Partnership and includes senior management from NTHSSA. This committee works to ensure communication and foster working relationships related to the entire project over the 30 year contract period.
- **Performance Monitoring/Performance Accountability Reporting** – Representatives from BHP, Dexterra, NTHSSA, GNWT Infrastructure. This group reviews monthly reports related to performance measures in the Project Agreement (PA), discusses improvement strategies, and assesses penalties as outlined in the PA.
- **Facility Management Committees** – Topic specific committees with varying membership to build collaborative solutions and make targeted improvements in: Dietary/Food Services, Housekeeping, Access/Security, Help Desk, and Facility Services.
- **Dexterra/Stanton Daily Issues Meeting** – A daily meeting between Dexterra General Manager and NTHSSA Director of Contract Administration at which outstanding tickets and resolutions are discussed.
- **Dexterra/Stanton Facility Maintenance Meeting** – A weekly meeting with Dexterra General Manager, Stanton COO, NTHSSA Director of Contracts, Stanton Director of Operations, and Stanton Senior Manager Nursing, as well as others attending as needed, to discuss any broader issues impacting operations.
- **Change Management Meeting** – Collaborative venue for Dexterra and NTHSSA to discuss any facility changes that will impact operations (including minor works notices) and facilitate notice to staff for awareness of process changes or upcoming works.
- **Warranty Period Meeting** – Monthly meeting of senior officials from BHP, Dexterra, Bird Clark Joint Venture (the Construction Contractor for the Stanton Territorial Hospital Project), NTHSSA, and GNWT Infrastructure to discuss warranty/deficiency issues and resolutions.
- **Infection Prevention and Control (IPAC) Meetings** – Meetings scheduled as required to discuss IPAC to ensure any facility work follows standard/best practices.

Will the GNWT be undertaking an audit of this P3 project?

The Project Agreement provides significant provisions to ensure the parties in this P3 project are accountable and we continue to use the tools within the Project Agreement to address issues.

What is the current status of heating issues at Stanton?

There continue to be issues related to consistency of heat in certain areas of the building. Recent extreme cold weather is testing the building and its systems, being the first winter in the new facility with a full patient and staff compliment, it is taking time to adjust building systems to address concerns about heat.

Most recently the NTHSSA has requested the Department of Infrastructure provide assistance as needed to ensure Dexterra are able to address any issues as quickly as possible.

How many incidents of water leaks/code browns have happened at Stanton?

Since Service Commencement, there have been 31 incidents of water leakage. The majority of these leaks are related to drain or toilet backups. The majority of these did not result in significant overflows or flooding.

What other issues have been raised and/or dealt with during the adjustment period?

Other issues that we are aware of and have worked to address include:

- Mould remediation on two occasions related to water leaks/backups.
- Wifi connectivity issues related to a remote patient monitoring system. These issues have been resolved.
- Elevator power issues.
- Water temperature regulation at sinks. These issues continue to be resolved as found and are often resolved by a simple valve adjustment to the hot/cold water mixture.
- Water pressure issues to the 5th floor. This issue was resolved in October, 2019.