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Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

TRAUMA SERVICES PROVINCIAL CLINICAL TEAM

Clinical & Preventive Services Plan Summary

An opportunity to elevate outcomes through reconfiguration

Manitoba's key population characteristics create an opportunity for the province's health system to both **meet evolving needs and set the standard for care in priority areas including rural health, healthy aging, and needs of diverse populations.** The significant **Indigenous population** presents an opportunity for leadership in **collaborative design and delivery of health services**.

Key Population Characteristics

Manitoba's Population is Growing

Growth rates vary by region with **higher growth in Winnipeg and Southern regions**, by 45% and 62% respectively, over the next 25 years.

Manitoba is Highly Rural

44% of the population is **highly distributed across geographies** with less than 10 people per km

Manitoba has an Aging Population

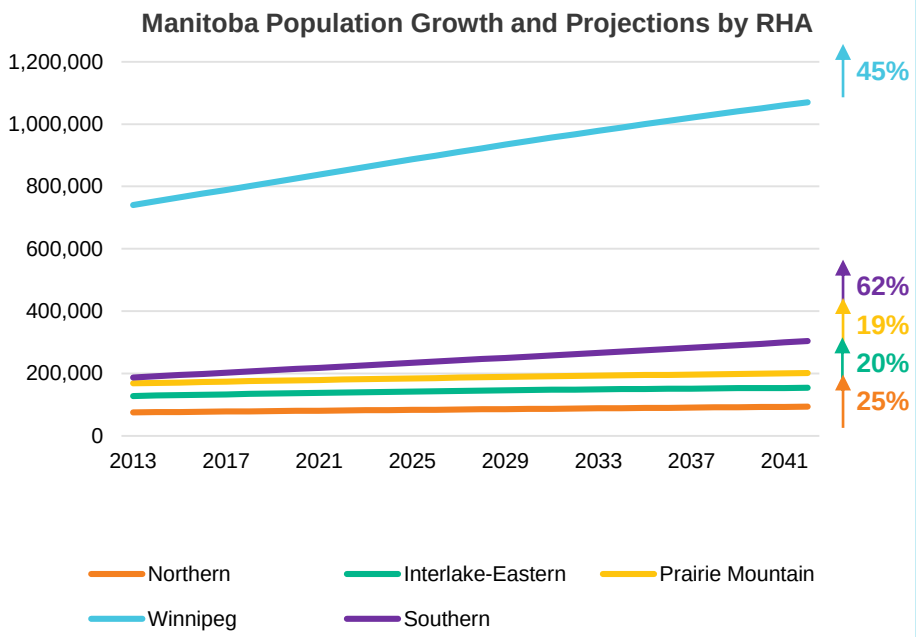
The **largest growth** is projected to occur with the **80+ and 60-70 year old cohorts** however Manitoba remains the only province where youth under 15 exceed the older population

Manitoba has a large Indigenous population

Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province

Manitoba has a Diverse Culture

109,925 Manitobans speak French of whom 74% were born in Manitoba. **18.3% of Manitoba's population are immigrants** with 80% settling in Winnipeg



A strong foundation to build upon

Manitoba already holds **capabilities and characteristics** that can be leveraged to enhance the future healthcare system

One provincial academic hospital

The majority of tertiary health services for Manitoba's 1.3M people are delivered in Winnipeg through one provincial academic hospital: Health Sciences Centre (HSC), an internationally recognized and accredited academic hospital and research centre.

A leading university and research centre

University of Manitoba is a leading centre for the training of health professionals and support for specialist care delivery and rural and urban primary care.

International leadership role in the health of First Nations, Metis, Inuit, and Indigenous Communities

- Leadership role in instituting Jordan's Principle – a Child-First Initiative to assure equitable access to essential care
- Internationally recognized partnership-based health research through Ongomiizwin - Indigenous Institute of Health and Healing

Adaptability to innovative models of care

37% Increase in MBTelehealth utilization over in the past five years and multiple modes in place

1m+ miles saved — By clients who visited the Mobile Clinic (primary care bus) over five years in Prairie Mountain Health

Multiple achievements to improve wait times and patient experience

25% Improvement in total time spent in Winnipeg EDs (Winnipeg) – the most improved in Canada

50% Improvement in total wait time for endoscopy through centralized referral and intake models – similar models in place for hip and knee replacements, spine surgeries, and others

Flexible workforce options provide new opportunities to build future models of care

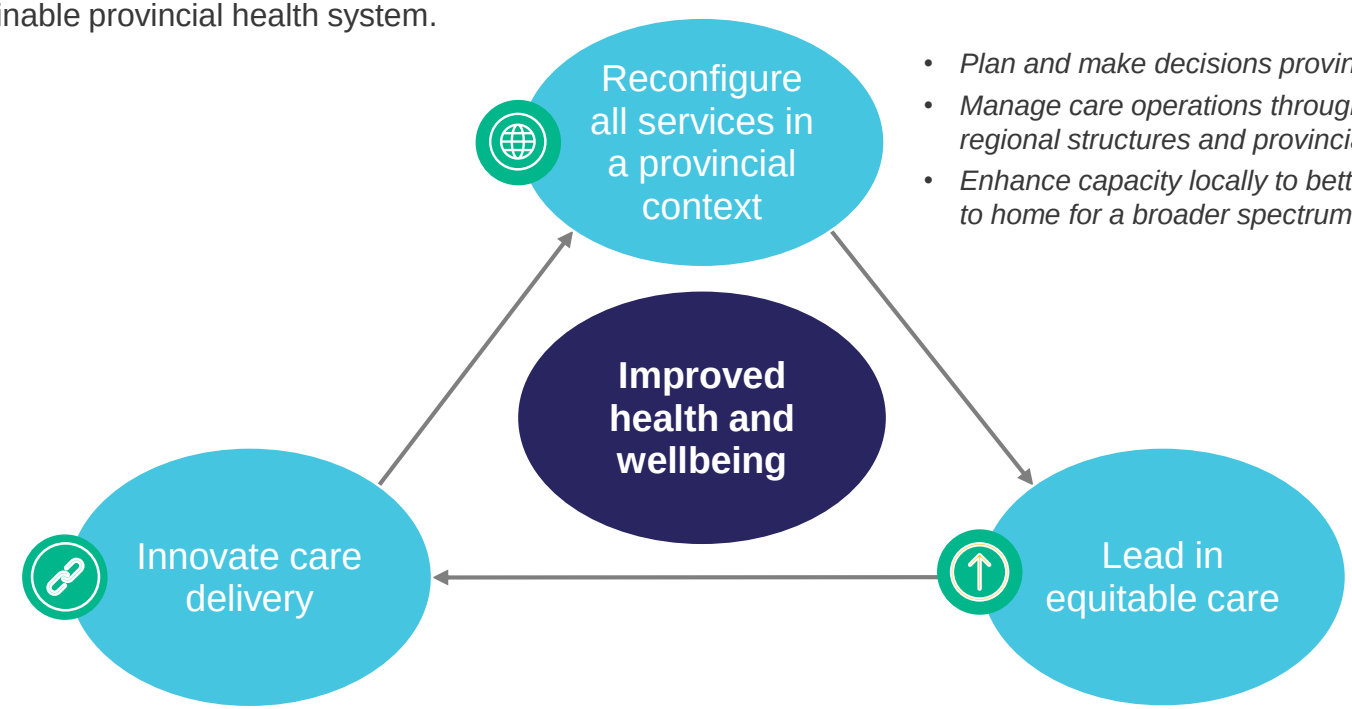
2x More paramedics per 100,000 residents than the Canadian average and more female paramedics (national average: 32%)

20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts

Expanding scope of Nurse Practitioners (e.g., minor invasive procedures, ordering diagnostic tests). Long standing leader in training, education, and employment of physician assistants including into primary care.

Manitoba's bold new future: Reconfiguring For Better Health and Wellbeing

The **elements of the future vision will work together** to improve how the health system supports Manitobans. Through redefined access and service capabilities across the province, Manitobans will benefit from improved health outcomes and a more sustainable provincial health system.



- *Plan and make decisions provincially*
- *Manage care operations through a combination of regional structures and provincial services*
- *Enhance capacity locally to better support care close to home for a broader spectrum of health needs*

- *Provincial clinical governance to support clinical practice and model-of-care improvements province-wide*
- *Modernize care delivery approaches to increase reach and access from a patient and provider perspective*
- *Innovate* how *care is delivered to achieve better health and broader outcomes*

- *Lead in equitable care to urban, rural and remote communities through connected care*
- *Commit to a new future for Indigenous health in Manitoba based on a collaborative model of co-design and enablement among Indigenous communities and the provincial health system*

What does a modernized health system mean for individuals?

TODAY

- **Knowing where to go for the right care can be confusing** – for patients and for providers
- Your health care provider **may not have all the necessary information** about you and your health – this can result in you having to tell your story over, and over, and over again
- You may wait a **long time to access** the right care including diagnostic services and specialist care
- The care you need may not be accessible close to home, **requiring you to travel** to access services
- Your **visits may not be coordinated** across care providers, resulting in multiple trips to access care

IN THE FUTURE

- Consistent, reliable services will be accessible at facilities that are clearly defined by the care they provide, making it **easier to know where to go for care**
- Your health care providers will have **access to appropriate information** about you and your health needs
- Providers will **work together to coordinate** your care, ensuring that wherever you go, you are able to access the right care
- Coordination will **reduce your wait times** and unnecessary travel
- You will have the choice to **manage and navigate your own care**, in partnership with your primary care provider
- Your primary health team will have support to provide your **care closer to home** through virtual tools, advice and guidance

What does a modernized health system mean for individuals?

TODAY

Find a family doctor (primary care provider)
Wait for appointment to discuss your care needs
– or visit an Emergency Department

1st primary care visit

Specialist or diagnostic services referral and wait

Travel for care

1st specialist or diagnostic service visit

2nd primary care visit

Specialist or diagnostic services referral and wait

Travel for care

2nd specialist or diagnostic service visit

3rd primary care visit

Repeat referral and wait until an answer or diagnosis is determined

Travel for care

Ongoing visits to specialists and for tests

IN THE FUTURE

Providers work together to coordinate your care and multiple tools and options exist to help manage your own care

1st primary care team visit (providers with different skills work together)

You have tools to manage your health

You can get advice virtually

You have help to find the right health care

Your primary health team has the information they need about you and your health **and** has access to …

… advice and guidance for more specialized care needs that they can manage, with some support

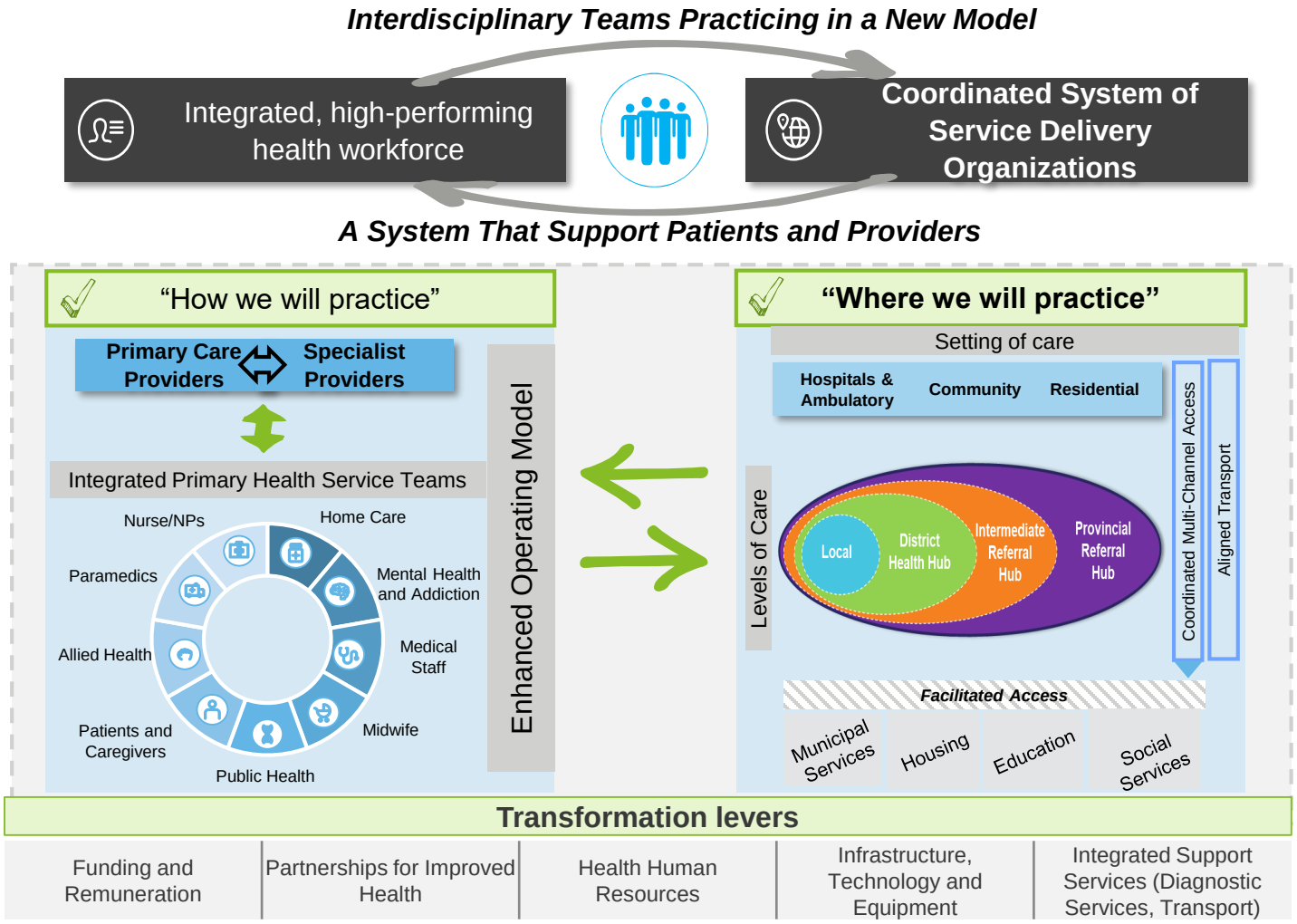
… virtual tools to bring care closer to home

… a network of other teams nearby for in-person or virtual access to care

… coordinated access to specialists that work together to reduce or eliminate unnecessary travel and coordinate with your primary care team

Each step in your care path seamlessly connects back to your local primary health team, keeping them up to date on your care

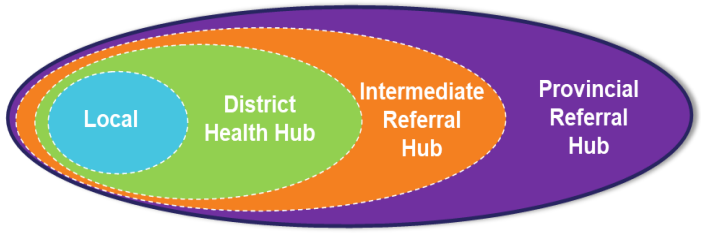
An integrated network for accessing and delivering services is core to the new provincial model



Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

The Integrated Network Model

- The Integrated Network Model shown below links local, district, intermediate, and provincial hubs and provides common service standards, capabilities and pathways for patients, providers and health system managers in the province.
- The model will reconfigure care to improve the health and well-being of all Manitobans through provincial standards that elevate care and innovative approaches to ensure equitable care delivery. The key to success will be the development of ***appropriate, sustainable*** capacity at the local level and ***standardized pathways*** that streamline how patients and providers navigate the system. ***Provincial clinical governance*** will guide the development and monitoring of standards and pathways. By leading in ***connected care***, Manitoba will optimize a hybrid digital and in-person care experience for everyone.
- The network model is intended to facilitate the relationship between providers and the flow of patients in the province. It is not intended to create barriers or "gates" in the system, instead it will be used to **create transparency and certainty of capabilities**.

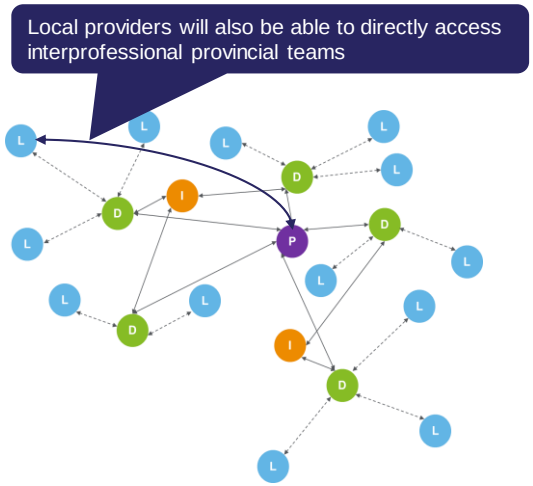


L **Local Area Hub**
Integrated network for prevention and screening, transitional care, community based support and rehab, and primary and community care

D **District Health Hub**
Integrated network for low-moderate acuity, variable volume general medicine/surgery interventions/procedures, post acute treatment and emergency services

I **Intermediate Referral Hub**
Integrated network for moderate acuity/complexity medicine, surgery, critical care, and emergency services

P **Provincial Referral Hub**
Provincial integrated network for high-acuity, highly complex medicine, surgery, critical care, and emergency services



Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

The network model outlines ***minimum service standards and capabilities*** as the basis for infrastructure, health human resources, and clinical support services planning. Local Area and District hubs will feature a spectrum of capabilities (Enhanced, Core) to match the needs of its population, with increased acuity along the continuum from District to Provincial. Facilities at the District and Intermediate level may have targeted areas of programmatic focus that extend into higher levels of care.

Local	District	Intermediate	Provincial
Low acuity community-based care	*Low to moderate acuity community-based and inpatient care*	*Moderate to high acuity inpatient and medical/surgical care*	*High acuity/specialty medical and surgical care*

Enhanced

Interdisciplinary primary care teams who provide enhanced community services such as mental health support, midwifery, chronic disease management, and/or pain management; supported by appropriate diagnostics and the ability for short-term patient observation

Increased focus on **prevention and screening** with proactive population health management capacity

- My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia)

Core

Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)

Increased focus on **prevention and screening** with proactive population health management capacity

Core:
Urgent care during set hours for lower acuity patients

Enhanced and Intermediate:
24/7 Emergency Department

Provincial:
24/7 Emergency Department

General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services

Enhanced:
Special Care Unit

Intermediate:
Intensive Care Unit (ICU)

Provincial:
ICU with specialized capabilities

Core:
Elective surgery, primarily with Family Practice Anaesthesia (FPA)

Enhanced and Intermediate:
Elective and emergency surgery with FPA or FRCPC

Provincial:
Elective and emergency surgery with FRCPC

Specialist Services may include:
District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus

Intermediate:
Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre

Provincial:
Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal

Provincial Services such as:
Major trauma, thoracic services, comprehensive stroke care, specialty cancer care

Creating the capacity for a provincial approach to delivery in Manitoba through a 10-Point Plan

This 10-Point Plan outlines key mechanisms for Manitoba to improve access to care across the province and deliver on the benefits of moving to a provincial approach to care design and delivery

Interdisciplinary Teams Practicing in a New Model

Integrated, High-Performing Health Workforce

Coordinated System of Service Delivery Organizations

A System That Support Patients and Providers

"How we will practice"

1. Provincial clinical governance
3. Enhanced community supports
5. Bridge the gap between primary care provider and specialist
7. Shift care between disciplines to enable clinicians to work to full scope of practice
9. Provincializing key aspects of our workforce

"Where we will practice"

2. Clear roles and capabilities in network model
4. Innovative approaches to care through digital health
6. Consistent pathways for targeted patient populations
8. Coordinated provincial access
10. Provincial approach to outcomes and deliverables management

Trauma Services

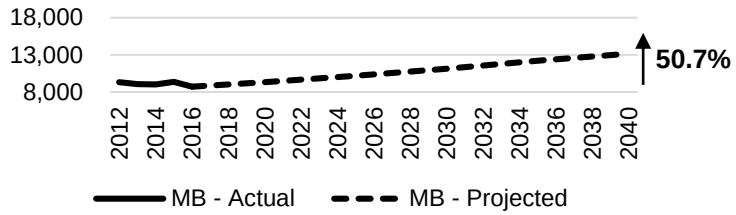
Current state and case for change

Manitoba is one of the only Canadian provinces without a provincial inclusive trauma system and where 10% of the population does not have access to trauma care within four hours

Insufficient provincial **oversight** to coordinate components of trauma care including standards, protocols, pathways, education, and repatriation

- Provinces with a Lead Agency were found to have a lower mortality rate. The odds of mortality in provinces with an inclusive trauma system are 32% lower than provinces with non-inclusive systems.
- Manitoba does not have a Lead Trauma Agency and has the highest risk-adjusted mortality incidence among provinces
- Inpatient admission projections for trauma services in the province is projected to increase 50% between 2016 and 2041

Inpatient Admission Projections, FY16/17 to FY40/41



Source: MHSAL – Discharge Abstract Database

Challenge in **accessing** timely trauma care, and current pathways result in multiple patient transfers

- Between FY04/05-FY13/14, 63% of HSC major trauma admissions were transferred from another site, of which 77% spent more than two hours at the first site
- The median transport time for high ISS patients transferred to HSC vary between three hours from sites in the Southern RHA, and eight hours from the Northern RHA (FY15/16)
- Earlier definitive treatment of major trauma (ISS>12) patients at a trauma center is associated with a significant reduction in mortality.

Median Transport Times to HSC, ISS>12, FY15/16

ISS RANGE	Winnipeg	Southern	Prairie Mountain	Northern	Interlake-Eastern
12 to 24	5:43	3:41	6:52	8:18	4:42
25 to 34	4:48	4:06	5:22	9:07	4:05
>35	2:59	n/a	5:49	5:52	2:40
ALL ISS>12	5:17	3:43	6:09	8:18	4:39

Source: HSC Trauma Registry

Variable capacity, timely access to **specialized rehab** services, and inconsistent repatriation post-rehab, particularly to rural, remote and northern regions

- 58% of Allied Health FTEs are located in Winnipeg, while less than 5% are in Northern, which aligns with population distribution
- The average total LOS for trauma patients was nearly 10 days; 13% of stay was ALC, which may reflect challenges in accessing specialized rehab services (FY17/18)

Trauma Admissions by RHA, FY17/18

	# Admissions	Average Total LOS	Average Acute LOS	% of stay that was ALC
Manitoba	**8,747**	**9.9**	**8.6**	**13%**
Northern	253	3.6	3.6	1%
Interlake-Eastern	235	15.4	11.0	29%
Prairie Mountain	1,094	8.5	7.5	11%
Winnipeg	6,648	10.1	8.8	12%
Southern	517	10.5	8.9	15%

Source: MHSAL – Discharge Abstract Database

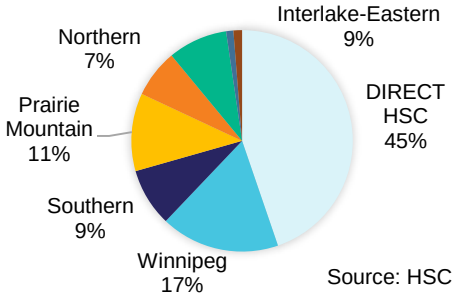
Current state and case for change

A high volume of trauma patients are transferred to HSC, however there are challenges coordinating care to ensure patients are transferred to the right location in a timely manner – there is opportunity to work with EMS/Patient Transfer groups to streamline triage and transfer protocols to ensure coordinated access to appropriate levels of care

Challenges to **coordinating** care from the point of trauma through discharge with high volumes of patients transferred to HSC

- There are no consistently implemented provincial standards/protocols that are integrated with EMS to triage trauma patients to an appropriate level of care
- 55% of patients admitted to HSC with a high Injury Severity Score (ISS>12) were transferred from another site
- Complexities in arranging transport of major trauma patients to the trauma center - involves multiple calls to specialists and transport resources
- Resource and process challenges impact timely repatriation of trauma patients

Origin of High ISS>12 Trauma Patients Admitted to HSC, FY15/16



Source: HSC Trauma Registry

Variable capacity and capabilities outside of Winnipeg contribute to more transfers to HSC

- Pre-hospital assessments are not consistently implemented provincially to determine the level of care a patient requires
- In FY15/16, 722 low severity (ISS<4) patients were transferred to HSC, accounting to 3808 total bed days – these patients could potentially have been cared for at other sites

Transport of Patients with Low ISS <4, FY15/16

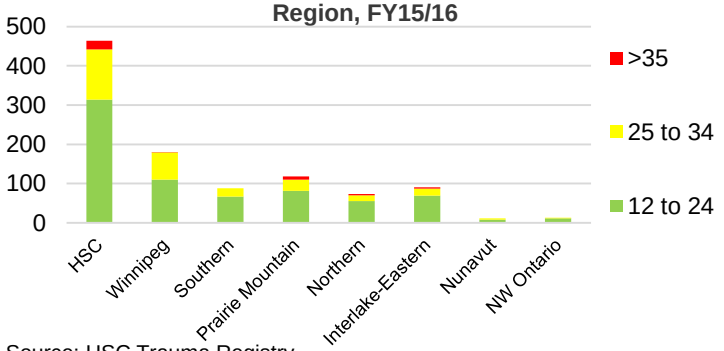
	Number of Patients	Median LOS	Total Patient Days
Winnipeg	290	6	1740
Southern	120	6	720
Prairie Mountain	100	5	500
Northern	106	4	424
Interlake-Eastern	106	4	424

Source: HSC Trauma Registry

Manitoba has an **established provincial trauma centre**, positioning it well for TAC accreditation

- Manitoba already has a provincial trauma centre with some elements of a Level I Trauma Centre, located at HSC in Winnipeg. This positions Manitoba well for the establishment of an inclusive provincial trauma system
- The TAC recommends one Level I or II Trauma Centre and one Level I or II Paediatric Trauma Center to serve a population of one or two million with an anticipated caseload of 500 to 1,000 major trauma cases
- Manitoba has a population 1.27 million and there were 1,037 major trauma admissions to HSC in FY15/16, thus Manitoba does not require designation of a second Level I or one Level II Trauma Centre

Major Trauma Injury Transferred to HSC by Severity and Region, FY15/16



Source: HSC Trauma Registry

Moving from today to the future

The vision for the future is based on evidence, informed by PCTs' holistic input, and aligns with jurisdictional practices

	Highlights of Current State	Highlights of Future State
Service Model – Highly Effective Teams	• Long transport times to access trauma services • Variable capacity and capabilities outside Winnipeg • Inconsistent oversight and coordination of trauma care • Lack of trauma team structure and designated trauma team leaders at provincial hub (HSC) • Trauma service at provincial hub often responsible for care of high volume of trauma and general surgical patients during peak times • Variability of specialized and locally available rehab in communities • Inconsistent education and prevention strategies	• Standardized pathways align services and patient transfers (e.g., referral protocols, criteria, etc.) • Coordinated access to consistently available rehab services for timely care closer to home • Establishment of a provincial governance network as part of an inclusive trauma system • Dedicated Trauma Team Leader to lead all major trauma presentations to HSC and provide virtual and remote support to other hubs • Trauma Teams present at Provincial and Intermediate sites • Workload and resource management to ensure appropriate ratios of providers and patients (e.g., trauma service, rehabilitation) and alignment with leading practices • Provincial prevention and education strategies
Service Standards and Pathways – Coordinated Delivery Systems	• High rate of major trauma patients from across the province transferred to HSC • High volume of low severity patients transferred to HSC, who could be cared for at other sites • Multiple unnecessary transfers to access trauma services • Delays in accessing dedicated rehabilitation beds • Delays in repatriation to local hubs	• Province wide trauma system with one Level I Trauma Centre • Enhanced capabilities of regional centres to support trauma care closer to home • Clear levels of care for trauma services to reduce low complexity patients transferred to the Provincial Trauma Centre • Central call number to coordinate and triage referrals, ensure expedited time to care, and provide consultations • Coordination with EMS to streamline patient transfers to increase timely access to trauma care

Provincial view of the future vision

Future Vision: Manitoba will establish a provincial inclusive Trauma System that aligns with the Trauma Association of Canada Accreditation (TAC) guidelines to improve patient outcomes and improve system efficiencies. It is anticipated that the future model will result in:

- Standardized, streamlined care to support enhanced patient outcomes and improved mortality rates
- Reduced time and costs associated with avoidable patient transport
- Additional capacity for lower complexity patients at regional sites
- Enhanced capacity for higher complexity patients at HSC

Key features of the future vision include but are not limited to:

- Provincial inclusive trauma system with leadership structure with provincial level reporting
- Designation of targeted sites to align with TAC guidelines with consideration for volumes and geography
  - 1 Provincial Hub (i.e., HSC) which reflects TAC Level 1
  - 1-2 Intermediate Referral Hubs (i.e., Brandon) which reflect TAC Level III
  - District Hubs are expected to encompass Level IV/V and non-accredited hospitals (District Hubs may not necessarily be TAC accredited IV/V)
- Provincial Trauma Team Leader on call for all major trauma consultations
- Multidisciplinary Trauma Team at Level I and III sites with defined team member roles
- Standardization of provincial triage protocols and pathways from initial point of contact (i.e., 911 call) to transfer protocols (i.e., by air and land)
- Shift of lower complexity cases from HSC to other regional sites
- Reduction of avoidable patient transfers
- Enhanced virtual access to consultations with trauma specialists at the Provincial Hub to support capabilities at Intermediate and District Hubs closer to home
- Standardized pathways to access rehab, including enhanced community-based options

Service standards and provider roles

Service standards and provider roles are outlined across the Network Model

	Trauma Services in the Provincial Network – Network Model Overview	
	Service Standards	**Provider Roles**

Provincial Referral Hub	• **Patient population:** Referral center for all major trauma from Manitoba
	• **Network role:** Access to a full range of specialty, critical care, diagnostics and specialty rehab services. HSC to provide education to all hubs in the Network through various modes of delivery (i.e., simulation)
	• **Post-acute role:** Linkages with post-acute rehab and mental health
	  • System navigation to provide support for those with complex needs (i.e., homeless, social complexities, individuals without families)
		• Consistent model for delivery of trauma care to major trauma patients at Level I and III sites
		  • Trauma Team Leader
		  • Trauma Team with defined roles
		
		• Provincial Governance Model
		  • Provincial trauma medical director and operational lead
		  • Provincial trauma leadership committee
		  • Defined provincial reporting structure
		
		• Supporting structure
		  • Access to Provincial Coordinated Access Team
		  • Expansion of trauma database to capture data for major trauma patients at all sites
		  • Discharge coordinator (e.g., social workers) to ensure appropriate repatriation to post-acute support in home community
		  • Rehab and mental health specialist to provide in-person and virtual assessment and treatment

Intermediate Referral Hub	• **Patient population:** Select major traumas in the nearby geography, and higher volumes of non-major traumas
	• **Network role:** Access to 24/7 general and orthopedic surgery, anaesthesia (FRCPC), diagnostic imaging, allied health, and opportunity to leverage telehealth to connect with expertise at the Provincial Hub
	  • Considerations for siting include geography and spatial mapping to enable access to trauma within one hour
	• **Post-acute role:** Rehab and mental health capacity available in person where possible and via telehealth
	  • Connections with expertise at the Provincial Hub to reduce readmissions for acute and post-acute rehab care	

District Health Hub	• **Patient population:** First point of contact for select major trauma patients and support for minor traumas outside HSC • Standard decision protocols for transfer (i.e., which patients require services at HSC) • **Network role:** 24/7 ED to support stabilization and resuscitation of major trauma patients prior to transfer, and ability to conduct virtual consults for urgent procedures • **Post-acute role:** Rehab and mental health capacity available in person where possible and via telehealth	
Local	• Focus on injury prevention (i.e., falls prevention) and post-trauma care in the community • Community and outpatient mental health services	• Primary Health and Community Services to support injury prevention and disaster planning in collaboration with the Trauma Team Structure
Across all hubs	• Integration and communication across acute trauma and rehab • Digital connectivity to support consult and education • Linkages with primary health to support post-discharge needs • Support for staff post-major trauma • Screening for mental health and addictions	

Provincial network alignment to TAC Guidelines

The future trauma model will align with the TAC guidelines by seeking accreditation for select sites across the network

Trauma Services in the Provincial Network – Alignment with TAC Guidelines	
Provincial Referral Hub	**Level I Trauma Centre** Improved coordination of referrals and transports for timely access to the **majority of tertiary, major trauma care and complex and unique trauma services for the province**, including a full array of medical specialties and ready access to advanced medical technology. Expected to reduce time to trauma care, reduce the number of transfers, improve communication between sending and receiving persons and reduce provincial mortality rates. • Primary role in the provincial trauma system, including Lead Agency for Trauma Services • Provincial rehabilitative services for trauma • Academic leadership including trauma training and research programs and outreach educational and clinical support to other trauma facilities • Performance Improvement and Patient Safety program • Injury prevention programs TAC guidelines suggest one Level I or II Trauma Centre is required in a trauma system serving a population of one-to-two million; Manitoba has a population 1.27 million and thus does not require designation of a Level II Trauma Centre
Intermediate Referral Hub	**Level III Trauma Centre** Increase capacity and capabilities for timely access to **low severity and/or less complex** trauma resources, and initial care for major trauma patients **in their jurisdiction**. Expected to reduce time to trauma care, reduce the number of transfers, and improve mortality rates. • Virtual and remote consults with trauma specialists at the Level I centre • Performance Improvement and Patient Safety program • Injury prevention programs within the regional and local community Illustrative examples of Intermediate Hubs include Brandon Regional Health Centre
District Health Hub	**Level IV, V Trauma Centre** Implement **standardized triage protocols and pathways,** including established transfer agreements and policies to divert major trauma cases to the Level I Trauma Centre, and allowing patients requiring **definitive care for secondary level traumas** and **resuscitation and stabilization of major traumas** at the District site. Expected to reduce time to trauma care, reduce the number of transfers, and improve mortality rates. • Virtual and remote consults with trauma specialists at the Level I centre • Performance Improvement and Patient Safety program • Injury prevention programs and telehealth trauma rounds relevant to their trauma population
Local	**Primary Health and Community Services** Implement **provincial injury prevention and education strategies** through broad education strategies, intentional and targeted prevention, and partnerships with prevention agencies and community health/wellness organizations – expected to reduce total admissions and ambulatory visits related to trauma patients to reduce system costs.

Shifts across the Network Model

Shifts in the care pathway through triage, acute and post-acute care

Triage	Acute Care	Post-Acute Care

• Develop a Provincial Coordinated Access Team Model where access to trauma services, specialists, inter-professional team members and resources will be supported by a common platform enabled through evidence based clinical decision and triaging tools
  • Provincial centralized referral and intake process including consistent protocols and communication through a central call number
• Standard coordination with EMS, STARS, Life Flight to improve access to trauma care and reduce time for major trauma patients to reach HSC
  • Standardized process for transport, including air and ground (i.e., operational plans for refuel)
  • Triage protocols to be developed for each RHA
  • Standardized protocols for radiology consults with trauma specialists (i.e., by type of scan)
• Enable air transport launch capabilities to align with designated Intermediate sites
• Establish standard criteria for patient transfers to designated sites
  • Consistent awareness of designated sites and capabilities across sites
  • Clear criteria for appropriate referral to HSC vs. other sites (triage criteria to be adjusted based on geographical location of trauma)
• Align with expanding scope of practice of paramedics
	• Allow for the capability to view patient flow and capacity in acute and post-acute settings to support patient transfers and improve access
	• Institute a multidisciplinary trauma response team at the provincial referral hub and limited trauma response teams at intermediate referral hubs
	• Trauma Team Leader on call 24/7 for major resuscitations and consultations
	• Dedicated trauma ward at the provincial referral hub
	• Workload and resource management to ensure appropriate ratios of providers and patients (e.g., trauma service, rehabilitation) and alignment with leading practices
	• Establish protocols to provide early acute rehab for inpatient trauma patients
	• Transparency in system to view capacity for rehab across sites
	• Build capacity for rehab in local communities to support care closer to home
		• Establish standard repatriation pathways to provide post-acute care closer to home
		  • Clarity and consistency on policies regarding “right of refusal” for repatriation
		  • Standard repatriation agreements to ensure physician in home community will accept patient
		  • Consistent processes to ensure patients have access to primary care providers at discharge
		• Establish standard pathways and prioritization protocols into post-trauma rehab
		  • Higher complexity and acuity cases to remain in Winnipeg for post-trauma rehab
		  • Lower complexity and acuity cases to receive rehab at Intermediate or District Hubs where possible
		• Increase rehab capacity in the community to allow for early aggressive rehab
		  • Services closer to home through rehab professionals where possible
		  • Telehealth and virtual consults to support rehab needs closer to home (i.e., rehab assistant to provide rehab care, with access to virtual expertise)
		• Implement standard pathways to shift appropriate patients out of inpatient rehab and into the community

<u>Implementation planning considerations</u>:

- Seek TAC Accreditation
- Develop provincial policy that aligns with future model (i.e., transportation)
- Communication strategy on roles/responsibilities within the system
- Geospatial mapping of trauma resources
- Explore partnerships (e.g., mental health, non-profits)
- Linkage with EMS/patient transport
- Change management to drive revised referral patters and “right of refusal”
- Review of rehab admission criteria to align with needs and resources
- Build trust across sites and referring partners

Opportunities for innovative service delivery

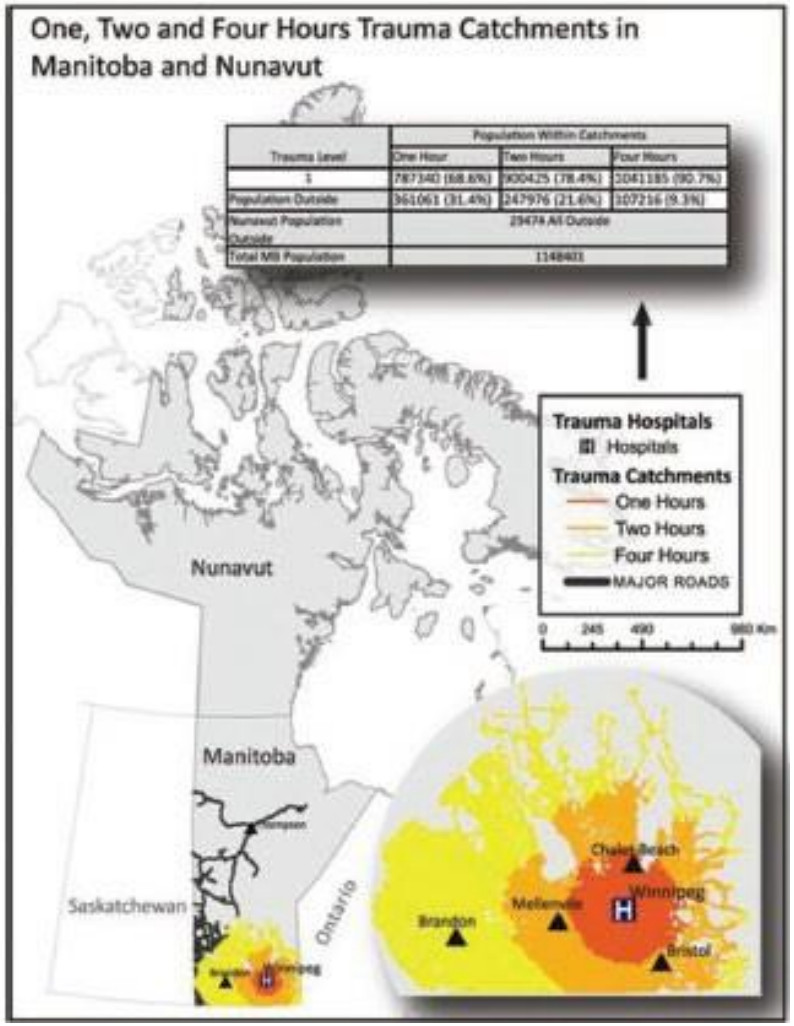
Innovative service delivery and improved access to care can be achieved through digital technology, including associated information and technology requirements, as well as integrated support services including diagnostics, patient transport, Emergency Services, infrastructure and equipment. The table below highlights key elements for the Trauma Services PCT as they are unique to those outlined in the Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model.

Digital Health	• Digital health tools, such as telehealth that are accessible across the province will be important to enable the Provincial Trauma Centre to provide outreach and education to centres across the province
Diagnostic Services	• Trauma Association of Canada accreditation guidelines will need to be reviewed to determine what specific diagnostics requirements are needed for Level III Trauma Centres – investments may need to be made in Brandon to support them in moving toward an accredited Level III Centre
EMS/Patient Transport	• Alignment between EMS/Patient Transport and the Trauma PCT will ensure that patients can be timely triaged to the appropriate level of care while accounting both for the injury severity of the trauma, as well as geospatial mapping of nearby facilities • Enhancing paramedic capabilities will improve competencies in the community and support appropriate triage decisions
Infrastructure and Equipment	• Trauma Association of Canada accreditation guidelines will need to be reviewed to determine what specific infrastructure and equipment requirements are needed for Level III Trauma Centres – investments may need to be made in Brandon to support them in moving toward an accredited Level III Centre
Prevention	• Provincial injury prevention and disaster planning strategies are a key element of the Trauma Services PCT and will support Trauma Association of Canada accreditation for the development of a Provincial Trauma System. This includes targeted injury prevention strategies for high risk populations (i.e., falls prevention for seniors), as well as partnerships with prevention organizations (i.e., MADD)

Key Performance Indicators

1. HSC to gain TAC accreditation status as a Level I Trauma Centre
2. Development of a Trauma Team Structure to coordinate aspects of the future Provincial Trauma System
3. Develop provincial and standardized policies and protocols
4. Reduce LOS
5. Reduce transportation time to meet targets

Appendix – Trauma Catchments in Manitoba



Source: Access to Trauma Systems in Canada (2010). *The Journal of Trauma Injury, Infection, and Critical Care,69*(6):1350-1361.