

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

CONSOLIDATED PROVINCIAL CLINICAL
TEAM CHAPTERS



Table of contents

Provincial Clinical Team	Slide
Primary Health & Community Services	3
Emergency, Critical Care & Acute Medicine	26
Women's Health & Child Health	45
Trauma Services	66
Surgery & Anaesthesia	87
Mental Health & Addictions	107
Cardiovascular & Thoracic	132
Neurosciences	154
Chronic & Complex Medicine	172
Seniors & Rehabilitation	197
Cancer & Palliative Care	219

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PRIMARY HEALTH AND COMMUNITY
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

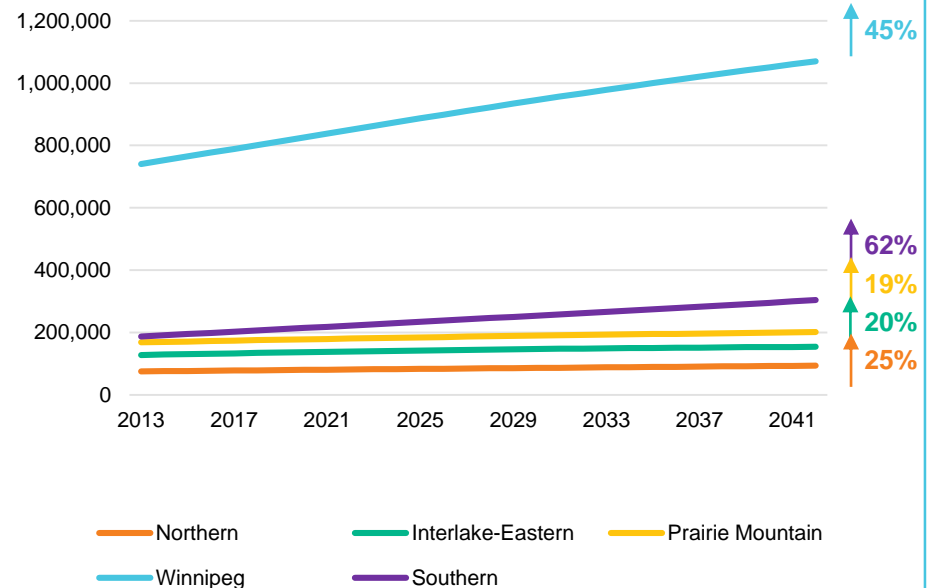
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

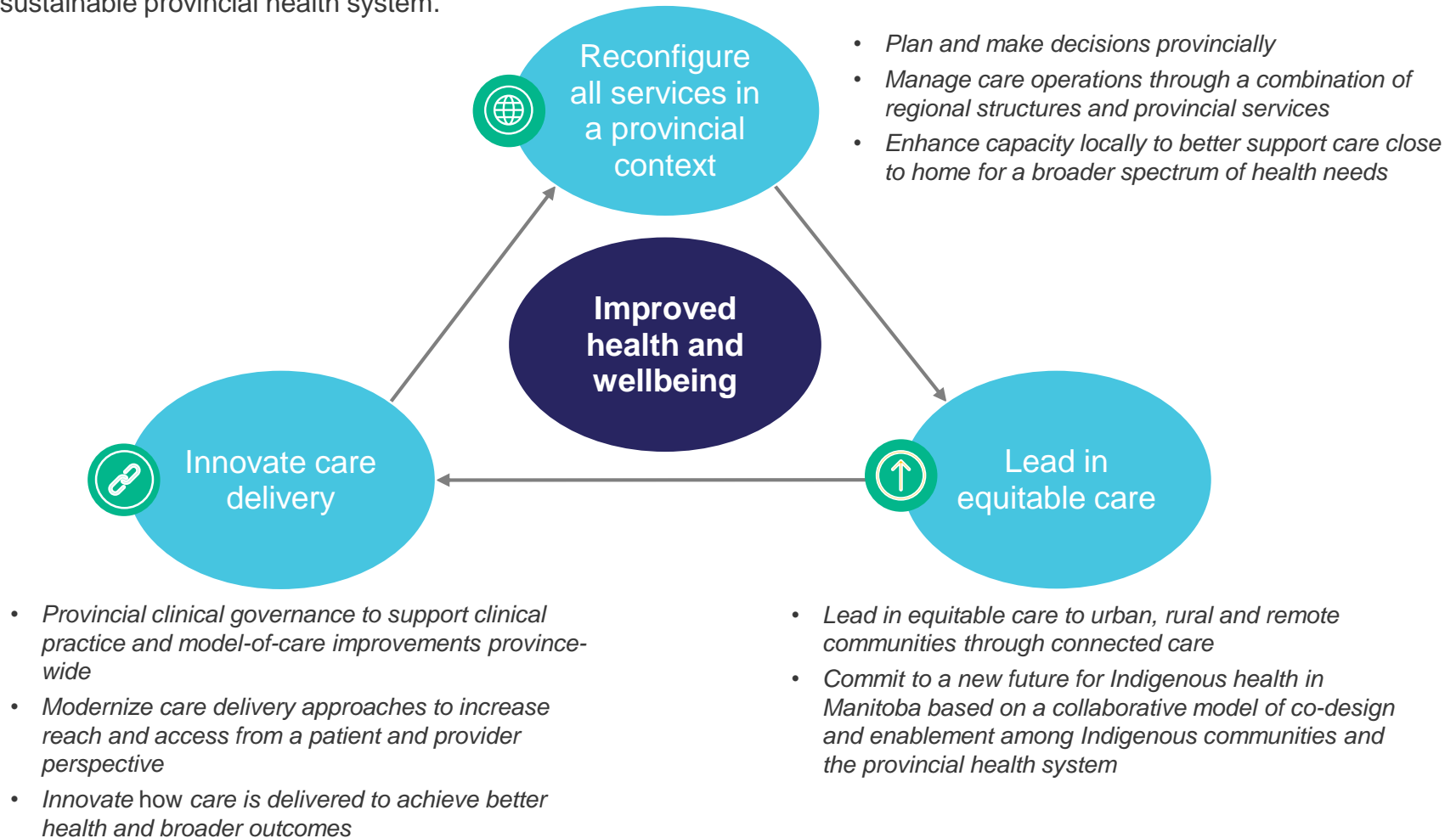
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

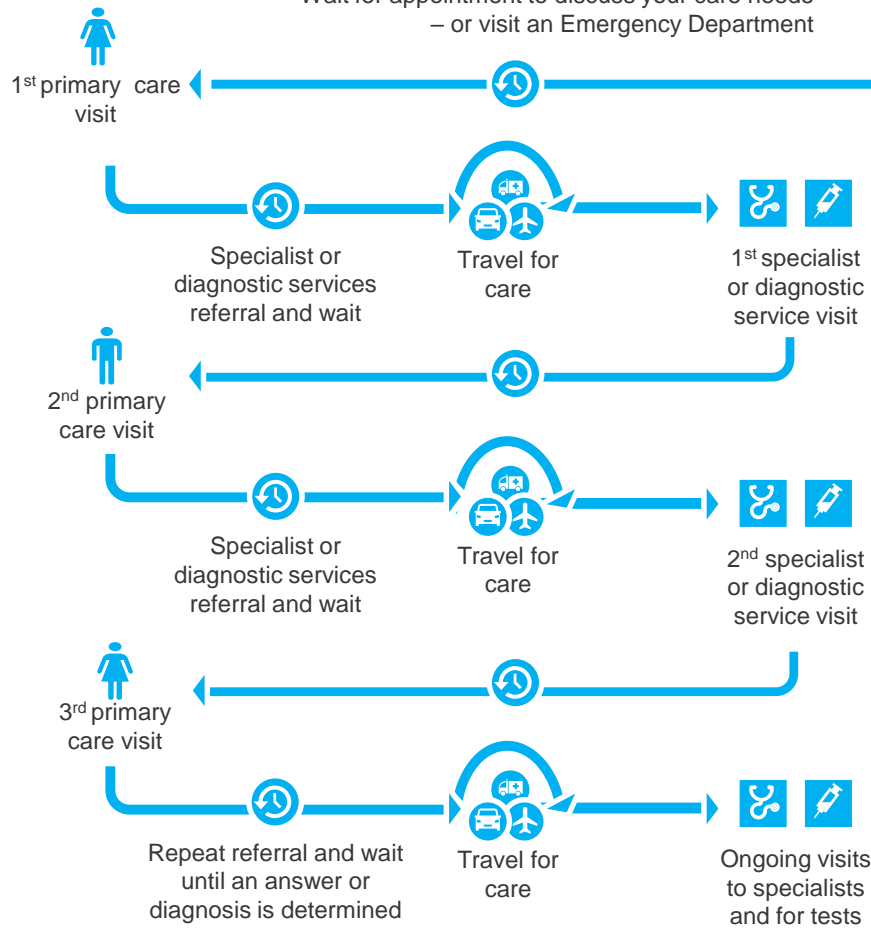
IN THE FUTURE

- 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?

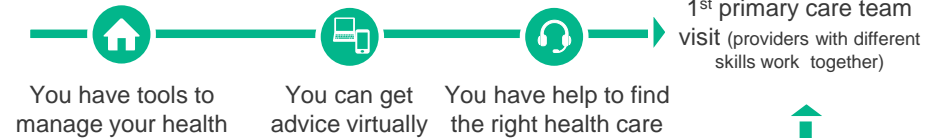
TODAY

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



IN THE FUTURE

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



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

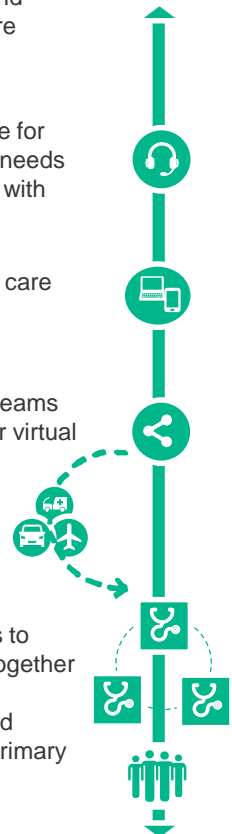
... advice and guidance for more specialized care needs that they can manage, with some support

... virtual tools to bring care closer to home

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

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

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

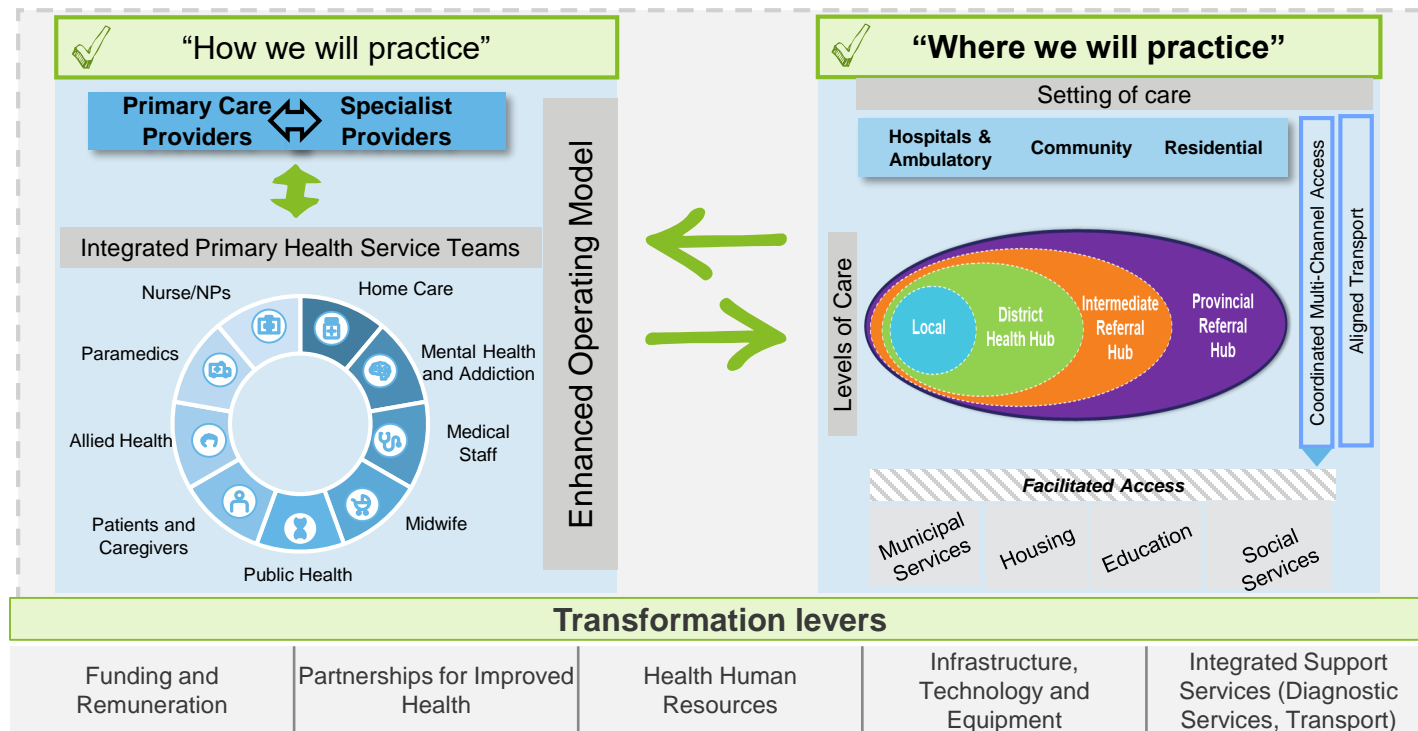


An integrated network for accessing and delivering services is core to the new provincial model

Interdisciplinary Teams Practicing in a New Model



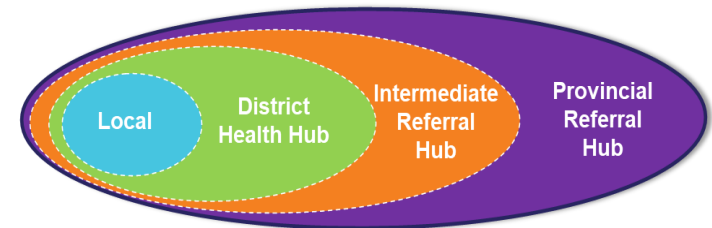
A System That Support Patients and Providers



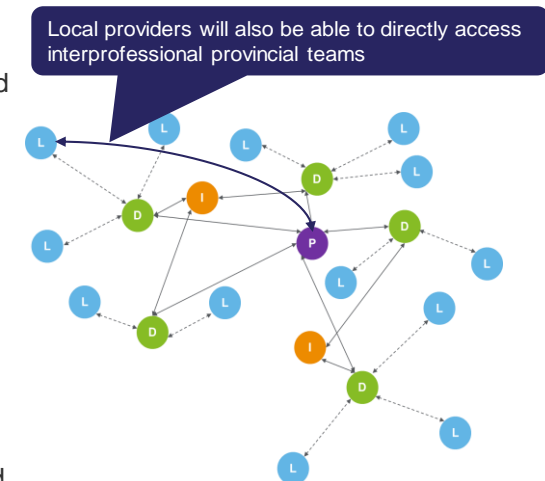
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



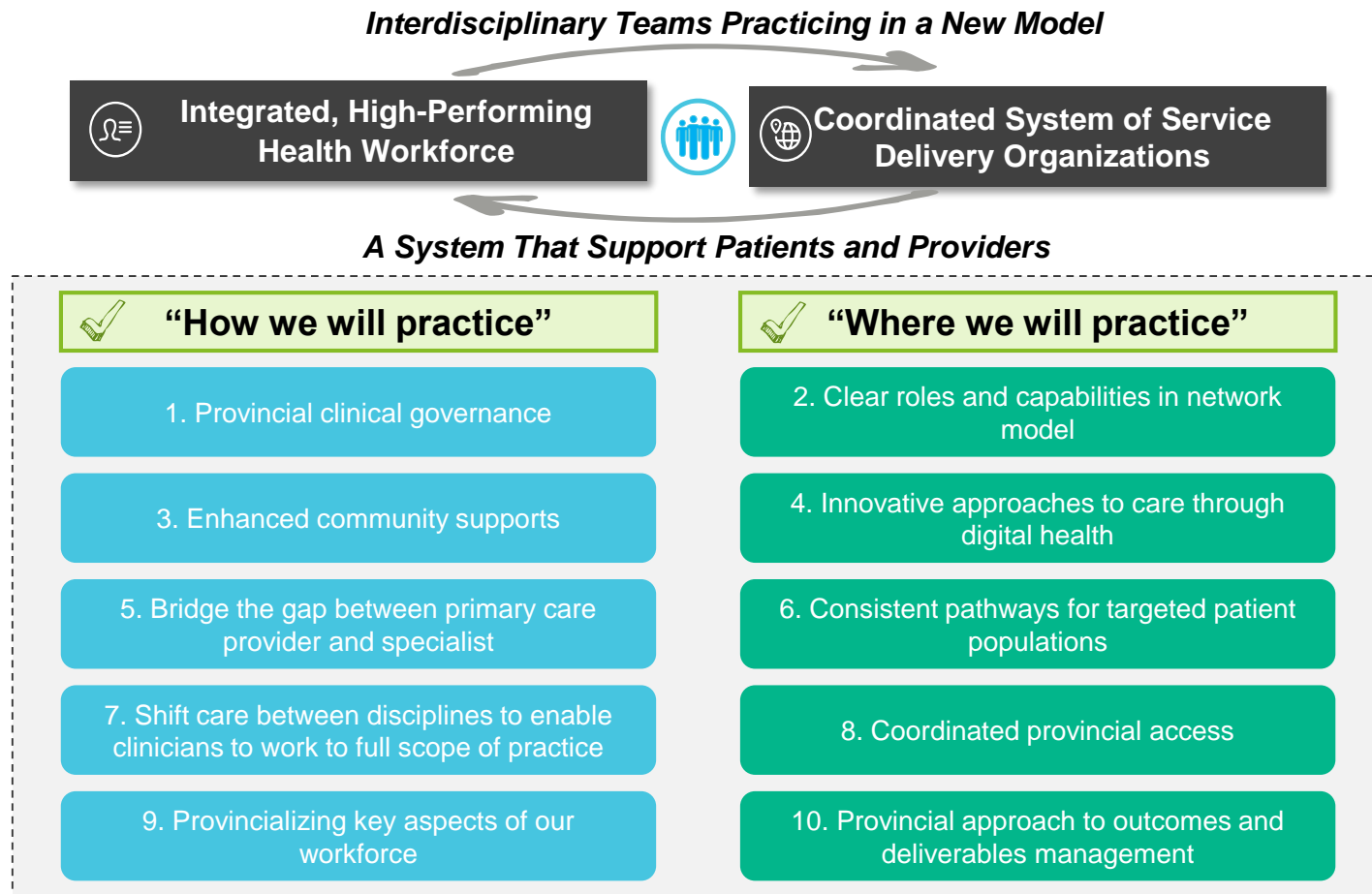
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<div></div> <div><u>Enhanced</u> 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 <ul style="list-style-type: none">My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia)</div>	<div></div> <div><u>Core:</u> Urgent care during set hours for lower acuity patients</div> <div><u>Enhanced and Intermediate:</u> 24/7 Emergency Department</div>		<div><u>Provincial:</u> 24/7 Emergency Department</div>
	<div></div> <div>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</div>		
	<div></div> <div><u>Enhanced:</u> Special Care Unit</div> <div><u>Intermediate:</u> Intensive Care Unit (ICU)</div> <div><u>Provincial:</u> ICU with specialized capabilities</div>		
	<div></div> <div><u>Core:</u> Elective surgery, primarily with Family Practice Anaesthesia (FPA)</div> <div><u>Enhanced and Intermediate:</u> Elective and emergency surgery with FPA or FRCPC</div> <div><u>Provincial:</u> Elective and emergency surgery with FRCPC</div>		
	<div></div> <div><u>Core</u> 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</div>	<div></div> <div><u>Specialist Services may include:</u> District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</div> <div><u>Intermediate:</u> Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</div> <div><u>Provincial:</u> Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</div>	

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



Primary Health and Community Services

Current state and case for change

While multiple initiatives are underway, key risks identified in Manitoba's health status suggest a need for continued enhancement of integrated approaches to healthy living, prevention, and Primary Health and Community Services

Multiple initiatives are underway to enable care integration throughout the province

- **Primary Health initiatives**
 - New models of primary care are currently being implemented including MyHealth Teams and Home Clinics, as models to foster care continuity and integration particularly as it relates to mental health, rehabilitation, home care, public health, long term care/healthy aging and chronic disease prevention and management
 - A five-year Primary Care Strategy has been initiated with the goal of increasing access, continuity and comprehensiveness of Primary Care in Manitoba. The strategy supports a shift away from siloed care towards interprofessional care with a long-term view of health
- **Community Service initiatives**
 - Multiple initiatives are underway, including: Manitoba Homecare Hub to support planning and communications; The Self and Family Managed Care (SFMC) program; Priority Home strategies, delegation from Nurses to Home Care Attendants (HCAs)

Key medical and social risk factors for poor health signal a need for shifts in preventative and population health

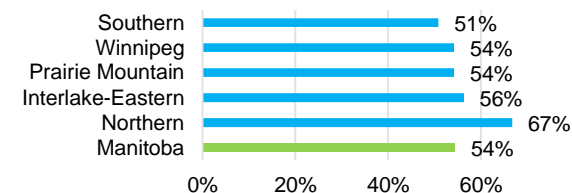
- **Health risk factors**
 - In FY15/16, over half of Manitobans aged 40+ had one or more chronic conditions, of which about 20% had 3+ conditions
 - Manitoba's diabetes prevalence is above the Canadian rate of 7%. Prevalence of diabetes in NRHA is 2x the provincial rate
- **Medical complexity:**
 - ~5% of the population was dispensed 10+ prescription drugs within a one-year period
 - Winnipeg has higher rates of medically complex individuals based on mental health concerns than other parts of the province
 - 68% of home care clients have acute or chronic pain (based on data available in WRHA)
- **Social complexity:**
 - Approximately 13% of Manitobans have three or more social complexities. Poverty is a key contributor to social complexity: over half of socially complex Manitobans live in the poorest areas.
 - Income: Research has shown that the lowest income Manitobans are 1.9x (rural) to 2.9x (urban) more likely to die prematurely than highest income Manitobans. This is important as more than 1/5 Manitobans lived below national low income cut-offs in 2016.

Highlights of health behaviours by RHA

Highlights of health status	MB	NRHA	IERHA	PMHA	WRHA	SH-SS
Has Activity Limitations	35%	35%	36%	34%	36%	35%
Binge Drinking	46%	59%	49%	47%	48%	39%
High General Mental Health (SF-36)	40%	44%	39%	43%	38%	41%
Current Smoker	20%	33%	23%	20%	19%	19%
% Overweight or Obese	56%	65%	62%	59%	54%	59%

For Health Status Statistics only: Rates circled in yellow indicate an area's rate was statistically different from the Manitoba average

Chronic Disease Prevalence, 2012, ages 40+



Source: MHSAL – Discharge Abstract Database and Manitoba Community Health Assessment Network (2017) *Primary Health Care and Community Services*; Wait Times Reduction Task Force (WTRTF): Final Report (2017); WRHA (2017) *Clients in the WRHA Home Care Program*. Note: Data was specific from this report and comparable data for other regions were not identified at the time of this analysis; Statistics Canada Community Health Survey, Manitoba Community Health Assessment Network (2017), Emergency, Critical Care & Acute Medicine; Statistics Canada, Annual Estimates, Canadian Community Health Survey. URL: <https://www150.statcan.gc.ca/t1/tb1/en/tv.action?pid=1310009607>; CHAN, 2018

Current state and case for change

Data trends suggest opportunities for Primary Health Services to support avoidance of unnecessary hospital-based care

Health utilization patterns suggest an opportunity for primary health and community services to enable care closer to home and prevention of avoidable care

Reducing avoidable health utilization

- ~49-59% of ED patients presented with low acuity needs (CTAS level 4-5) which might have been addressed through enhanced access to regular primary health services or urgent care
- ~20% of Manitobans with a primary care provider are high users of health services, a medically complex patient, and/or a socially complex patient
 - Top 5% of “heavy users” accounted for 45% of all hospital days in the province and 90% of all ALC days
 - Having a mental health disorder was a significant factor for heavy use

Mitigating risks through prevention

- 41% of home care clients are at risk for falls (based on data available in WRHA)
- Reported increase in complexity and acuity of care needs (e.g., mental health, dementia care)

Addressing challenges in continuity of care

- Providers and patients report long wait times to access basic specialist consults to support consultations. Limitations in processes, pathways, and technology impact the ability for primary care providers to connect with specialists in a timely manner

Challenges with the supply and demand of primary health providers - particularly in Northern/remote regions, after hours, and on weekends.

- **Linkages with primary health teams:** Almost one in three community-dwelling Manitobans do not see a primary care provider regularly. Of those who see a primary care provider regularly, approximately 40% travel outside their MyHTs for care, emphasizing the importance of local responsiveness to meet the needs of rural and remote/Northern communities
- **Hot spots:** Communities in rural and northern areas persistently unable to sustain adequate access to regular primary health services (“hot spots”) from 2016-2018, driven by increases in Northern and Southern populations, often due to recruiting and/or to retaining Physicians and/or Nurse Practitioners (NPs)
- **Linkage with federal supports for Indigenous populations:** The Manitoba Wait Times Report noted inconsistent and unreliable care available at both federal and provincial nursing stations. Unfortunately, for these patients, the only other option for primary care may be attending the ED when they occasionally have the opportunity to travel to a community with a health care facility.
- **ED and primary care in rural areas:** Many ED sites are run by a local family physician responsible for covering the ED, inpatient ward, dialysis unit, cancer care and adjacent PCH, all while retaining primary care practices, often in the hospital (Wait Times, 2017). When the same physicians are responsible for both community primary care and the ED, primary care services are often displaced to provide urgent care in the ED – clinic appointments are cancelled or run late.
- **Availability:** Variable number of clinics offer early morning, evening, and weekend appointments. Inconsistencies in types of services available in primary health teams and variable use of advanced access principles
- **Limited options:** for prevention, self management, self referral, access to information/education, awareness

Source: Wait Times Reduction Task Force Final Report, 2017; Primary Care Capacity Planning Provincial Roll-up Report, Primary Health Care Branch, MHSAL (2018); Future of Home Care Services in Manitoba Report, Dec 2016, WRHA (2017)

Current state and case for change

Data trends suggest an opportunity to enhance the capacity and capabilities in Community Services, including Personal Care Homes, to provide restorative, supportive and rehabilitative care closer to home

Inconsistent accessibility to home care services and access to community-based rehabilitative and restorative care

- **Consultative approach to care:** RHA consultations have identified an inability to provide these services consistently across the region, noting financial and personnel resources as constraints and need for greater standards. Limited health human and financial resources, challenging needs, and increased need to support hospital discharges are noted to have contributed towards a “health/medical model” in home care.
- **Implications for patient flow:** 24% of ALC patients were waiting in acute care for home care, primarily older adults in poor health and living in lower income areas. In WRHA, over 2,200 days in rehab were spent waiting for home care and PCH services
- **Access to rehabilitation:** A recent scan of rehabilitation services identified consistent challenges across RHAs as it relates to demand exceeding capacity, underutilized scope of practice, imbalance of needs and staff training, underutilization of virtual models, and variability of provider roles and services in home care and in PCHs

PCH wait times, delays to access home care services, or appropriate supports in the community contribute to increased ALC days in acute care

- **Appropriateness for PCH:** 33% of newly admitted WRHA PCH residents were assessed as having potential to be supported through non PCH settings. Manitoba rated the highest across jurisdictions reviewed in this report. 10% of newly admitted PCH residents were assessed as clinically similar to supportive housing tenants based on a recent review
- **Wait times:** 49% of ALC patients were waiting for placement in PCH – they represented 86% of ALC days. In WRHA, 15% of clients spent an average of 20 days waiting for placement into PCH
 - Priority Home Transitional Home Care Service has demonstrated prevention or delay in PCH placement by promoting home as the primary discharge destination and providing up to 90 days of short term, intensive and restorative services
- **Capabilities:** While supportive housing, independent older adults’ housing, and PCHs are all housing options for older Manitobans, there is an expected need to broaden the capabilities of these settings to support increasingly complex populations (e.g., dementia, behavioural challenges).

Long Term Care Wait List Volumes, FY17/18

RHA	Total Eligible Persons Paneled for Placement			Cumulative Total Number of Persons on Wait list ending March 31 st		
	PCH	CC	SH	PCH	CC	SH
IERHA	394	24	47	154	14	69
NRHA	94	20	6	45	26	2
PMH	717	1	12	214	8	1
SHSS	376	0	75	302	0	41
WRHA	1334	60	336	136	14	95
Total	2915	105	476	851	62	208

Source: Manitoba Health Policy Centre. Who is in our hospitals and why? September 2013; Clients in the WRHA Home Care Program, Rehabilitation Services in Manitoba, Environmental Scan of Current Knowledge and Models of Care, 2017.

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	Highlight of Future State
Service Model - Highly Effective Teams	<ul style="list-style-type: none"> • Long wait times to access specialists • Long wait times for home care and PCH services • Variability of primary health team capabilities • Variability in integrating the full scope of the interprofessional team into primary health • Recruitment and retention challenges 	<ul style="list-style-type: none"> • Standard processes for and consistently available provincial pool of coordinated expertise (e.g., tech enabled consultation) in priority areas of need, including: geriatricians for complex older adults, NP/APN/Paramedic to carry out integrated care plan to enable chronic patients to manage home, mental health workers and coaches, midwives to support birth closer to home • Address high users and complex user needs and free capacity of Primary Health Physicians through greater reliance on allied health (e.g., addressing cardiovascular/ musculoskeletal concerns, diabetes and chronic conditions) and nursing practitioners (e.g., prescribing capabilities) • Focus Primary Care Physicians' capabilities in addressing medical management of older adults, mental health and addictions, maternal/child needs, more complex chronic diseases • Develop standardized patient pathways to support a more seamless care journey; implement patient navigators when the patient pathway requires it (for more complex or rare conditions) • All teams supported through provincial virtual consultation resources (e.g., telehealth, e-consult, RACE)
Service Standards and Pathways - Coordinated Delivery Systems	<ul style="list-style-type: none"> • Persistent hot spots for primary health access and limitations in nursing station services • Challenges with after hours support options beyond the ED • PCHs see lower acuity patients who could be managed in alternate settings of care (e.g., supportive housing, enhanced home care) • Variability in community-based access to restorative, rehabilitative, or supportive care due to lack of accessibility to allied health resources, resulting in focus on consultative, medical focus 	<ul style="list-style-type: none"> • Enhanced capabilities of Primary Health Services at the District and Intermediate levels of care to free up specialists and hospital-based services, while providing rapid access for local levels closer to home and consistent linkage with nursing stations • Greater consistency in the "basket" of Primary Health services and capabilities within each level of care to support equity of access • Consistently integrated virtual enabled models of care to support consultation, assessment, and care delivery for Primary Health and Community Services including: <ul style="list-style-type: none"> • Virtual home monitoring and support for self management for Primary Health Services • Virtual delegated care or other forms of virtual models for restorative, supportive, and rehabilitative Home Care (e.g., Palliative Care, Complex Paediatrics, targeted areas of restorative and rehabilitative care)

Provincial view of the future vision

Future Vision: Enhanced provider capacity and capability for prevention and to identify risks earlier, shift care from hospital to community settings, and provide care as close to home as possible, particularly for priority needs

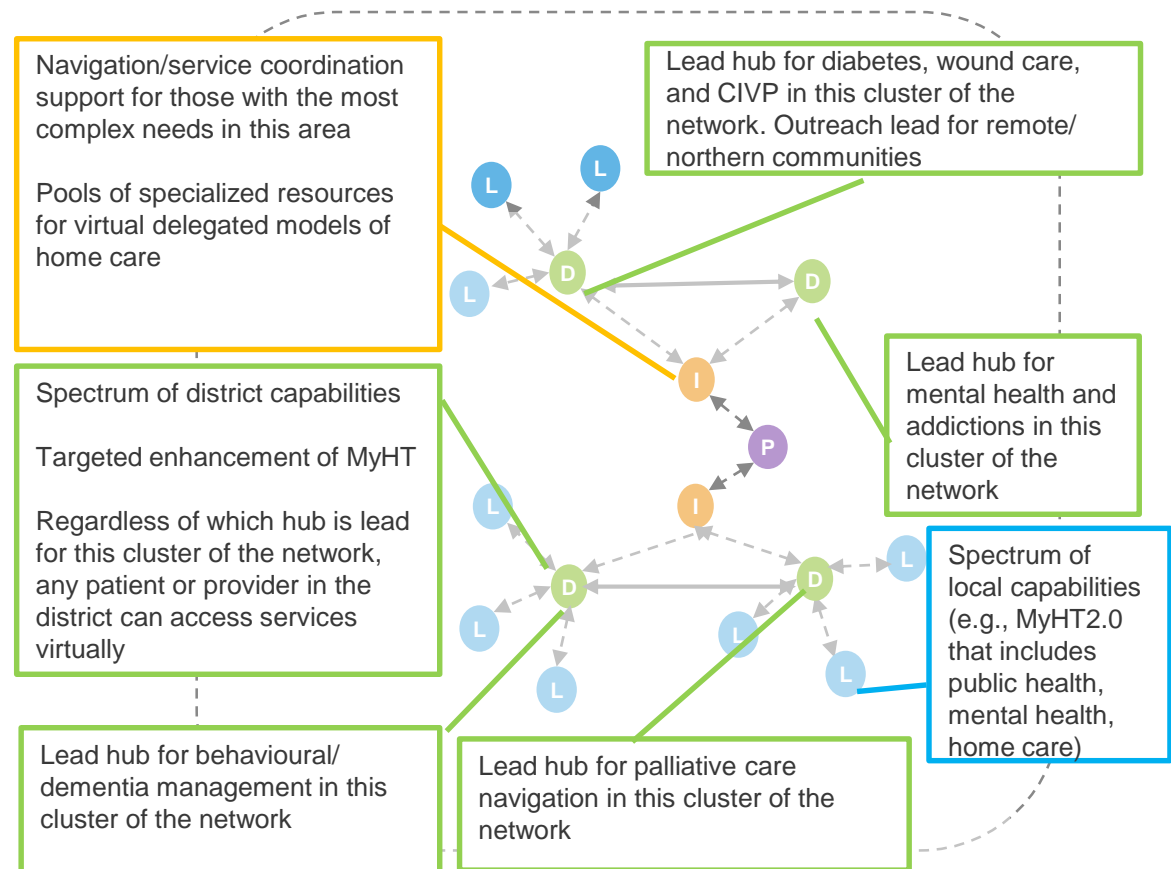
Coordinated planning of service models, standards, pathway changes, and provider roles will:

- 1) Create consistent capabilities to manage priority areas (older adults, mental health, chronic disease, social/medical complexity)
- 2) Streamline and standardize care that results in enhanced quality outcomes
- 3) Reduce avoidable ED and hospitalization
- 4) Support earlier discharge from acute care

Proposed changes:

- **Service standards** – Advance the consistency and clinical capabilities at intermediate levels of care
- **Service model + Provider roles – Access to primary health** – Increase the consistency and clinical capabilities at local and district levels of care – starting with hot spots
- **Service model + pathways – Virtual access** – Integrate virtual access within and across network hubs, including specialist care and outreach to rural, remote/Northern communities (e.g., Indigenous/Francophone communities)
- **Provider roles + pathways – PCH** – Standardized pathways to PCH placement and enhanced options in the community

Illustrative example of network hubs working together



Service standards and provider roles

	Service standards	Provider roles
	<i>There are no provincial referral hub related services anticipated for Primary Health and Community Services</i>	
Intermediate Referral Hub	<ul style="list-style-type: none"> Improve coordinated and virtual approaches for timely access to moderate acuity and/or highly specialized Primary Health and Community Services capabilities and resources Expected to support avoidance of ED visits/hospitalization and reduce ALOS/ALC by supporting transitions back to the community with more complex needs 	<ul style="list-style-type: none"> Primary Health Services: Navigation support for patients identified as having the most complex needs; advanced nursing skillsets (e.g., complex wounds), coordination with paramedics Community Services: Coordination of specialized or limited number of resources to manage delegation of virtual care models (e.g., Palliative Care Nursing, OT, PT, SLP, pediatric dentistry) PCH: PCH with dementia/behavioural support units. Alternate living for younger adults with cognitive/behavioural impairments (e.g., ABI)
District Health Hub	<p>Deliver a spectrum of district capabilities which may include:</p> <ul style="list-style-type: none"> Community based specialty services (e.g., community cancer care, palliative care team, transitional care, and screening for specialty needs) Expanded capabilities of targeted My Health Teams to provide a minimum “basket” of services in each district with opportunities to share resources <p>Expected to support avoidance of ED visits/hospitalization and reduce ALOS/ALC by supporting earlier discharge home and management of more complex needs</p>	<ul style="list-style-type: none"> Primary Health Services: Enhanced capabilities to address priority areas, reducing risk for ED/hospitalization, and promoting care at home – e.g., <ul style="list-style-type: none"> General rehabilitation Advanced nursing/wound care Basic geriatric/dementia care Basic mental health and addictions care Falls prevention Chronic pain Diabetes, foot care, education Community Services: Enhanced to manage more complex needs for earlier discharge home with virtual support to local home care teams (e.g., stroke, basic MSK) PCH: Develop additional supportive housing options to reduce wait time for PCH
Local	<p>Multiple modes of access for patients to access regular care (e.g., in-person, virtual, satellite clinics, itinerant care) to extend and support equitable access to local hubs (e.g., MyHTs) across the province</p> <p>Deliver a spectrum of local capabilities which are responsive to local population needs and meet minimum service standards—e.g.,:</p> <ul style="list-style-type: none"> 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 Local primary care providers (e.g., GP, NP) as 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 Support for early risk identification, avoidance of ED visits/hospitalization, prevention of deterioration 	<ul style="list-style-type: none"> Integration with existing My Health Teams, Home Clinics, Home Care, and other Primary Health and Community Services within a network to support regular access to a community team that offers basic medical and prevention services in all localities delivered in collaboration with an interprofessional team. Linkage with other health providers (e.g., public health, dentists/oral health promotion) and outreach to rural/remote/Northern regions with limited access to care, including nursing stations, to coordinate and enhance community based care, screening/prevention, chronic disease management, population health, and aging in place Primary Health: Enhanced capability and capacity of physicians, nurses, public health, other local primary health providers to manage shifts towards increased local services in mental health and addictions, aging in place, support for the frail elderly, basic maternal and child health, chronic disease management, rehabilitation and restorative care Community Services: Local coordination of home care services with restorative, rehabilitative, supportive focus beyond medical/consultative using virtual or in person models using standardized models. PCH: Basic personal care homes to continue to supporting patients who can no longer manage at home

Evolving My Health Teams

My Health Teams are envisioned as a collaborative model to enable access to a community-based team of health providers closer to home

The My Health Team (MyHT) model is a Manitoba-specific model intended to bring multiple providers together to provide care closer to home. The strength of the MyHT is to be responsive to local needs and address population differences. MyHTs operate in both in-person and online modes of delivery across clinics and communities.

The MyHT model has been successful in enrolling 24% of insured residents to clinics that are part of MyHTs and attaching over 24,000 patients, exceeding initial goals. 13 MyHTs were in place or planned across Manitoba by 2018 with consistent service standards but can vary broadly in their location and make-up of providers and clinical capabilities accessible, as outlined in the table below, with an increasing focus on building clinical competencies through a range of inter-professionals.

Overview of current MyHTs (current as of November 2018)

RHA	MyHT	Clinics	Related Community Organizations	Services Offered
Prairie Mountain Health	Brandon Area	<ul style="list-style-type: none"> Western Medical Clinic - FFS 7th Street Access Centre Meredith Clinic - FFS 	<ul style="list-style-type: none"> Western Manitoba Cancer Centre 	<ul style="list-style-type: none"> Cancer Shared Follow up Care Mental Health Chronic Disease Management Complex Patient Support Complex Needs Medication Management
	Swan Valley Area	<ul style="list-style-type: none"> Swan Valley Primary Care Centre 	<ul style="list-style-type: none"> Sapotaweyak Cree Nation 	<ul style="list-style-type: none"> Complex Needs Support for Medications Outreach to Vulnerable Populations Mental Health Support Chronic Disease Support
Interlake Eastern Regional Health Authority	Selkirk South	<ul style="list-style-type: none"> Selkirk Medical Associates - FFS Selkirk Quick Care Clinic 	<ul style="list-style-type: none"> Addictions Foundation of Manitoba Canadian Mental Health Association 	<ul style="list-style-type: none"> Currently in planning
	Lake Manitoba East	<ul style="list-style-type: none"> Ashern Health Centre FFS Pinaymootang Health Centre FFS Lake Manitoba Health Centre Little Sask. Health Centre Eriksdale Health Centre Lundar Health Centre St. Laurent Community Health Centre Woodlands Community Health Centre Mobile Clinic Percy E. Moore Clinic (Ongomiizwin Health Services, UofM) 	<ul style="list-style-type: none"> Little Sask FN Health Centre Lake Manitoba FN Pinaymootang FN OHS 	<ul style="list-style-type: none"> Currently in planning

Source: Chateau, D., Katz, A., Metge, C., Taylor, C., McDougall, C., & McCulloch, S. (2017). Describing Patient Populations for the My Health Team Initiative. Manitoba Centre for Health Policy, Winnipeg, MB; Community Health Assessment Network for Wave One Launch. (2018). Primary Health & Community Services Provincial Clinical Team. Manitoba. Shared Health, 2019

Evolving My Health Teams (cont.)

Overview of current MyHTs (current as of November 2018)

RHA	MyHT	Clinics	Related Community Organizations	Services Offered
Winnipeg Regional Health Authority	River Heights/Fort Garry	<ul style="list-style-type: none"> Elemental Medical - FFS Corydon Medical - FFS Riverwood - FFS Bison Medical (Bison) - FFS Access Fort Garry/Corydon PC Corydon Village Medical – FFS Tuxedo Medical Centre – FFS Sheldon Permack Med Corp – FFS Bison Medical (Pembina) – FFS Prairie Trails at Taylor - FFS 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Clinical Pharmacy Occupational Therapy Tobacco Cessation Social Work
	St. James/ Assiniboine South	<ul style="list-style-type: none"> Assiniboine Medical Clinic - FFS Westwood Clinic - FFS Access Winnipeg West Crestview Clinic- FFS River West Medical Centre - FFS 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Clinical Pharmacy Occupational Therapy Social Work
	Seven Oaks/Inkster	<ul style="list-style-type: none"> Prairie Trails at the Oaks - FFS Leila Medical Clinic - FFS Kildonan Medical Clinic - FFS Dr. Rakesh Gera - FFS Access Nor-West (Nor-West Community Co-Op & Bluebird CHA) LifeSmart Medical Clinic – FFS 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Clinical Pharmacy Occupational Therapy Physical Therapy
	St. Boniface/ St. Vital	<ul style="list-style-type: none"> Centre de Sante Saint-Boniface (Access St. Boniface) Laxmi Medical - FFS St Boniface Clinic - FFS Family Medical Centre Health Plus Medical Centre -FFS Seine River Medical Clinic - FFS Family Matters – FFS River Park Medical - FFS 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Pharmacological Management Occupational Therapy

Source: Shared Health, 2019

Evolving My Health Teams (cont.)

Overview of current MyHTs (current as of November 2018)

RHA	MyHT	Clinics	Community Orgs	Services
Winnipeg Regional Health Authority	Downtown/ Point Douglas	<ul style="list-style-type: none"> Eaton Place – FFS Dr. Peter Kuegle Med Centre - FFS Aikins Street Com Health Centre Access Downtown Mount Carmel Clinic Hope Centre Health Care Aboriginal Hlth and Wellness Centre Klinik Community Health Northern Connections Med Centre McGregor Medical FFS Nine Circles Community Hlth Centre BridgeCare Clinic 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Social Work
	River East/ Transcona	<ul style="list-style-type: none"> Concordia Health Associates - FFS Prana - FFS Pritchard Farms – FFS Primacy Regent Med Clinic – FFS Gateway Primacy Med Clinic – FFS Access River East Access Transcona 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Chronic Disease Management Co-occurring Disorders Mental Health Social Work
Southern Regional Health Authority	Morden/ Winkler Area	<ul style="list-style-type: none"> Agassiz Medical Centre - FFF CW Wiebe Medical Centre - FFF 	<ul style="list-style-type: none"> South Central Immigration Services 	<ul style="list-style-type: none"> Chronic Disease Management Mental Health Social Work
	Portage/Gladstone Area	<ul style="list-style-type: none"> Portage Clinic - FFF Gladstone Clinic (Seven Regions Health Centre) 	<ul style="list-style-type: none"> Long Plain Health Centre 	<ul style="list-style-type: none"> Chronic Disease Mental Health Prenatal Pharmacy
	Francophone	<ul style="list-style-type: none"> Centre Medical Seine - FFF Centre de bien-être St. Claude & Haywood Wellness Centre Clinique Notre-Dame Clinic 	<ul style="list-style-type: none"> Sante en français 	<ul style="list-style-type: none"> Social Work for complex psycho-social population Community Health
	Steinbach Area	<ul style="list-style-type: none"> Steinbach Family Med Centre - FFF 	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Mental Health Chronic Disease Management Pharmacy
Northern Regional Health Authority	NA			

Source: Shared Health, 2019

Evolving My Health Teams (cont.)

The future model will build on the successes of the MyHT model and enhance its spread and consistency through “My Health Team 2.0” as Integrated Local Community Health Hubs

My Health Team 2.0 will provide enhanced access to a more consistent range of clinical capabilities as a type of local hub in Manitoba’s network model. My Health Team 2.0 is critical to supporting planned shifts in the future health system closer to home, via both in-person and virtual means. The vision for MyHT 2.0 retains the original intent and philosophy of team-based care and local responsiveness. In addition, MyHT 2.0 is expected to:

- Work in population focused approach to deliver care in collaboration with an interprofessional team, including home care, public health and other outreach services, virtually or in-person
- Foster greater collaboration with non-health funded or Indigenous communities
- Provide a broader and more consistent basic level of interprofessional care, including, for example: nursing, allied health, public health, mental health and addiction professionals, community paramedicine and pharmacists.
- Develop stronger alliances and collaboration with public health, midwifery, Indigenous communities and nursing stations, non-health funded community resources
- Deliver a broader range of clinical capabilities to support care closer to home, including care delivered through a range of in-person and virtually based providers addressing community-based:
 - Mental Health and Addictions
 - Rehabilitation and restorative care
 - Prevention and health promotion
 - Chronic disease management
 - Healthy aging in place through primary prevention, including support for the frail elderly living in the community (including PCH)
 - Basic maternal child health and outreach (pre-natal, birthing, post-natal, immunizations)
- Embed digital models of care to allow for increased reach both across different hubs, MyHTs and into more rural and remote/Northern communities
- Proactive outreach to Indigenous communities
- Local quality improvement across public and private practices with measurement of change and defined ownership around data and measurement

Considerations for success

There are multiple elements of a MyHT2.0 that are anticipated to be important for success in the future model, including, for example:

- **Multiple modes of access** (e.g., in-person, virtual, satellite clinics, itinerant care) to extend and support equitable access to MyHTs across the province
- **A “No wrong door” philosophy** – There is recognition that while multiple modes of access will be available to support access to care, each mode of access should support navigation and redirection if required to support
- **Capability and capacity building** – The nature of shifts in MyHT2.0 requires capability and capacity enhancements to leverage and where appropriate re-invest available resources in an integrated, coordinated manner to enable skill-development and enhanced connection
- **Recognition of local nuances to support continued engagement** – While there is identified need for greater provincial planning tables and governance in the CPSP, there is also recognition that there will always need to be engagement at local levels, particularly around MyHT 2.0 planning, governance, and remuneration considerations.

Through an enhanced set of capabilities, MyHT 2.0 is expected to play a key role in promotion of early prevention and mitigation of health needs (e.g., avoid unnecessary visits/admissions for older adults) and delivery of lower to moderate acuity/complexity care closer to home.

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, laboratory, patient transport, Emergency Services, infrastructure, and equipment. The table below highlights key elements for the Primary Health and Community Services PCT as they are unique to this Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model

Digital Health	<ul style="list-style-type: none"> • Access to telehealth and virtual care consults, assessments, treatments, and remote monitoring will be used to provide streamlined linkages between primary health teams, allied health, and specialists, reduce unnecessary travel, and promote appropriate, earlier discharge home • Centralized referral and intake supports for navigation to streamline access to specialized services
Diagnostic Services	<ul style="list-style-type: none"> • Point of care testing to enhance local capabilities. Standardization and streamlining of basic diagnostic testing capabilities that would be available at local, district, and intermediate levels, with consideration for key metrics and quality standards (e.g., efficiency, turnaround times)
EMS/Patient Transport	<ul style="list-style-type: none"> • Linkages with paramedics to support community based care, outreach, and enhanced services particularly in rural and remote communities
Infrastructure and Equipment	<ul style="list-style-type: none"> • Consideration for use of shared spaces, particularly as health provider roles gradually shift to align with population needs
Prevention	<ul style="list-style-type: none"> • Linkages with municipal and social services partners and public health providers to support consistent prevention and self-management particularly in key areas of diabetes and chronic disease management • Linkage with national initiatives such as Exercise is Medicine, etc. • Collaboration with FNHIB and linkages with nursing stations to support equitable access

Key Performance Indicators

1. Improved quality and outcomes of primary and community based care
2. Increased consistency in regular access to enhanced local hubs and core local hub services
3. Reduced ALC days; enhanced use of home care and continuity with PCH
4. Expanded capacity for home care – both medical/consultative as well as rehabilitative/restorative (e.g., in-person or virtual home-based care)

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

EMERGENCY, CRITICAL CARE AND ACUTE
MEDICINE 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

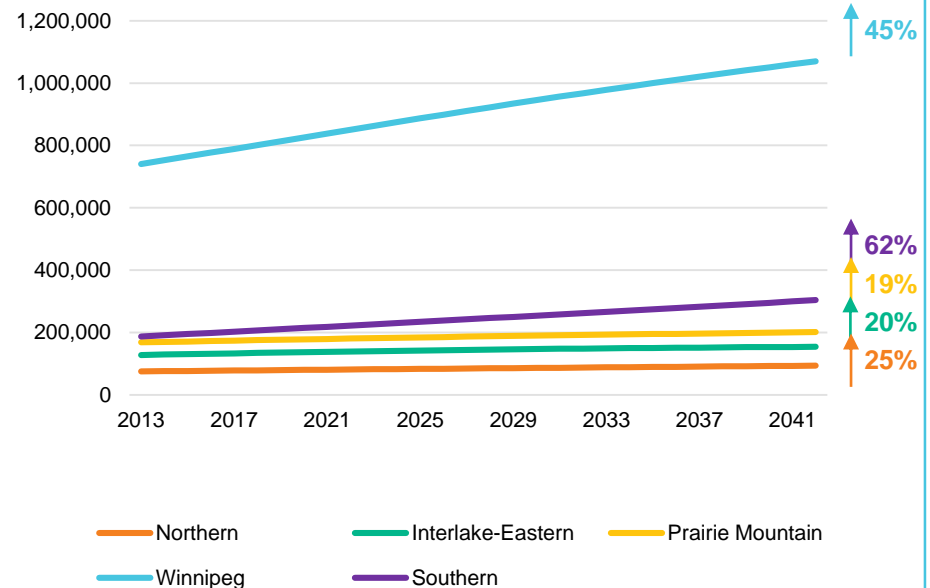
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

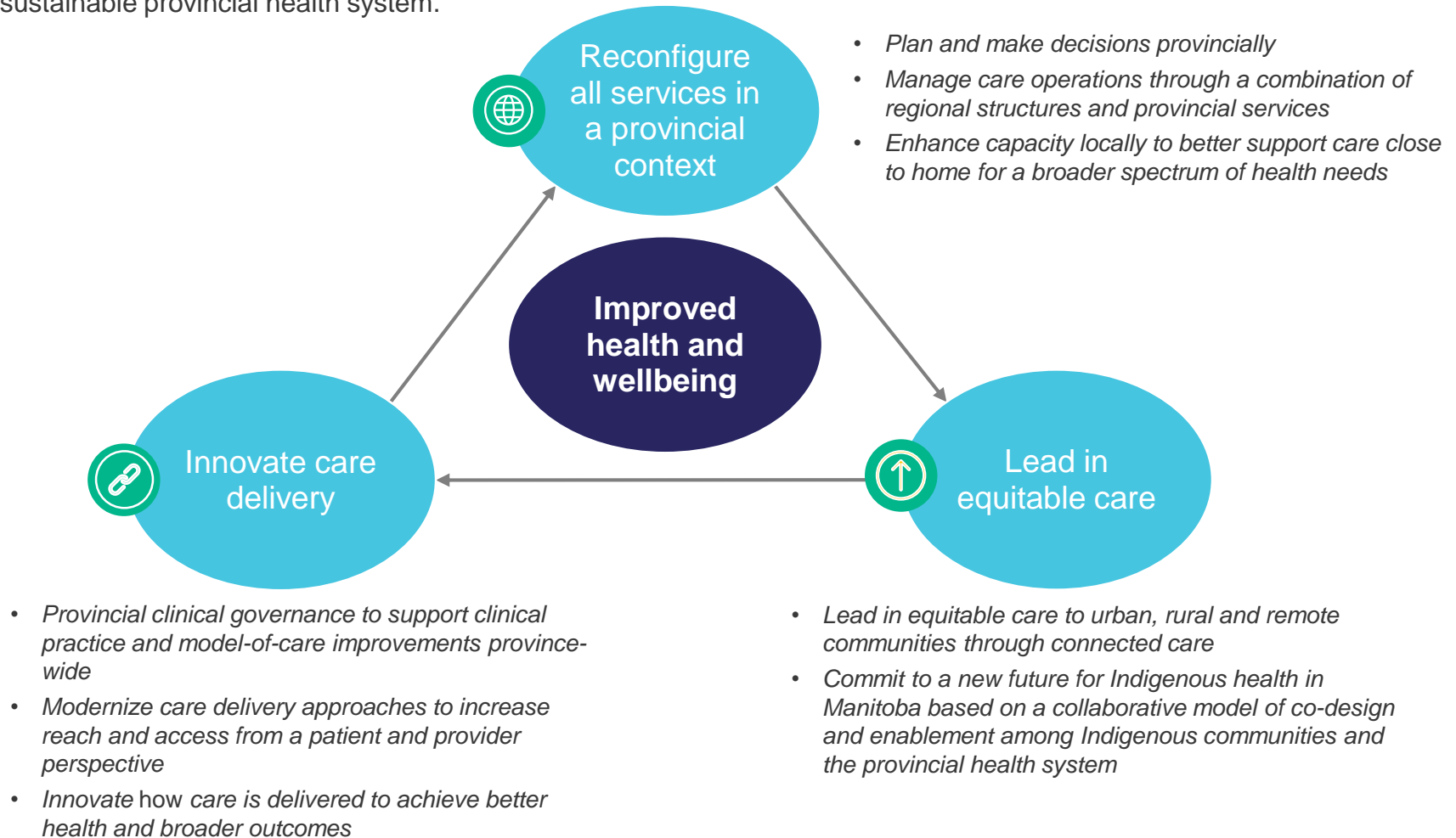
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

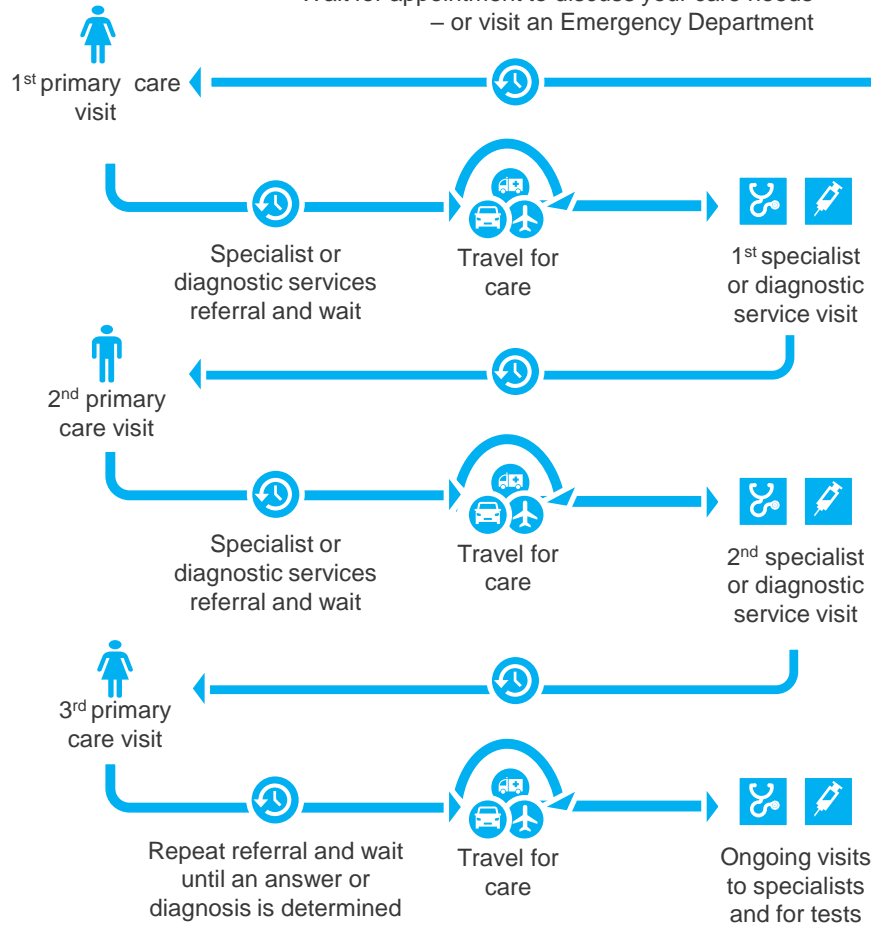
IN THE FUTURE

- 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?

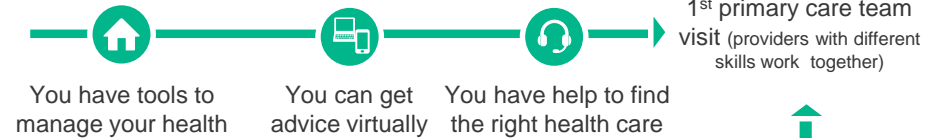
TODAY

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



IN THE FUTURE

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

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

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

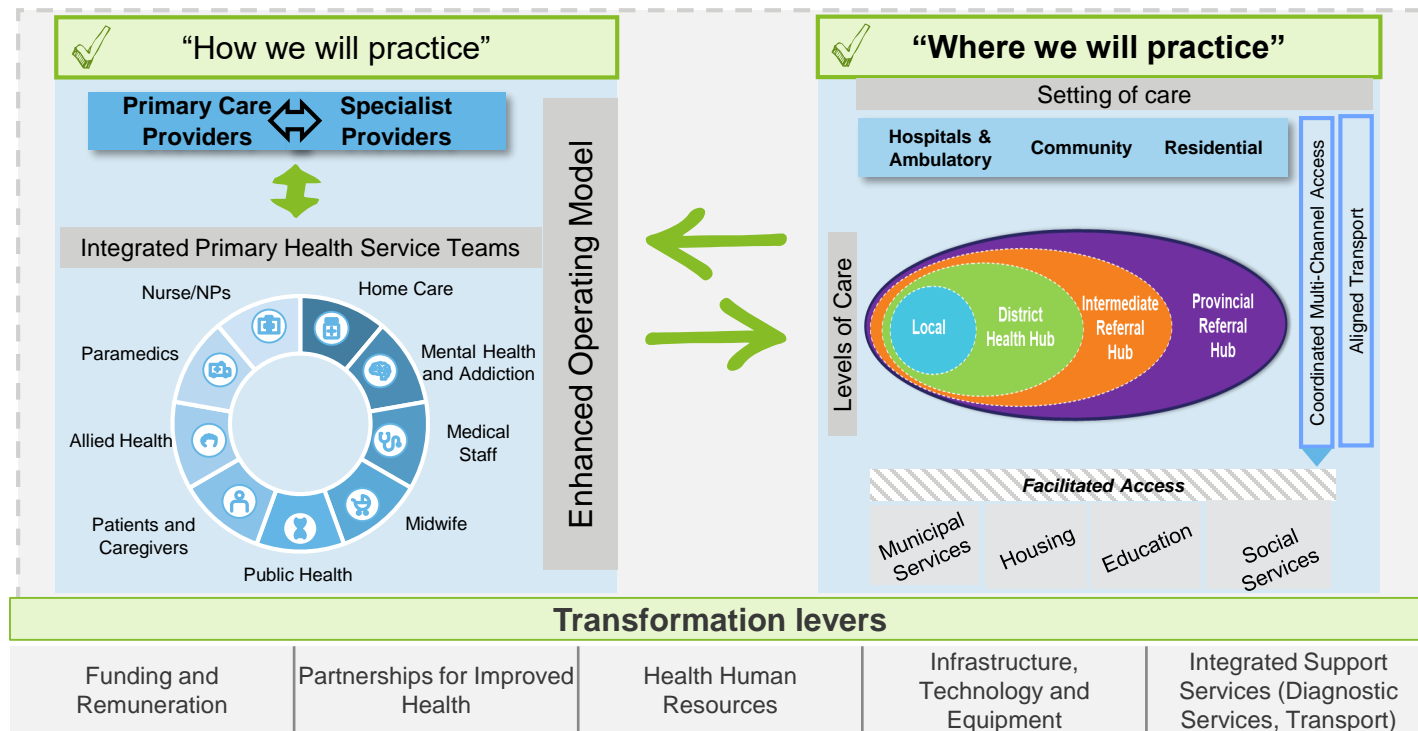


An integrated network for accessing and delivering services is core to the new provincial model

Interdisciplinary Teams Practicing in a New Model



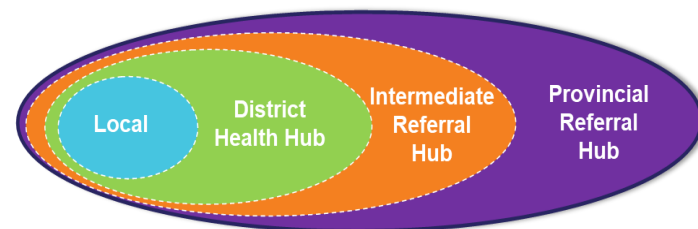
A System That Support Patients and Providers



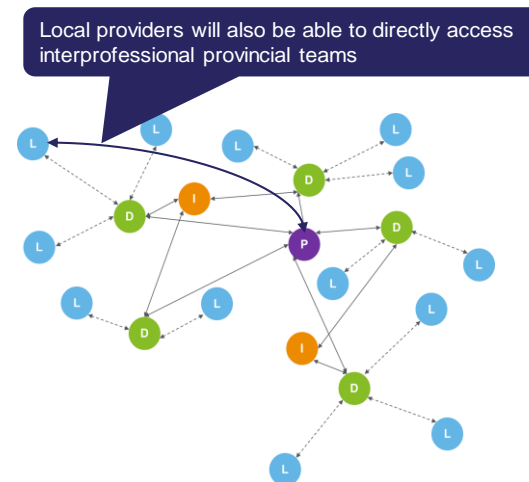
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



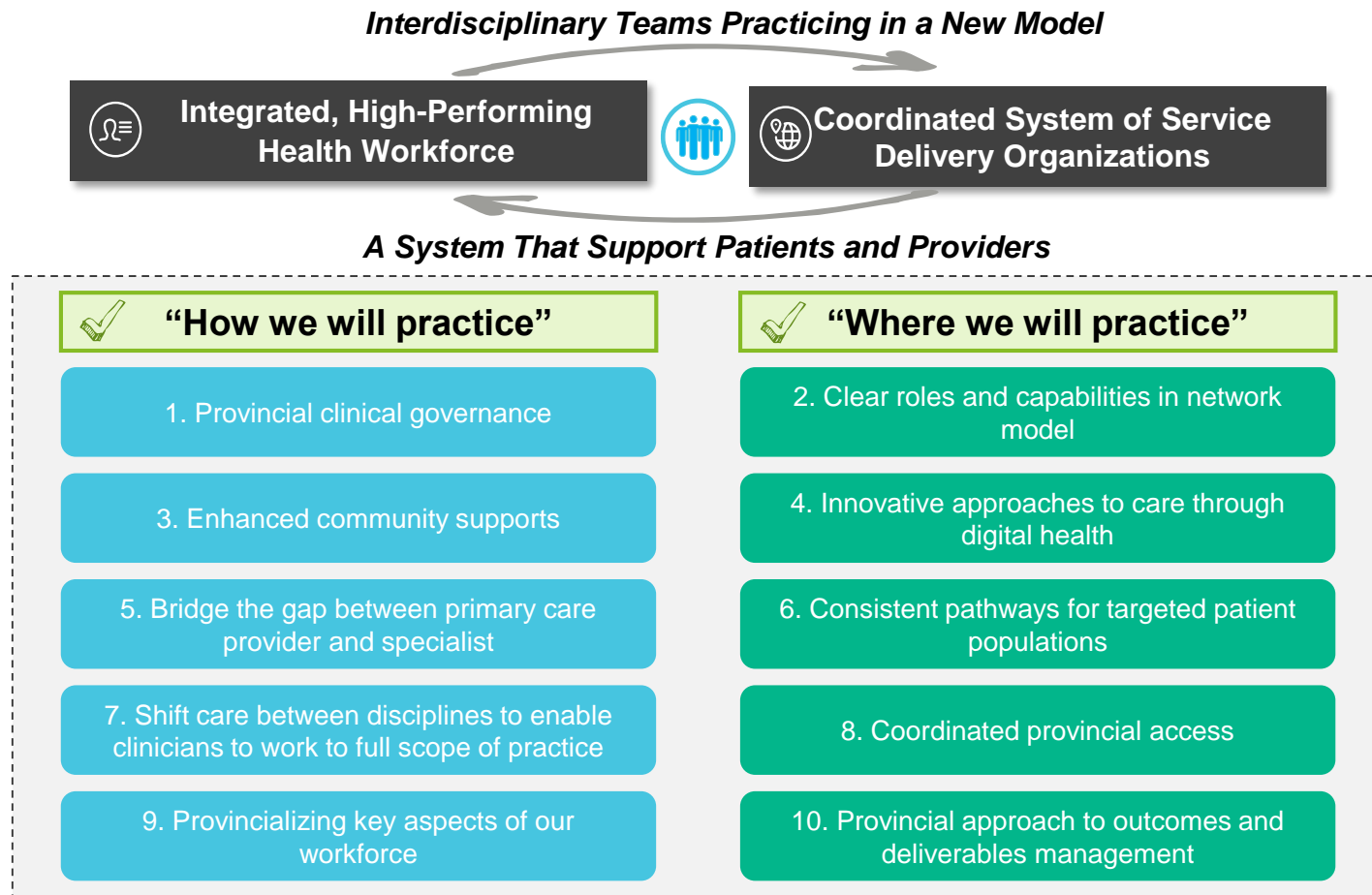
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core: Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate: 24/7 Emergency Department</p> <p>Provincial: 24/7 Emergency Department</p>		
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced: Special Care Unit</p>	<p>Intermediate: Intensive Care Unit (ICU)</p>	<p>Provincial: ICU with specialized capabilities</p>
	 <p>Core: Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate: Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial: Elective and emergency surgery with FRCPC</p>
 <p>Core Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	 <p>Specialist Services may include: District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate: Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial: Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as: Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Emergency, Critical Care and Acute Medicine

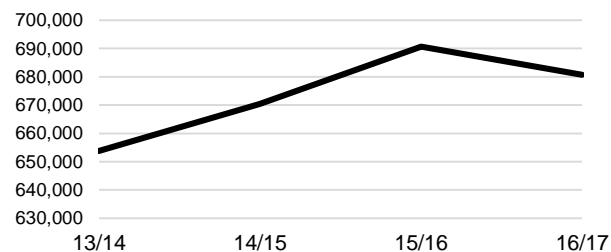
Current state and case for change

The number of annual Emergency Department (ED) visits at hospitals across the province ranges greatly from <100 to >25,000 and a high proportion of patients presenting in EDs are lower acuity patients (CTAS level 4-5)

Wide range of volume and acuity of ED visits provincially

- Between FY13/14 to FY16/17, ED visits have increased provincially, with a period of stabilized visits from FY15/16 to FY16/17
- Across regions, there was some variability in ED visits from FY14/15 to FY17/18. NRHA saw the highest increase in visits while PMH, SHSS and IERHA experienced a decrease.

Manitoba ED Visits, FY 14/15 – FY 17/18



Source: MHSAL – MIS & EDIS

Wide range of volume and acuity among ED visits across hospitals

- All hospitals in Winnipeg had over 30,000 ED visits in 2016/17 (EDIS)
- Outside of WRHA, 10 facilities had 10,000-27,000 visits, 34 facilities had 1,000-9,999 visits, and 16 facilities had less than 1,000 visits (EDIS and MIS)
- 31 facilities had less than 200 CTAS one and two visits in 2016/17 (EDIS and MIS)

Level 4 and 5 ED visits FY 17/18	MB	NRHA	IERHA	PMH	WRHA	SHSS
EDIS hospitals	49%	-	55%	52%	48%	-
MIS hospitals	59%	62%	54%	73%	-	49%

Source: MHSAL – MIS & EDIS*

Challenge with sustainability of ED operations and consistent clinician availability, particularly in rural and northern communities

- Manitoba had over 500 days of service suspended due to physician unavailability at 16 EDs from July 1-September 30, 2018
- All were at rural facilities.
- Physician availability was the reason for 97% of service suspensions in the province (MHSAL)

	MB	NRHA	IERHA	PMH	WRHA	SHSS
Unplanned ED suspensions (days)	515.97	92	252.63	161.48	-	9.86

Source: MHSAL – MIS and EDIS*

Current state and case for change

A high volume of acute medicine and critical care patients are transferred to HSC and SBH due to limited availability of after-hours internal medicine consultation and centralization of ICU care in WRHA

High volume of non-WRHA patients transferred to WRHA hospitals annually for acute and critical care needs

- In 2016 and 2017, there were ~600 patients transferred annually from non-WRHA to WRHA sites for critical care and internal medicine admissions
- 40% of acute medicine inpatients from Northern, 27% of acute medicine inpatients from Interlake-Eastern and 13% of acute medicine inpatients from Southern received their care in Winnipeg (DAD, 2017/18)
- This was higher for outpatient procedures for which 49% of Northern patients, 55% of Interlake-Eastern Patients and 37% of Southern patients received care in Winnipeg (DAD, 2017/18)

Critical Care and Acute Medicine Admissions Transfers From Non-WRHA to WRHA Hospitals, 2016

	All transferred patients (no duplicates)	Critical Care	Acute Medicine
MB	625	455	456
NRHA	155	100	121
IERHA	216	161	152
PMH	105	74	76
SHSS	149	120	107

Source: WRHA CCMDDB Database

The total number of acute medicine inpatients in the province has been stable though LOS varies by region

- While the total number of inpatients has been stable over the past six years, the distribution across the province has changed with more inpatient visits happening in Winnipeg.
- Winnipeg had the shortest total length of stay and the smallest proportion of stay as ALC but did have the longest Acute LOS.
- Southern region had the longest total and ALC lengths of stay
- Factors impacting these differences could include the complexity of patients, the availability of community resources to support discharged patients, delays in repatriation, variation in rounding practices, or capacity to transfer patients to a lower level of care

Acute Medicine Discharges by RHA, FY 17/18

	# Discharges	Average Total LOS	Average Acute LOS	% of stay that was ALC
Manitoba	26,979	11.7	8.1	31%
Northern	1,316	11.7	6.5	44%
Interlake-Eastern	2,326	14.0	8.1	42%
Prairie Mountain	5,598	12.0	6.9	42%
Winnipeg	14,356	10.2	8.8	14%
Southern	3,383	16.2	8.0	51%

Source: MHSAL – Discharge Abstract Database

Current state and case for change

80% of critical care services are delivered at HSC and SBH through a range of ICU, CCU, and Step-Down units

Critical Care services are primarily delivered in Winnipeg and Brandon

- Winnipeg has a range of critical care services including Intensive Care Units (ICUs), Cardiac Intensive Care Units (CCUs), and Step-Down Units
- Data shown represents critical care prior to the current consolidation of WRHA critical care services which will impact ICU bed sites
- Pre-consolidation, Health Sciences Centre, and SBH together managed 80% of critical care in the province
- Brandon Regional Health Centre, which has the only full-scope ICU outside of Winnipeg has the longest average length of stay. Lack of after-hours access to internal medicine support on wards is likely a contributing factor.
- Differences in length of stay may reflect differences in patients acuity, capacity to transfer them out of the ICU, and variation in rounding practices

Critical Care Discharges by Facility, FY 17/18

	# discharges				Average days/ discharge
	ICU	CCU	Step-Down	TOTAL	
Manitoba	5945	1804	2574	10,323	6.3
Concordia Hospital	347			347	4.6
Grace Hospital	512			512	4.3
Health Sciences Centre	2,568	202	1,931	4,701	7.5
Seven Oaks General Hospital	391			391	4.6
St. Boniface General Hospital	1,301	1,602	643	3,546	5.3
Victoria General Hospital	160			160	4.9
Brandon Regional Health Centre	666			666	7.6

Note: excludes newborns and pediatric patients

Source: MHSAL – Discharge Abstract Database

Moving from today to the future

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

	Highlights of Current State	Highlights of Future State
Service Model – Highly Effective Teams	<ul style="list-style-type: none"> • Variability in navigating access to the right specialists at the right time • Challenge accessing internal medicine specialists after hours in targeted areas • Clinicians do not consistently work to full scope of practice • Recruitment and retention challenges across the province including in WRHA as well as rural and northern regions 	<ul style="list-style-type: none"> • Centralized access to specialists consults for timely advice and care closer to home • WRHA specialist providers (physicians and allied health) provide virtual and remote support to Intermediate and District Health Hubs • Creation of a Internal Medicine Teaching Unit in Brandon ensures 24/7 internal medicine service for western Manitoba Standardized pathways aligns services and patient transfers
Service Standards and Pathways – coordinated Delivery Systems	<ul style="list-style-type: none"> • Inconsistent hours of operation in a proportion of EDs due to lack of availability of physicians and nurses, resulting in unplanned closures • In targeted hubs, variable, low acuity visits comprise highest volumes, which could be managed in primary care settings • High LOS for patients waiting for community-based care 	<ul style="list-style-type: none"> • Enhanced capabilities of Brandon Regional Health Centre to support critical care and acute medicine care closer to home and communities • Rapid access to internal medicine clinics and virtual home monitoring reduce readmissions • Clear levels of care for emergency services ensure clarity for patients on where to go for urgent and less-urgent needs • Enhanced primary care models reduce low acuity patients presenting in Emergency Departments • Coordination of consults, referrals, and transfers to ensure expedited admissions and ensure continuity of care

Provincial view of the future vision

Future Vision: Key service model and pathway changes will:

- Create capacity for moderate acute and complex medical-surgical patients in a hub-and-spoke network
- Streamline and standardize care that results in enhanced quality outcomes
- Reduce patient transports and costs

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

- **Build on the strong foundation at Brandon Regional Health Centre to increase clinical capabilities** to consistently care for critical care and acute medicine patients in Western Manitoba
- With model of care and enablers established in PMH, **build capacity in the Northern Health Region (NRHA)** to increase capacity.
- The networks comprise a **provincial system of critical care** across three networks and supports **increased capacity** to manage **medicine** patients
 - Continue to work through clinical governance to support other clinical areas to inform the standards and pathways for special care and close observation units
- Ensure victims of sexual assault have **equitable province-wide access to appropriate sexual assault services** such as the SANE program currently delivered in Winnipeg
- **Transform emergency service delivery** to address the high and low acuity needs of patient
 - Reinforce capabilities of emergency departments (EDs) that can provide optimal emergency care based upon volume, acuity, and human resources
 - For EDs that cannot sustain volume-dependent ED care, review the profile of the “network” of sites and providers in a geographic cluster to provide best possible mix of acute and primary patient care:
 - Convert EDs to provide services during finite hours (e.g., Urgent Care Centre operating 08:00-20:00hrs)
 - Enhance capabilities of primary care practices to provide different services – diagnostics, low-risk procedures, short-term monitoring (e.g., elements of Collaborative Emergency Centres)
 - Close EDs not required for the geographic network

Service Standards and Provider Roles

	Emergency Services	Critical Care & Acute Medicine
Provincial Referral Hub	<ul style="list-style-type: none"> Provincial clinical network provides centralized consultative services to EDs across the province and coordinates transports Provincial clinical governance creates standardized pathways and practices across service levels and clear criteria for direct admission of patient transfers that avoid the ED <ul style="list-style-type: none"> Expand access and coordination to specialized emergency services, including a provincial SANE program 	<ul style="list-style-type: none"> Maintain HSC as a provincial referral hub with Internists, Intensivists and other team members providing virtual remote support to Intermediate hubs for acute medicine and critical care consults (e.g., tele-ICU)
Intermediate Referral Hub	<ul style="list-style-type: none"> Intermediate hub at Brandon to manage higher acuity patients and minimize transfers to WRHA as appropriate 	<ul style="list-style-type: none"> Evolve Brandon Regional Health Centre internist model to a 24/7 admitting service and establish an Internal Medicine Clinical Teaching Unit Rapid access internal medicine clinics and virtual home monitor support reduced readmissions and unnecessary ED visits and supports early hospital discharge
District Health Hub	<ul style="list-style-type: none"> Focus emergency medicine service on hubs providing 24/7 access and meet national comparators for volume and acuity Hubs with moderate acuity and visit volumes to provide urgent care services using a standardized model Convert low volume and low acuity hubs to transitional care with enhanced primary care services 	<ul style="list-style-type: none"> Standardized pathways and processes to consult Intermediate and District sites and access to specialist advice, via different forums including common eConsult and eReferral platform Access to MyHT 2.0 services
Local	<ul style="list-style-type: none"> Enhance capabilities of primary care practices in areas where emergency services will close 	<ul style="list-style-type: none"> Standardized pathways and processes to consult Intermediate and District sites and access to specialist advice, via different forums including common eConsult and eReferral platform

Opportunities for innovative service delivery

Innovative service delivery and improved access to care can be achieved through digital technology, including associated ICT and IM&A requirements, as well as integrated support services including diagnostics, patient transport, Emergency Services, infrastructure and equipment. The table below highlights key elements for the Emergency, Critical Care and Acute Medicine 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	<ul style="list-style-type: none"> Implementation of digital health tools, such as telehealth, eReferral, that are accessible across the province will be important to enable a provincial emergency and specialist consultation service Provincial and Intermediate hubs will have tele-ICU capabilities to support real-time assessments and rounding to support patient care and minimize transfers to WRHA Standardized provincial data (e.g., provincial critical care database, electronic CTAS functionality) will provide information on real-time capacity and inform decision-making
Diagnostic Services	<ul style="list-style-type: none"> Diagnostic services standards and diagnostic requirements for hospitals with 24/7 EDs and critical care services. Investments may be needed in Brandon to support them in moving toward ICU care and at District hubs to support enhanced primary care.
EMS/Patient Transport	<ul style="list-style-type: none"> EMS & Patient Transport patterns will align with shifts in facility roles as a result of the network model. For example, with enhanced capabilities at Brandon, more patients will be transferred to these hubs rather than WRHA Increase the capacity of Advanced Practice Paramedics to support the networks by increasing their scope and including the ability to triage to appropriate hubs (including MyHT2.0) based on standardized pathways
Infrastructure and Equipment	<ul style="list-style-type: none"> Shifts in clinical activity will inform the needed infrastructure and equipment requirements for Intermediate, District and Local hubs.
Prevention	<ul style="list-style-type: none"> District and local hubs will play a pivotal role in health prevention activities across all health conditions. Specific prevention activities are identified in other PCT chapters and will include targeted strategies for high risk populations as applicable. Public education and awareness of changes to the clinical model and where to go for different healthcare needs will be critical to successful implementation

Key Performance Indicators

1. All EDs provide 24/7 service with no unanticipated service suspensions
2. Reduced transfers of internal medicine and ICU patients from PMH, SHSS, and PMH to WRHA

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

**WOMEN'S HEALTH AND CHILD HEALTH
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

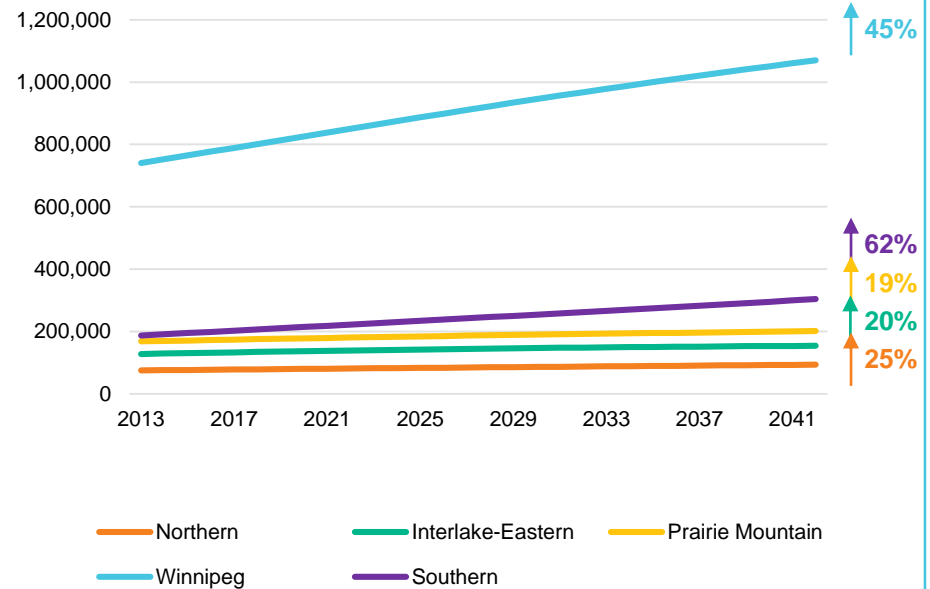
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

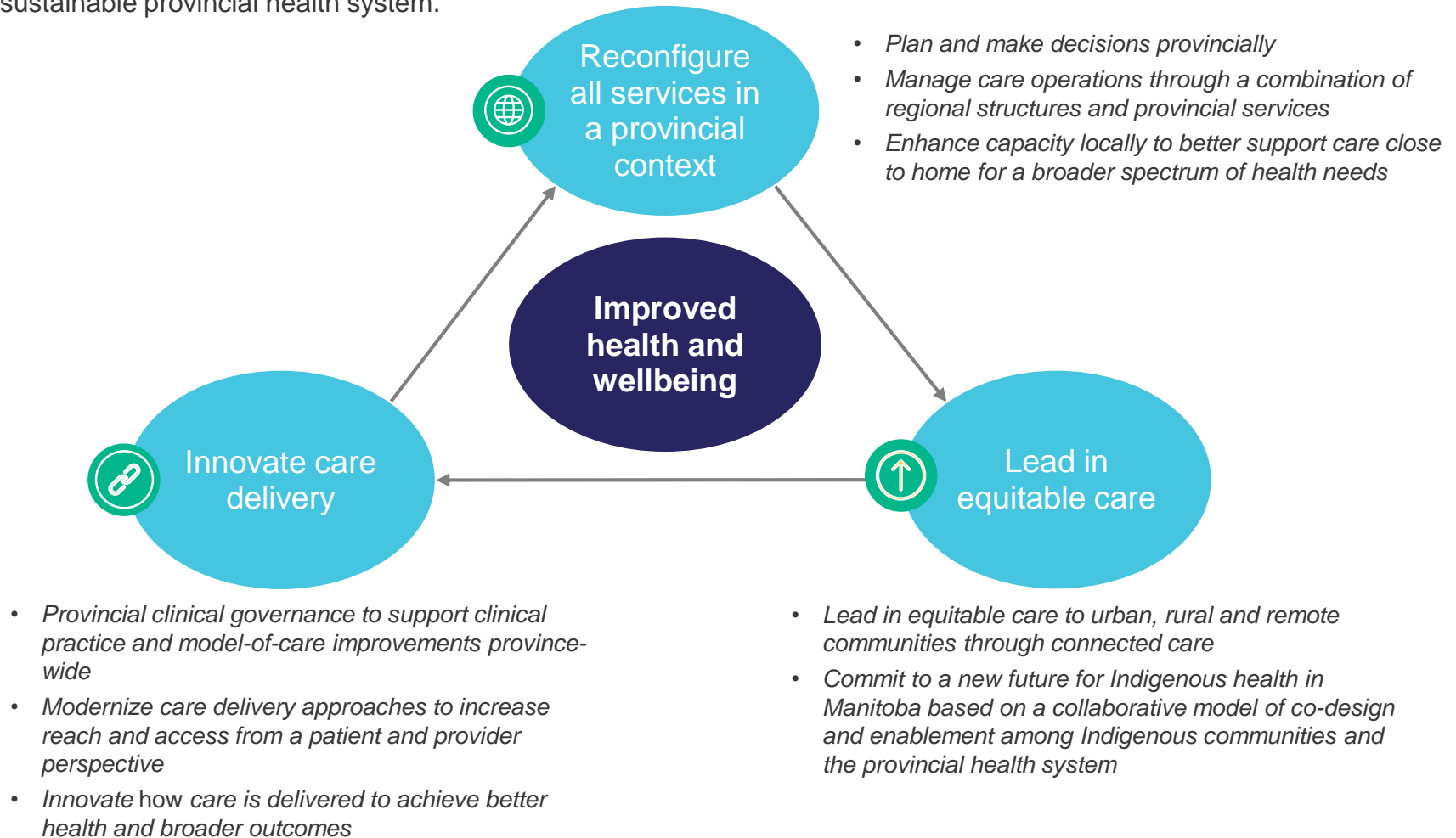
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

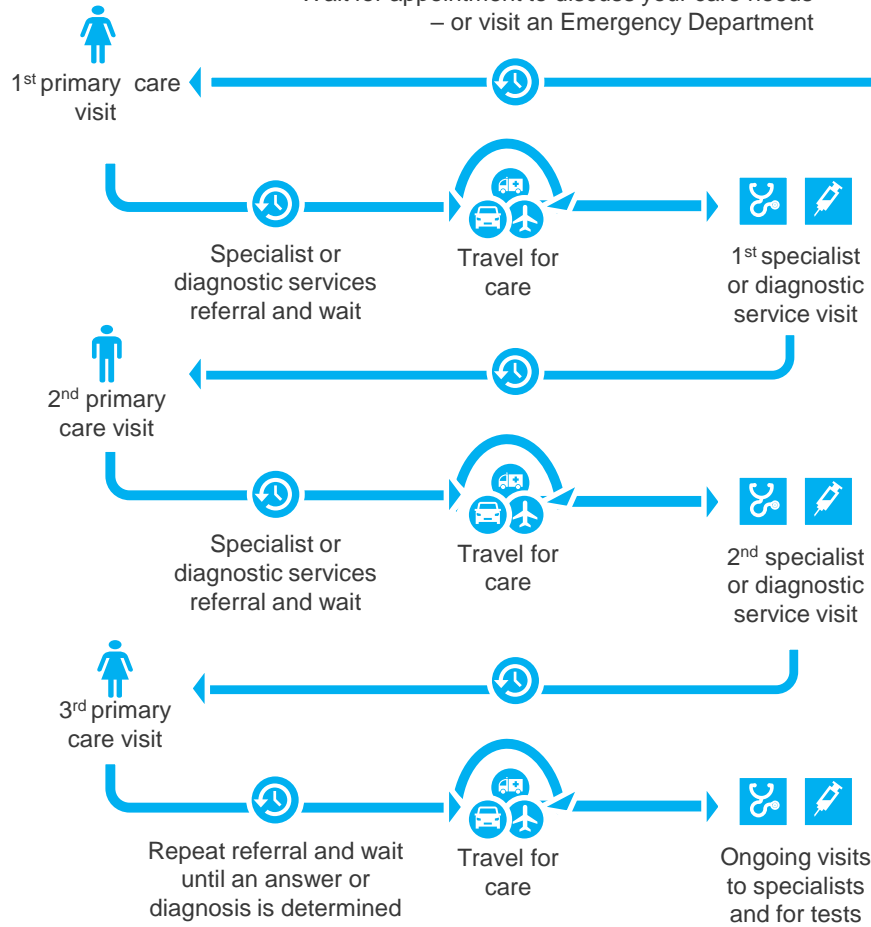
IN THE FUTURE

- 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?

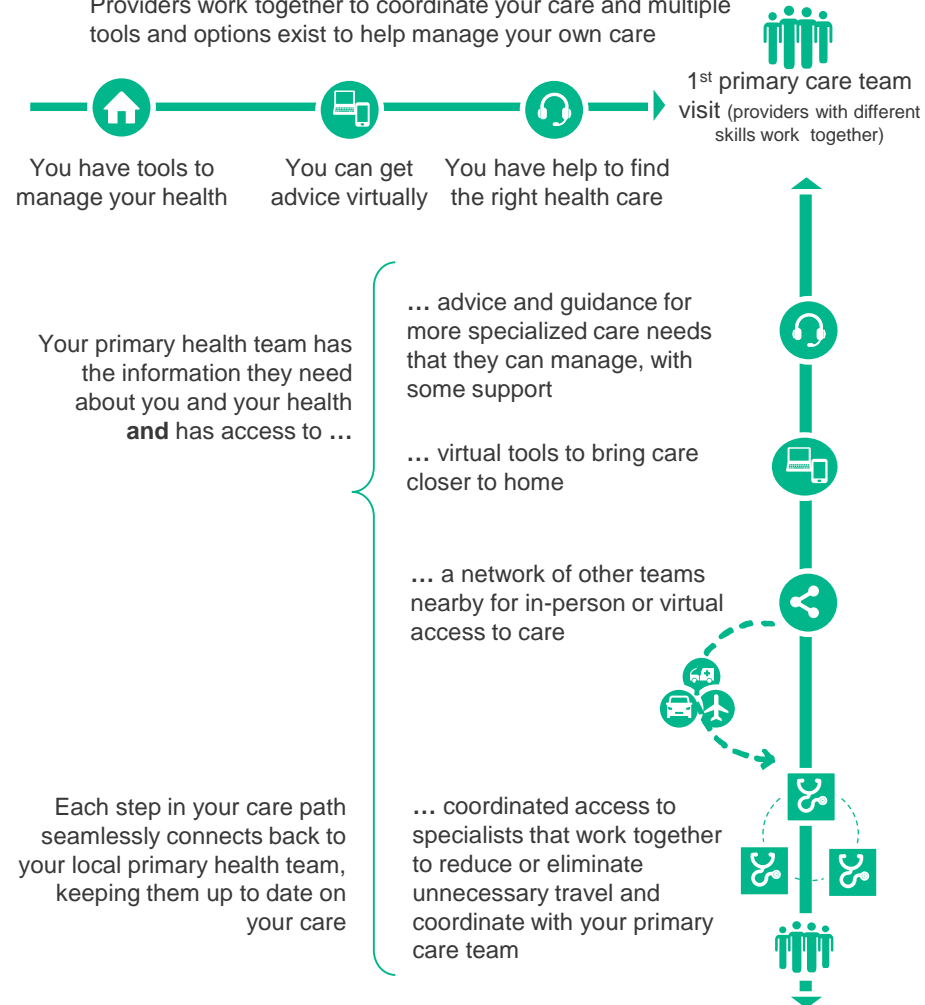
TODAY

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



IN THE FUTURE

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

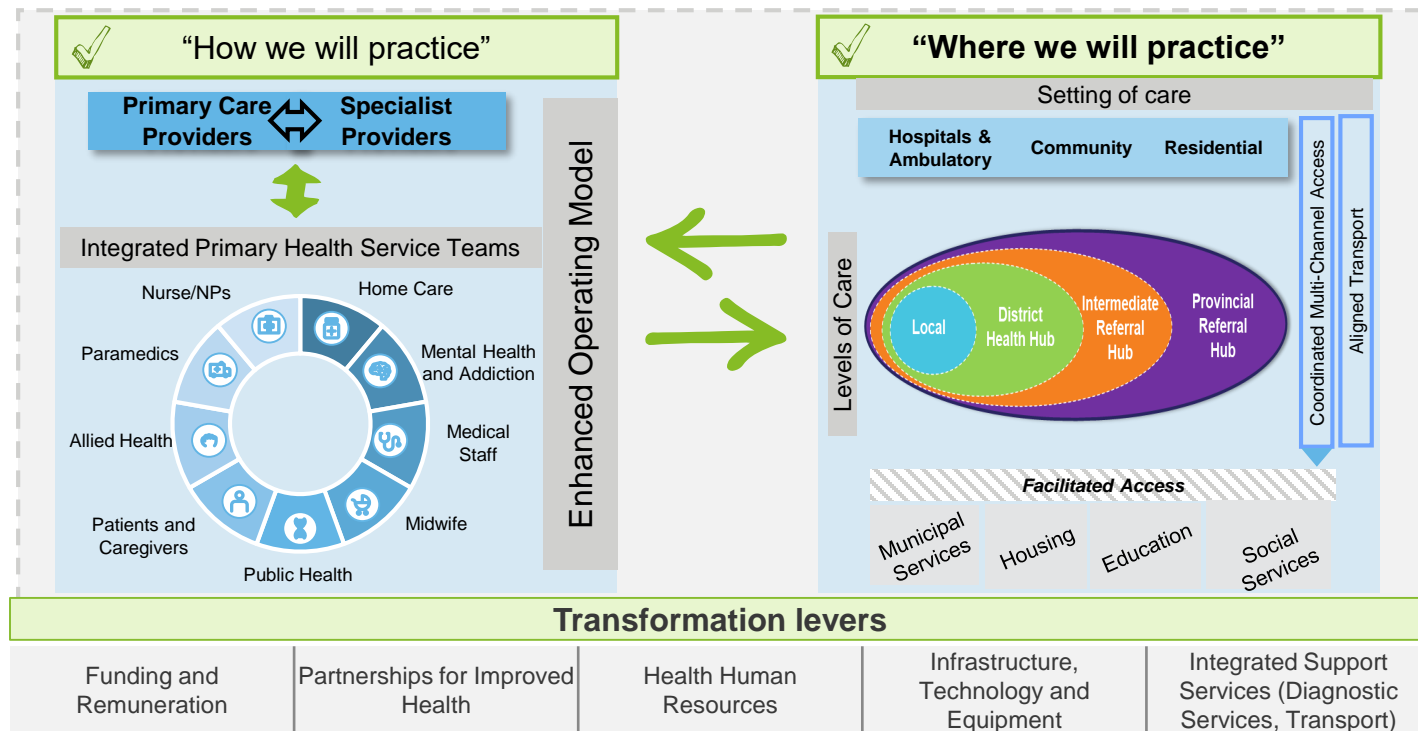


An integrated network for accessing and delivering services is core to the new provincial model

Interdisciplinary Teams Practicing in a New Model



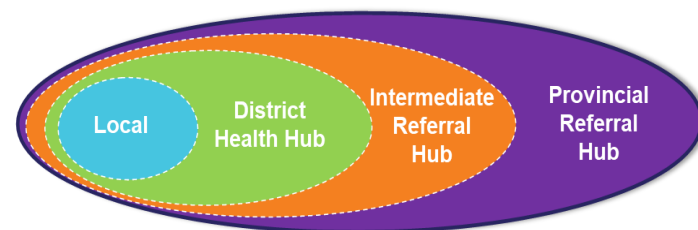
A System That Support Patients and Providers



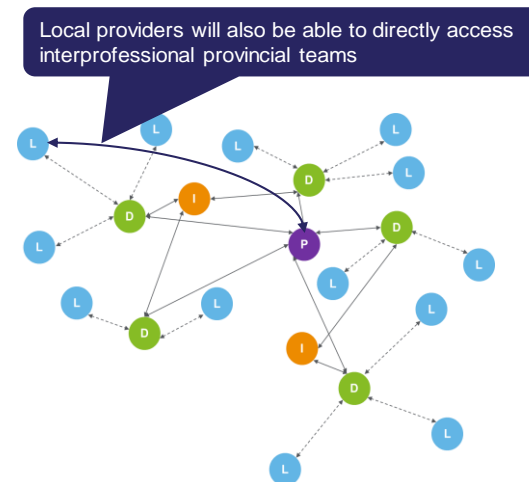
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



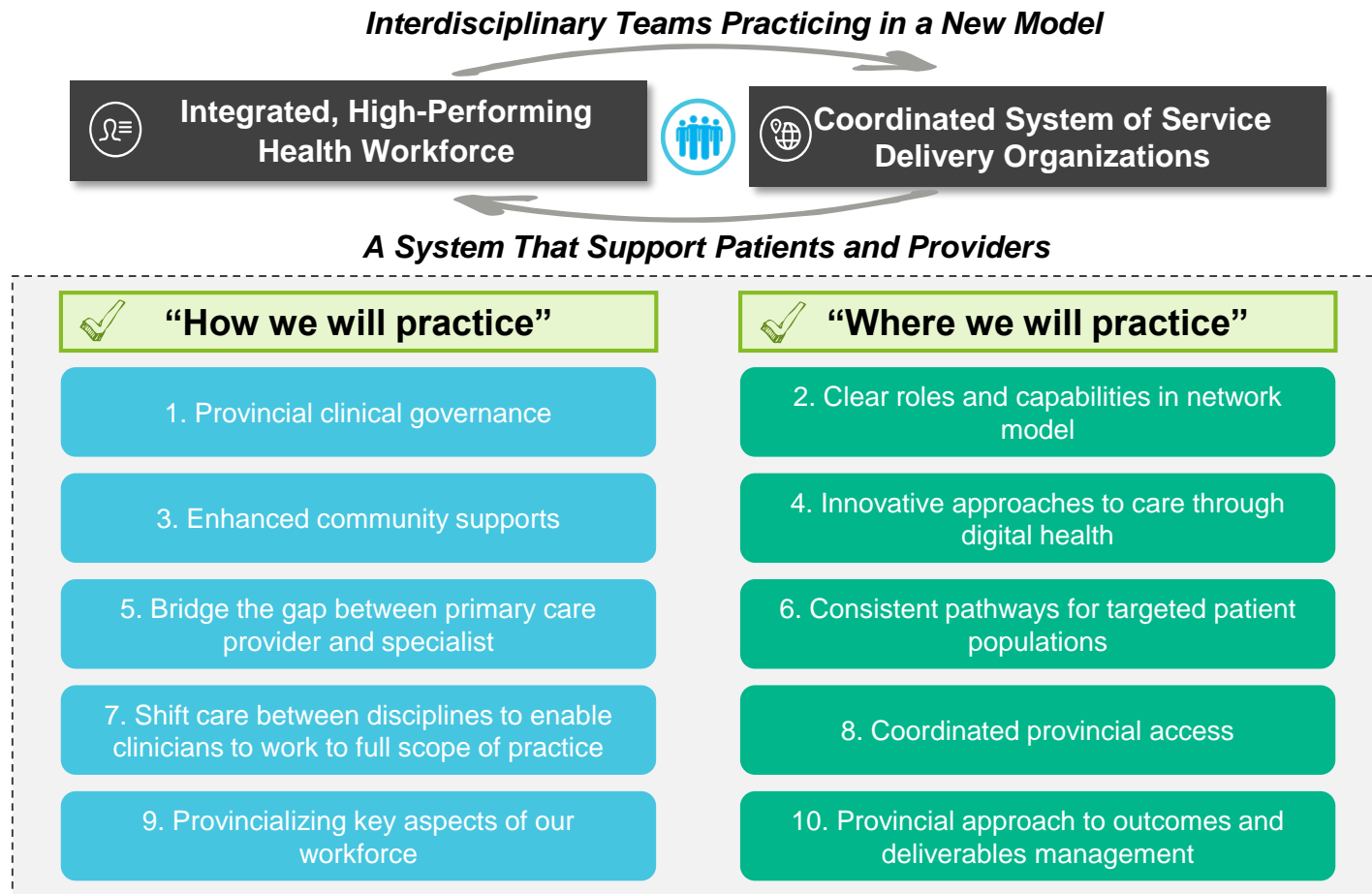
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>Enhanced</p> <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p>  <p>Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p>		<p>Provincial:</p> <p>24/7 Emergency Department</p>
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p>  <p>Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
 <p>Core</p> <p>Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p>  <p>District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Women's Health and Child Health

Current state and case for change | Women's Health

Manitoba has the second-highest infant mortality rate in Canada and, with a growing population, faces challenges ensuring women have access to appropriate multi-disciplinary care

Variation in access to services close to home, including obstetrics and gynecology (e.g., surgical procedures)

- Over half of patients from Northern, Interlake-Eastern and Southern regions have women's health-related day procedures outside of their home region (DAD, 2017/18)
- 77% of gynecological day surgeries/procedures and 76% gynecological inpatient admissions were performed in the WRHA (DAD, 2017/18)
- Manitoba women have universal access to medical abortion medication (Mifegymiso) through pharmacies, free of charge (Government of Manitoba).

Proportion of Women receiving care in Winnipeg (by their home region), FY 17/18

	NRHA	IERHA	PMH	SHSS
Inpatient	28%	79%	9%	38%
Day Procedure	52%	86%	25%	69%

Source: MHSAL – Discharge Abstract Database

Facilities with >5 deliveries, 2016/17

Hospitals across regions offer obstetrics services though 67% of births occur in the WRHA

- Manitoba has the second highest infant mortality rate in Canada though the rate varies widely by region:
 - NRHA: 10/1000 births
 - IERHA: 5.2/1000 births
 - PMH: 5.6/1000 births
 - WRHA: 4.8/1000 births
 - SHSS: 4.4/1000 births
- Deliveries are conducted across all regions however PCT members indicate unique challenges in the Northern and Southern areas of the province with access to pre-natal care being a priority in the North and shifting low-risk delivery closer to home as a priority in southern Manitoba

RHA	Facility	2016/17 Deliveries*	# of Obstetrics beds**
NRHA	Flin Flon General Hospital	156	8
	The Pas Health Complex	377	8
	Thompson General Hospital	821	16
IERHA	Selkirk and District General Hospital	210	6
	Brandon Regional Health Centre	1,682	20
PMH	Dauphin General Hospital	295	8
	Neepawa District Memorial Hospital	109	2
	Health Sciences Centre	5,648	59
WRHA	Hôpital St-Boniface Hospital	5,572	54
	The Birth Centre	n/a	n/a
	Centre de Santé Notre Dame Health Centre	16	1
SHSS	Portage District Hospital	291	5
	Hôpital Ste-Anne Hospital	131	2
	Bethesda Regional Health Centre	446	6
	Boundary Trails Health Centre	901	7

n/a: not available

Source: * MHSAL – Discharge Abstract Database; ** MHSAL – Bed Map

Current state and case for change | Women's Health

Manitoba has the second-highest infant mortality rate in Canada and faces challenges ensuring women have access to appropriate multi-disciplinary care and with a growing population, this has placed stress on NICU services.

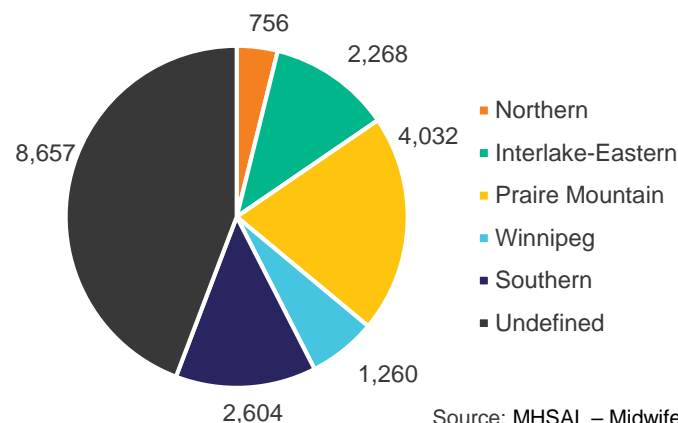
Low utilization of multidisciplinary teams (including midwives and NPs) despite patient demand, around prenatal, birth, and post-natal care in the community; particularly for rural and Indigenous populations

- In FY10/11, 5% of all deliveries in Manitoba were midwife-attended (Shared Health, Midwifery Services in Manitoba); however, the goals of the midwifery program were midwife-attended births accounting for 14% of all provincial births (Thiessen et al., 2016)
- 73% of Manitoba's 187 registered NPs work in urban areas and maternal/child care was not among their top self-reported direct patient care activities (Nurse Practitioner Association of MB)

NICUs are frequently at full/over capacity

- Newborn hospitalizations have increased 15% since FY12/13 to a high of 18,204 admissions in FY 17/18 (DAD)
- NICU admissions have increased 10% since FY 12/13 to a high of 1,762 admissions in FY 17/18 (DAD). Admission pathways for NICU patients are variable and uncoordinated across the province
- Between 2014/15 and 2017/18 the average LOS in a WRHA NICU increased 37% from 17.6 days in FY 14/15 to 24 days in FY17/18 (WRHA NICU database as provided by PCT member)
- Approximately 1/3 infants admitted to a WRHA NICU required Level III NICU care. The remaining 2/3 could be cared for in a Level I or II nursery (Data from WRHA PCT members)

Midwifery Services by Region, 2016/17



Source: MHSAL – Midwifery Database

Newborn ICU Admissions, FY 16/17

	Total Admissions	Average Gestational Age (weeks)	Average LOS (days)
HSC	720	35.3	22.5
SBH	512	35.2	15.9

Source: WRHA NICU database as provided by PCT member

Current state and case for change | Child Health

Access to care close to home is a key challenge for Manitoba’s children, especially those in rural and remote regions.

High number of specialists (in particular paediatricians) in WRHA but very limited access in other regions. Recruitment and retention issues in rural and remote communities

- 95% of pediatricians work in the WRHA (Peachey Report), while generalist providers including family physicians and nurse practitioners provide the majority of paediatric care in other regions.
- However, there remain long wait times to access specialist paediatric services for patients outside of WHRA and, in particular, in the North
- Winnipeg and Prairie Mountain residents were the most likely to receive acute care in their region while those in Interlake-Eastern were the most likely to travel for care

Proportion of Children receiving care in Winnipeg (by their home region), FY 17/18

	NRHA	IERHA	PMH	SHSS
Inpatient	41%	83%	13%	46%
Day Procedure	59%	97%	55%	76%

Source: MHSAL – Discharge Abstract Database

Lack of coordination across community based programs for perinatal care and paediatric care

- A 2018 review of perinatal programs delivering similar services (e.g., prenatal education, well baby checks) found they are not well coordinated and that there are instances where non-WRHA residents have to travel into Winnipeg from their home community, to deliver
- Variable access to paediatric-focused primary and community care programs such as youth hubs and school-based programs that address identified health issues affecting a child’s educational potential
- Children with complex care needs face particular challenges navigating the system including multiple appointments across providers, facilities and regions and in accessing care closer to home (e.g., rehab services)

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	<ul style="list-style-type: none"> • Limited access to specialists (in particular paediatricians) outside of WRHA despite high utilization of specialists within WRHA • Recruitment and retention issues in rural and remote communities. • Low utilization of multidisciplinary teams (including midwives and NPs) despite patient demand, around prenatal, birth, and post-natal care in the community; particularly for rural and Indigenous populations 	<ul style="list-style-type: none"> • Midwives, NPs and GPs working to full scope to support low risk births in rural areas and for specialized populations and closer to home • Specialists including paediatricians are linked to integrated primary networks (MyHT 2.0) as consultants • Specialists provide care through a complement of both travel and virtual care models to increase their presence outside of WRHA <ul style="list-style-type: none"> • Includes equitable provincial after hour call coverage for peds/obs and primary care physicians
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> • Variation in access to services close to home, including obstetrics and gynecology (e.g., surgical procedures) • Lack of coordination across community based programs for perinatal care and paediatric care • Overcapacity in NICUs and Level II Nurseries 	<ul style="list-style-type: none"> • Tiered service levels of care to clarify service delivery organization roles and capabilities for obstetrics, neonates, and women's health (surgical and medical) • Gyne-surgery will be guided by standards of practice established by provincial clinical governance • Centralized referral connects unattached low-risk, pregnant women to integrated primary care while sensitive to the patient's background and needs • Coordinated care models to reduce confusion and duplication in services (e.g., well baby visits, school health, care, navigation for children with complex needs) • Tiered SCU levels (NICU and PICU) ensure standardized assessment, consult supports, and access to beds • Lower-acuity neonates born in low-risk settings are kept closer to home with appropriate tools and supports • A provincial maternal and child database, that can also track population demographics, supports improved system utilization, performance and quality

Provincial view of the future vision

Future Vision: Manitoba will create capacity through an integrated system to provide low risk primary care closer to home through key service model and pathway changes that will:

- Create standardized care and admission criteria to ensure consistency in care
- Streamline and standardize care that results in enhanced quality outcomes
- Reduce unnecessary patient transports and costs

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

- **Transform service delivery** to address the high and low acuity needs of patient
 - Reinforce and/or increase capabilities at Intermediate Hubs and shift moderate to high acuity care from the Provincial Hub (HSC) closer to home
 - Reinforce clinical capabilities at Brandon Regional Health Centre as an Intermediate site to consistently care for women and children and build up capacity in the northern hub to increase capacity for obstetrical, paediatric and gynecological care and reduce patient travel
 - Enhance the capabilities of Local and District Hubs to provide coordinated care for women and children with low-risk needs with the right provider at the right time
 - Increase the utilization of primary health providers including GPs, NPs, midwives and public health and enhance their services and collaboration with community services (including mental health and social services)
 - Identify District areas that may need enhanced services such as a Level I Nursery in SHSS and gyne-procedures
- **Ensure province-wide access to family planning** including education and access to a range of safe, patient-centred contraceptive choices. Women should also have access to counselling and education if they choose to terminate a pregnancy and equitable province-wide access to mifegymiso
- **Ensure standardized, evidence-based obstetrical education and practice** across the province similar to programs such as MoreOB
- **Ensure standard admission and transfer criteria** for consistency in care delivery across the province and clarity in appropriate transfers to higher levels of care, particularly with NICU admissions and women's reproductive surgical procedures
- **Utilize virtual health tools** (e.g. telemedicine, eConsult, eReferral) to extend the reach of specialists to rural and Northern regions, improve coordination of care and better support primary care providers, particularly with complex paediatric patients with developmental needs
- Create **appropriate monitoring tools** via a perinatal database to inform alignment to care standards and pathways

Service standards and provider roles | Obstetrics & NICU Care

	Obstetrics	Neonates
Provincial Referral Hub	<ul style="list-style-type: none"> Level III Facility focusing on high risk deliveries from across the province and all deliveries from the local area Provides all associated maternal and neonatal surgical and medical services including high-risk cases <ul style="list-style-type: none"> Note: May be a joint-program across multiple sites (e.g., HSC and SBH) Provincial clinical governance establishes standard levels of care, education modules (e.g., obstetrics residents obligated to go to rural/northern as part of rotations) and provincial perinatal database (linked to other provincial databases such as home clinic / provider registry) Telehealth connection 	<ul style="list-style-type: none"> Level III NICU Provincial team provides telemedicine support and tele-rounding for Level I and II Nurseries Provincial coordinator to ensure appropriate referrals and manage availability of NICU/Nursery beds across the province and ensure timely access to Level III NICU when needed <ul style="list-style-type: none"> Note: May be a joint-program across multiple sites (e.g., HSC and SBH) Provincial clinical governance establishes standard levels of care, education and pathways to support access to the appropriate level of care when needed.
Intermediate Referral Hub	<ul style="list-style-type: none"> Level II Facility focusing on intermediate to high risk deliveries Capacity to perform Caesarean section Coordinated admittance for rural/remote deliveries – work with surrounding sites to accept transfer if needed 	<ul style="list-style-type: none"> Level II Nursery Telemedicine support from and provincial rounding with Provincial site Provides support to and accepts transfers from surrounding District sites to divert unnecessary transfers to WRHA
District Health Hub	<ul style="list-style-type: none"> Level I Centre conducting low risk deliveries Access to surgical resources to perform Caesarean sections (ensure general surgeons are trained to do C-Section if practicing in rural areas) Access to point of care testing including amniure and ferning/amnicator Low risk deliveries discharged home in 12 hours to receive public health nursing or midwifery support for post-natal care (weight, breastfeeding, metabolic screen and transcutaneous or serum bilirubin screen) Inclusion of midwives on labour floor and in MyHT2.0 	<ul style="list-style-type: none"> Level I Nursery to provide basic care for neonates/infants who no longer require NICU or Level II Nursery care Targeted sites able to care for neonate who require feeding and monitoring May include Level I nurseries at select sites depending on volumes
Local	<ul style="list-style-type: none"> Community-based pre-natal care for low-risk deliveries Centralized referral to connect unattached low-risk, pregnant women to integrated primary care (e.g., GP, NP, midwife, mental health counsellor) Appropriate supports for pre-natal care in Northern region – adopt findings from PIIPC project (Partners for Integrated PN Care) Prenatal classes combined with pre-natal visits with MD/Nurse/Midwife Increase scope of nursing stations to ensure they include prenatal care, point of care testing including amniure and ferning/amnicator and well baby visits and breastfeeding education Utilization of social media to extend pre-natal education, especially in northern remote areas Equitable, closer to home access to breastfeeding support 	<ul style="list-style-type: none"> Primary post-natal care in the community (provided by enhanced My Health Teams and public health) Ability to perform basic tests and assessments (e.g., Bilirubin tests)

Service standards and provider roles | Women's Health

	Gynecological Procedures and Surgeries	Women's Mental Health	Reproductive Health (including termination, infertility and menopause)
Provincial Referral Hub	Provincial Clinical Governance establishes standardized care pathways and referral criteria		
	<ul style="list-style-type: none"> Specialized care including gynecology, complex minimally invasive surgery and uro-gyne Implementation of ERAS approach Provincial clinical governance establishes practice and training standards and patient pathways 	<ul style="list-style-type: none"> Centralized access with navigation supports for those with mental health needs (e.g., sleep disorder, internet-based self assessment process to determine what tier of care is needed) 	<ul style="list-style-type: none"> Provision of therapeutic surgical and medical abortions Complex infertility treatment Specialist treatment related to menopause and premature menopause Use of telehealth for menopause assessment and treatment
Intermediate Referral Hub	<ul style="list-style-type: none"> Provision of specialties including uro-gyne, D&C Implementation of ERAS approach 		<ul style="list-style-type: none"> Provides therapeutic surgical and medical abortions Clinical governance to inform medical abortion policy and expand to all sites where prescribed D&C can be done
District Health Hub	<ul style="list-style-type: none"> Centralized referral to ensure procedures are done by the most appropriate provider (e.g., if a referral is can be managed by a PC provider such as a pap test) 	<ul style="list-style-type: none"> Virtual services at this level, and/or group programs for improved access to mental health and addictions services 	<ul style="list-style-type: none"> Provision of basic gynecology and reproductive health (e.g., IUD, endometrial biopsies, HRT) by family physicians, NPs and Midwives (as appropriate) Provision of medical abortion Greater access to patient education for those going through menopause groups run by PHN/PC nurses and including MH counselors and supports and more appropriate referrals to gynecologists
Local	<ul style="list-style-type: none"> Repatriation of post op care to more local (primary care) level 4-6 week follow up for D&C, endometrial ablation and other similar procedures with specialist consult if needed 	<ul style="list-style-type: none"> Improved access to mental health counselling in immediate prenatal and postpartum through direct contact, use of social media, telemedicine or community based support groups Population screening of the population (e.g., Towards Flourishing pre-natal screen) 	<ul style="list-style-type: none"> Increase training for family physicians, NPs and Midwives (as appropriate) to provide more basic gynecology and reproductive health (e.g., IUD, endometrial biopsies, HRT) Greater integration with MyHT 2.0 and greater access to teen clinics with strong links to mental health and addiction services Primary care provides education, assessment and ongoing follow up and engages with public health to provide prevention and promotion services Work with public health and other partners to help prevent increase in sexually transmitted infections and blood-borne illnesses

Service standards and provider roles | Paediatrics

	Primary Paediatric Care	Care for Children with Complex Developmental Needs
Provincial Referral Hub	<ul style="list-style-type: none"> PICU for children requiring critical care Tertiary care/specialists/sub-specialist services Itinerant teams provide services and education for rural/remote areas and virtual/remote telehealth support and consultation Standardized referral, transport and communication pathways Provincial governance establishes standards, leveraging existing tools such as TREKK (Translating Emergency Knowledge for Kids) Wait List management for paediatric dental surgery 	<ul style="list-style-type: none"> Leveraging existing WRHA-based clinics to coordinate support for children with complex needs across RHAs and jurisdictions Standardized definition of complex needs and types and associated pathways Enhanced virtual support to enhance access to specialized rehab support Provincial clinical governance supports coordination across sectors to avoid duplication of services and avoid gaps in care (e.g., for patients in the care of child services)
Intermediate Referral Hub	<ul style="list-style-type: none"> Support for District Hubs and Local providers through eConsult and telemedicine Recruit for rural/northern practice by including rural/northern experience in training Subspecialty training for paediatricians to meet local system needs in identified areas Leverage existing standards including TREKK guidelines in EDs 	<ul style="list-style-type: none"> Admits and provides care to children with complex and developmental needs with support from Provincial hub Management of “expected crises” according to care plan (e.g., suicidal ideation, fever)
District Health Hub	<ul style="list-style-type: none"> Low acuity paediatric admissions Use of telehealth to reduce patient travel and admissions at intermediate and provincial facilities Leverage existing standards including TREKK guidelines in EDs 	<ul style="list-style-type: none"> Coordination of rehab Implementation of ongoing day-to-day care Access to a family navigator and utilization of a health/mental health passport that gives care plan and status of care Utilize alternative models of care including tele-rehabilitation, group programming, and delegation to rehabilitation assistants Rehabilitation assistants and/or educational assistants to provide rehab services in local communities, supported by provincial resources to educate and provide oversight
Local	<ul style="list-style-type: none"> Community Integrated Care Teams (MyHT2.0), including Primary care and public health providers provide coordinated core services appropriate to population need to reduce duplication of services (e.g., well baby visits, school health) Health system providers partner with various stakeholders to address youth in education systems focusing on chronic disease prevention, including mental health, through the alignment and development of new and existing school and community-based programs Prioritize children for Pediatric Dental care based on severity of decay and dental condition, underlying medical status and quality of life impact Access to eConsult services to improve access to specialists Education for parents on safe sleeps for newborns 	<ul style="list-style-type: none"> Non-regulated health providers to provide rehab services in local communities, supported by provincial resources to educate and provide oversight Education on wellness, preventive care, parenting, social supports Screening, early identification of children at risk (protocol for screening and referral to early intervention)

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 Women's Health and Child Health 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	<ul style="list-style-type: none"> Utilization of virtual health tools (e.g., telemedicine, eConsult, eReferral) to extend the reach of specialists to rural and Northern regions, improve coordination of care and better support primary care providers, particularly with complex paediatric patients with developmental needs
Diagnostic Services	<ul style="list-style-type: none"> Consistent access to point of care testing including amniure and ferning/amnicator at District Health Hubs and remote Local Hubs to support low risk births and obstetrical care Assess diagnostic requirements for intermediate hubs with Level II Nurseries
EMS/Patient Transport	<ul style="list-style-type: none"> Enhanced Level II Nursery care in Brandon and in a northern hub and the development of a Level I Nursery in SHSS will likely impact patient transfer patterns and reduce the number of transports required to WRHA
Infrastructure and Equipment	<ul style="list-style-type: none"> Shifts in clinical surgical activity may impact the infrastructure needs
Prevention	<ul style="list-style-type: none"> Appropriate prenatal care is critical for addressing Manitoba's high infant mortality rate, especially in the Northern region. Anticipated programs such as the PIIP project should be leveraged to improved access to care Population screening for perinatal mental health will be delivered through enhanced My Health Teams and can leverage existing tools (e.g., Towards Flourishing pre-natal screen) Health system partnership with schools to increase access for kids to prevention, assessment, diagnosis and treatment Enhanced awareness through perinatal counselling/visits delivered through enhanced My Health Teams about the importance of chronic disease prevention for parents and their babies leveraging existing tools (e.g., Exercise is Medicine Canada) Pediatric dental prevention and promotion supported by public health and enhanced My Health Teams

Key Performance Indicators

1. Reduction in lower acuity infants treated in WRHA NICU
2. Reduced transfers for complex paediatric patients from non-WRHA sites to WRHA
3. Increase in children receiving primary care from general practitioner
4. Shift in low-risk obstetrical deliveries from provincial/intermediate hubs closer to home at district and local hubs for patients outside of WRHA

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

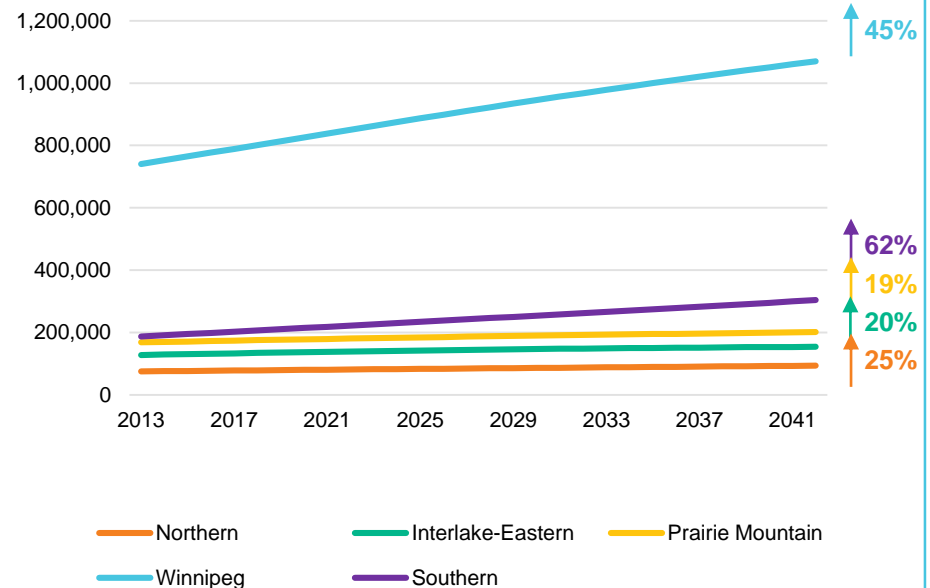
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

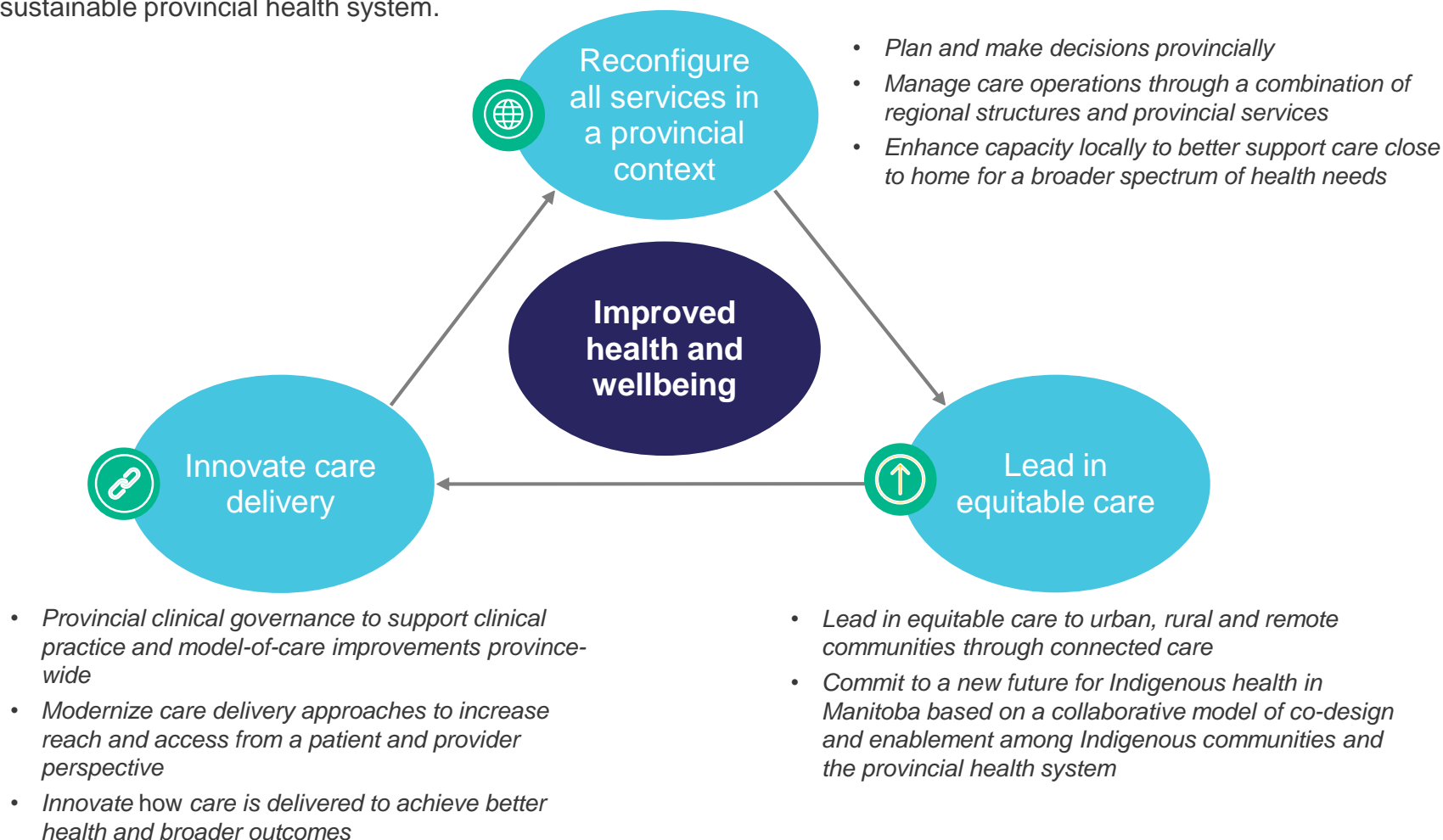
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

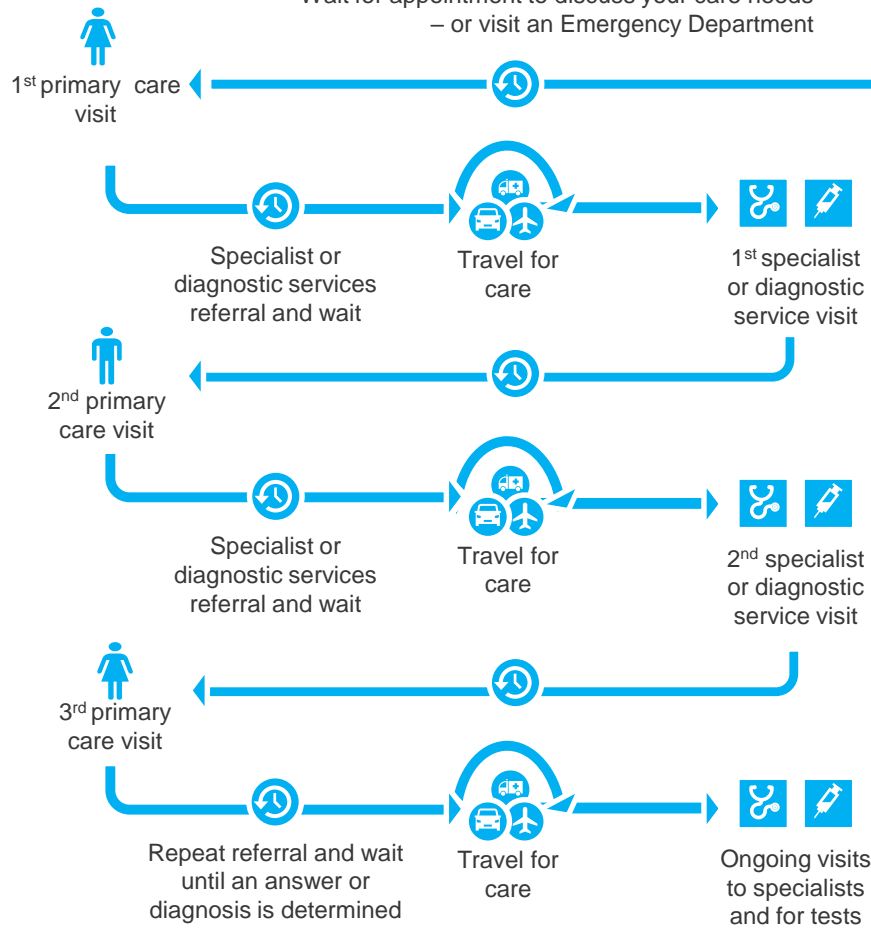
IN THE FUTURE

- 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?

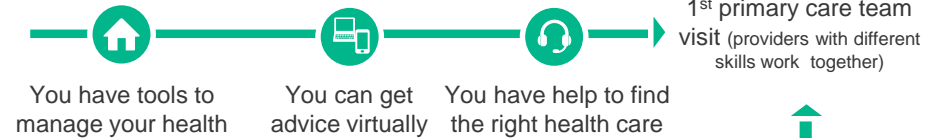
TODAY

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



IN THE FUTURE

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

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

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

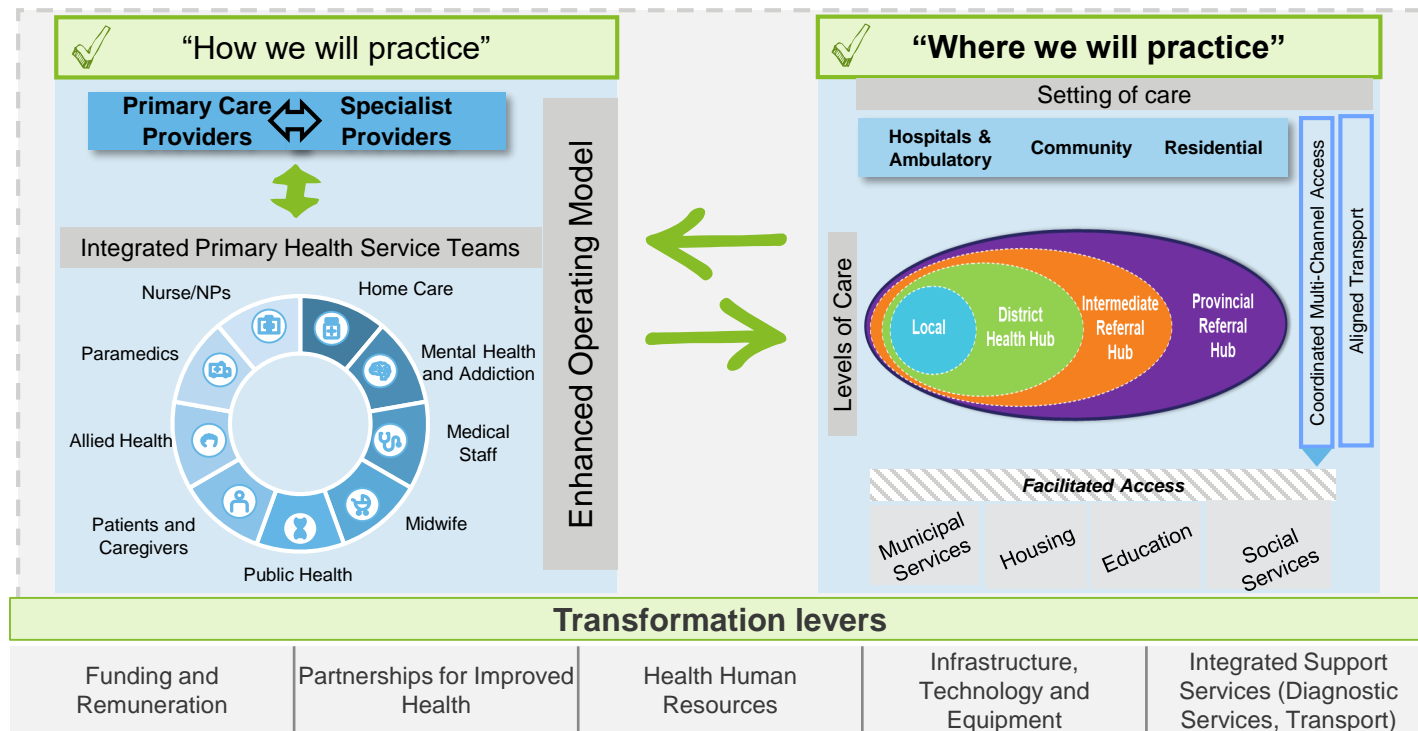


An integrated network for accessing and delivering services is core to the new provincial model

Interdisciplinary Teams Practicing in a New Model



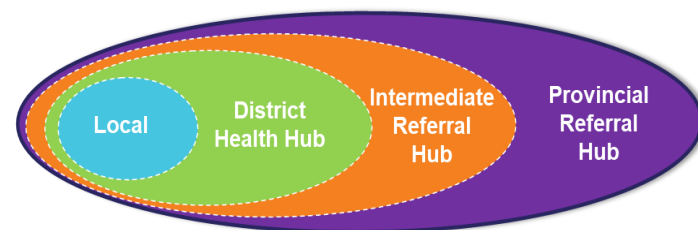
A System That Support Patients and Providers



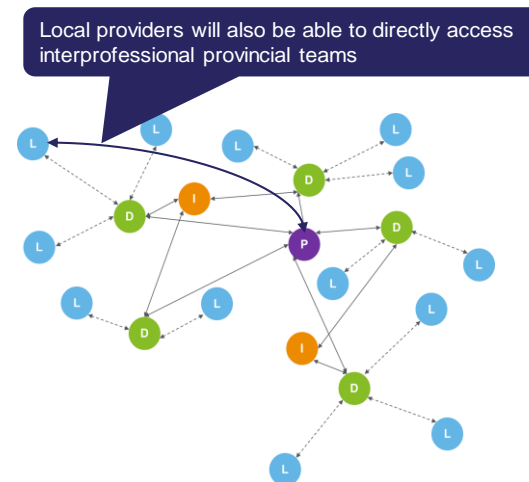
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



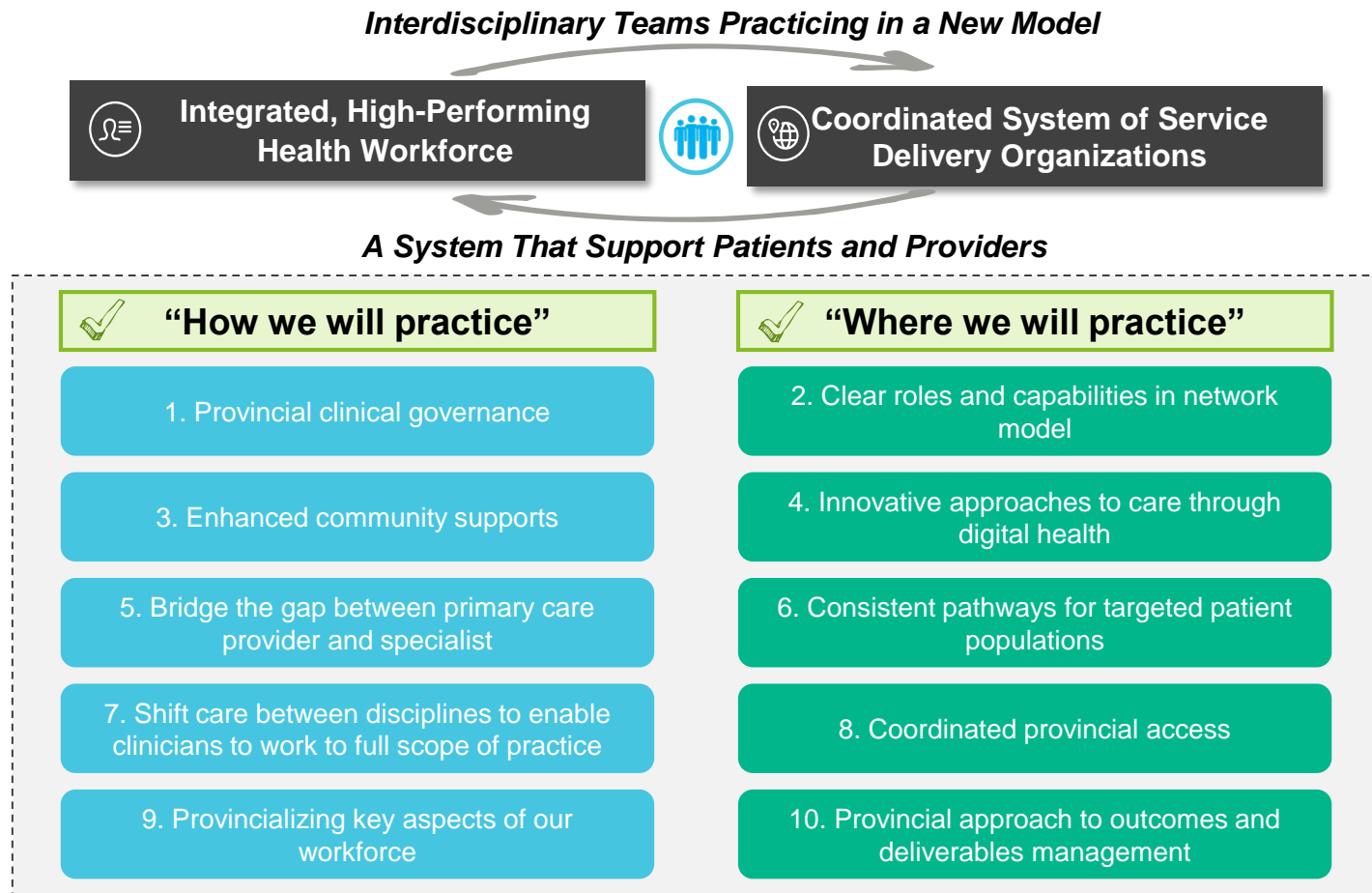
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
<p>Enhanced</p> <p> 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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p> <p> Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p>		<p>Provincial:</p> <p>24/7 Emergency Department</p>
	<p> General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	<p> Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p> <p> Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
<p>Core</p> <p> Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p> <p> District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			<p> Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



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

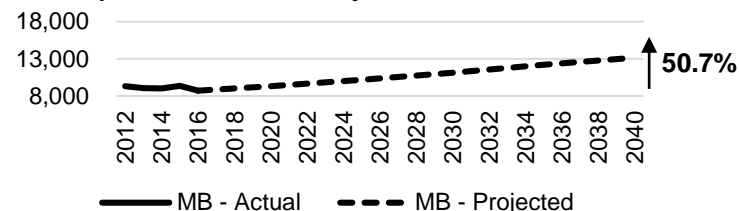
Challenge in **accessing** timely trauma care, and current pathways result in multiple patient transfers

- 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.

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)

Inpatient Admission Projections, FY16/17 to FY40/41



Source: MHSAL – Discharge Abstract Database

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

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

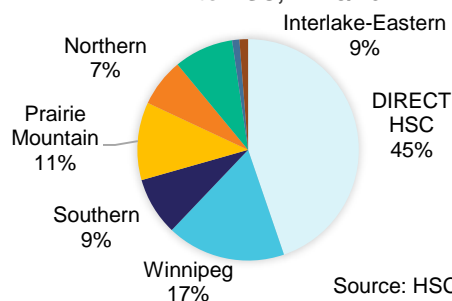
Variable capacity and capabilities outside of Winnipeg contribute to more transfers to HSC

- 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

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

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



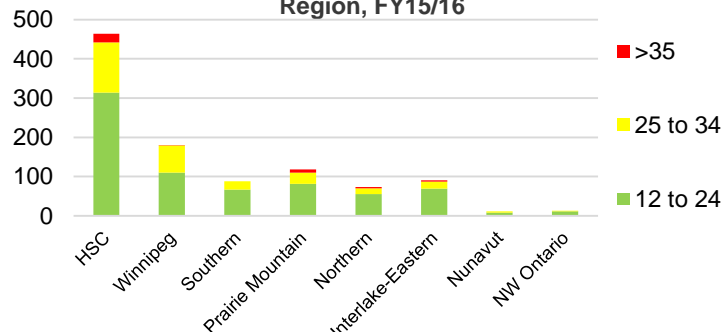
Source: HSC Trauma Registry

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

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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • System navigation to provide support for those with complex needs (i.e., homeless, social complexities, individuals without families) 	<ul style="list-style-type: none"> • Consistent model for delivery of trauma care to major trauma patients at Level I and III sites <ul style="list-style-type: none"> • Trauma Team Leader • Trauma Team with defined roles • Provincial Governance Model <ul style="list-style-type: none"> • Provincial trauma medical director and operational lead • Provincial trauma leadership committee • Defined provincial reporting structure
Intermediate Referral Hub	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Connections with expertise at the Provincial Hub to reduce readmissions for acute and post-acute rehab care 	<ul style="list-style-type: none"> • Supporting structure <ul style="list-style-type: none"> • 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
District Health Hub	<ul style="list-style-type: none"> • Patient population: First point of contact for select major trauma patients and support for minor traumas outside HSC <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Focus on injury prevention (i.e., falls prevention) and post-trauma care in the community • Community and outpatient mental health services 	<ul style="list-style-type: none"> • Primary Health and Community Services to support injury prevention and disaster planning in collaboration with the Trauma Team Structure
Across all hubs	<ul style="list-style-type: none"> • 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	<p><u>Level I Trauma Centre</u></p> <p>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.</p> <ul style="list-style-type: none"> • 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 <p>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</p>
Intermediate Referral Hub	<p><u>Level III Trauma Centre</u></p> <p>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.</p> <ul style="list-style-type: none"> • 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 <p>Illustrative examples of Intermediate Hubs include Brandon Regional Health Centre</p>
District Health Hub	<p><u>Level IV, V Trauma Centre</u></p> <p>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.</p> <ul style="list-style-type: none"> • 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	<p><u>Primary Health and Community Services</u></p> <p>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.</p>

Shifts across the Network Model

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

Triage	Acute Care	Post-Acute Care
<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Establish standard repatriation pathways to provide post-acute care closer to home <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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

Implementation planning considerations:

- 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 patterns 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

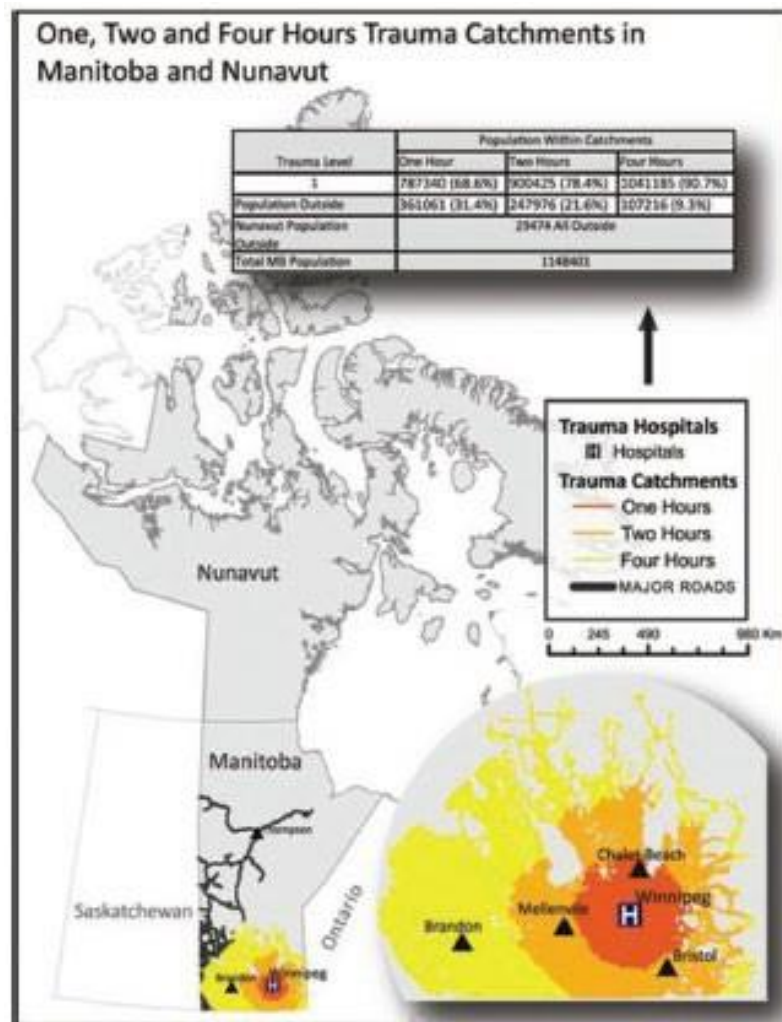
Innovative service delivery and improved access to care can be achieved through digital technology, including associated information and technology requirements, as well as integrated support services including diagnostics, patient transport, Emergency Services, infrastructure and equipment. The table 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

**SURGERY AND ANAESTHESIA 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

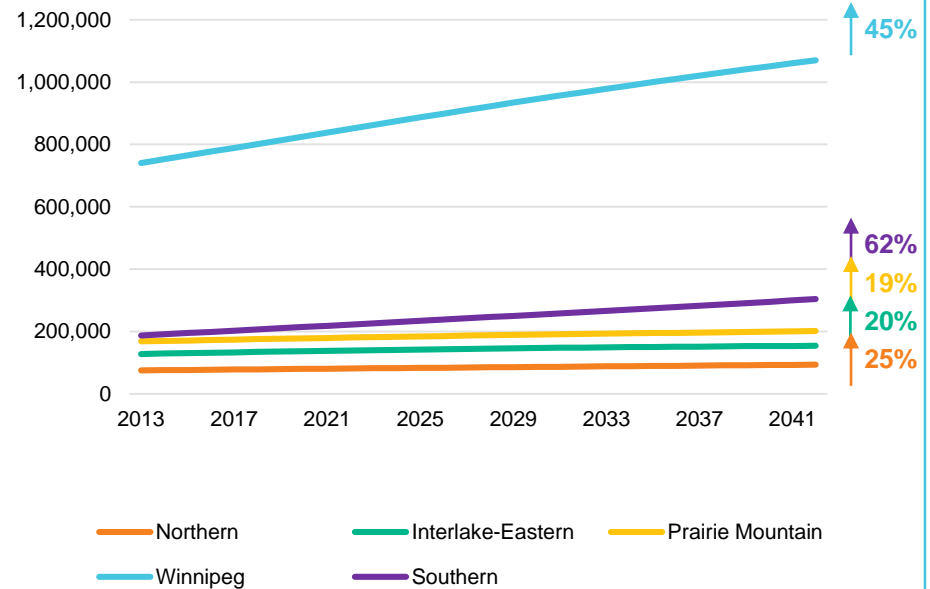
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

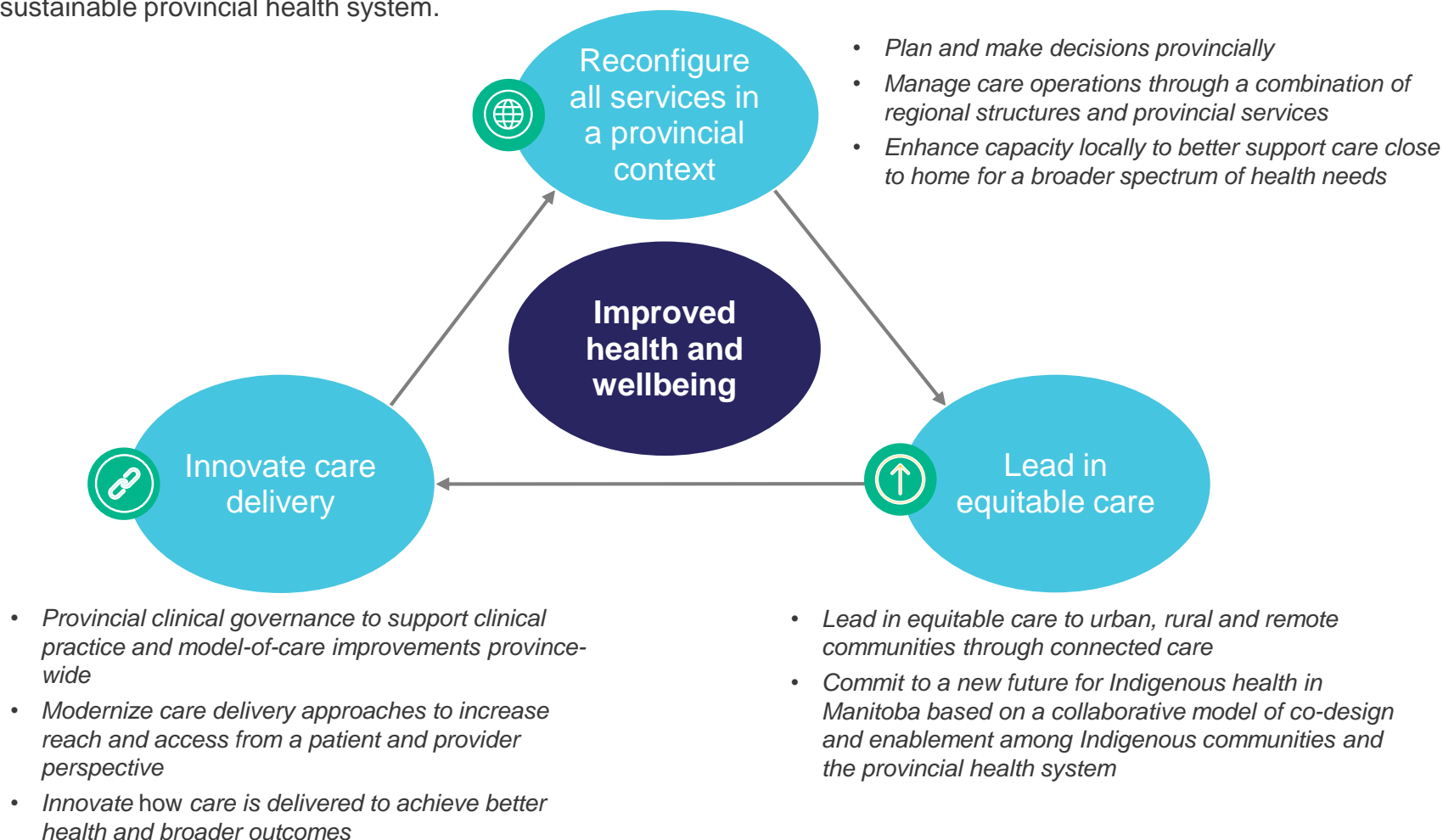
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

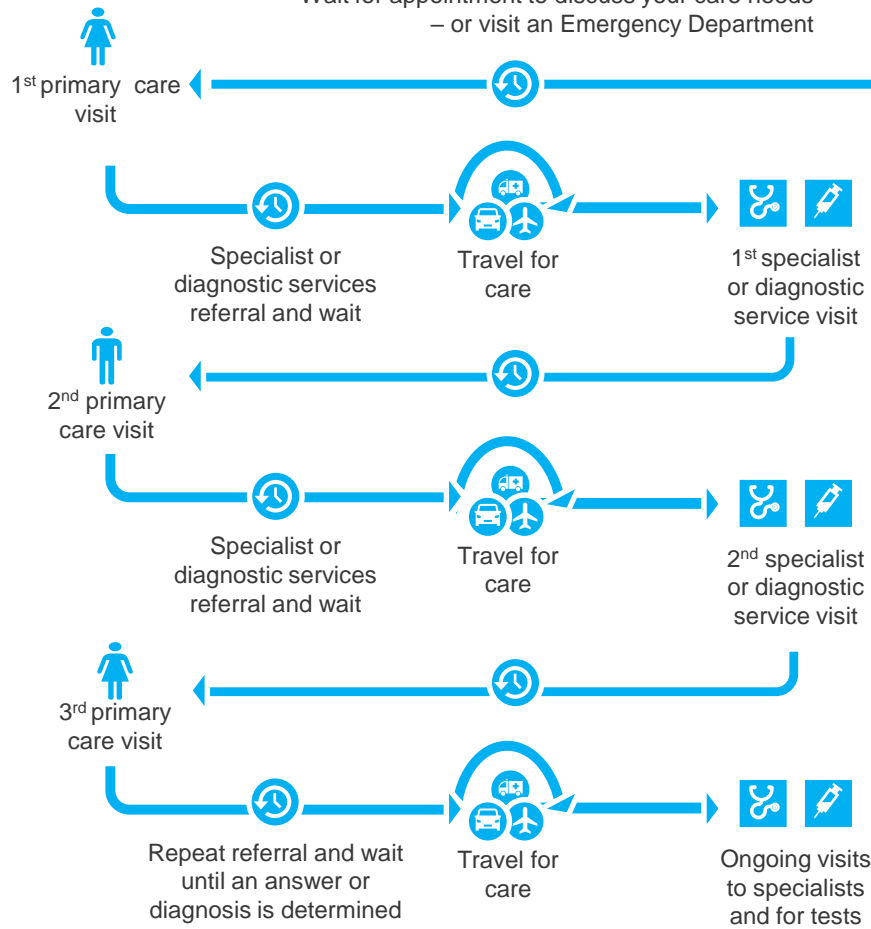
IN THE FUTURE

- 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?

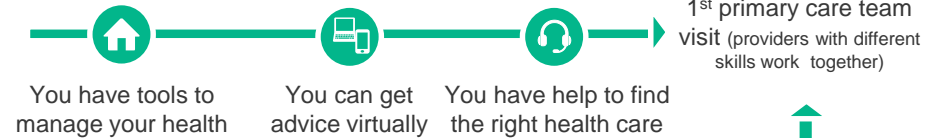
TODAY

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



IN THE FUTURE

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

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

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

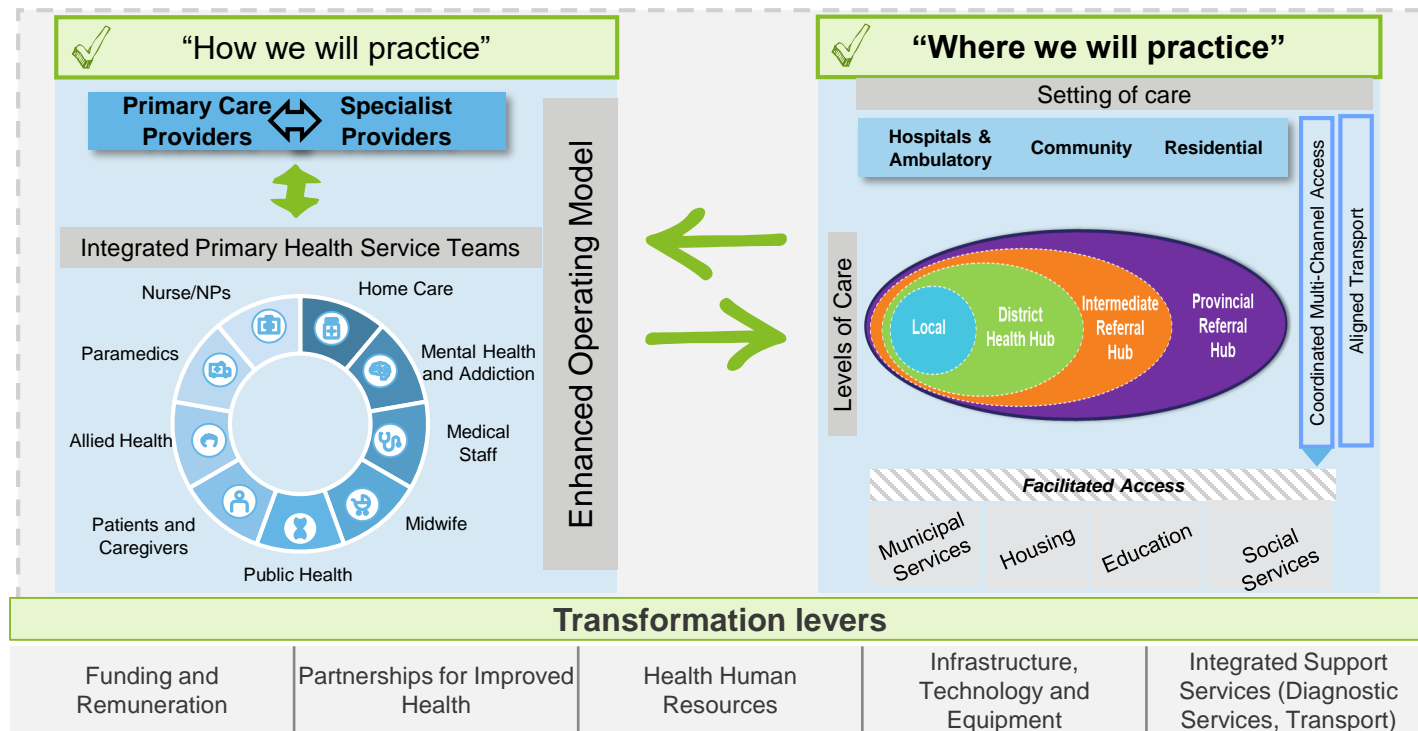


An integrated network for accessing and delivering services is core to the new provincial model

Interdisciplinary Teams Practicing in a New Model



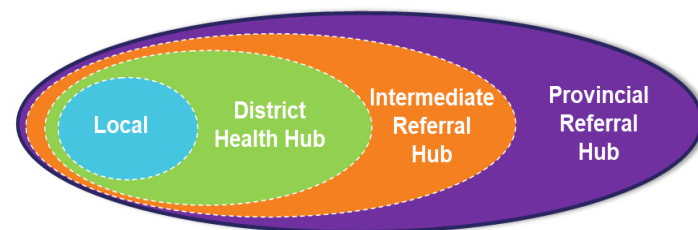
A System That Support Patients and Providers



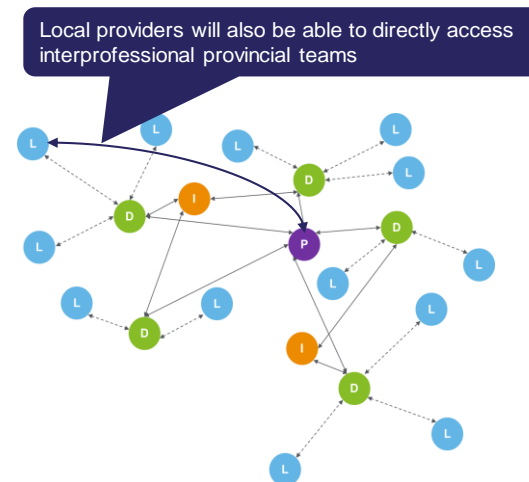
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



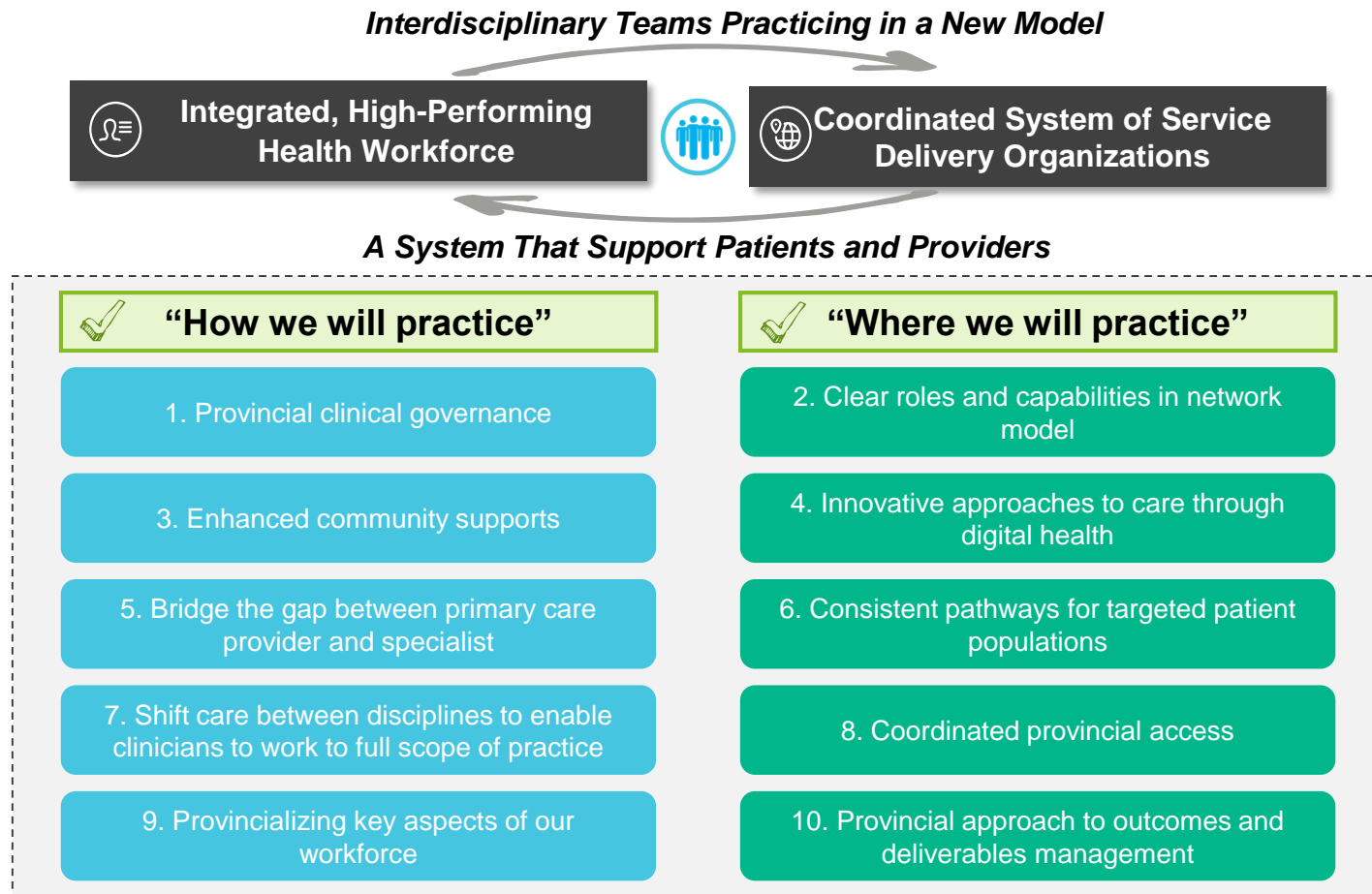
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core: Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate: 24/7 Emergency Department</p> <p>Provincial: 24/7 Emergency Department</p>		
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced: Special Care Unit</p>	<p>Intermediate: Intensive Care Unit (ICU)</p>	<p>Provincial: ICU with specialized capabilities</p>
	 <p>Core: Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate: Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial: Elective and emergency surgery with FRCPC</p>
 <p>Core Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	 <p>Specialist Services may include: District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate: Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial: Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as: Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Surgery and Anaesthesia

Current State and Case for Change

Major current state issues and supporting evidence indicates the need for change and shifts within this clinical area

Lack of consistency between lengths in stay across the regions

- Adult Surgery Inpatient Admissions, FY 17/18: PMH has the second highest admissions (1,957) and the longest average LOS (9.7 days) compared to NRHA which has an average LOS of 5.8 days, but 164 total admissions

	Total Admissions	% of Patients who are First Nations	Average Total LOS (days)	Average Acute LOS (days)	% of LOS that was ALC
Manitoba	15,081	8.1%	7.4	6.8	7%
Northern	164	45.4%	5.8	5.8	0%
Interlake-Eastern	298	10.2%	6	6	1%
Prairie Mountain	1,957	7.4%	9.7	8.2	15%
Winnipeg	11,372	7.7%	7	6.8	4%
Southern	1,290	5.9%	7	5.5	21%

Source: MHSAL – Discharge Abstract Database - Excludes surgery volumes related to other PCTs: Cardiovascular and Thoracic, Cancer and Palliative, Neurosciences, Trauma, Women's Health

The WRHA accounts for more than 75% of all inpatient and day surgeries

Facility	Health Region	Inpatient Surgery	Day Surgery	Grand Total
SELKIRK REGIONAL HEALTH CENTRE	IERHA	519	1422	1941
BEAUSEJOUR DISTRICT HOSPITAL	IERHA	6	817	823
THOMPSON GENERAL HOSPITAL	NRHA	337	530	867
FLIN FLON GENERAL HOSPITAL	NRHA	106	369	475
ST ANTHONY'S HOSPITAL	NRHA	134	238	372
BRANDON REGIONAL HEALTH CENTRE	PMH	3090	6114	9204
DAUPHIN GENERAL HOSPITAL	PMH	612	1042	1654
MINNEDOSA DISTRICT HOSPITAL	PMH	18	731	749
SWAN VALLEY HEALTH CENTRE	PMH	19	428	447
NEEPAWA DISTRICT MEMORIAL HOSPITAL	PMH	122	134	256
BOUNDARY TRAILS HEALTH CENTRE	SHSS	1389	1690	3079
PORTAGE HOSPITAL	SHSS	599	925	1524
BETHESDA REGIONAL HEALTH CENTRE	SHSS	411	571	982
STE ANNE HOSPITAL	SHSS	103	658	761
CARMAN MEMORIAL HOSPITAL	SHSS	67	584	651
HEALTH SCIENCES CENTRE	WRHA	10233	9521	19754
ST. BONIFACE GENERAL HOSPITAL	WRHA	7802	7067	14869
MISERICORDIA HEALTH CENTRE	WRHA	419	10593	11012
VICTORIA GENERAL HOSPITAL	WRHA	1883	6463	8346
GRACE HOSPITAL	WRHA	3133	3946	7079
SEVEN OAKS GENERAL HOSPITAL	WRHA	2296	4213	6509
CONCORDIA HOSPITAL	WRHA	2897	2284	5181
PAN AM CLINIC	WRHA	0	3780	3780
Other facilities		115	10	125
Total		36310	64130	100440

Note: including surgical volumes from other clinical teams

Source DAD – FY 16/17

Current State and Case for Change

Major current state issues and supporting evidence indicates the need for change and shifts within this clinical area

Manitoba already has existing initiatives to build upon in the future model

- **Enhanced Recovery After Surgery (ERAS)** is being implemented at HSC with three surgeons for the colorectal patient population. SBH on the verge of implementing with the same patient population. Plan to expand through entire general surgery program and into other specialties and Network hubs (e.g., Intermediate).
- There is currently a programmatic approach to train **Family Practice Anesthesiologists (FPAs)** in Winnipeg to practice outside of Winnipeg. The intent of these roles is largely to practice outside of Winnipeg in communities that require less specialized Anaesthesia health workforce needs coupled with critical support of Family Practice and Emergency Room medical service models.
- There are standardized clinical pathways for hip and knee arthroplasty and hip fractures being provided in Manitoba

There is a high level of travel for patients outside of WRHA travelling to WRHA for surgeries.

- >50% of patients in rural and northern regions are travelling out of their regions for inpatient and day surgeries.
- Across all PCTs, the three major clinical categories with highest total day surgeries in FY17/18 were driven by gastrointestinal, ophthalmology, and musculoskeletal procedures.
- Across all PCTs, the three major clinical categories with highest total admissions in FY17/18 are comprised of musculoskeletal, gastrointestinal, and labour and delivery related admissions
- ORs are not currently operating at full capacity, some sites shut down OR at 12PM

Proportion of adult patients receiving care in Winnipeg (by their home region), FY 17/181

	Northern	Interlake - Eastern	Prairie Mountain	Southern
Inpatient Surgery	79%	76%	21%	51%
Day Surgery	63%	70%	15%	56%

Source: MHSAL – DAD

Long wait times to access surgeons for assessments and for surgeries

- In FY17/18, median wait time for hip and knee surgeries across Manitoba was **29 weeks**.
- In FY17/18, PMH and Southern's wait times for cataract surgery regularly exceeded **15 weeks**.
- As of November 8, 2018, there were 4,520 patients in the Spine Central Intake waiting list with average waiting time of **634 days**. The majority of patients are waiting to be seen by the surgeon or by the Spine Assessment Clinic (SAC).
- ENT surgical wait times in the province range from **two-to-three months** for children and adults at Portage District General Hospital to **one-to-1.5 years** at HSC/Children's and SBH for the same elective procedures. Similar patterns are seen for general surgery (data provided by PCT members).

Manitoba's Priority Procedures Wait Times Ranking Relative to the Other Provinces

Surgery	Rank* for 50th percentile wait time	Rank* for 90th percentile wait time
Hip replacement	7/10	8/10
Knee replacement	8/10	8/10
Cataract surgery (first eye only)	10/10	10/10

Source: CIHI

*Ranking corresponds to Manitoba results compared to the results of the other provinces, with "1" being the lowest median wait time or lowest 90th percentile. The denominator of the ranking indicates the number of provinces which provide the service and were able to report comparable data.

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	<ul style="list-style-type: none"> • Lack of clinical resources in Northern/rural/remote communities • Anaesthesia Care Team model variability 	<ul style="list-style-type: none"> • Enhanced use of digital health models to support improved communication between surgeons and other care providers • Advance the clinical capabilities at district and intermediate levels of care to ensure competencies outside Winnipeg. • Formalize a surgeon rotation program with anaesthesia provider coverage where appropriate to connect specialized services with other regions <ul style="list-style-type: none"> • Identify and maximize underutilized operating room capacity across the province
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> • Long wait times for elective surgery • High level of patient transfers from rural and northern regions for procedures that can be performed in non-urban facilities • Inconsistent surgical patient journeys, anaesthesia models, pre-/post-operative care, standard order sets • Inconsistent reporting systems and lack of common standards for surgical and anaesthesia quality measurement across the province • Varied availability of education programs to support surgery and anaesthesiology development • Inconsistent booking or slating processes across the province • Inconsistent surgical patient referral pathways and referral process for pediatric dental surgery 	<ul style="list-style-type: none"> • Establish a “hub and spoke” model to provide pre and post surgical care closer to home • Shift post-surgical care to facilities and resources within the patient's home community • Establish appropriately defined wait times and ensure awareness and understanding provincially, and by each region • Spread Enhanced Recovery After Surgery (ERAS) principles • Standardized patient flow and referral pathways to optimize providers' access specialists and improve patient experience • Establish provincial centralized referral and provincial coordinated access system for centralized surgical slating to improve patient flow and monitor surgical slate utilization • Expand the Surgery Information Management System (SIMS) at all surgical sites across the province to monitor all surgery wait times and operating room utilization • Establish standardized criteria for pre-operative screening and direct referrals including Telehealth consultations • Future continuing medical education programs to include provincial context, inter-professional education and simulation training opportunities using technology with remote learning capacity

Provincial view of the future vision

Future Vision: Enhanced provider capacity and capability of hospitals outside of Winnipeg to:

- Reduce and create transparency around wait times
- Create care closer to patient's home and reduce patient transport cost
- Standardize the patient journey from pre-operative to post-operative care
- Streamline reporting processes and enhance standards to ensure surgical and anaesthesia quality provincially through the National Surgery
- Quality Improvement Program via implementation of the National Surgical Quality Improvement Program (NSQIP) and an Anesthesia Information's Management System (AIMS)
- Standardize ERAS processes across the surgical sites for earlier discharge

Key proposed changes, but are not limited to, include:

- Establish **defined wait times** and ensure awareness and adherence provincially
 - Establish **provincially coordinated wait list** to provide patients with the **transparency and option to travel to other sites** for care (e.g., paediatric dental, spine, endoscopy centralized wait list, prioritizing high volume procedures)
- Establish a system providing **provincially coordinated access to standardize patient flow** for providers to access specialists and optimize patient experience
 - **Standardized pathways for elective, urgent, emergent and specialty care** including repatriation and referral process, and system navigation processes for patients that are required to move between levels of the network. (e.g., Hip and Knees central intake, central call line, etc.)
 - **Expand usage of e-consult** with standards to ensure timeliness for response windows
 - **Standardize special care unit** resourcing and competencies for post surgical patients
- **Utilize dedicated itinerant specialists or teams to reduce wait times and travel for patients**
 - Optimize usage of OR by sending surgical teams from provincial and intermediate hubs to **perform surgeries in facilities that have OR capacity at District Hubs**
 - Utilize itinerant teams for **pre/post-operative assessments for higher acuity cases**
- **Standardized guidelines** for sites providing surgeries and procedures (i.e., NSQIP, Medical Devices Regulation, Accreditation Standards, National Association of PeriAnesthesia Nurses of Canada, Manitoba Association of PeriAnesthesia Nurses, Operating Room Nurses Association of Canada, Manitoba Operating Room Nurses Association, Canadian Anaesthesia Society Guidelines)
 - Earlier discharge with standardized patient discharge instructions (e.g., Enhanced recovery after surgery)
 - Create **standard definition for procedure vs surgery** and which facilities can perform each
- **Utilize the hub and spoke model** to enhance capabilities of surgeons outside of Winnipeg through training and education (e.g., Project ECHO)
 - Expand capabilities of **primary care physicians to perform pre-operative assessments** to reduce travel and wait times for patients
 - **Specialists to outline common problems and guidelines** for primary health physicians to provide assessments

Service standards across the network model

	Service Standards
Provincial Referral Hub	<ul style="list-style-type: none"> Cases that require a high degree of specialization and/or of are high acuity <ul style="list-style-type: none"> Different sites at this hub (SBH and HSC) will specialize in different conditions (e.g., neurosurgery, cardiac surgery, major trauma) 24/7 Anaesthesiologist (FRCPC) in house providing local, regional, and general anaesthesia OR running 24/7 Facilities will be equipped with 24/7 ICU, high observation units, specialized personnel, and equipment Consistent ERAS standards Rehab services will be available for complex post-operative patients Diagnostic capabilities will support highly specialized surgical needs Provincial coordinated access and waitlist to inform patient of options available at different hubs and scheduling Use of telemedicine for specialists and various providers to support one another with consults and assessments and throughout patient journey Provincial clinical governance supported by quality and performance improvement tools such as National Surgical Quality Improvement Program (NSQIP) and Anesthesia Information Management Systems (AIMS)
Intermediate Referral Hub	<ul style="list-style-type: none"> Expand capabilities of site to treat medium to lower acuity cases (e.g., minor trauma, joints, urology, ENT, general surgery, obs/gyne) Screen for cases that require specialty services and limited transport ability 24/7 ICU, high observation units, and same day surgery units with post-operative observation facilities and personnel Consistent ERAS standards Diagnostic capabilities will support specialized surgical needs Access to rehab clinic and services to keep patients closer to home
District Health Hub	<ul style="list-style-type: none"> Expand capabilities to treat medium acuity cases, elective and emergent day surgeries and procedures based on surgical team, special care unit resources (e.g., endoscopy, hernia, cataracts and colonoscopies, orthopedic, minor trauma, paediatric dental) Screen for cases that require specialty services and limited transport ability for dedicated intermediate itinerant teams to treat Establish special care unit based on the types of surgery provided <ul style="list-style-type: none"> Observation units for select post-operative patients and for complications arising from low acuity cases with 24/7 capabilities Diagnostics requiring low-levels of specialty care and depending on resources with access to 24/7 radiologists, lab and imaging support (e.g., ultrasound, mammography, CT) Facilities will have a 24/7 ED on site Establish follow-up care practices through home and community rehab programs that are dependent on type of surgery
Local	<ul style="list-style-type: none"> Perform procedures of low acuity/day surgery (e.g., Mole removal), no inpatient or procedures requiring anaesthesia Community based rehab programs for patients post-operation (non-acute) Diagnostics that require lower levels of specialty with access to 24/7 radiologists (e.g., x-ray) Establish follow-up care practices through home and community rehab programs

Provider roles across the network model

	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Dedicated itinerant teams will rotate through the Intermediate and District hubs to provide surgical and perioperative care (e.g., specialists, anaesthesiologist, OR nurses, OR and MDR educator resources) • Providing support to surgeons and physicians at other network hubs on an ongoing basis to educate and increase the spectrum of higher acuity surgeries (i.e., Project ECHO) • Enhanced scope of practice for allied health (i.e., allied health to provide screening and assessment for centralized access to enable nurses to provide surgical assistance)
Intermediate Referral Hub	<ul style="list-style-type: none"> • Anaesthesiologists (FRCPC) to provide care for moderate acuity cases and Family Practice Anesthesia providers (FPA) to provide for lower acuity where applicable, available 24/7 • Dedicated itinerant teams will rotate through the district level to provide surgical and perioperative care (i.e., general surgery)
District Health Hub	<ul style="list-style-type: none"> • Anaesthesiologists (FRCPC) and Family Practice Anesthesia providers (FPA) to provide for lower acuity cases where required
Local	<ul style="list-style-type: none"> • Integration with primary health providers to provide patient assessment for early signs of various conditions (e.g., joint replacement) <ul style="list-style-type: none"> • Pre-screening and treatment plan (i.e., PT can screen for surgical candidates and provide treatment by exercise and therapy) • Identify targeted procedures that can be general directed referrals through patient pathways • Follow-up pre and post-operative processes – Primary care physicians to take responsibility of patient until elective operation occurs and consult specialists at other hubs in the network model

Opportunities for innovative service delivery

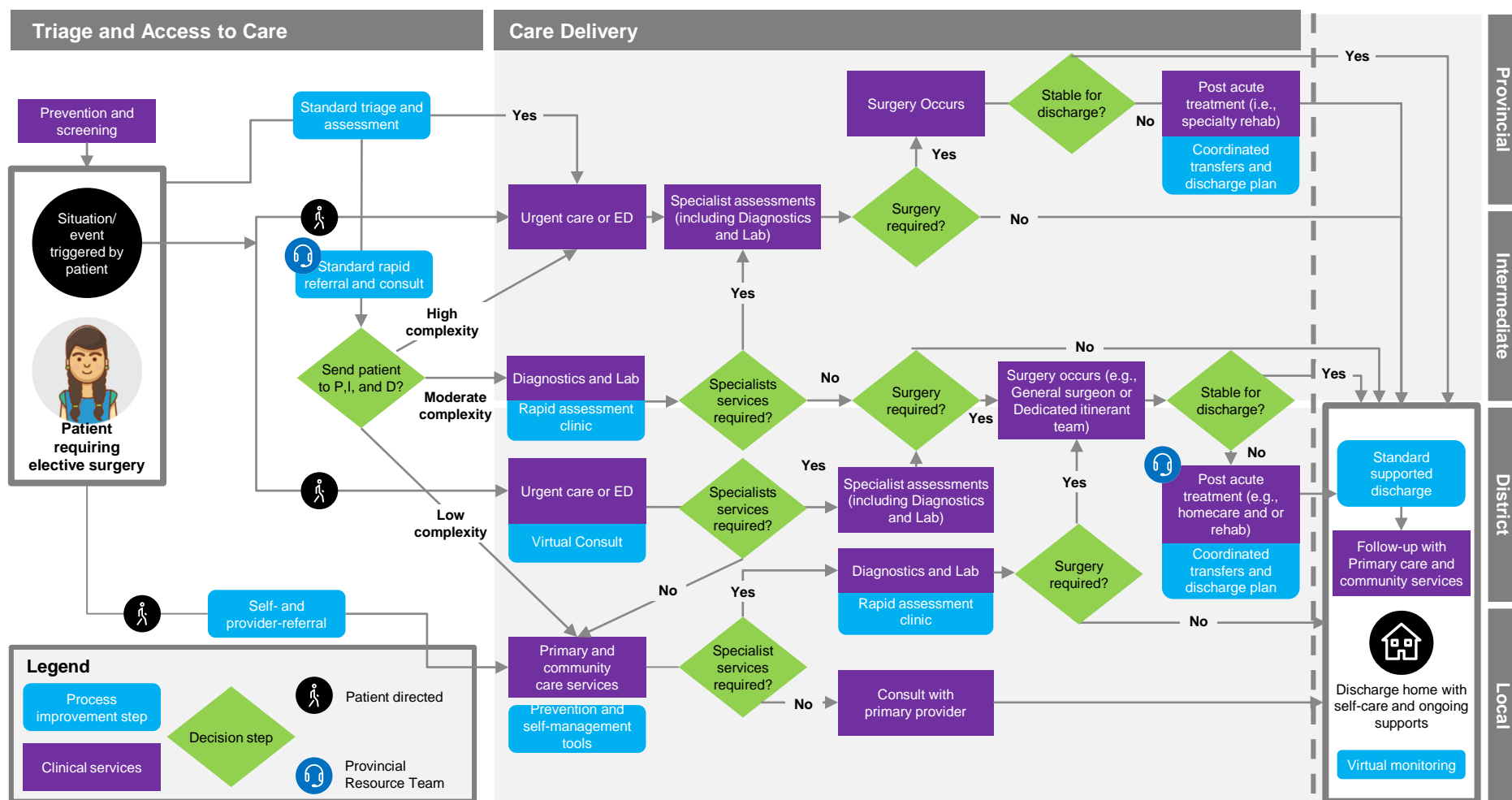
Innovative service delivery and improved access to care can be achieved through digital technology, including associated information and technology requirements, as well as integrated support services including diagnostics, laboratory, patient transport, Emergency Services, infrastructure and equipment.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

Digital Health	<ul style="list-style-type: none"> • Video-conferencing hubs that reduce travel for patients in northern and remote communities and support health care providers using Project ECHO • Implementation of NSQIP and AIMS quality improvement systems will require investment into data collection and quality improvement processes • Implementation of SIMS across all surgical sites to monitor wait times, resources, medical device tracking, etc.
Diagnostic Services	<ul style="list-style-type: none"> • <i>There are no major DI/Lab considerations that are unique to this PCT</i>
EMS/Patient Transport	<ul style="list-style-type: none"> • Patients will require access to scheduled transports for surgical care and pre/post-operative assessments at Intermediate and District hubs
Infrastructure and Equipment	<ul style="list-style-type: none"> • Equipment for targeted procedures will need to be available for dedicated itinerant teams travelling to various facilities • Establishment of ERAS practices will require an investment into equipment (e.g., colorectal surgery, pancreas surgery and cystectomy surgery have international guidelines that will need to be followed by Manitoba, which will require changes in surgical practices, nursing care, and quality improvements)
Prevention	<ul style="list-style-type: none"> • <i>There are no major prevention considerations that are unique to this PCT</i>

Key Performance Indicators

- Reduced length of stay for all surgery patients to be determined with NSQIP
- Reduced travel and associated costs for elective surgery patients outside of WRHA
- Reduced wait time for surgery to be monitored by SIMS
- Increased rate of day procedures, reducing associated inpatient costs
- Increased number of pre/post assessments completed via telehealth, to reduce patient travel
- Improved patient experience

Appendix – Future Provincial Clinical Services Pathway – Elective Surgery



Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

MENTAL HEALTH AND ADDICTIONS
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

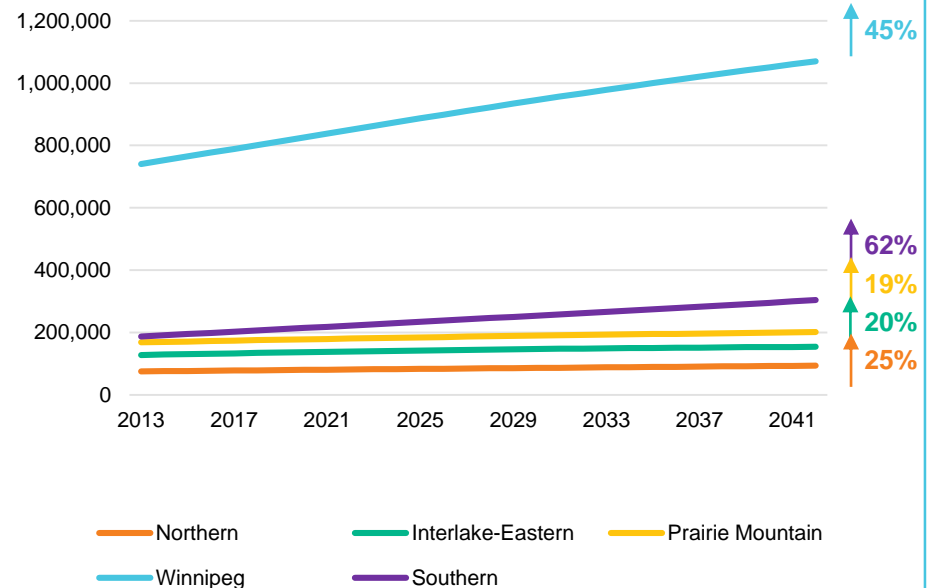
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

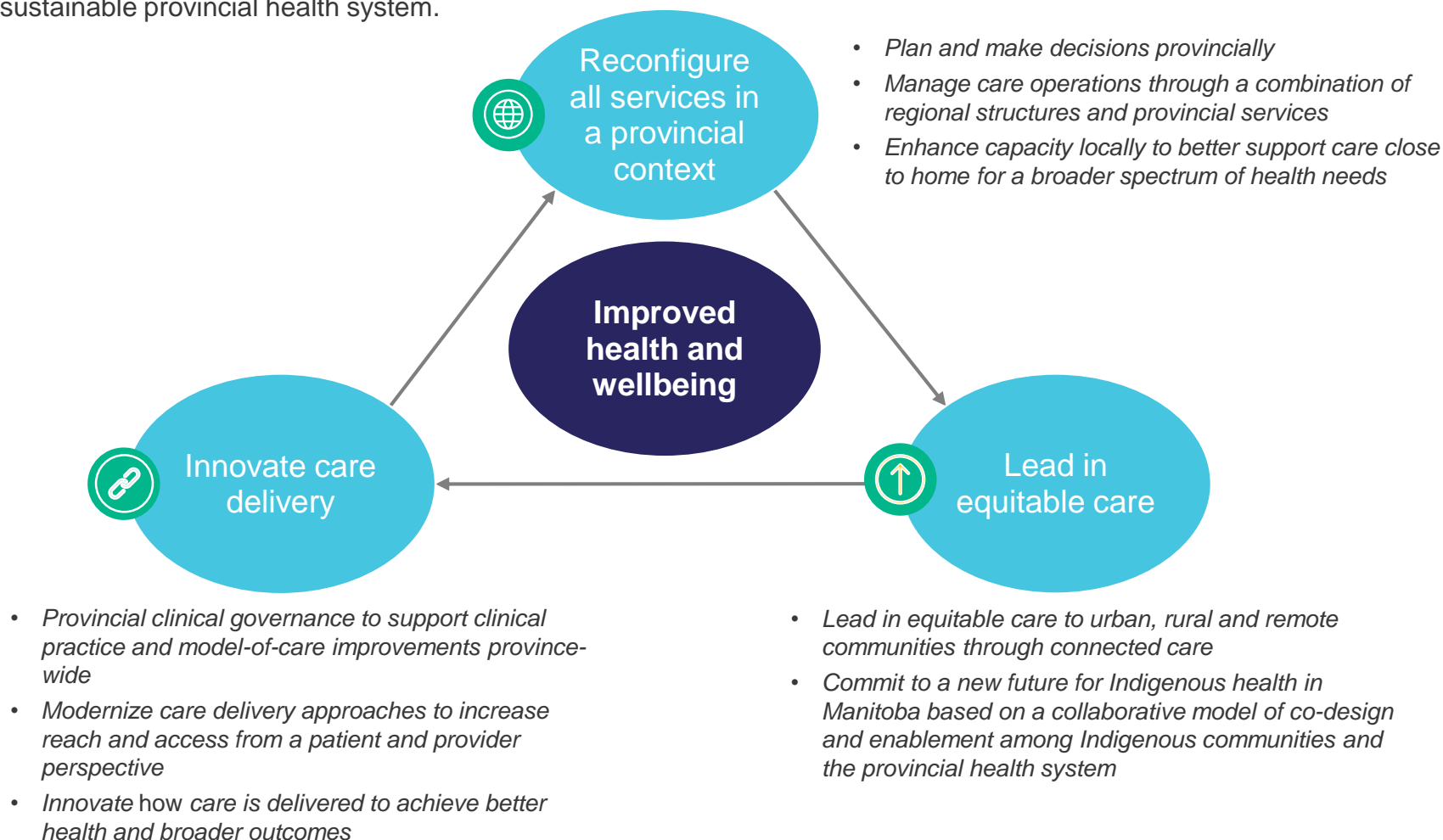
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

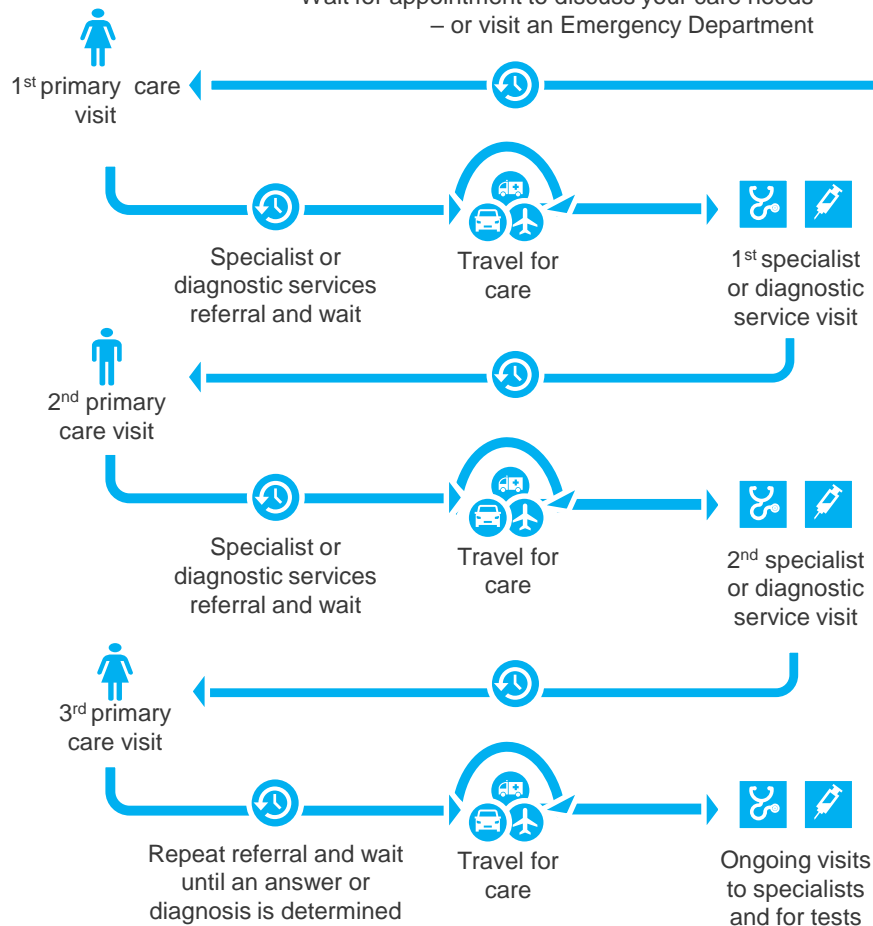
IN THE FUTURE

- 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?

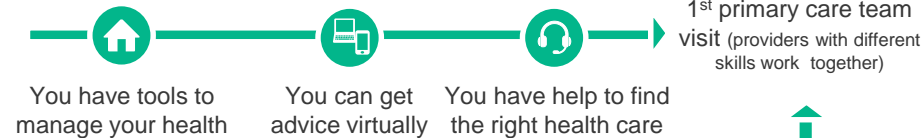
TODAY

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



IN THE FUTURE

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

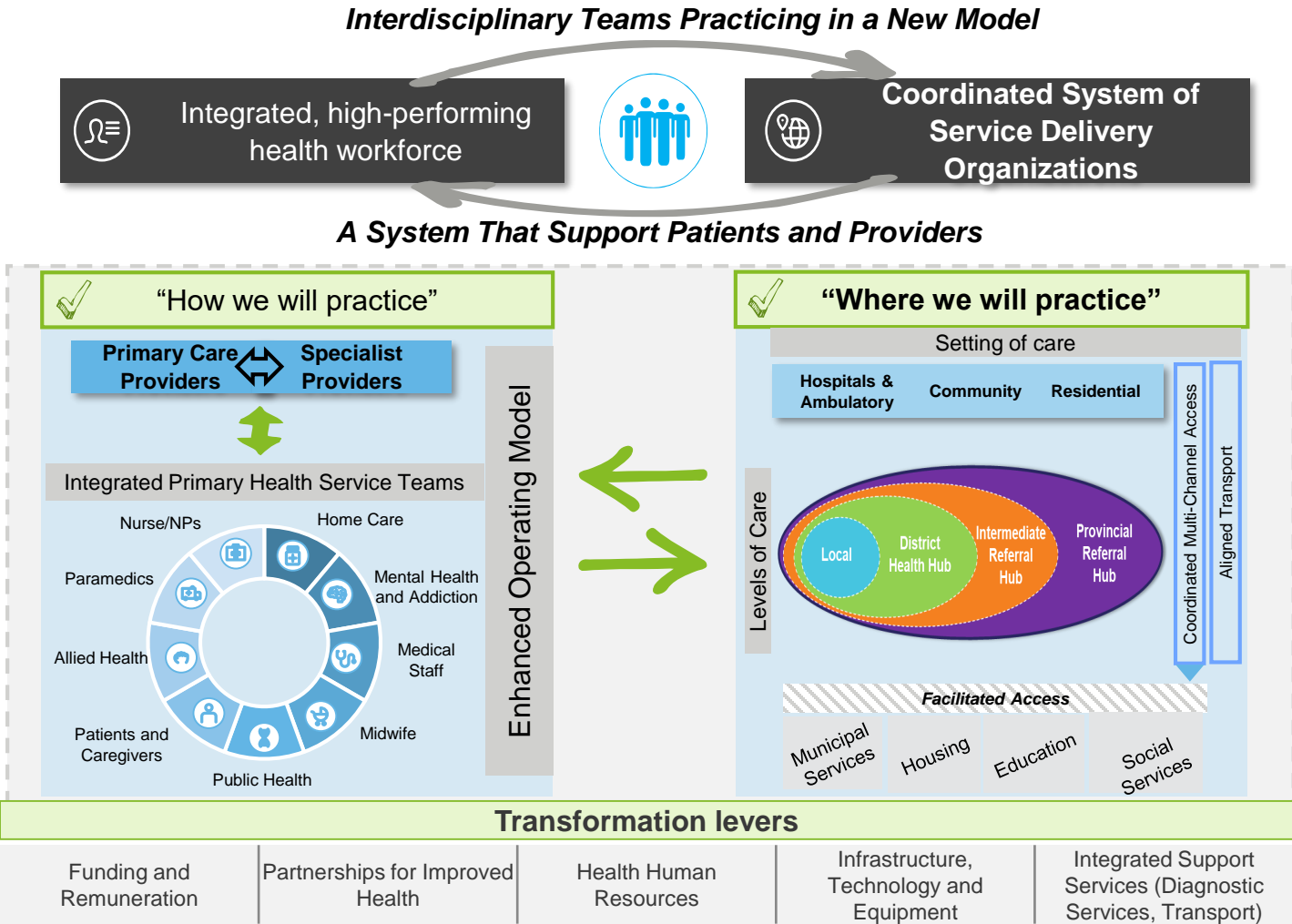
... a network of other teams nearby for in-person or virtual access to care

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

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



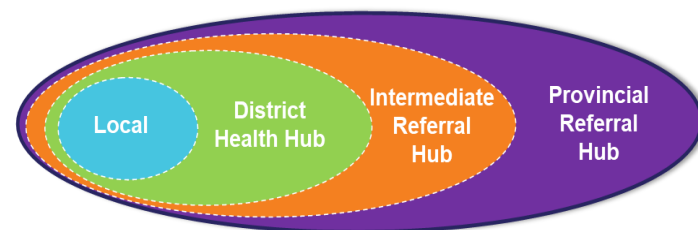
An integrated network for accessing and delivering services is core to the new provincial model



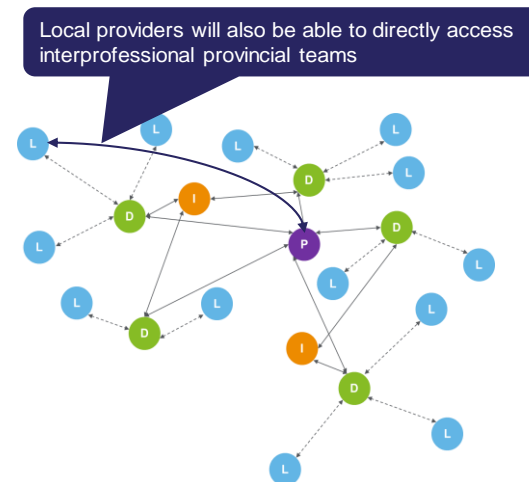
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



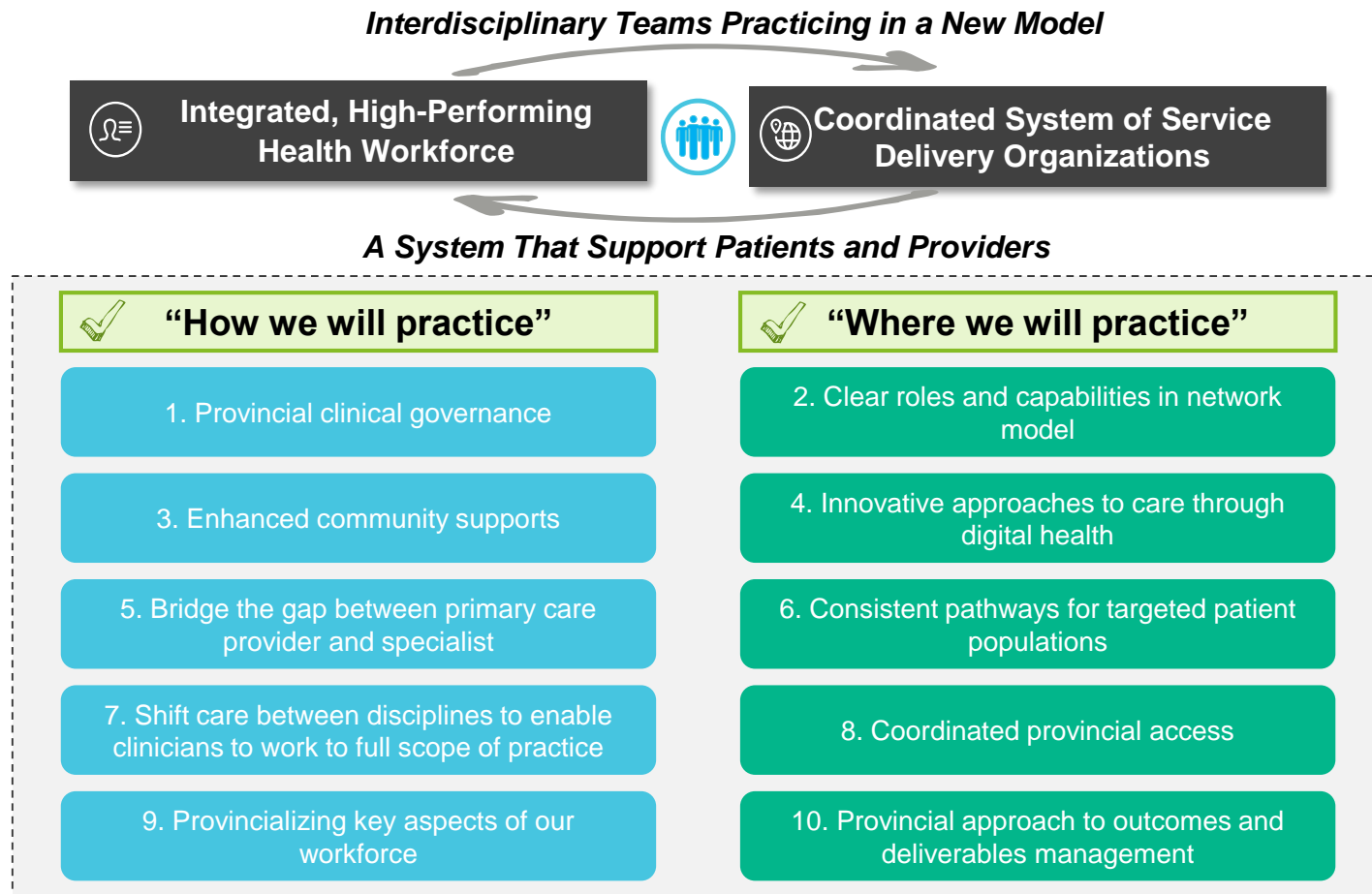
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core: Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate: 24/7 Emergency Department</p> <p>Provincial: 24/7 Emergency Department</p>		
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced: Special Care Unit</p>	<p>Intermediate: Intensive Care Unit (ICU)</p>	<p>Provincial: ICU with specialized capabilities</p>
	 <p>Core: Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate: Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial: Elective and emergency surgery with FRCPC</p>
 <p>Core Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	 <p>Specialist Services may include: District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate: Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial: Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as: Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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

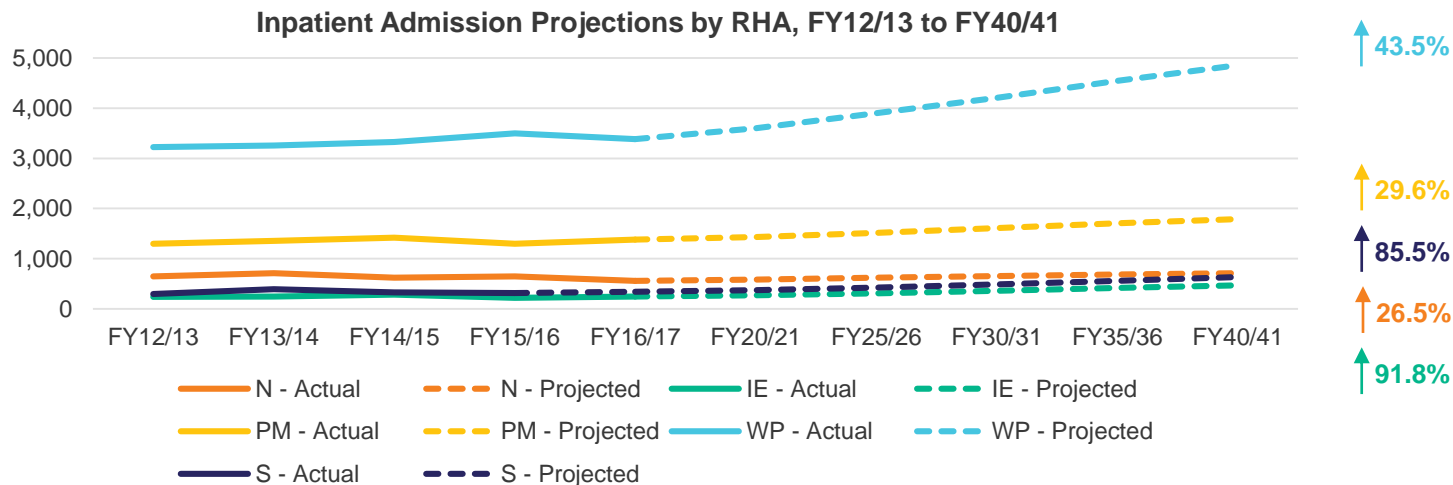


Mental Health and Addictions

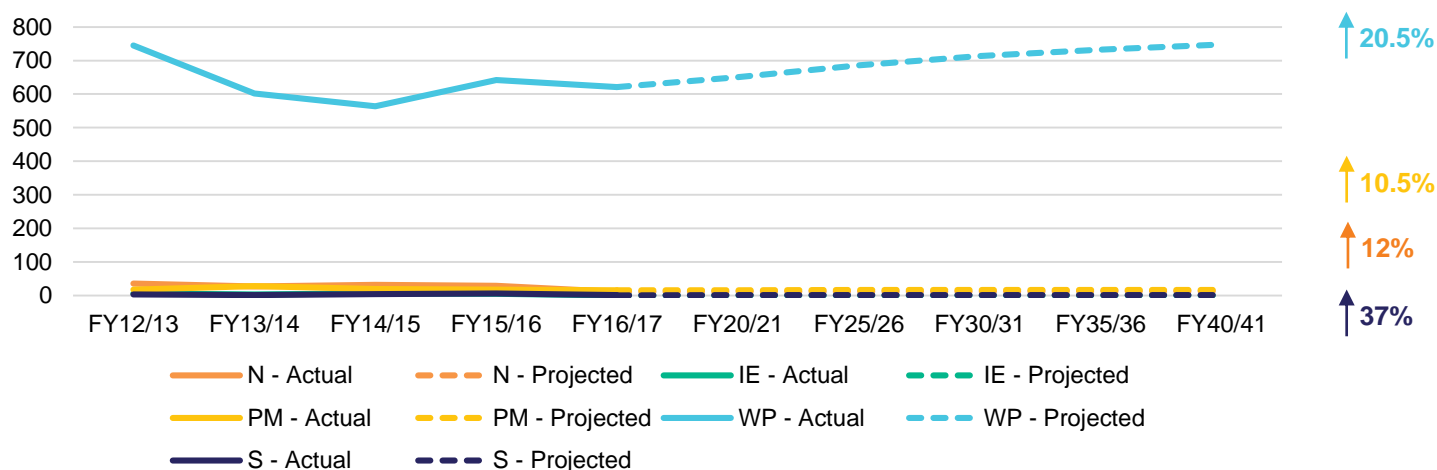
Current state and case for change

Both adult and paediatric inpatient mental health and addictions related admissions are projected to increase by 2040

Adult inpatient mental health and addictions admission are projected to increase **43% in Manitoba** between 2016 and 2040



Paediatric inpatient mental health and addictions admission are projected to increase **20% in Manitoba** between 2016 and 2040



Source: MHSAL – Discharge Abstract Database

***Projection Methodology:** Growth percentages provided by MHSAL were applied to the FY 2016/17 DAD data. The “base-case future scenarios” reflect projections that assume utilization and clinical service delivery are unchanged. In future iterations of the projections, this ‘future base case’ analyses will be updated using input from the PCTs, and other sources, to include alternative future scenarios that reflect the volumes where there are changes to the PCT model.

Current state and case for change

In 2017/18, substance use/addiction and mental health problems and illnesses were declared a national priority. In Manitoba, many individuals including children and youth and Indigenous populations face challenges with coordination and equitable access to mental health and addictions services across the province – there is opportunity to build upon the Virgo Report recommendations and consider alternate modes and settings of care to improve access to limited resources

Manitoba has already initiated programs and initiatives that support access to care closer to home which positions Manitoba well for future transformation

- Virgo Consultants created a Provincial Strategic Plan to improve access and coordination which has informed many of the discussions and planning at the various provincial clinical teams
- Rapid Access to Addictions Medicine (RAAM) Clinics are already opened in Winnipeg, Brandon, Selkirk and Thompson to provide walk-in support for substance abuse and addictions (WRHA, 2018)
- Rapid Access to Consultative Expertise (RACE) has been implemented in WRHA to provide a telephone service that allows primary care physicians to access psychiatry consultations for advice by calling one central number (WRHA, 2016)

Manitoba has a high proportion of adults, children and youth with mental health illness and problems. Where suicide rates are particularly high in First Nations communities, there is a need for shifts in preventative and population health

- Between FY10/11 to FY14/15, 27.6% of adults in Manitoba received a diagnosis of at least one mental illness. During the five-year period, there were 67 deaths by suicide, and 262 attempted suicides per 100,000 adults that resulted in hospitalization (Manitoba Centre for Health Policy, 2018).
- Over one-third of Grade 7 and 8 children and almost half of Grade 9-12 students are at risk for future mental health problems (Manitoba Centre for Health Policy, 2018)
- In Manitoba, suicide is the leading cause of injury deaths in children ages 10 and up. The suicide rate is 74/100,000 for 13- to 19- year olds, where almost one in five youth in First Nations communities have contemplated suicide, and one in ten have attempted suicide at least once (Manitoba Centre for Health Policy, 2018).

There is significant demand for Mental Health and Addictions services, however availability of core mental health and addictions services and supports are not coordinated and aligned to patients' level of need and complexity

- Of patients discharged from inpatient psychiatry in WRHA, many were observed to have multiple mental diagnosis, including about half with substance use disorders, and over 75% with medical diagnosis (Virgo, 2018)
- The prevalence of mental health disorders among children and youth in Canada (including Manitoba) appears to have remained the same since FY06/07, yet there has been an increase in ED visits and hospitalizations of 53% and 47% respectively (Virgo, 2018)
- Over 50% of adults in Opaskwayak Cree Nation were diagnosed with depression or anxiety, yet few were accessing mental health counselling services (Virgo, 2018)
- Manitoba has the lowest number of psychologists per 100,000 residents, compared to other provinces (Mental Health Commission of Canada), with 181 licensed psychologists

Inconsistent provincial adoption of evidence based interventions/programs, resulting in inequitable access/variability of service

- Manitoba has seen a higher number of individuals who access ER mental health support because they have not received help elsewhere, when compared to other provinces; of these many had not been seen by another health care provider in the previous two years (Virgo, 2018)

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	<ul style="list-style-type: none"> Variable coordination, and inconsistent communication between providers (i.e., primary care and specialists) across services, leading to challenges access services Variable education and awareness among primary health and community to support access and early intervention at various points of contact Variable use of multidisciplinary teams and evidence based interventions to provide wrap around care to prevent inpatient admissions 	<ul style="list-style-type: none"> Central access/call number for family physicians to access psychiatry consultants Enhanced capacity of primary care to build capacity in the community Shared care models of service delivery Specialists provide care through virtual care models to increase access outside WRHA Standard education and training across various points of contact through core competency models Integration of mental health and addiction services into MyHT 2.0
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> Inconsistent adoption of evidence based interventions/programs across the province Variable coordination of mental health and addictions services, resulting in greater challenges and inequities in access to care High volume of mental health related emergency room visits High volume of transfers between sites for assessments No provincially consistent source of information for the population to access, including system navigation and self-management resources 	<ul style="list-style-type: none"> Tiered services and supports aligned to patient's level of need and complexity for both mental health and addictions Alignment and greater integration between mental health and addictions services across the province Coordinated access through a single point of access for referrals Rapid access to addictions services through expansion of RAAM clinics Web-based platform to triage, navigate and support access to resources and information Collaboration across select government sectors (i.e., Justice, Child Services) to support mental health and addictions care across the province

Provincial view of the future vision

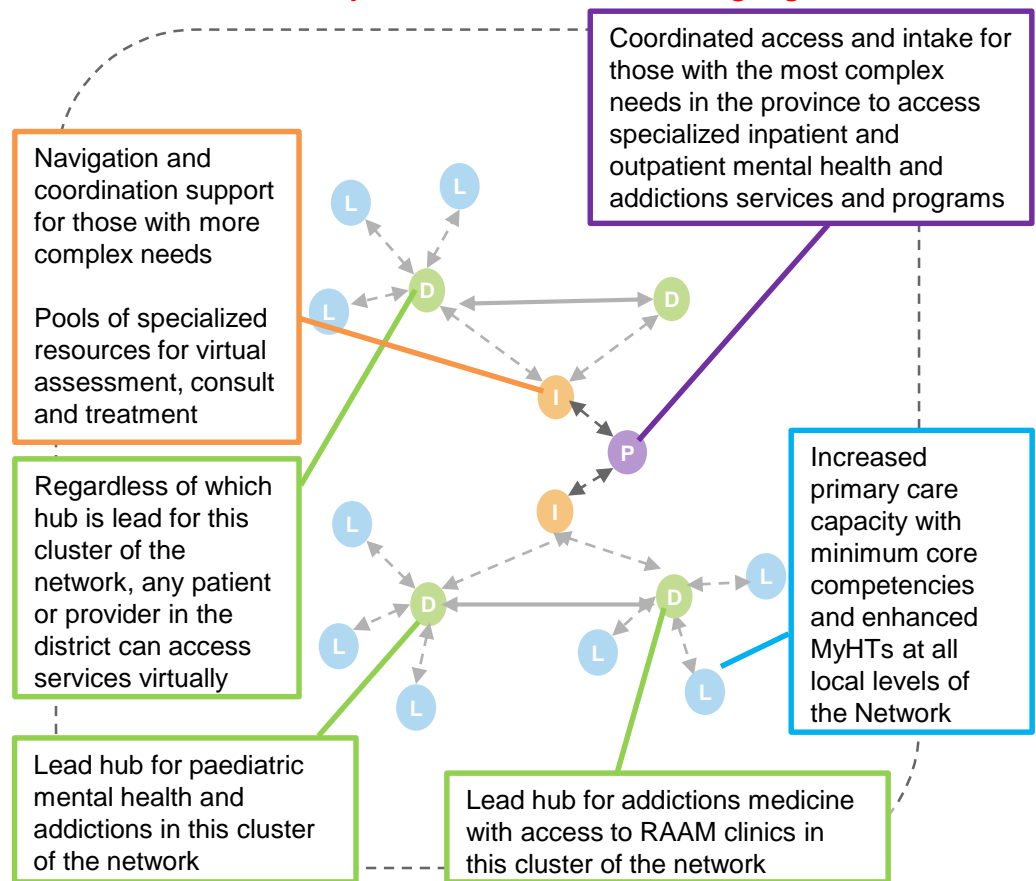
Future Vision: Manitoba will adopt a Stepped Care Model whereby mental health and addictions treatment and recovery support services are aligned to five tiers of complexity as outlined by the 2018 Virgo Report. It is anticipated that the future model will result in:

- Improved access and coordination of mental health and addictions services
- Standardized, streamlined care to support enhanced patient outcomes
- Improved primary care capacity to support service delivery closer to home

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

- Tiered services and supports aligned to patient's level of need and complexity
 - Enhance capabilities at Local and District Hubs to provide coordinated care for lower complexity needs closer to home
 - Expand existing initiatives, including RACE, ECHO, Shared Care models to build capacity in primary care and support access to care closer to home
 - Standard tools and supports to enable primary care capacity building
- Standardize capabilities at Intermediate and Provincial Hubs for higher complexity needs
 - Coordinated intake and assessment for specialized populations (i.e., paediatrics, seniors, trauma, co-occurring needs etc.)
- **Alternate modes of care delivery** (i.e., virtual group classes) to extend the reach of specialists outside WRHA and provide an alternate mode of assessment and consults
- **Standard education and training** through a core competency model at various points of contact across the workforce

Illustrative example of network hubs working together



Future state of the provincial network | Indigenous

Focus on mental health and addictions amongst **Indigenous communities**

Current issues:

- Challenges related to foundational social determinants of health – housing, water, food, education, etc.
- High rate of mental health and addictions challenges including suicide and violence
- Specialists come in to support the community for a short-period of time, where there is a lack of familiarity and trust
- Lack of consistent system coordination and navigation to streamline access to specialist care
- RAAM clinics are not as accessible for Indigenous individuals who require an appointment to access travel benefits
- Challenges related to medication distribution in nursing stations including for opiate replacement therapy
- Maximum time-limit to keep a patient waiting for a virtual consult in a nursing station (i.e., virtual specialist consult) results in higher transfers to WRHA
- Unnecessary Form 4 use

Opportunities:

- Commit to longer-term trust relationships and capacity building within teams across the Network
- Bridge the gap with FNIHB to improve communication and services on-reserve, including supports for nursing stations
- Immediate access to virtual specialist consults to support the local team (i.e., individual providers) and nursing stations, including on-call physicians
 - Provincial Coordinated Access Team Model to provide virtual support in nursing stations, including intake and repatriation decisions
 - Coordinated access system with a single call number
 - Virtual tools to support active consults and assessments
- Standard cultural competency among providers across the province (i.e., language competencies and understanding of diversity across Indigenous communities)
- Rapid access to crisis stabilization for urgent/emergent cases as well as suicide and crisis prevention strategies
- Expand support for children and youth through school systems (e.g., telehealth stations in schools)
- Enhanced scope of practice for paramedics to support EMS response for lower complexity patients

Future state of the provincial network | Overview

Services and programs align with tiers of severity and complexity as outlined by the Virgo Report, and across levels of the Network Model

Tier 2 – Early intervention and self-management services	Tier 3 – Services targeted to moderate MHA needs	Tier 4 – Intensive and specialized services	Tier 5 – Highly specialized, intensive services
<ul style="list-style-type: none"> • Build capacity in primary health through provincial expansion of existing initiatives and increased use of virtual tools through a shared care, team based model • Focus on preventing individuals from moving to higher tiers through early intervention and self-management (i.e., mental health and addictions prevention) • Increase access to specialist services, community supports and virtual group classes • Expand availability of virtual, web-based mental health and addictions treatment and assessment options (e.g., web-based treatment programs; Bounce Back Program, Strongest Families) • Interdisciplinary team model to support care for lower need individuals • Increased cultural competency to support Indigenous individuals in the community 	<ul style="list-style-type: none"> • Standard core competency training and enhanced scope of practice across service providers (i.e., NPs) <ul style="list-style-type: none"> • Focus on evidence based treatment strategies • Build capacity in primary health (i.e., through collaboration with enhanced My Health Teams) • Provincial centralized intake to specialty services to ensure appropriate access to the right services and treatments • Standard screening and assessment tools • Stepped care within the tier with varying methods of service delivery across levels of complexity • Telehealth to increase access to specialist consults • Increased caregiver support and self-management 	<ul style="list-style-type: none"> • Expanded use of telehealth for consults and assessments to expand access to specialist care in the community • Core competency training to enhance provider roles for local service providers including educational workers, police, social workers, etc. • Expansion of outpatient psychosocial programs • Enhanced treatment services for intoxicated individuals and urgent treatment resources for high needs addiction patients • Expand mobile crisis teams • Centralized coordination of dedicated beds 	<ul style="list-style-type: none"> • Standard assessment tools to identify Tier 5 patients • Core competencies across all communities in the same hub of the Network to support higher need individuals • Focus on treatment, including medical withdrawal management • Care coordination/case manager to support Tier 5 patients across levels of the Network • Coordination of system navigation and access (i.e., through Provincial Coordinated Access Team) • Wrap-around service team across levels of the Network • Increased peer supports • Urgent treatment resources for high needs addiction patients • Housing supports in the community to allow for faster discharge • Expand mobile crisis support teams • Centralized coordination of dedicated beds
<p>Consistent mental health and addictions competencies among primary care providers including appropriate training depending on scope of practice</p> <p>Virtual access to specialist consults and assessments across levels, including on-reserve communities</p> <p>Standard assessment tools to determine appropriate level of support needed</p> <p>Enhanced access and support for hard to reach population (i.e., homeless, Indigenous individuals)</p> <p>Collaboration with peer support organizations</p>			

Service standards and provider roles | Tier 2

Tier 2 – Low need, early intervention and self-management services		
	Service standards	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> Enhance capacity for development, implementation and evaluation of programs in intermediate, district and local hubs (ECHO, RACE, psychological and biological treatments) Addictions prevention strategies to prevent individuals from moving to higher tiers 	<ul style="list-style-type: none"> Development of education, training and evaluation of treatments Mental health and addiction specialists to provide virtual consults, assessments and treatment to Intermediate, District, Local Hubs
Intermediate Referral Hub	<ul style="list-style-type: none"> Enhance awareness of self-management tools and navigation of the mental health and addiction system 	
District Health Hub	<ul style="list-style-type: none"> Provincial standard for trauma-informed care Feedback circuits to support primary care providers in managing patients who end up in the ED to avoid future crisis Streamlined and more timely transition of care between the ER and primary care in discharge planning 	<ul style="list-style-type: none"> Competency based training for evidence-based treatments <ul style="list-style-type: none"> Incorporate clinical supervision into competency building Pharmacist support for medical reconciliation
Local	<ul style="list-style-type: none"> Build capacity in primary health: <ul style="list-style-type: none"> Provincial expansion of RACE to increase primary care access to psychiatry consults Provincial expansion of the ECHO Model of Care to increase primary care capacity in treatment, management of MH&A Outreach to Indigenous communities that is culturally safe and familiar Improve access to services: <ul style="list-style-type: none"> Virtual access to MH&A consults and services to support early intervention treatment Increase access to behavioural therapies to avoid pharmacological interventions Consistent access to evidence-based (behavioral, biological and psychosocial) treatments Enhance access to class based and group based interventions (e.g., CBTm, and shared medical visits) Access to brief interventions in primary care, including for addictions management Integrate self-help tools into primary care Ensure standard access to primary care providers Enhance early identification: <ul style="list-style-type: none"> Enhance use of wellness assessments to support early identification Increased screening for early MH&A treatments, including in schools 	<ul style="list-style-type: none"> Shared Care Models of MH&A service delivery with interdisciplinary teams to support patients to remain in their community <ul style="list-style-type: none"> Enhanced MyHT to provide assessment and treatments Enhanced MyHT to promote non-medication interventions Increased use of spiritual care providers, elders and traditional healers to support cultural differences Addictions counsellors to support patients in community and contribute to addictions prevention Standardization of training for local care providers including allied health, social workers, paramedics, police, etc.

Service standards and provider roles | Tier 3

	Tier 3 – Moderate need, services targeted to moderate MHA needs	
	Service standards	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> Provincial expansion of virtual access to specialized services (i.e., telehealth for child, adult, geriatric psychiatry, psychology), including consistent competencies to use technology/virtual tools 	<ul style="list-style-type: none"> Competency based training for evidence-based treatments <ul style="list-style-type: none"> Incorporate clinical supervision into competency building Mental health and addiction specialists to provide virtual consults, assessments and treatment to Intermediate, District, Local Hubs
Intermediate Referral Hub	<ul style="list-style-type: none"> Provincial expansion of virtual access to specialized services (i.e., telehealth for child and adult psychiatry, psychology) where needed Telepsychiatry in EDs to support emergent MH&A cases 	
District Health Hub	<ul style="list-style-type: none"> RAAM Clinics expanded to all RHAs Telepsychiatry in EDs to support emergent MH&A cases Telehealth to allow for virtual consults with specialists in Intermediate or Provincial Hubs Increase standard basket of services including case management, psychosocial rehab, brief treatments, system navigation, etc. 	
Local	<ul style="list-style-type: none"> Build capacity in primary health: <ul style="list-style-type: none"> Provincial expansion of RACE to increase primary care access to psychiatry consults Provincial expansion of the ECHO Model of Care to increase primary care capacity in treatment, management of MH&A (e.g., through My Health Teams) Standard assessment tools for screening in primary care clinic waiting rooms to measure aspects of MH&A (i.e., algorithm developed to determine appropriate resources) Improve access to services: <ul style="list-style-type: none"> Regional and provincial coordinated access to ensure equitable access and appropriate triage to providers and programs in the community Virtual access to MH&A consults and services and standard education to use virtual tools Consistent access to standard evidence-based treatments (e.g., CBT, DBT, IPT, CPT) and virtual group classes Brief interventions for select patient populations Standard assessment to identify patient needs Stepped care within the tier (i.e., web-based evidence-based treatments, group therapy, individual therapy) 	<ul style="list-style-type: none"> Shared Care Models of MH&A service delivery an providers working to full scope of practice (e.g., Psychiatric NP) <ul style="list-style-type: none"> Enhanced MyHT to provide assessment and treatments Increased use of spiritual care providers, elders and traditional healers to support cultural differences Competency-based training for evidence-based treatments and appropriate supervision Standardization of training for local care providers including allied health, social workers, paramedics, police, etc.

Service standards and provider roles | Tier 4

Tier 4 – Moderate to severe need, intensive and specialized services		
	Service standards	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Crisis support services available to all via in person or virtual supports • Specialized paediatric and seniors MH&A services with centralized intake and standard assessment • Access to inpatient services including psychosocial rehab and DBT programs • Standard bed management for forensic and co-occurring needs • Specialized assessment and treatment for complex trauma and PTSD • Enhanced treatment services for intoxicated individuals and urgent treatment resources for high needs addiction patients (e.g., housing, medical, harm reduction) • Enhanced access to novel neurostimulation and biological treatments 	<ul style="list-style-type: none"> • Competency based training for evidence-based treatments <ul style="list-style-type: none"> • Incorporate clinical supervision into competency building • Mental health and addiction specialists to provide virtual consults, assessments and treatment to Intermediate, District, Local Hubs
Intermediate Referral Hub	<ul style="list-style-type: none"> • Telepsychiatry in EDs to support emergent MH&A cases • Specialized paediatric and seniors MH&A services via telehealth and dedicated itinerant models • Crisis support services available to all via virtual care supports • Standard bed management for forensic and co-occurring needs • Specialized assessment and treatment for complex trauma and PTSD • Enhanced treatment services for intoxicated individuals and urgent treatment resources for high needs addiction patients (e.g., housing, medical, harm reduction) 	
District Health Hub	<ul style="list-style-type: none"> • RAAM Clinics expanded to all RHAs • Telepsychiatry in EDs to support emergent MH&A cases • Telehealth to allow for virtual consults with specialists in Intermediate or Provincial Hubs • Access to outpatient services including psychosocial rehab and DBT programs • Recovery services for acutely intoxicated individuals (i.e., detoxification vs. treatment) • Coordinated bed management 	<ul style="list-style-type: none"> • Mobile crisis team to support access to services • Standard education and awareness in trauma informed care
Local	<ul style="list-style-type: none"> • Enhanced community services for early psychosis and co-occurring MH&A needs • Enhanced forensic community programming • Treatment services for acutely intoxicated individuals (i.e., enhanced capacity for recovery services for 'revolving door' patients) 	<ul style="list-style-type: none"> • Standardization of training for local care providers including allied health, social workers, paramedics, police, etc.

Service standards and provider roles | Tier 5

Tier 5 – Severe or complex need, highly specialized, intensive services		
	Service standards	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> Emergency mental health consultation and assessment services available to all via in person or virtual supports Specialized paediatric and seniors MH&A services with centralized intake and standard assessment Standard bed management for forensic and co-occurring needs Enhanced treatment services for intoxicated individuals and urgent treatment resources for high needs addiction patients (e.g., housing, medical, harm reduction) 	<ul style="list-style-type: none"> Management teams for detox support/medical withdrawal and stabilization Psychiatric emergency nurses in ED Care coordinator/manager available 24/7 to follow patient through levels of the Network Mental health and addiction specialists to provide virtual consults, assessments and treatment to Intermediate, District, Local Hubs
Intermediate Referral Hub	<ul style="list-style-type: none"> Telepsychiatry in EDs to support emergent MH&A cases Emergency mental health consultation and assessment services available to all via in person or virtual supports Specialized paediatric and seniors MH&A services with centralized intake and standard assessment Virtual access to MH&A consults at the Provincial Hub Enhanced treatment services for intoxicated individuals and urgent treatment resources for high needs addiction patients (e.g., housing, medical, harm reduction) 	<ul style="list-style-type: none"> Management teams for detox support/medical withdrawal and stabilization Psychiatric emergency nurses in ED
District Health Hub	<ul style="list-style-type: none"> RAAM Clinics expanded to all RHAs Virtual access to MH&A consults at the Provincial Hub Wrap-around services available through mobile and virtual support, including EMS and police 	<ul style="list-style-type: none"> Care coordinator/manager available 24/7 to follow patient through levels of the Network <ul style="list-style-type: none"> Assessment and treatment services available in the community through virtual supports Psychiatric emergency nurses in ED Expand mobile crisis support teams
Local	<ul style="list-style-type: none"> Services available locally for tier 5 patients as they decrease in acuity Wrap-around services available through mobile and virtual support, including EMS and police 	<ul style="list-style-type: none"> Care coordinator/manager with standard core competencies available 24/7 to follow patient through levels of the Network <ul style="list-style-type: none"> Standard assessment and treatment services available in the community through virtual supports Access to a coordinated consult system (i.e., Provincial Coordinated Access Team) to gain advice on provincial services To support mobile crisis planning (in home or remotely), which can also be triggered by EMS/police for assessment at local level

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 Mental Health and Addictions PCT as they are unique to those outlines in the Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model.

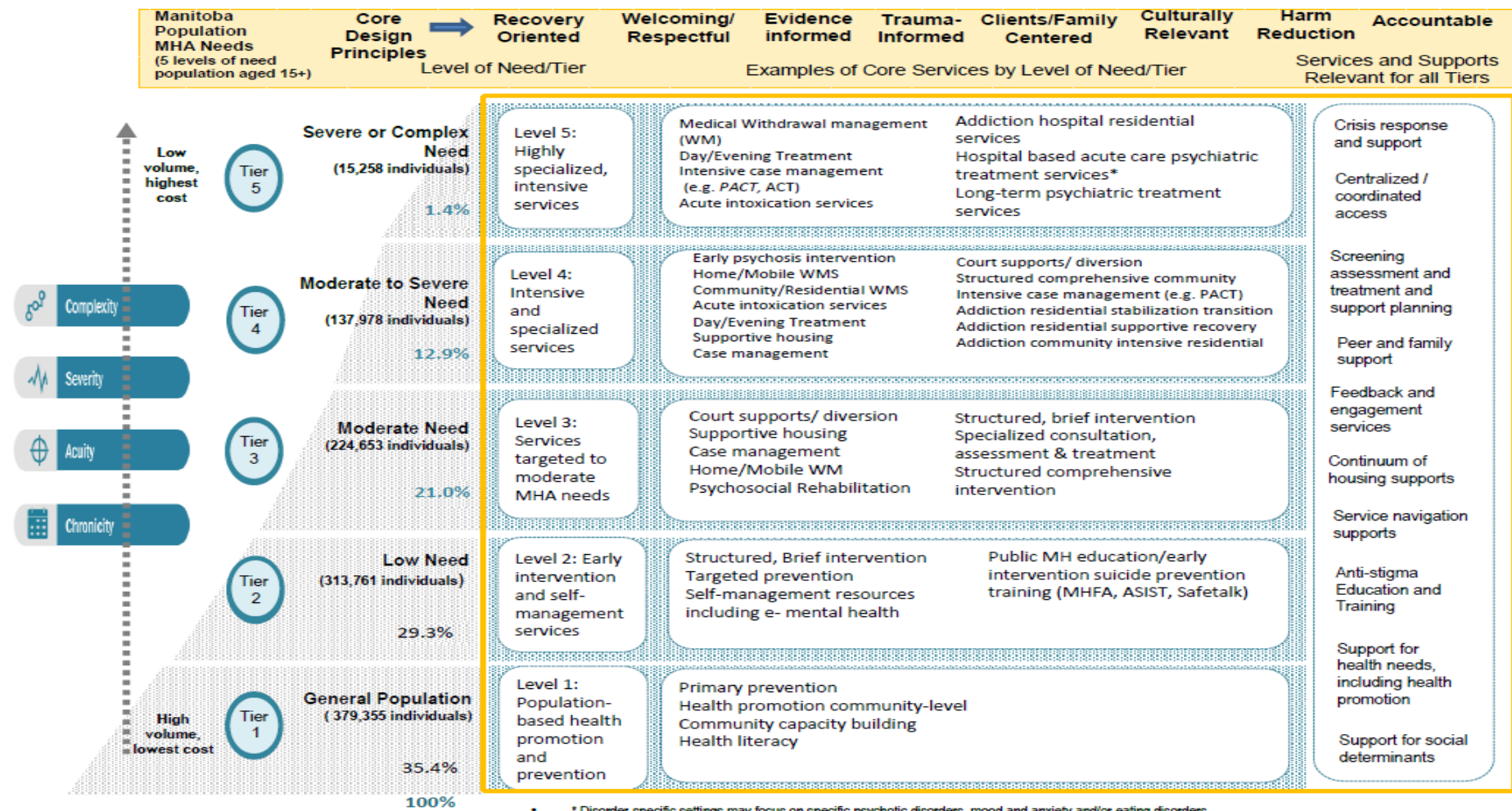
Digital Health	<ul style="list-style-type: none"> Digital enablers to support the implementation of provincial programs (i.e., RACE and ECHO), and to provide alternate modes of consult, assessment and treatment (i.e., through telehealth, eConsult, etc.) to increase access to care in Local and District Use of outcome measures embedded in service delivery
Diagnostic Services	<ul style="list-style-type: none"> Diagnostic considerations to include increased access and coordination of mental health and addictions diagnostics including psychiatry and clinical health psychology diagnostic supports
EMS/Patient Transport	<ul style="list-style-type: none"> Enhanced community supports (i.e., community paramedics) to support emergent mental health and addictions needs
Infrastructure and Equipment	<ul style="list-style-type: none"> Physical space considerations required to support enhanced capacity in the community, including RAAM clinics, space for delivering expanded programs (i.e., RACE, RAAM), and equipment for mobile crisis teams
Prevention	<ul style="list-style-type: none"> Mental health and addictions support services to include rapid access to crisis stabilization for urgent/emergent cases as well as suicide and crisis prevention strategies, including in First Nations communities Collaboration with FNIHB and linkages with nursing stations to support equitable access and prevention for First Nations communities

Key Performance Indicators

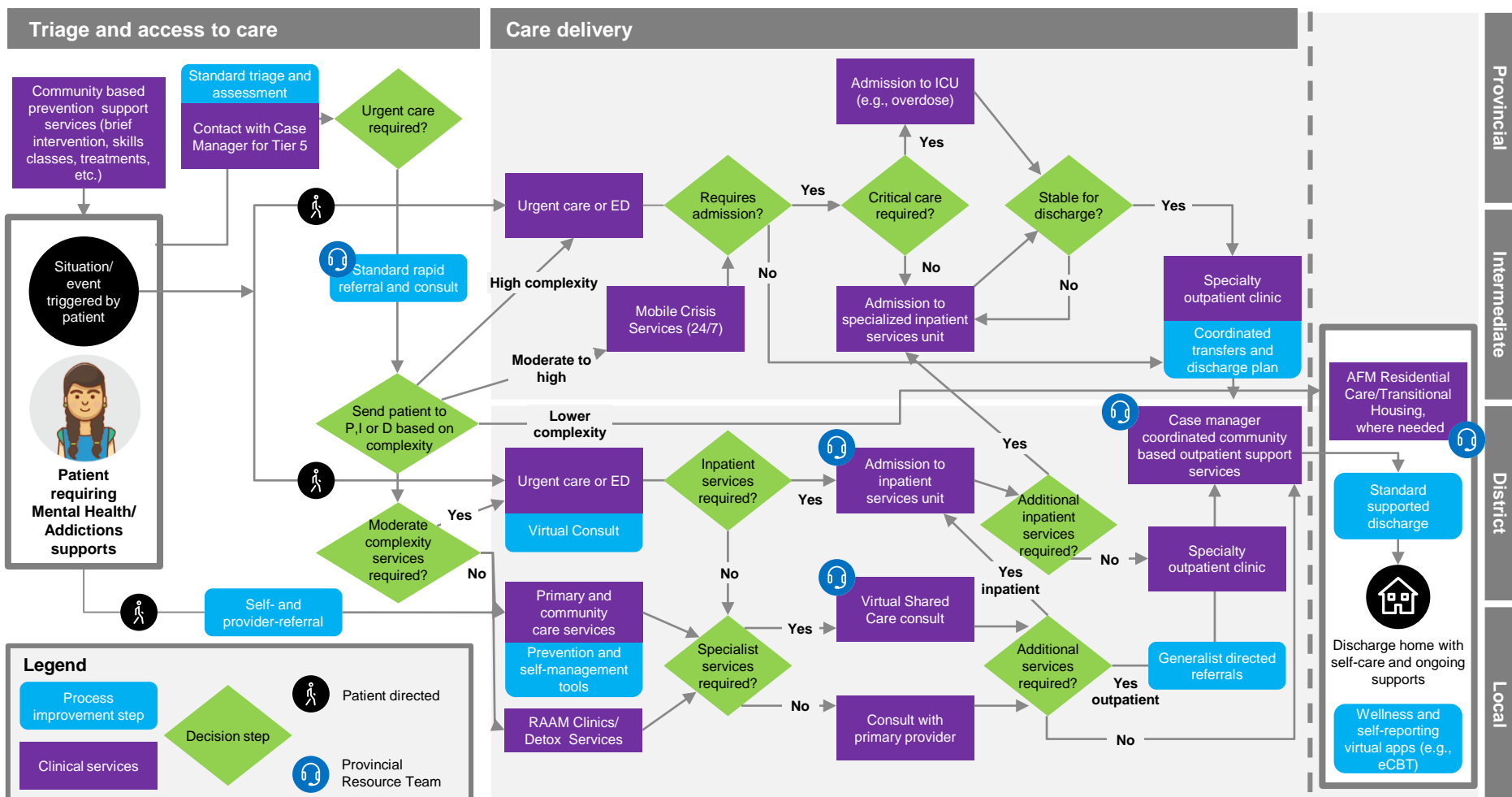
1. Increased use of urgent treatment resources for high needs addictions patients, resulting in a reduction in the number of patients who cycle through the ED
2. Increased number of Tier 2, 3 patients managed in the community through enhanced primary health and virtual tools
3. Reduced suicide rates, including in First Nations communities, with implementation of a provincial suicide prevention strategy
4. Implementation of standard core competency training to enhance provider roles for local service providers (i.e., educational workers, police, social workers, etc.)
5. Consistent use of standard assessments and coordinated intake for specialized populations, including paediatric, seniors, trauma, co-occurring needs, etc.

Appendix – Virgo Report Tier Descriptions

Mental Health and Substance Use/ Addiction Treatment System Framework for Manitoba



Appendix – Future Provincial Clinical Services Pathway – Mental Health and Addictions



Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

CARDIOVASCULAR AND THORACIC
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

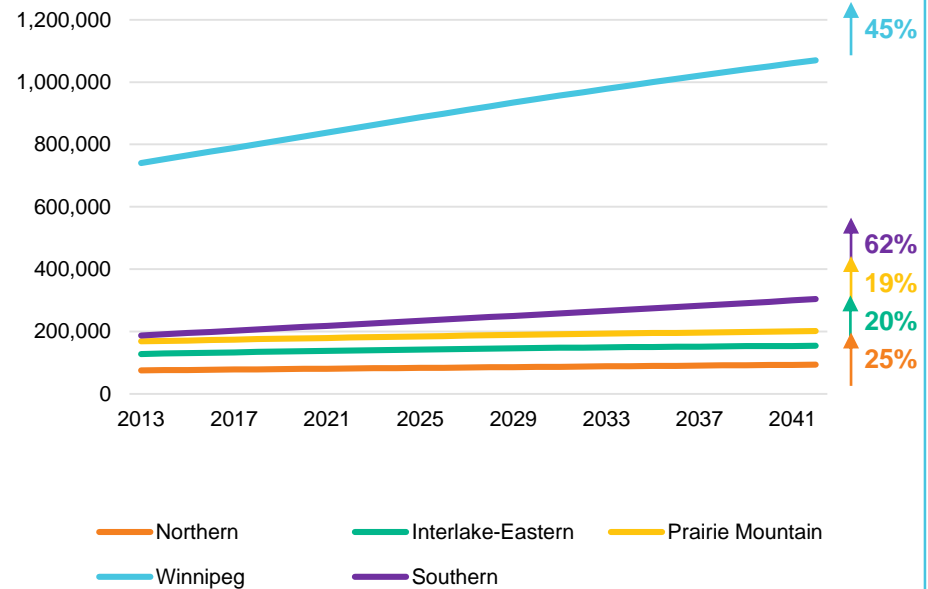
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

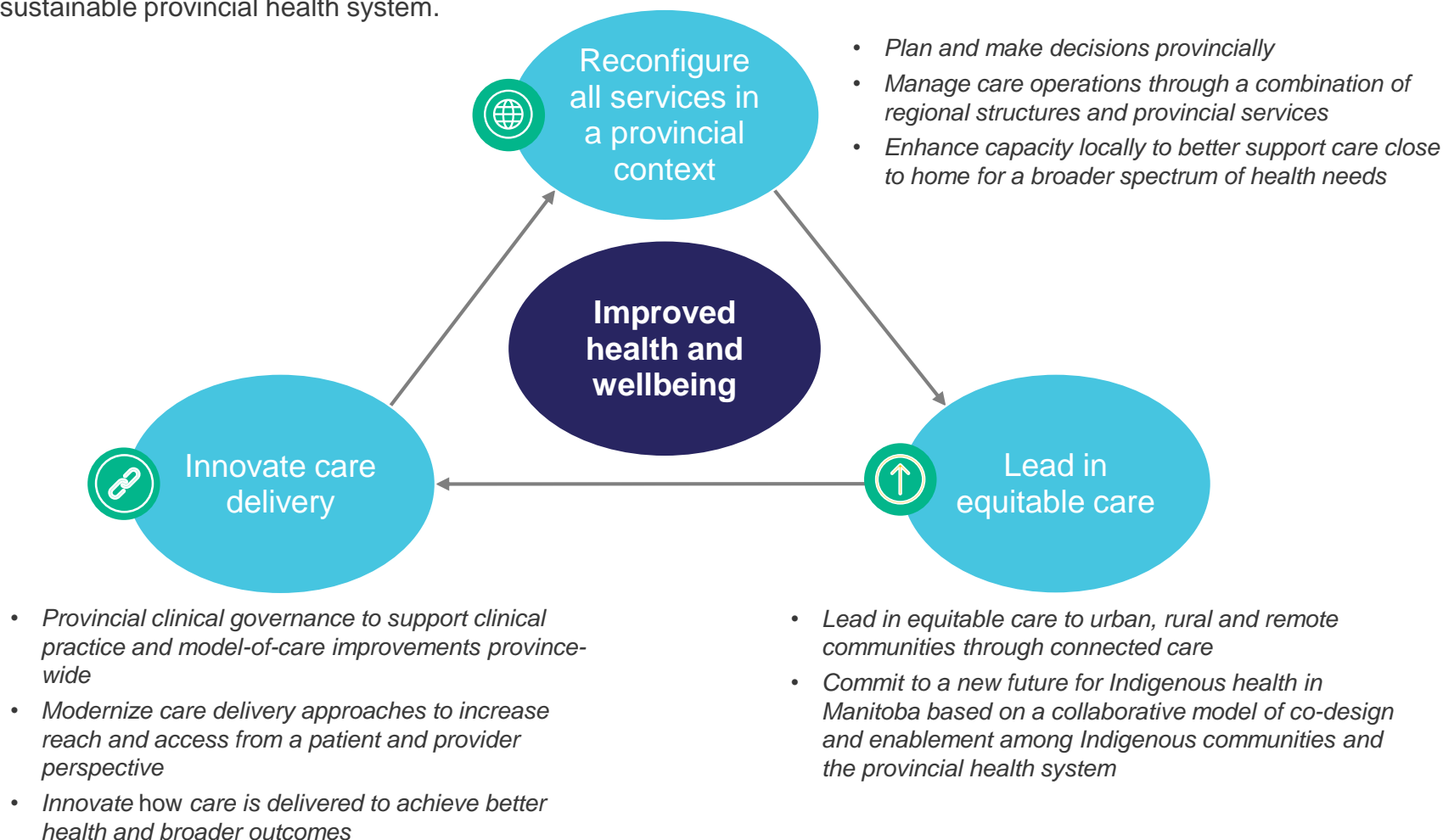
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

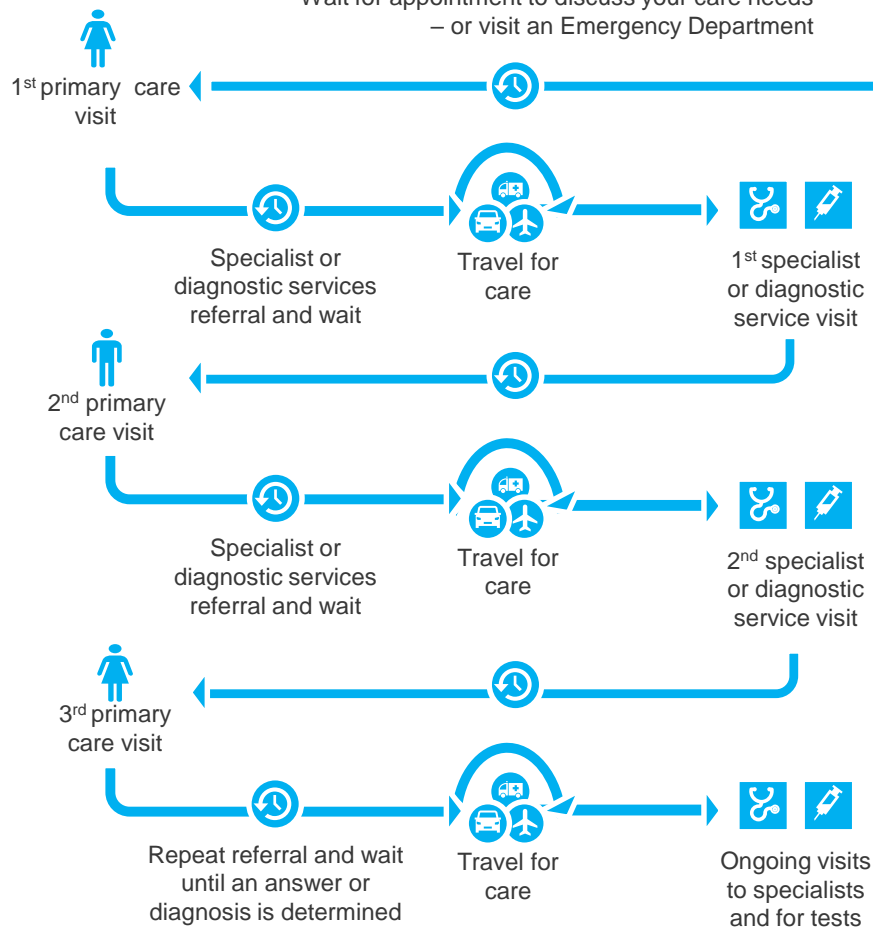
IN THE FUTURE

- 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?

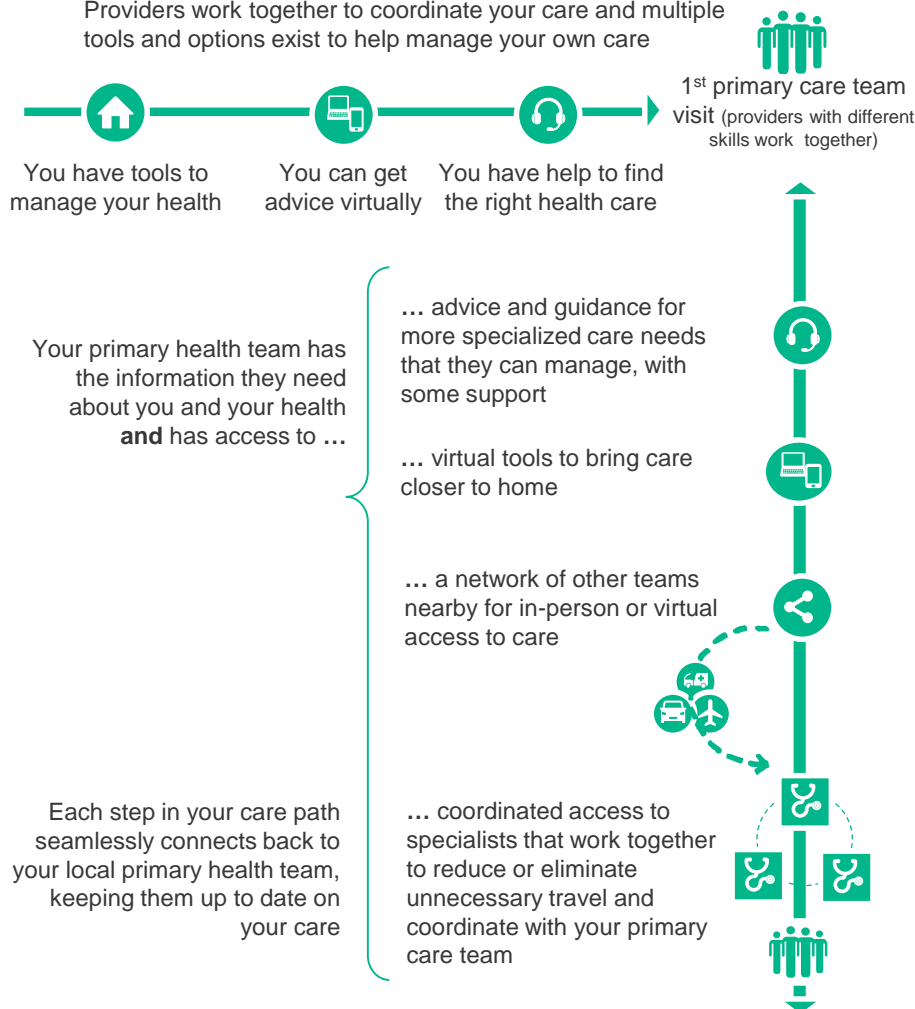
TODAY

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

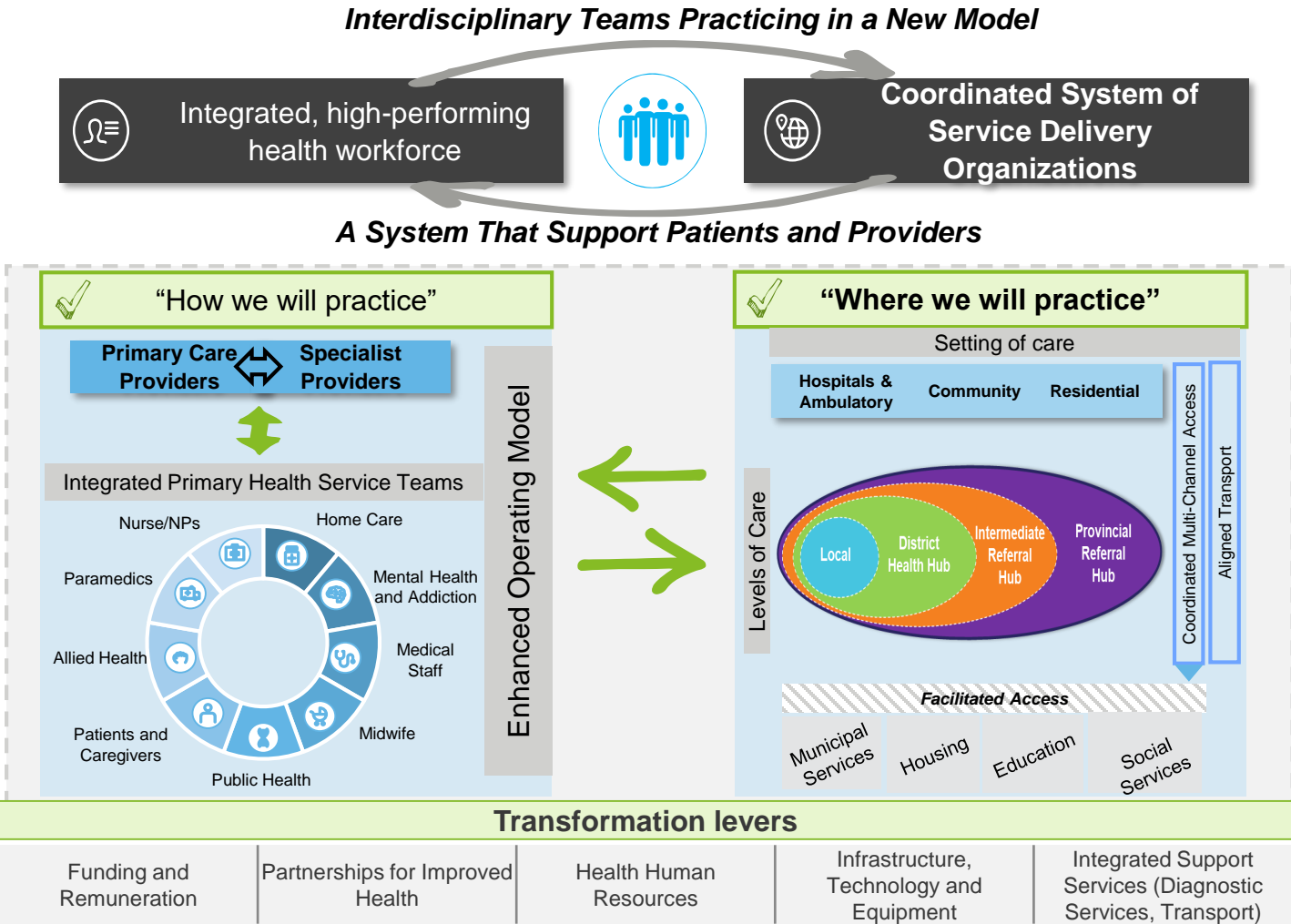


IN THE FUTURE

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



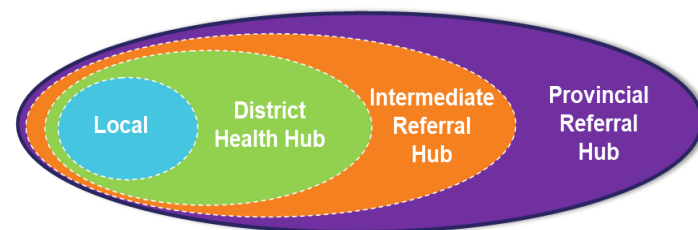
An integrated network for accessing and delivering services is core to the new provincial model



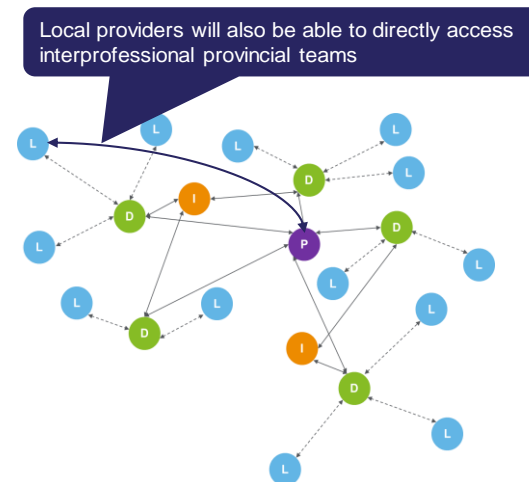
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



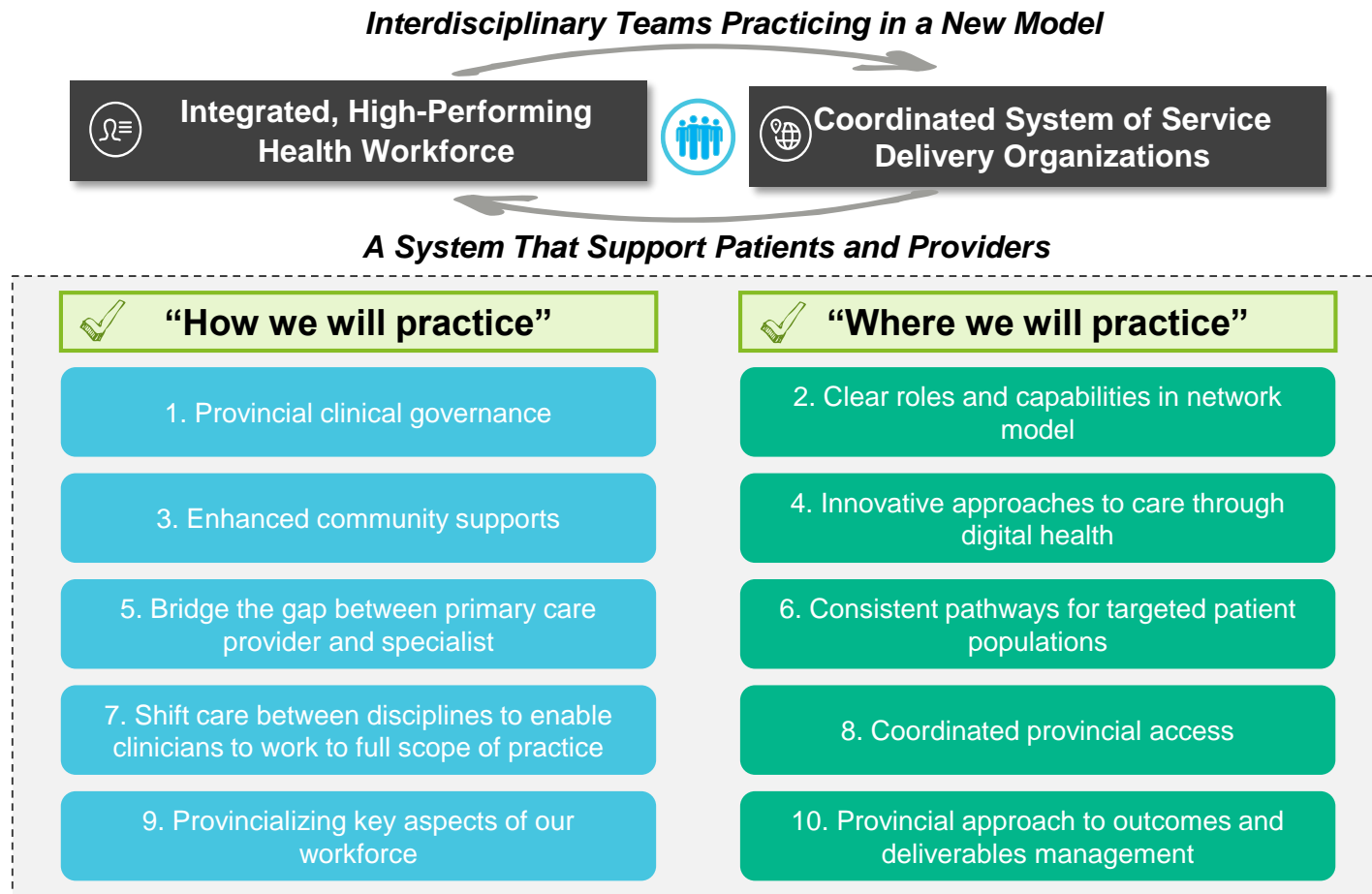
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
<p>Enhanced</p> <p> 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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p> <p> Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p>		<p>Provincial:</p> <p>24/7 Emergency Department</p>
	<p> General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	<p> Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p> <p> Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
<p>Core</p> <p> Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p> <p> District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			<p> Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



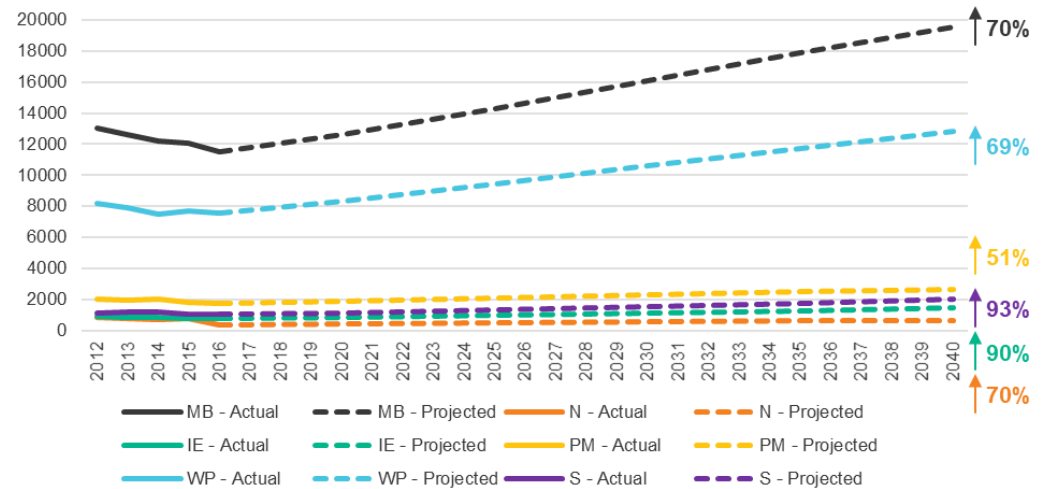
Cardiovascular and Thoracic

Current state and case for change

Inpatient admissions for Cardiovascular and Thoracic are expected to increase between now and FY40/41

Cardiovascular and Thoracic inpatient admissions are projected to **increase 70%** across the province over the next 20 years

Projected Growth in Cardiovascular & Thoracic Inpatient Admissions, FY2012/13 to FY40/41



Source: HSAL – Discharge Abstract Database

Current state and case for change | Cardiac

The current state and supporting evidence indicate the need for change and shifts within Cardiac services

Challenge to access specialist consults and cardiac related diagnostics*	<ul style="list-style-type: none">While wait times are below CIHI data national benchmarks, there has been a recent increase in wait time for Level 3 CABG surgeries, relative to the recent thirteen-month mean wait timeIn October 2018: there was a median of 64 days for elective cardiac surgery and 7,782 patients were waiting a median of 60 weeks for elective echocardiography examsIt was reported that there is limited availability of current standard of care procedures (e.g., TAVI, Mitra-clip)																										
Most critical care admissions occur in Winnipeg, while each region consistently has much lower volumes each year	<div><ul style="list-style-type: none">The table to the right shows the top five cardiovascular and thoracics-related admissions in FY17/18, where there were a total of 3,024 admissions provincially. These top five types accounted for 55% of total SCU cases.<ul style="list-style-type: none">Admissions related to PCIs comprised the highest volumes, followed by valve replacements.</div> <table><tr><th>Inpatient Admissions by Clinical Category FY17/18**</th><th># of SCU Admissions</th></tr><tr><td>MI/Shock/Arrst wo Cor Anglo</td><td>553</td></tr><tr><td>Cardiac Valve Replacement</td><td>402</td></tr><tr><td>PCI w MI/Shock/Arrest/Hrt Fail</td><td>325</td></tr><tr><td>CABG-Angio-MI/Shock/Ar+/-Pump</td><td>193</td></tr><tr><td>CABG-Angio+MI/Shock/Ar+Pump</td><td>176</td></tr></table>	Inpatient Admissions by Clinical Category FY17/18**	# of SCU Admissions	MI/Shock/Arrst wo Cor Anglo	553	Cardiac Valve Replacement	402	PCI w MI/Shock/Arrest/Hrt Fail	325	CABG-Angio-MI/Shock/Ar+/-Pump	193	CABG-Angio+MI/Shock/Ar+Pump	176														
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CABG-Angio-MI/Shock/Ar+/-Pump	193																										
CABG-Angio+MI/Shock/Ar+Pump	176																										
Variable sub-specialty care capacity outside of Winnipeg for cardiac services	<div><ul style="list-style-type: none">96% of cardiac specialists are located within in WRHA</div> <table><tr><th>Location and Specialty***</th><th>Number of Physicians</th></tr><tr><td>Brandon</td><td>2</td></tr><tr><td>Cardiology</td><td>1</td></tr><tr><td>Cardiology, Internal Medicine</td><td>1</td></tr><tr><td>Winnipeg</td><td>50</td></tr><tr><td>Cardiac Surgery</td><td>7</td></tr><tr><td>Cardiology; Cardiology, Internal Medicine</td><td>34</td></tr><tr><td>Cardiology, Pediatrics</td><td>2</td></tr><tr><td>Cardiovascular & Thoracic Surgery, General Surgery</td><td>2</td></tr><tr><td>Critical Care Medicine, Cardiac Surgery</td><td>1</td></tr><tr><td>Critical Care Medicine, Cardiology, Internal Medicine</td><td>1</td></tr><tr><td>Pediatric Cardiology</td><td>2</td></tr><tr><td>Grand Total</td><td>52</td></tr></table>	Location and Specialty***	Number of Physicians	Brandon	2	Cardiology	1	Cardiology, Internal Medicine	1	Winnipeg	50	Cardiac Surgery	7	Cardiology; Cardiology, Internal Medicine	34	Cardiology, Pediatrics	2	Cardiovascular & Thoracic Surgery, General Surgery	2	Critical Care Medicine, Cardiac Surgery	1	Critical Care Medicine, Cardiology, Internal Medicine	1	Pediatric Cardiology	2	Grand Total	52
Location and Specialty***	Number of Physicians																										
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Grand Total	52																										
Strong Cardiac Rehabilitation Program	<ul style="list-style-type: none">Participants admitted to the Winnipeg site have seen improvements in 5 areas of their health and wellbeing: enhanced psychological symptoms, lower blood cholesterol, reduced waist girth, increase in MET levels, and higher quality of life																										

*MHSAL – Information Management and Analytics

**MHSAL – Discharge Abstract Database

***Physician Directory on the College of Physician and Surgeons of Manitoba website, March 2019

Current state and case for change | Thoracic

The current state and supporting evidence indicate the need for change and shifts within Thoracic services

Health Sciences Centre provides thoracic surgical care to the province	<ul style="list-style-type: none"> HSC provides a full range of thoracic surgery procedures <ul style="list-style-type: none"> Lung, esophageal, gastric tracheal and mediastinal cancer procedures Specialize in minimally invasive surgery for the chest and upper GI tract Active interventional thoracic endoscopy program – building a Thoracic Endoscopy Unit The program works closely with the Cancer Care program to provide integrated care to patients HSC, Grace, St. B, and Thompson General Hospital are the only facilities in Manitoba with PFT Labs containing a full range of services including: spirometry pre/post, flow-volume loop, lung volumes, diffusion capacity, ABG, six minute walk, and progressive exercise testing
Limited standardization for thoracic services	<ul style="list-style-type: none"> Targeted thoracic procedures are largely performed at Brandon Regional Health Centre in non-WRHA regions with an ALOS of 10 days for open lobectomies in FY 16/17 In WRHA, 87% of wedge resections were minimally invasive, compared to 23% outside WRHA. The average length of stay for wedge resection in WRHA was seven days compared to 8.8 days outside WRHA In WRHA, 70% of lobectomies were minimally invasive, where the average length of stay was shorter compared to other regions
There are opportunities to build on existing standard referral and repatriation processes for patients	<ul style="list-style-type: none"> Centralized process through IN60 pathway for cancer-related thoracic referrals enables standardized processes for practitioners <ul style="list-style-type: none"> CT scans; diagnostic visit with specialist; diagnostic procedures and pathology; follow-up appointments; surgical, medical, or palliative consult; first surgery or chemotherapy or radiation therapy

**Wedge Resection Volumes and Length of Stay
FY17/18***

	Inpatient/Day Surgery	Total Volume	ALOS (Days)	# Minimally Invasive	# Open Approach
WRHA Facility	Inpatient	250	7	216	34
	Day Surgery	1	-	1	0
Outside WRHA	Inpatient	26	8.8	6	20

**Lobectomy Volumes and Length of Stay
FY17/18***

	Inpatient/Day Surgery	Total Volume	ALOS (Days)	# Minimally Invasive	# Open Approach
WRHA Facility	Inpatient	98	5.7	69	29
Outside WRHA	Inpatient	9	9.6	0	9

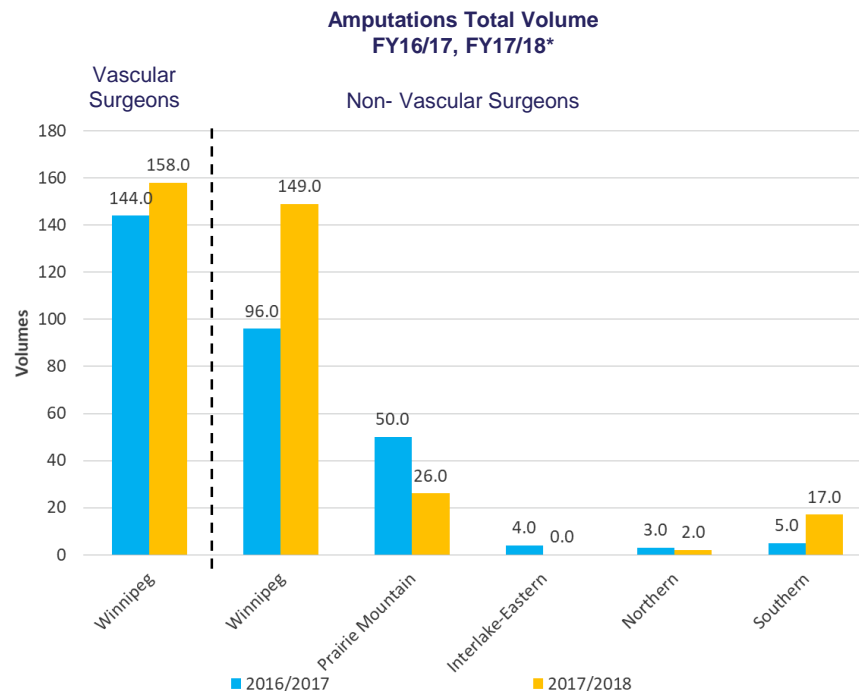
*MHSAL – Information Management and Analytics

Current state and case for change | Vascular

The current state and supporting evidence indicate the need for change and shifts within Vascular services

Increasing volume of amputations across the province with the majority of amputations being done at HSC and SBH

- Between FY16/17 and FY17/18, the volume of inpatient amputations has grown by 20%.
- More than 75% of amputations completed by non-vascular surgeons occurred in Winnipeg
- Between 2010 and 2020, the prevalence of diabetes is expected to grow 2.5%, which will potentially increase the population of patients that will require amputations



Long wait times and variable standards for vascular surgery outside of WRHA

- Facilities outside of WRHA lack the capabilities to treat varicose veins as a result of low volume and variable standards
- Long wait times ranging from months to years have been reported for varicose vein surgeries.
 - Varicose vein stripping is not covered for patients when performed in private community sites
 - In FY 17/18, approximately 57% of all varicose veins stripping/ligation surgeries were performed in Winnipeg by vascular surgeons, with the majority being performed at Seven Oaks General Hospital

*MHSAL – Information Management and Analytics

Current state and case for change | Prevention

The current state and supporting evidence indicate the need for change and shifts to emphasize building up prevention and rehabilitation programs related to cardiovascular and thoracic services

Variable access to providers for prevention and rehabilitation support for patients in communities	<ul style="list-style-type: none"> Long wait times and travel requirement for patients to access providers in Winnipeg
Psychological screening and treatment referrals are included in cardiac guidelines and clinical pathways	<ul style="list-style-type: none"> Psychological screening and treatment referral being included in the AMI, Cardiac Surgery and ACS clinical pathways as well as the Cardiac Rehabilitation (CR) process protocol of the WRHA Cardiac Sciences program <ul style="list-style-type: none"> The AMI and Cardiac Surgery pathways require patients to be psychologically screened by their third day of inpatient admission and be referred for inpatient and/or outpatient psychological services when appropriate
Manitoba has a number of prevention and wellness programs to build upon	<ul style="list-style-type: none"> The Westman Physical Literacy (PL) committee formed with representatives from Prairie Mountain Health South and Brandon, Indigenous and Municipal Recreation, Sport Manitoba, Westman Child Care Directors, Westman Recreation Practitioners Association and Assiniboine North Parent Child Coalition <ul style="list-style-type: none"> The purpose of this program is to provide an avenue for interested partners to work together to promote, implement and evaluate programs, services, amenities and policy which increases the physical literacy of Westman children aged 0-12

Source: PCT member provided information including description of programs for Psychological screening and Westman Physical literacy program

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	<ul style="list-style-type: none"> Challenge to provide equitable access to services due to limited number specialists and resources outside of Winnipeg Inconsistency in practitioners working to full scope of practice (e.g., advanced care paramedics collaborating with specialists on EKG readings to triage patients to right hospital) Variation in providers conducting specialized procedures, which may not align with national standards Opportunity to support generalists in managing patients in effective ways, particularly in rural and northern communities 	<ul style="list-style-type: none"> Improved integration between specialists and primary health providers across the continuum of care, which can be supported by the Cardiac Hub Expand capabilities and optimize scope of practice (e.g., advanced care paramedics, nurses, primary care providers) <ul style="list-style-type: none"> Expand radius for the implementation of Code-STEMI protocols Incorporate algorithms for patients to be screened and managed for cardiac needs Enhance itinerant model for specialist physicians/teams to integrate care between regions and for the provision of noninvasive cardiac diagnostics (i.e. rural, remote, and Northern) Enhance use of Telehealth, eConsults, and home monitoring to improve coordination and communication between specialists and health care providers
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> Limited transparency of specialty services available (prevention, promotion, acute care, and rehabilitation) and coordination across the province Challenge coordinating seamless patient access to diagnostics to optimize patient travel time Suboptimal process to consistently use telehealth for virtual visits Siloed process to triage general vascular referrals, such as varicose veins, resulting in long wait times in some regions and short wait times in others 	<ul style="list-style-type: none"> Clarify levels of care and capabilities that are provided at different facilities and sites, including service pathways to refer patients Enhance use of Telehealth, eConsults, and home monitoring to improve access for patients in remote and rural regions Centralize thoracic and vascular procedures to Winnipeg Coordinate diagnostic imaging services at District sites to align with Provincial sites Establish mobile clinics for screening and follow-up Establish a standardized patient information management system Establish provincial database to monitor performance and inform care models to address patient needs

Provincial view of the future vision

Future Vision: The future Cardiovascular and Thoracic Model will:

- Create transparency of services available across the province and improve patient coordination
- Provide care closer to home to optimize patient transfers and transport costs
- Streamline intake and referral processes
- Improve access to patients in remote, rural, and Northern regions

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

- **Enhance capabilities to deliver consistent services and alignment to pathways** across the province
 - **Continue** to enhance and communicate **standard pathways and protocols** for the vascular, cardiac, and thoracic populations (i.e., expand the role of community internist), which will be informed and monitored by provincial clinical governance
 - **Centralize appropriate specialized** cardiac, vascular and thoracic procedures to Provincial sites and service pathways for repatriation
 - **Align services and pathways** to national or other leading practice guidelines (i.e., Enhanced Recovery After Surgery, Pan-Canadian Standards for Thoracic Surgery, etc.), including formalizing centralized referral functions, where appropriate (e.g., Cardiac Hub managing home monitoring, telehealth, eConsults, referrals and cardiac diagnostics)
 - **Integrate primary health, generalists, and specialists care** through a centralized model that will coordinate care (i.e., Cardiac Hub)
- **Build primary health provider capacity** to support prevention programs and manage patient care closer to home
 - **Scale up existing prehabilitation and prevention programs** (i.e., Brandon Respiratory/Lung Clinic, Westman Physical Literacy Program, Health assessments in Indigenous primary schools)
 - **Enhance and promote rehabilitation programs in communities** and utilize virtual methods where appropriate (i.e. eCounselling, Dial a Dietitian etc.)
- **Expand virtual care capacity** to improve access to specialists in rural, remote, and Northern regions through District Hubs
 - Utilize virtual methods (e.g., Remote monitoring for pacemaker program) to **improve capabilities and education** in targeted District sites to **reduce patient transports** (e.g., Post-op thoracic patients with chest tubes)
- **Enhanced coordination and standardized quality assurance programs for diagnostic imaging** non-invasive cardiac testing to reduce variability and optimize travel for patients

Service standards and provider roles | Cardiac Care

Service standards and provider roles are outlined across the Network model

	Service Standards	Provider Roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Coordinate care for patients with specialized needs • Diagnostic capabilities will support highly specialized surgical and medical needs • Consistent ERAS standards 	<ul style="list-style-type: none"> • Surgical and Medical cardiac specialists will perform high acuity and highly specialized procedures and surgeries
District Health Hub/ Intermediate Referral Hub	<ul style="list-style-type: none"> • The Cardiac Hub will span all levels of the network model and be a consolidated point of access to care and provide coordination of care for patients requiring sub-specialty services including for those patients with: <ul style="list-style-type: none"> • Acute Coronary Syndromes (ACS) • Other coronary artery diseases (subacute and chronic) • Heart failure • Congenital heart disease • Aortic stenosis • Arrhythmia • Cardiac diagnostics • Thoracic aortic aneurysm • Primary prevention • The Cardiac hub will be the centre for timely access to subspecialty advice through the development of eReferral/eConsult services • Post-operative care, and cardiac patients with comorbidities, will be managed at District sites with care by General Internal Medicine Specialists, and support from Provincial subspecialists where necessary <ul style="list-style-type: none"> • Chronic heart failure patients without comorbidities will be managed by local primary health providers, with support from Provincial subspecialties where necessary • Integrate care and communicate diagnostics results (e.g., Holter monitor, Echo) between specialists, generalists (i.e., community internists), and primary health providers through telehealth, eConsults, home monitoring, and physical referrals • Continue to explore alternate practices to bridge the access to specialized care (e.g., remote monitoring for pacemaker maintenance to communities provincially) • Enhance specialized mental health support for patients to self-manage recovery with their chronic cardiac conditions across patient pathways (e.g., virtual support to manage hypertension) 	<ul style="list-style-type: none"> • Specialists to support services in rural, remote, and Northern regions through itinerant teams and virtually <ul style="list-style-type: none"> • Continue to build capacity in general internists to provide care locally (e.g., care for cardiac patients with comorbidities)
Local	<ul style="list-style-type: none"> • Incorporate patient self-management and preferences with primary health providers to promote behavior change, including longer term care management in communities (e.g., Nuka System of Care) • Primary and secondary level prevention programs located in community centers and areas closer to home (e.g., Westman Physical Literacy Program) 	<ul style="list-style-type: none"> • Enhanced MyHT will encompass a larger circle of care, including different partners that build up community capacity

Service standards and provider roles | Vascular and Thoracic

Service standards and provider roles are outlined across the Network Model

	Service Standards	Provider Roles
Provincial Referral Hub	<ul style="list-style-type: none"> • High acuity and highly specialized cases for vascular <ul style="list-style-type: none"> • Major vascular procedures and specialized procedures will be centralized to SBH and HSC • Major thoracic procedures will be centralized to HSC, in alignment with Canadian Partnership Against Cancer's (CPAC) national thoracic care guidelines <ul style="list-style-type: none"> • Surgeons will provide coverage for emergent cases • Post-operative care at HSC to support consistent ERAS • Complementary supports, including specialized diagnostics and testing, as well as support from nurses and allied health i.e., CT guided biopsy, PET, PFTs) • Establish multidisciplinary limb preservation clinics to promote prevention and reduce surgical intervention needs 	<ul style="list-style-type: none"> • Itinerant teams of vascular surgeons to support other hubs in the Network • Provide support to providers throughout the Network hubs (e.g., via eConsult) <ul style="list-style-type: none"> • Refresh IN60 pathway to promote standardized cancer-related thoracic care throughout the Network • Specialized multidisciplinary care teams to support limb preservation clinics
District Health Hub	<ul style="list-style-type: none"> • Moderate to lower acuity cases will be treated (e.g., Varicose Veins Stripping/Ligation and hemo-access procedures) • Multidisciplinary limb preservation clinics, prevention programs (e.g., Brandon respiratory/lung clinic), and rehab programs to assist with repatriation and follow-up care • Support for lower specialty levels of diagnostics (i.e., CTA – non aorta and runoff) • Establish multidisciplinary limb preservation clinics 	<ul style="list-style-type: none"> • Provide support to providers locally • Specialized multidisciplinary care teams to support limb preservation clinics <ul style="list-style-type: none"> • Provide access to local sites and other District hubs, where relevant
Local	<ul style="list-style-type: none"> • Integrate care and communication with specialists at other hubs through virtual methods (e.g., Telehealth and eConsults) • Use clinical pathways to standardize referral process to specialists • Prevention programs located in community centers and areas closer to home (e.g., Healthy Eating Toolkit, Diabetes clinics and educators, etc.) 	<ul style="list-style-type: none"> • General physicians will provide screening and assessments (e.g., Lung cancer screening that align with CCMB guidelines) • MyHealthTeams, NPs, RNs, Public Health, Paramedics, and Pharmacists to promote prevention programs located in community centers and areas closer to home (e.g., Smoking cessation programs implemented in pharmacies)

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, laboratory, patient transport, Emergency Services, infrastructure and equipment. The table below highlights key elements for the Cardiovascular and Thoracic PCT, as they are unique to those outlines in the Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model.

Digital Health	<ul style="list-style-type: none"> Technology enablement for community sites to utilize home/remote monitoring (e.g., Pacemaker Program at Community Centres for patients with ICD/CRT and pacemakers; monitoring CHF patients in community)
Diagnostic Services	<ul style="list-style-type: none"> Expansion of diagnostic imaging capabilities for thoracic care (i.e., CT guided biopsy, PET, PFT) to lower wait times
EMS/Patient Transport	<ul style="list-style-type: none"> Expand radius of implementation for Code-STEMI program by advancing care provided by paramedics Continue to expand the community paramedicine model to address the needs of patients with related cardiac, vascular, and thoracic disease <ul style="list-style-type: none"> Build up on paramedics ability to share EKG readings with a cardiology specialist to assist with triaging the ambulance to the appropriate hospital to receive care and treating patients pre-hospital
Infrastructure and Equipment	<ul style="list-style-type: none"> Enhanced support to establish limb preservation clinics at targeted Intermediate and District sites
Prevention	<ul style="list-style-type: none"> Expand existing programs (e.g., Westman Physical Literacy Program, Brandon Respiratory/Lung Clinic)

Key Performance Indicators

1. Reduced LOS for non-WRHA thoracic surgery patients, with the shift of clinical activity to HSC
2. Reduced volume of amputation cases related to chronic disease management initiatives, e.g., limb preservation clinics
3. Reduced LOS for cardiac-related admission with shifts to the community for care (e.g., integrated community care, home monitoring)
4. Centralization of thoracic surgeries to WRHA with reduced number of surgeries performed in other regions

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

NEUROSCIENCES 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

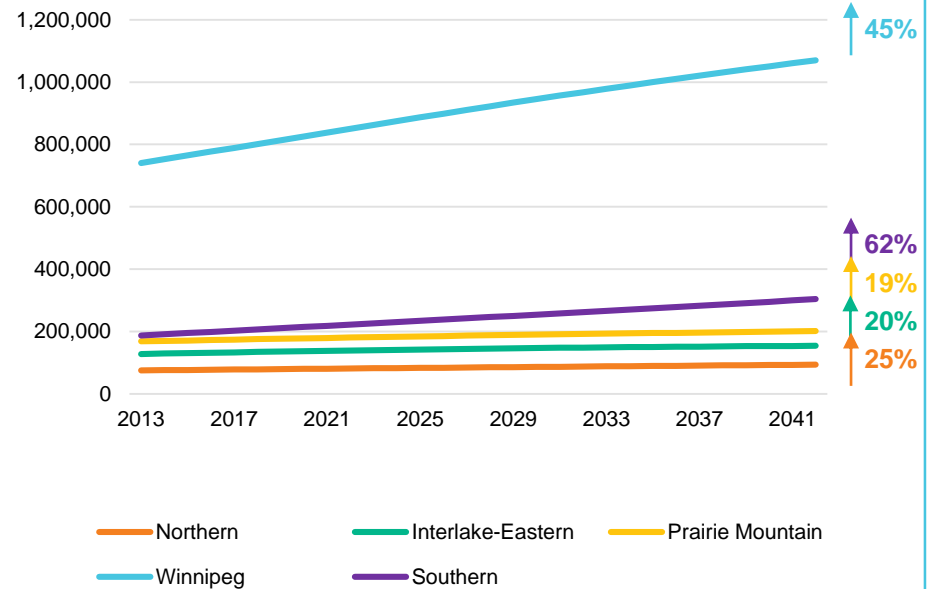
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

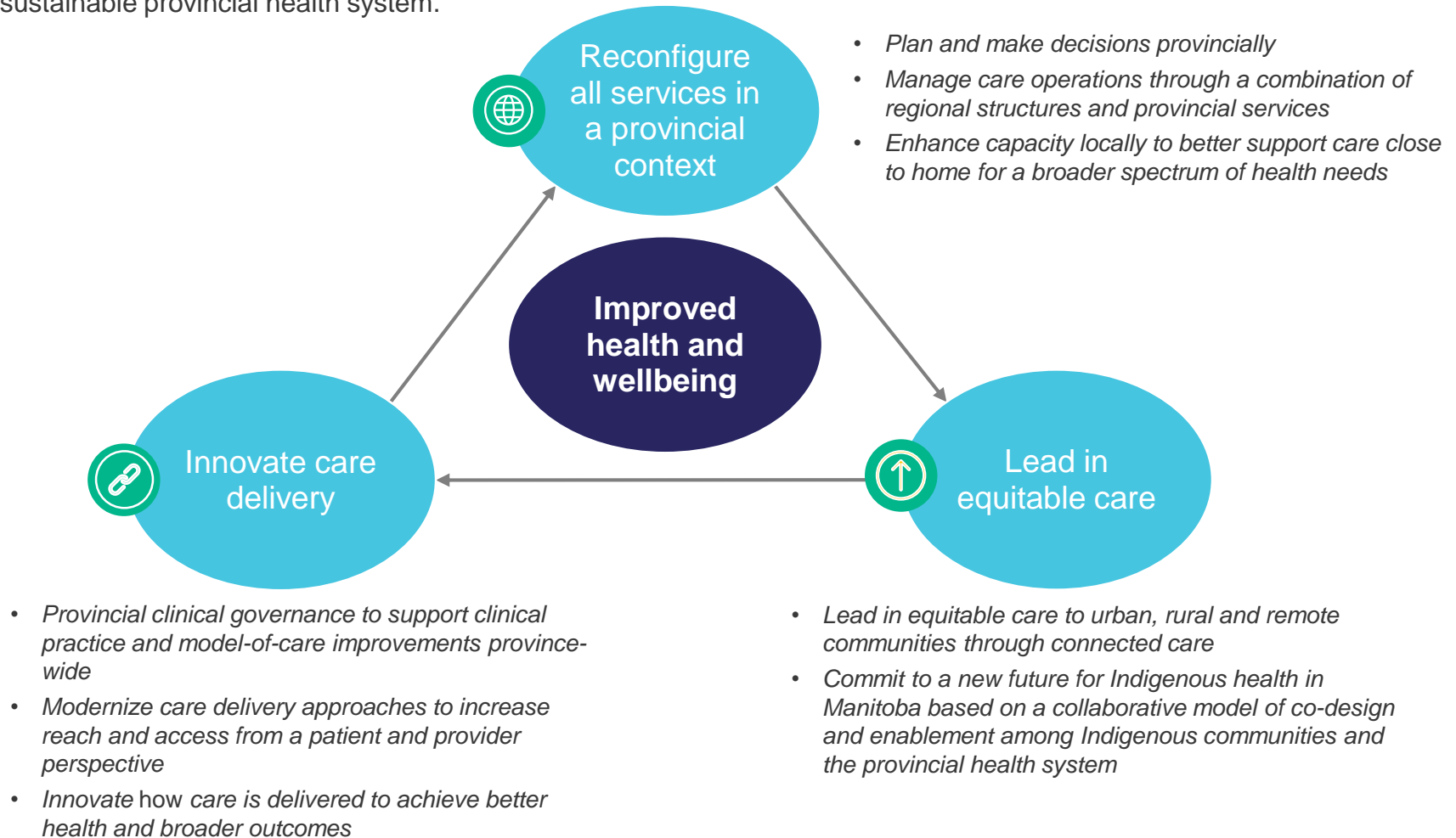
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

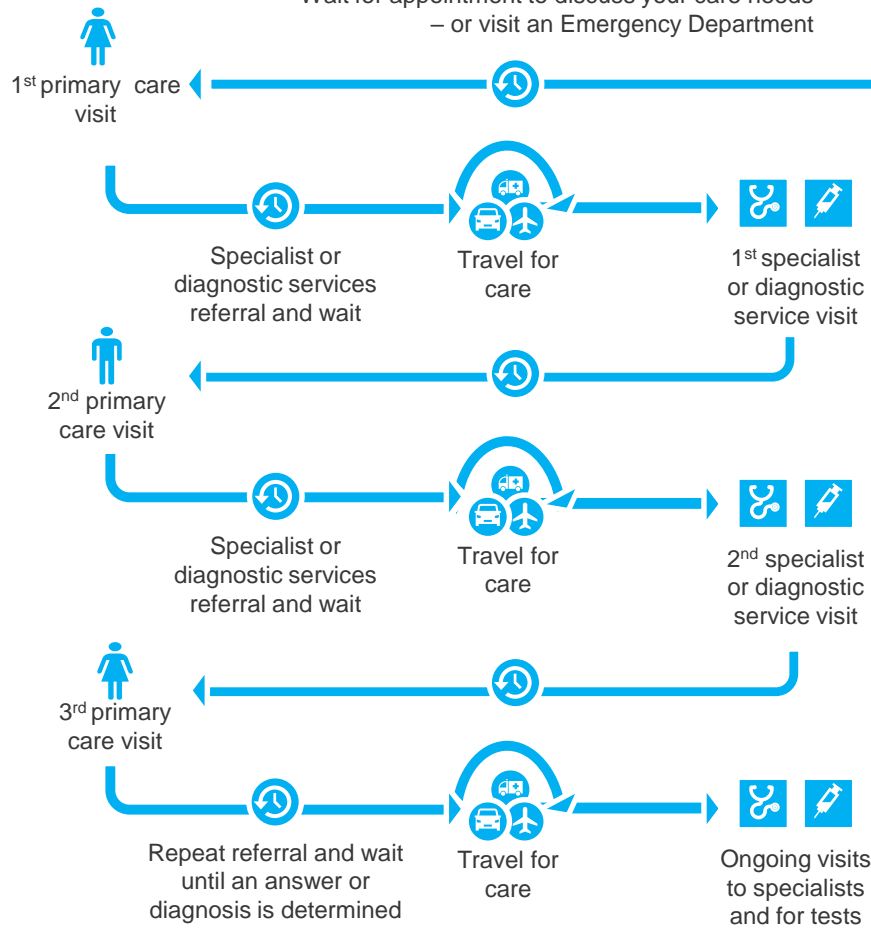
IN THE FUTURE

- 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?

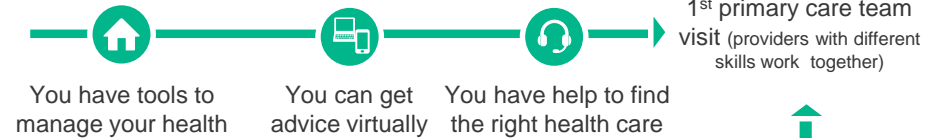
TODAY

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



IN THE FUTURE

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

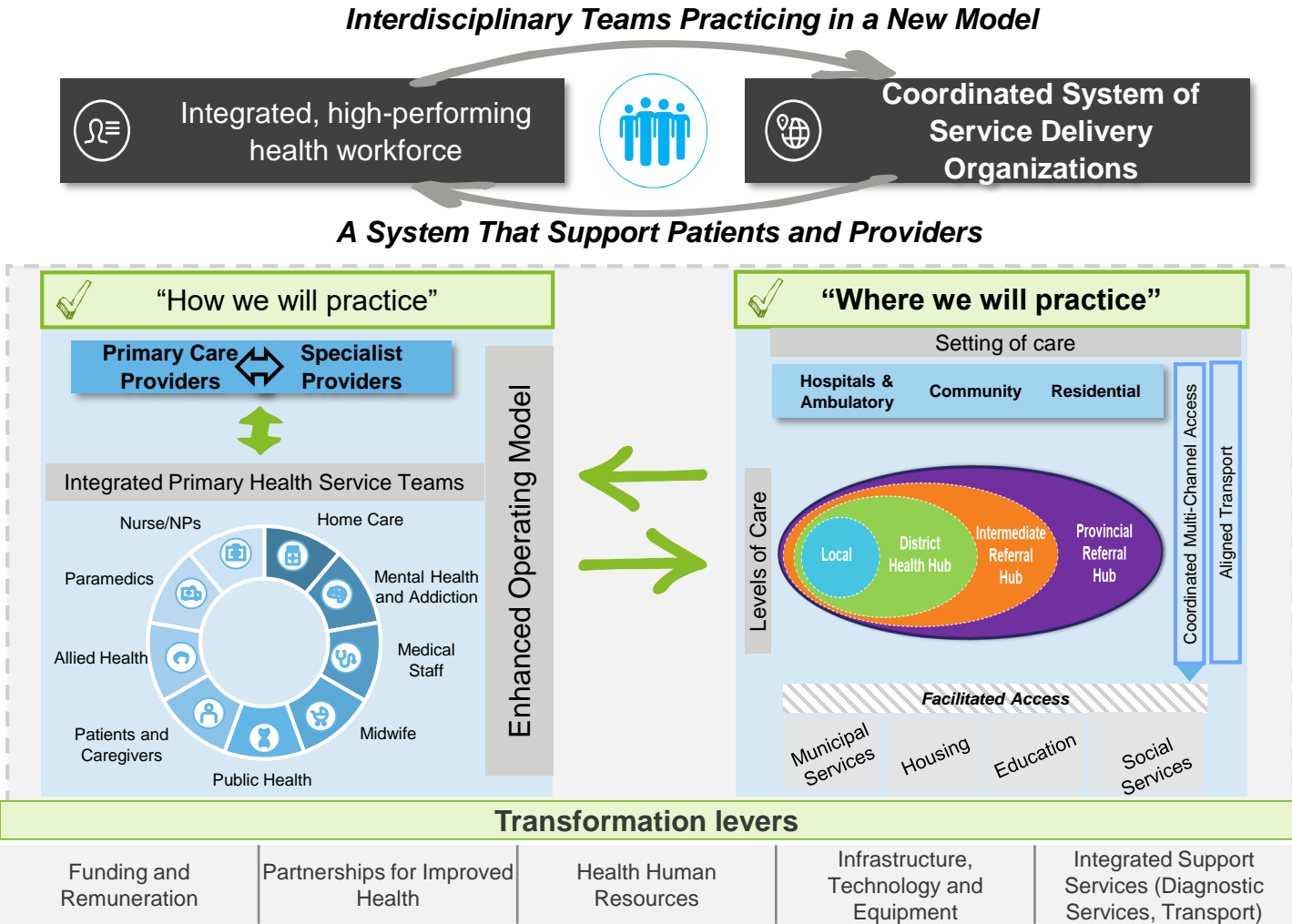
... a network of other teams nearby for in-person or virtual access to care

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

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



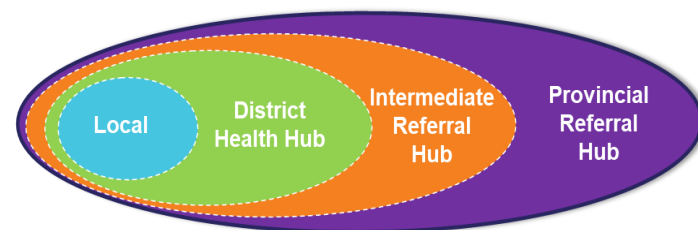
An integrated network for accessing and delivering services is core to the new provincial model



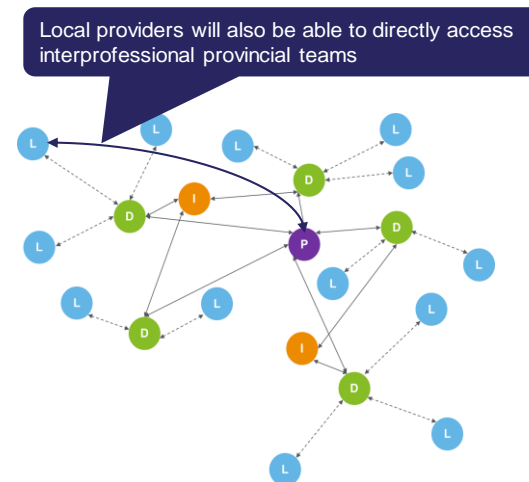
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



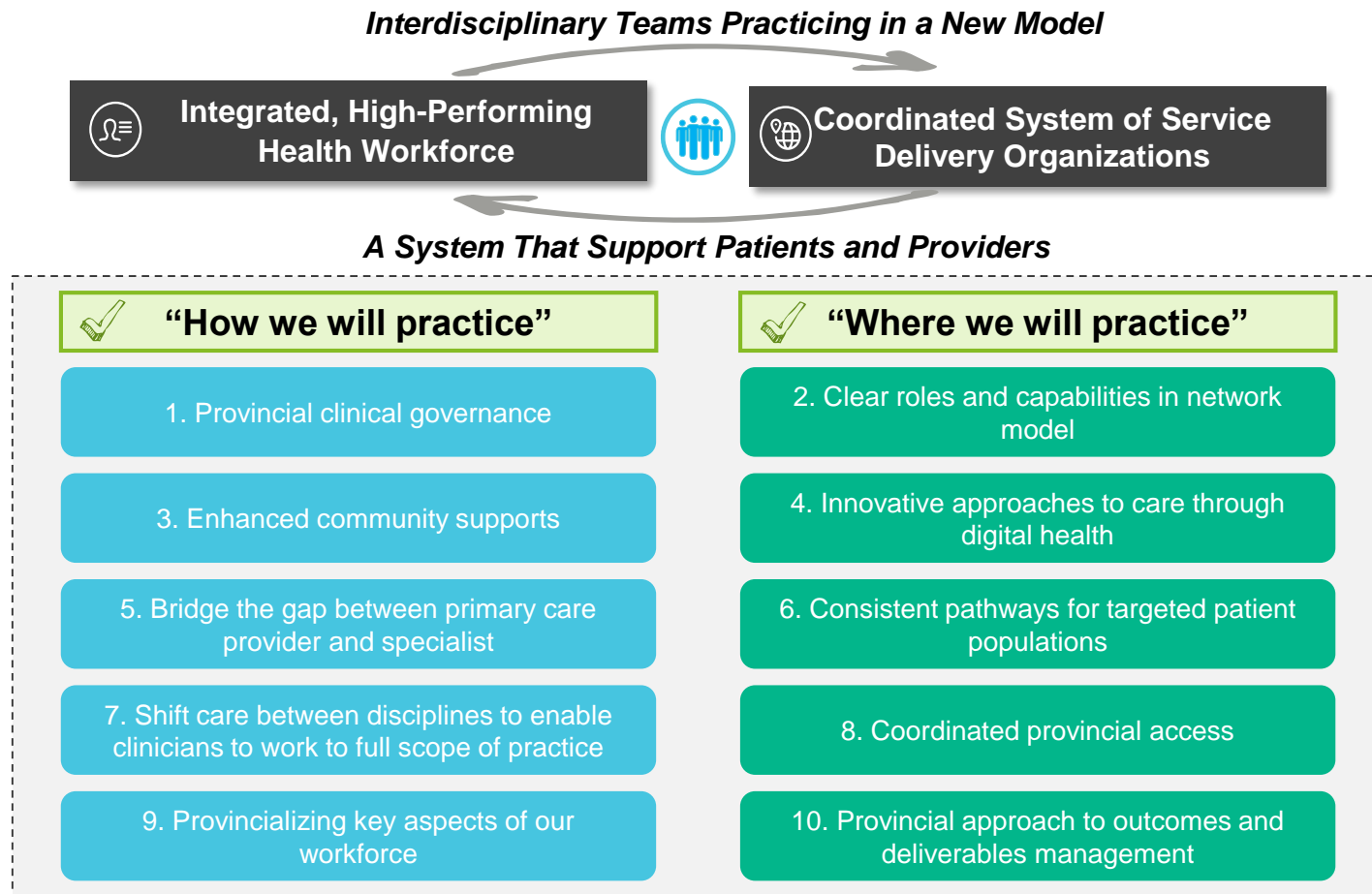
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core: Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate: 24/7 Emergency Department</p> <p>Provincial: 24/7 Emergency Department</p>		
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced: Special Care Unit</p>	<p>Intermediate: Intensive Care Unit (ICU)</p>	<p>Provincial: ICU with specialized capabilities</p>
	 <p>Core: Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate: Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial: Elective and emergency surgery with FRCPC</p>
 <p>Core Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	 <p>Specialist Services may include: District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate: Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial: Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as: Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Neurosciences

Current state and case for change

Patients receiving neuroscience services have experienced inconsistencies in care delivery and access

Overall long wait times for services and misalignment of need with access to highly specialized services signal challenges with demand management

- **Wait times:** The WRHA Spine Central Intake Program has helped address long and variable wait lists for spine surgery
- As of November 8, 2018, there were 4,520 patients in the Spine Central Intake waiting list with average waiting time of 634 days. The number of patients waiting for a surgical spine consult varies depending by surgeon from ~150 to ~850 (WRHA Spine Central Intake Program)
 - High case volumes and a large call load contribute to wait times and wait lists in the program

Neurosciences PCT Inpatient Admissions, FY 17/18¹

	Total Admissions	% of Patients who are First Nations	Average Expected LOS (days)	Average Total LOS (days)	Average Acute LOS (days)	% of LOS that was ALC
Manitoba	4,048	10.8%	7.33	14.71	11.32	23.02%
Northern	122	50.8%	4.44	8.53	6.73	21.13%
Interlake-Eastern	193	16.2%	4.79	16.71	10.29	38.42%
Prairie Mountain	451	7.9%	6.20	12.92	10.32	20.10%
Winnipeg	2,987	9.0%	7.91	14.03	11.31	19.31%
Southern	295	3.1%	6.09	25.67	15.53	39.49%

- **Utilization of specialized resources:** Lower complexity needs could be supported with alternate settings/modes of care
 - Reported that only ~50% of spine cases on the waiting list require surgery
 - The % of inpatient stays that is ALC ranges from 19% in Winnipeg to 39% in Southern – Neurosciences overall has one of the highest ALC% across PCTs (23%)
 - ESD program identified up to 37% of people with low to moderate stroke could be supported in community settings

Inconsistencies in pathways and services to align with best practices

Variability in repatriation processes (not always a facility close to home)

- **Lack of standardized pathways** aligned with best practices across care settings and providers (e.g., access to an acute stroke unit)
 - There is a lack of standardization in the definition of functional ability across providers
 - There is no common understanding of available resources and programs across the province by patients and providers.
- **Delays in discharge** from acute care to rehab, with a high number of patients waiting in ALC*: in WRHA, an average of 3.5 days are spent waiting for admission for rehab, where wait times are the highest at HSC (average 6.6 days)
- Units are regularly over census with consistently large numbers of neurosurgery patients that are 'chronic long stay patients' (e.g., up to 1/3 of patients) – often due to challenging behaviours (e.g., post TBI) or waiting for PCH
 - Lack of standard protocols and policies aligned with best practices that are consistent across RHAs, e.g., noted that there are inconsistencies in when and how patients are repatriated

*Data only available for WRHA

Current state and case for change

Patients often have to travel to access specialized services or wait for post acute care, suggesting an opportunity for alternate modes to bring care closer to home

Challenges in accessing care closer to home

- **Travel for care:** the majority of inpatient volumes are delivered in WRHA with increased travel requirements for patients in rural and northern Manitoba
- ~44-58% of non-WRHA residents go to Winnipeg for inpatient care
 - ~34-72% of non-WRHA residents go to Winnipeg for day visits
 - 14 Epilepsy patients were sent out of province for epilepsy surgery in the last 3 years; a Winnipeg-based review estimated that ~6-7,000 adults could benefit from similar surgery and avoid cost of drug treatment

Neurosciences PCT Inpatient Volumes in Manitoba, FY 12/13 - FY 17/18¹

Neurosciences Admissions by Region (location based on the facility where the patient was admitted)	Total Admissions						% change from 2012-2017	% change in # patients treated in Winnipeg 2012-2017
	2012	2013	2014	2015	2016	2017		
Manitoba	4,195	3,991	4,120	3,971	3,761	4,048	-3.5%	
Northern	411	346	377	374	179	122	-70.3%	34.7%
Interlake-Eastern	235	220	210	216	216	193	-17.9%	10.7%
Prairie Mountain	574	563	566	520	466	451	-21.4%	-1.5%
Winnipeg	2,631	2,535	2,636	2,568	2,606	2,987	13.5%	16.1%
Southern	344	327	331	293	294	295	-14.2%	11.1%

Variation in availability of rehabilitation services (both inpatient and community-based) and PCH care

- **Variation in availability of rehab services** accessible outside of Winnipeg particularly for stroke and ABI
- **ALC days for rehab:** Overall wait time for rehab has increased in the past three years in all WRHA hospitals except at Concordia Hospital
 - ALC inpatient stays range from 19% in Winnipeg to 39% in Southern
 - Neurosciences overall has one of the highest ALC percentages across PCTs (23%) (DAD)
- **ALC days for PCH:** Over 2,200 days were spent waiting in inpatient rehab for home care and PCH services (FY18/19)

Multiple processes and initiatives have been put in place to advance neuroscience services

- Central intake system implemented for spine and cranial surgeries (e.g., Winnipeg Spine Surgery Program provides coordination and standardized triage of patients, has supported offloading of cases from the surgeon and timely access)
- Alternate models have been implemented to address targeted space and resource challenges (e.g., locum surgeons, physician assistance, use of alternate spaces)
- Telestroke available in 7 hospitals to provide emergency physicians with immediate access to neurologists with expertise in stroke care via videoconferencing and CT
- Use of tele-health services in targeted areas to extend reach of specialized resources (e.g., tele-speech language therapy in NRHA)

Note in each year there were ~158-237 inpatients from undefined regions which are included in the above volumes

Source: MHSAL – Discharge Abstract Database, NRS

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	<ul style="list-style-type: none"> • Long wait times for specialist consultation, especially in some surgical areas and specialities (e.g., neuropsychology) 	<ul style="list-style-type: none"> • Standardized pathways across Network levels stratified to patient need, aligned EMS/patient transfer pathways, repatriation • Expansion of centralized referral and intake for all neurology care (including neurosurgery, spine clinic, neurologist) • Expand telestroke sites for application to broader neurological conditions for remote access to neurological expertise/guidance • Enhanced navigational supports for patients and families with complex needs. Centralized repository of info/services. Streamline appointments for patients traveling from remote/northern regions • Alternate living options for specialized populations (e.g., MS, ABI)
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> • Delayed access to diagnostic testing for outpatients and tools for comprehensive assessment • Siloed care across regions and across the continuum of care • Uncoordinated and un-standardized referral pathways • Inconsistent access to rehab and community services across geography and patient populations • High ALC rates for neurosciences patients 	<ul style="list-style-type: none"> • Designate provincial hubs for specialized care (e.g., Comprehensive Stroke Unit). Expand capacity of intermediate and District hubs to provide low-moderate complexity care (e.g., primary stroke unit at Intermediate hubs) • Expand enhanced recovery after surgery (ERAS) and early supported discharge programs (ESD) for stroke/ABI/SCI) • Optimize scopes of practice of the interprofessional team (e.g., rehabilitation professionals) to enable appropriate shifts in care from specialists access to care Neurosurgery and specialty rehab providers provide itinerant and virtual consultation and treatment in collaboration with Intermediate, District, and/or Local hubs as part of a hub and spoke model of care (e.g., aphasia, ADL) • Partnership with community organizations to deliver basic exercise programs where appropriate, deliver community-based prevention programs (stroke, concussion, brain injury, SCI)

Provincial view of the future vision

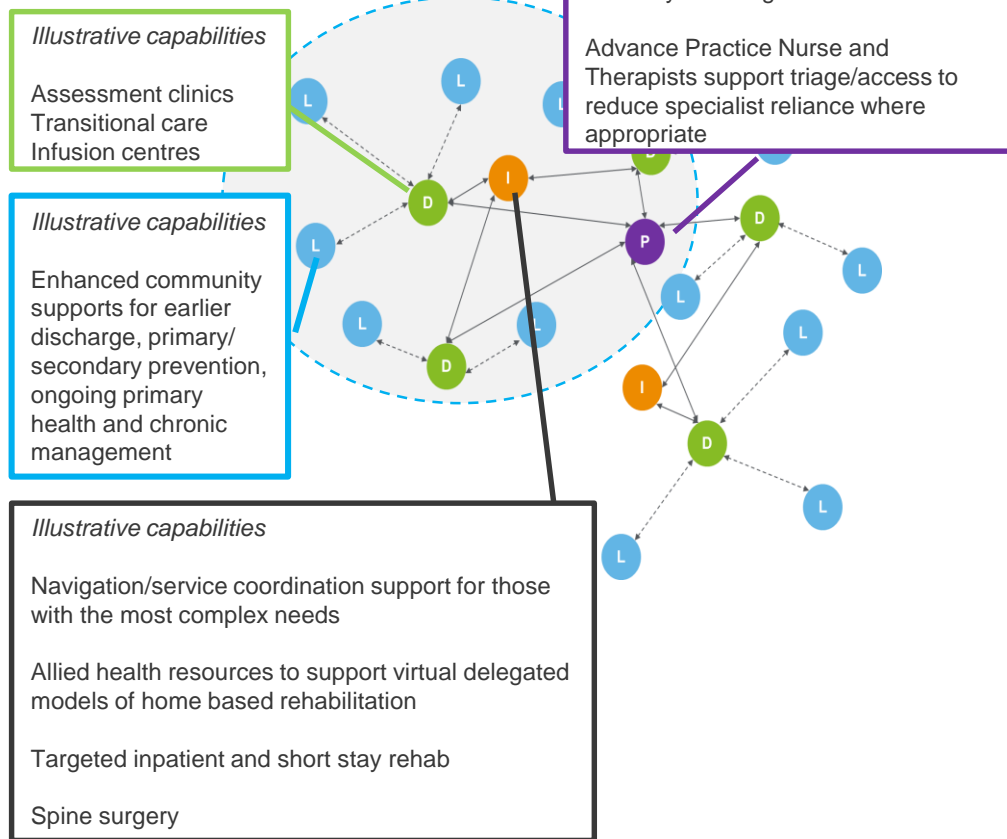
Future Vision: Manitoba will establish a coordinated and integrated network of provincial neurosciences services to improve patient outcomes and improve system efficiencies. It is anticipated that the future model will result in:

- Enhanced capacity for lower to moderate complexity rehabilitation in district and local hubs
- Streamlined pathways to target the most complex cases and services at provincial hubs and moderate cases at intermediate hubs

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

- Organization of services by Network level and level of care need for streamlined, appropriate access to available resources with consideration for volumes and geography
- **One Provincial hub** which provides highly specialized acute and rehabilitation services (e.g., Neurosurgery, Neurotrauma, Comprehensive Stroke Unit, Epilepsy Surgery and Monitoring Unit)
- **A number of Intermediate Referral Hubs** which provide support and access to greater specialty services closer to home and serve as a hub for nearby surrounding District hubs
 - Continuum includes: Primary Stroke Centre, Telestroke Hub, Spine Surgery (e.g., laminectomies), Navigation for complex needs
- **A number of District Referral Hubs** with capability to manage lower acuity services
 - Continuum includes: District assessment clinics, transitional care
- **Provincial standardization** of levels of care, triage protocols, and pathways from initial point of contact (i.e., 911 call) to transfer protocols (i.e., by air and land), post-acute, and repatriation
- **Enhanced virtual access to consultations** with specialized Neurosciences acute and rehabilitation specialists to support capabilities at Intermediate and District hubs
- **Central Referral Intake and Triage** pathways for specialized rehabilitation

Illustrative example of network hubs working together



Service standards and provider roles

	Service standards	Provider roles
Provincial Referral Hub	Focus on urgent/emergent care and highly specialized care <ul style="list-style-type: none"> Provincial programs for stroke (comprehensive stroke centre with dedicated stroke unit), epilepsy (epilepsy surgery & monitoring unit), MS Delivery of all neurosurgery other than spine Specialized DI (i.e., gamma knife) Access to specialized inpatient rehab Centralized coordination for repatriation and navigational supports for follow-up (in particular for patients from rural & remote areas) 	<ul style="list-style-type: none"> Specialists provide support and consultation for Intermediate, District and Local hubs through provincial consultation service Provincial specialists provide care to intermediate, district, local hubs through digital health tools (i.e., telehealth consults, remote monitoring, etc.) Provincial specialists provide itinerant service for in-person care at intermediate sites Alignment and integration with EMS and patient transport to ensure patients are transferred to appropriate settings of care across the future model
Intermediate Referral Hub	Capability to deliver urgent/emergent care <ul style="list-style-type: none"> Monitoring of epilepsy including tele-EEGs Provision of elective spine surgery by itinerant specialists Infusion centres (building on CCMB model) Primary Stroke Centre and Tele-stroke hub DI Capabilities: MRI, CT, EEG 	<ul style="list-style-type: none"> Navigation and social work support coordination and navigation for complex cases (including labs, tests & appointments)
District Health Hub	Capability to address lower acuity/complexity episodic needs <ul style="list-style-type: none"> Some may be primary stroke centres with telestroke access Focuses on moderate-acuity conditions such as headache, vertigo Provides transitional care to support repatriation and rehabilitation Infusion centres (building on CCMB model) DI capabilities: CT scan, EEG “caps” 	<ul style="list-style-type: none"> Assessment centres where inter-professional teams working to full scope of practice including physios to assess and manage patients and determine if neuro consult is needed
Local	Capability to address prevention, education, and ongoing chronic management and support early supported discharge <ul style="list-style-type: none"> Home-based care through home care and remote monitoring to support earlier discharge and reduced LOS Continuing care for rehabilitation and access to outpatient rehabilitation services Education and awareness in partnership with public health Caregiver and family support 	<ul style="list-style-type: none"> Enhanced My Health care team (MyHT 2.0), (e.g. physicians, nurses, NPs, allied health, health coaches) manages on-going support, screening, prevention, and partnering with home care With input and support from provincial, intermediate and district providers, develop care plans to ensure care can be managed locally MyHT 2.0 and rehab assistants to provide enhanced home care support for neurosciences with expanded scope of practice and use of alternate models of care (i.e., virtual care), where appropriate

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 DI, laboratory, patient transport, Emergency Services, infrastructure and equipment. The table below highlights key elements for the Neurosciences PCT as they are unique to this Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model.

Digital Health	<ul style="list-style-type: none"> Expanded access to telestroke Access to telehealth and virtual care consults, assessments, treatments, and remote monitoring to improve linkages across the network, reduce unnecessary travel, and promote appropriate, earlier discharge home Centralized referral and intake supports for navigation to streamline access to specialized services (e.g., specialized rehabilitation, spine clinic)
Diagnostic Imaging/Lab	<ul style="list-style-type: none"> Alignment of intermediate referral hub capabilities with specialized diagnostic services (e.g., gamma knife, MRI, CT, EEG, tele-EEGs for epilepsy monitoring, primary stroke centre capabilities) Alignment of district referral hub capabilities with enhanced diagnostic services (e.g., access to CT scan, EEG, primary stroke capabilities)
EMS/Patient Transport	<ul style="list-style-type: none"> Alignment of EMS/patient transport protocols and triage criteria to support future model (e.g., in alignment with future stroke centres)
Infrastructure and Equipment	<ul style="list-style-type: none"> Consideration for OR space to support future shifts (e.g., lower complexity/acuity surgeries closer to home, repatriation of surgeries back to Manitoba) Consideration for allocation of dedicated space and/or co-location where warranted for specialized services, to align with any existing plans (e.g., dedicated stroke unit, epilepsy monitoring unit)
Prevention	<ul style="list-style-type: none"> Linkages with municipal and social services partners and public health providers to support consistent prevention and self-management particularly in key areas of injury prevention (e.g., ABI, SCI, stroke) Collaboration with FNHIB and linkages with nursing stations to support equitable access.

Key Performance Indicators

1. Reduced wait time for access to specialized neuroscience acute services (e.g., spine clinic)
2. Reduced ALOS and reduced ALC days in acute care for targeted clinical populations (e.g., stroke) through enhanced community based / early supported discharge options
3. Reduction in post-stroke morbidity and mortality rates between pre/post stroke unit implementation
4. Increase in proportion of stroke patients meeting transportation guidelines and timeframes
5. Implementation/expansion of provincial initiatives (i.e., Spine Assessment Clinic, Stroke Unit) resulting in improved cost effectiveness

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

CHRONIC AND COMPLEX MEDICINE
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

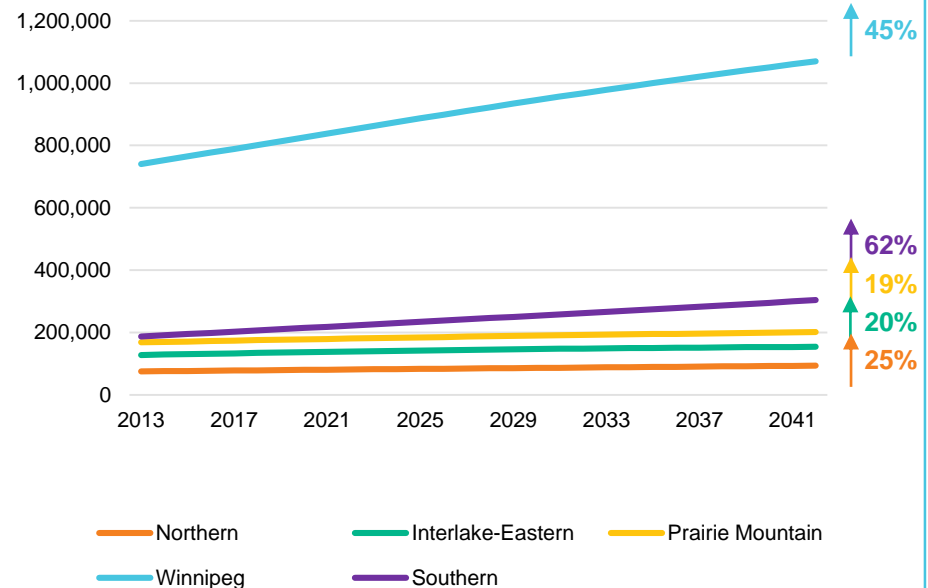
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

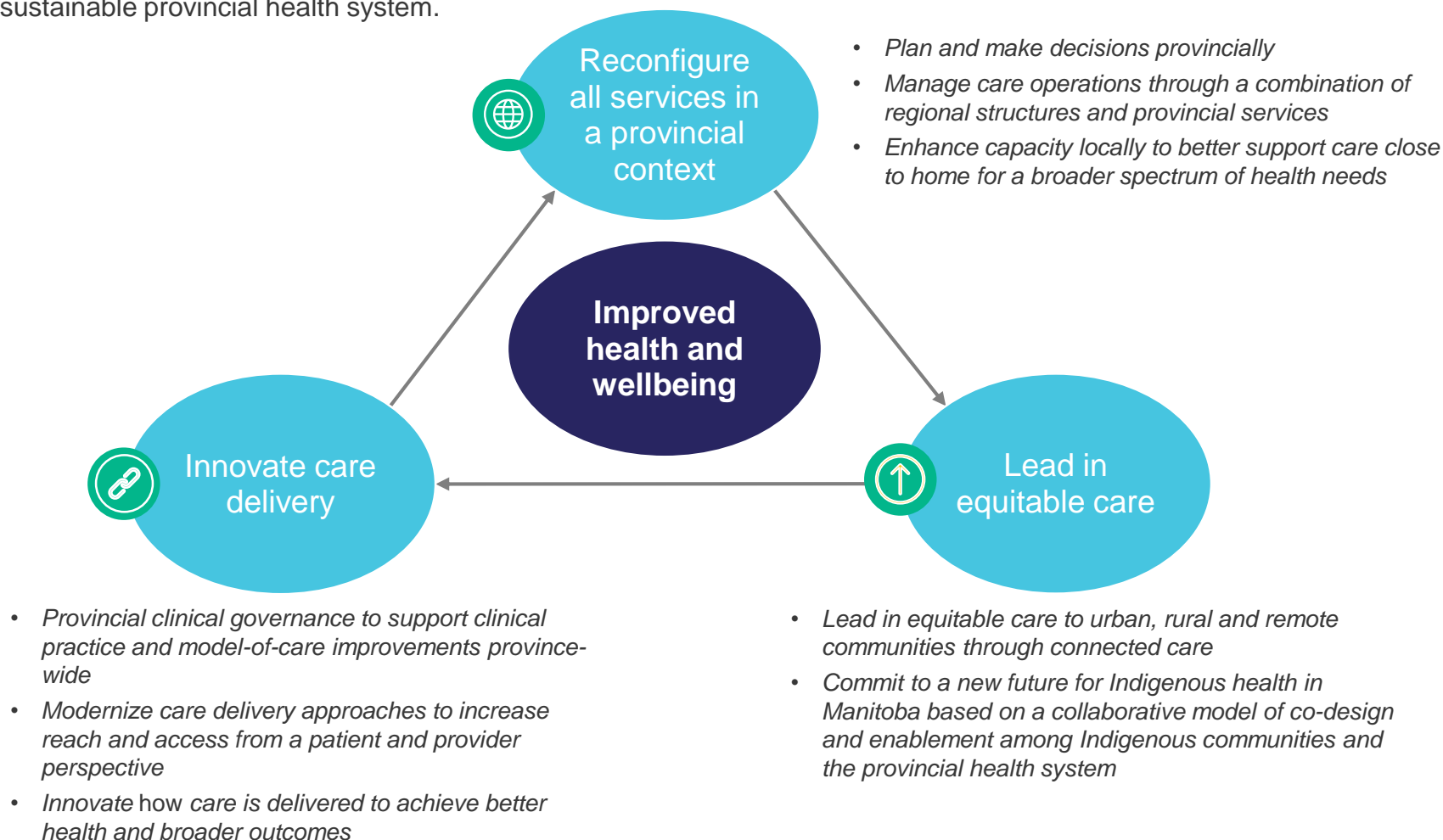
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

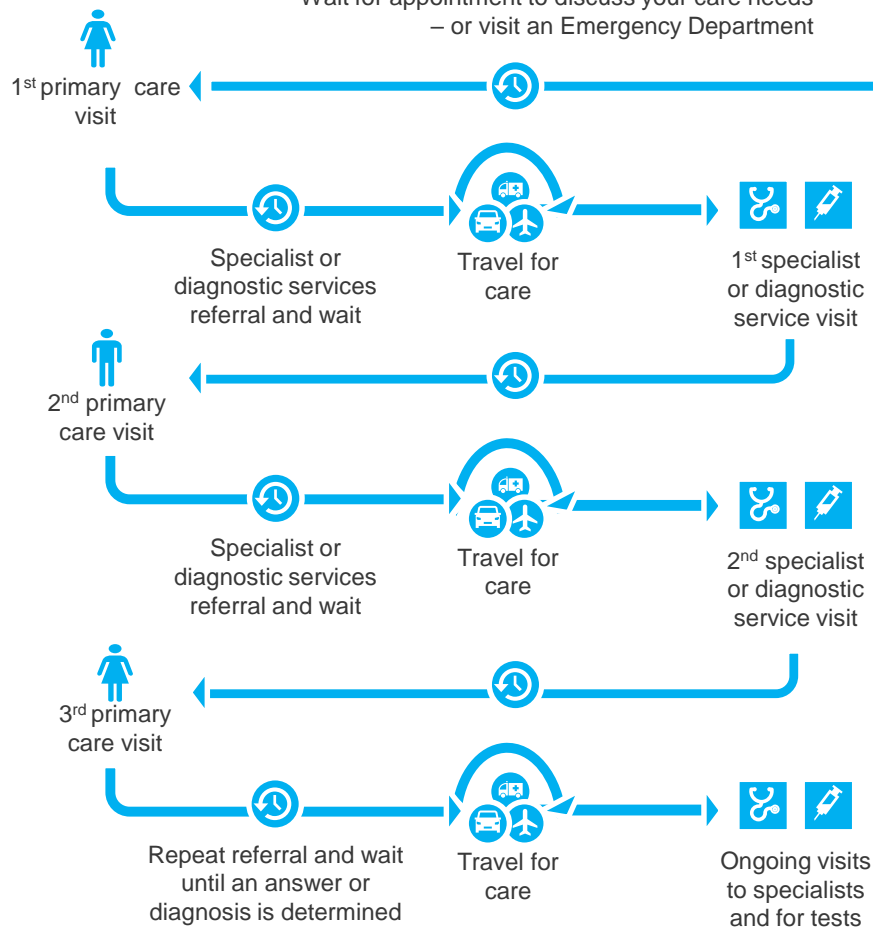
IN THE FUTURE

- 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?

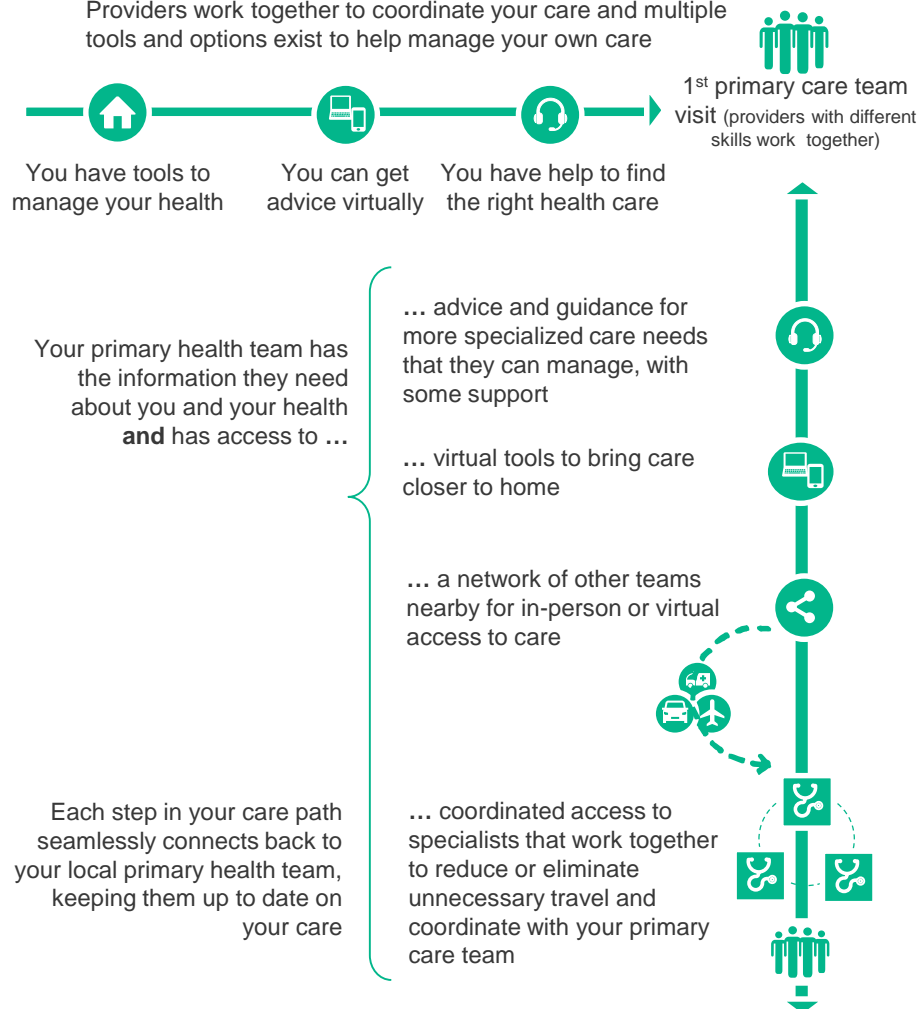
TODAY

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

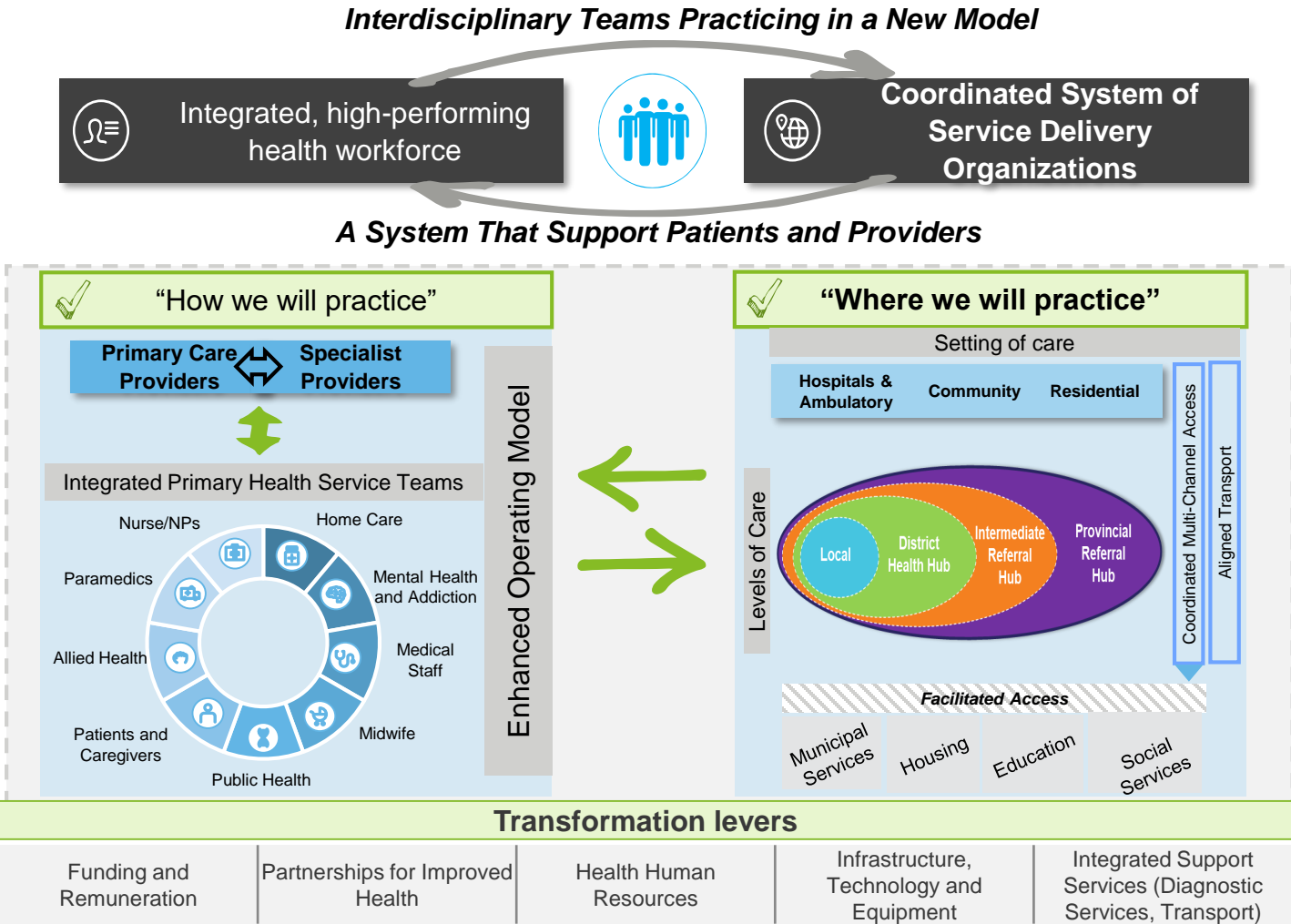


IN THE FUTURE

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



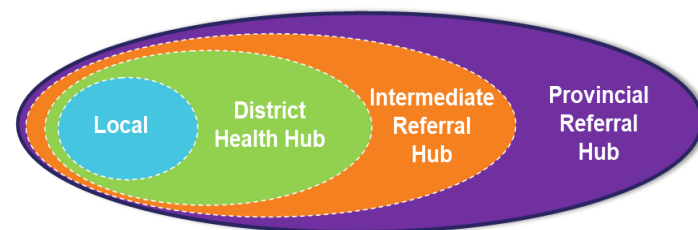
An integrated network for accessing and delivering services is core to the new provincial model



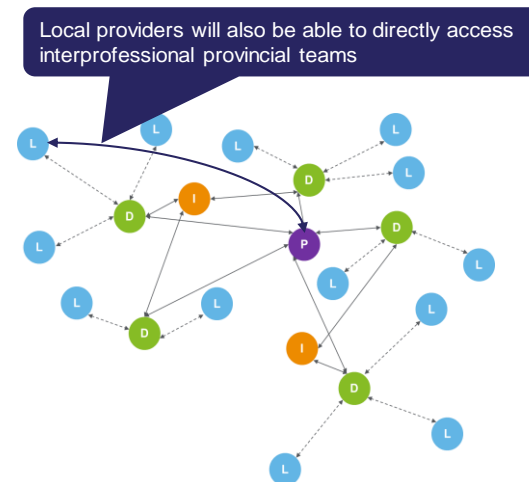
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



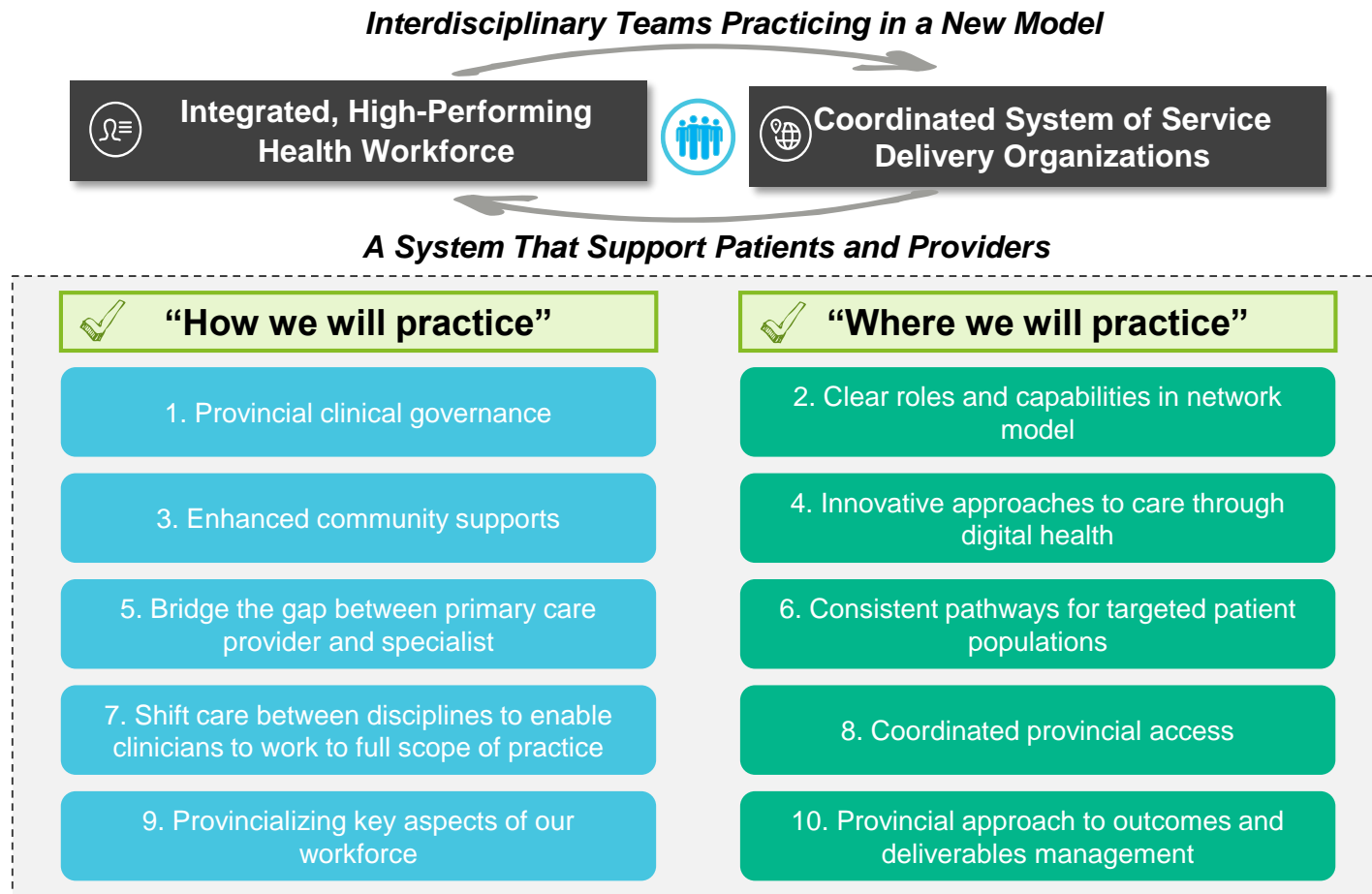
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
<p>Enhanced</p> <p> 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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p> <p> Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p>		<p>Provincial:</p> <p>24/7 Emergency Department</p>
	<p> General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	<p> Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p> <p> Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
<p>Core</p> <p> Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p> <p> District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			<p> Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



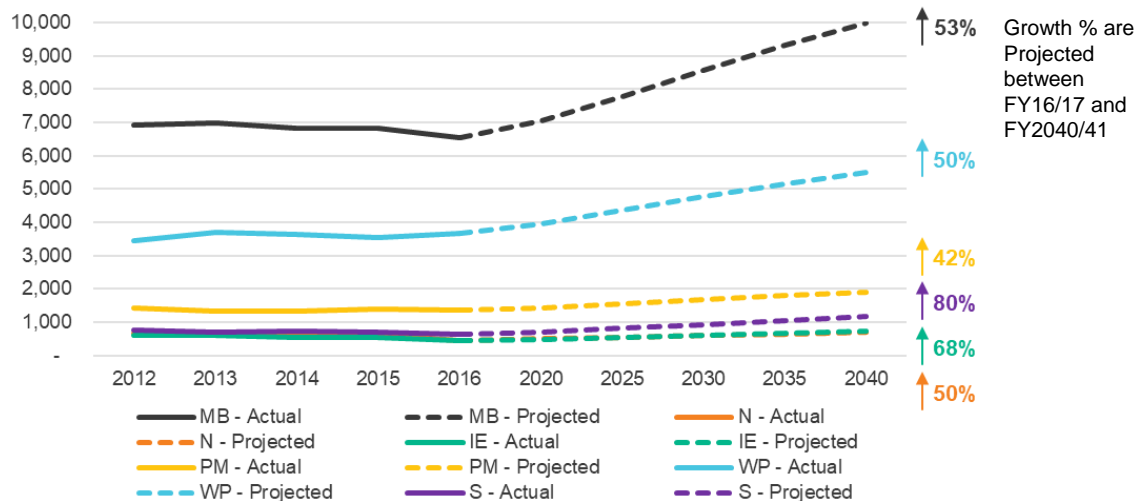
Chronic and Complex Medicine

Current state and case for change

Inpatient admissions, day surgeries and procedures related to Chronic and Complex Medicine expected to increase between 2016/17 and 2040/41

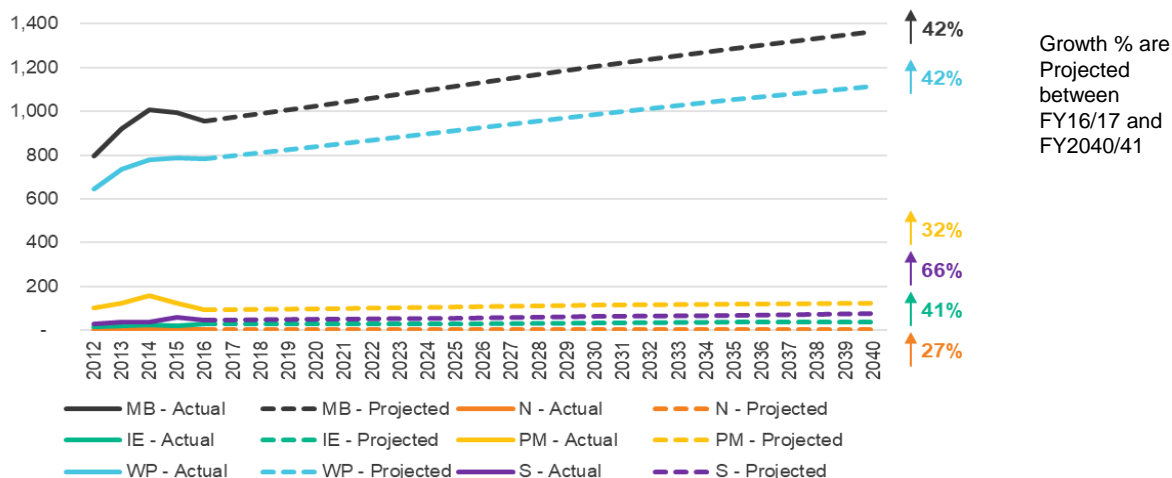
Chronic and Complex Medicine **inpatient admissions** are expected to increase **53%** in the province in the next 20 years

Projected Growth in Chronic and Complex Medicine Inpatient Admissions, FY12/13 to FY40/41



Chronic and Complex Medicine **day surgery and intervention/procedure visits** are expected to increase **43%** in the province in the next 20 years

Projected Growth in Chronic and Complex Medicine Day Surgery And Intervention/Procedure Visits, FY12/13 to FY40/41



Source: MHSAL – Discharge Abstract Database

Current state and case for change

There are three predominant patient population types in the Chronic & Complex Medicine area: patients with high impact, low volume conditions; prevention oriented, high volume disease patients; and patients with multiple chronic diseases/comorbidities. Major current state issues and supporting evidence indicate the need for change and shifts within this clinical area

Manitoba has existing initiatives and programs to build upon

- **The Manitoba Renal Program** is made up of an **inter-professional team** of health care professionals working together to provide the highest quality kidney care and kidney education. A total of 5,272 patients are in the program as of 2018 and currently, 24% of the patients receiving home dialysis and in-centre dialysis, with 5% on **home hemodialysis which is on par with other jurisdictions** (i.e., Ontario and British Columbia) across Canada.
- The **Diabetes Collaborative Care Pathway** described the patient journey and identified interactions between key stakeholders. As a result, the WRHA developed the **“Diabetes System of Care” strategy** that identifies service gaps and improves linkages to resources, e.g., working with **Pediatric Endocrinology**, two **primary care sites** and **Indigenous agencies on process for approaching youth with diabetes** differently in primary care; **Insulin Mentorship Program**.
- **COPD System of Care** from **upstream identification** through spirometry testing by building up community capacity to screen to **INSPIRED hospital to home model of care** for patients with moderate to severe COPD
- HSC has a provincial **Multiple Sclerosis Clinic** that evaluates, treats, and educates patients newly diagnosed with MS within five weeks and also follows up with patients who have been discharged, previously diagnosed, and patients suffering from acute relapses

Total Hemodialysis Treatments by Region, FY14/15-FY17/18

	2014	2015	2016	2017
Manitoba	181,560	183,021	197,183	199,796
Northern	9,312	6,179	8,910	5,653
Interlake-Eastern	11,139	11,563	12,038	13,249
Prairie Mountain	17,542	17,220	20,854	21,492
Winnipeg	13,5742	139,821	146,694	150,514
Southern	7,825	8,238	8,687	8,888

Source: MHSAL - MIS Data

Current state and case for change

There are three predominant patient population types in the Chronic and Complex Medicine area: patients with high impact, low volume conditions; prevention oriented, high volume disease patients; and patients with multiple chronic diseases/comorbidities. Major current state issues and supporting evidence indicate the need for change and shifts within this clinical area

Chronic disease prevalence is growing and highly varied across regions	<ul style="list-style-type: none">• In 2015/16, over half of Manitobans aged 40 and older had one or more of the following chronic conditions: diabetes, hypertension, ischemic heart disease, heart failure or chronic obstructive pulmonary disease• Provincially, 9% of Manitobans had a diagnosis of diabetes:<ul style="list-style-type: none">• Among all regions except NRHA the diabetes rate ranged between 7% and 10%; in NRHA 18% of the population had diabetes	<table><tr><th colspan="4">Prevalence of Chronic Disease by Region, 2015/16</th></tr><tr><th></th><th>Chronic Conditions*</th><th>Diabetes</th><th>COPD</th></tr><tr><td>Manitoba</td><td>54.4%</td><td>9.1%</td><td>12.6%</td></tr><tr><td>NRHA</td><td>66.7%</td><td>18.4%</td><td>15.6%</td></tr><tr><td>IERHA</td><td>56.3%</td><td>10.0%</td><td>13.5%</td></tr><tr><td>PMH</td><td>54.2%</td><td>9.5%</td><td>13.0%</td></tr><tr><td>WRHA</td><td>54.2%</td><td>8.6%</td><td>12.8%</td></tr><tr><td>SHSS</td><td>50.8%</td><td>7.1%</td><td>10.1%</td></tr></table> <p>Source: MHSAL – Annual Statistics</p> <p>* Chronic Conditions includes: diabetes, hypertension, ischemic heart disease, heart failure, stroke, or COPD</p>	Prevalence of Chronic Disease by Region, 2015/16					Chronic Conditions*	Diabetes	COPD	Manitoba	54.4%	9.1%	12.6%	NRHA	66.7%	18.4%	15.6%	IERHA	56.3%	10.0%	13.5%	PMH	54.2%	9.5%	13.0%	WRHA	54.2%	8.6%	12.8%	SHSS	50.8%	7.1%	10.1%
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Specialized care for patients is challenging to access for patients in rural, remote, and Northern regions and Indigenous populations	<ul style="list-style-type: none">• 40% and 42% of patients from Northern and Interlake-Eastern, respectively, receive care for inpatient admissions in Winnipeg• There is no provincial standard or service for primary health providers to receive timely access to specialists• Variable capacity and means within local communities for management of chronic diseases including poor local support exists for self-management in Northern and rural communities	<table><tr><th colspan="4">Where patient was admitted and treated</th></tr><tr><th>Patient's Home Region</th><th>Home Region</th><th>Winnipeg</th><th>Other Non-Winnipeg Region</th></tr><tr><td>Northern</td><td>59%</td><td>40%</td><td>1%</td></tr><tr><td>Interlake-Eastern</td><td>57%</td><td>42%</td><td>2%</td></tr><tr><td>Prairie Mountain</td><td>88%</td><td>11%</td><td>1%</td></tr><tr><td>Winnipeg</td><td>97%</td><td>--</td><td>3%</td></tr><tr><td>Southern</td><td>64%</td><td>33%</td><td>3%</td></tr></table> <p>Source: MHSAL – Discharge Abstract Database</p>	Where patient was admitted and treated				Patient's Home Region	Home Region	Winnipeg	Other Non-Winnipeg Region	Northern	59%	40%	1%	Interlake-Eastern	57%	42%	2%	Prairie Mountain	88%	11%	1%	Winnipeg	97%	--	3%	Southern	64%	33%	3%				
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Current state and case for change

PCT members identified duplication and gaps between federal and provincial chronic disease programs.

FEDERAL PROGRAMS FOR FIRST NATIONS	MANITOBA PROGRAMS
<ul style="list-style-type: none">• Canada Prenatal Nutrition Program• Aboriginal Diabetes Initiative• YSP – Youth Summer Program• National Native Alcohol and Drug Abuse Program• Public Health• Home and Community Care – First Nations and Inuit Home and Community Care• Child and Family Services – First Nations Child and Family Services• Recreation• Jordan’s Principle• Baby-friendly Initiative• Building Healthy Communities• Transportation	<ul style="list-style-type: none">• Family First• Canadian Diabetes Educator Certification / Diabetes Education Resources• Public Health• Mobile Clinic• Healthy Babies• Mental Health• Spiritual Care• Recreation Centres• Community health workers• COPD Inspire Program• Telecare

Moving from today to the future

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

	Highlights of Current State	Highlights of Future State
Service Model – Highly Effective Teams	<ul style="list-style-type: none"> Variable capacity within local communities with high volumes of patients travelling to Winnipeg to receive care Inequitable access to specialist care despite high volumes of patients with morbidities who require access to multiple specialists Variable capacity and means within local communities for prevention, early detection and early management of chronic diseases 	<ul style="list-style-type: none"> Broaden the inter-professional supports and scope of practice for primary health physicians and primary health providers to bring care closer to home Implement community-based case management and care coordination, including for Indigenous communities Develop education and skill building tools for patients and caregivers to promote self-management, including for diabetes Strengthen relationship with primary prevention resources (e.g., Public health, community partners, exercise is medicine)
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> Variable standards and practice for primary health prevention, screening, and intervention across the province Inconsistent care pathways to support the flow of patients throughout the system <ul style="list-style-type: none"> Inconsistent methods of communication between specialists and primary health physicians Variable coordination of care in the community, including gaps in data sharing between ED and Primary Health providers 	<ul style="list-style-type: none"> Establish a data sharing platform to facilitate sharing of patient information between care providers <ul style="list-style-type: none"> Improve patient access to their own health data Increase usage of e-consults and telehealth/telehomecare to create capacity province wide Implement standardized pathways for primary health, and clearly define their role in early prevention, screening and intervention, particularly for obesity and diabetes prevention <ul style="list-style-type: none"> Standard referral and return of patients to primary health, and ensure roles and responsibilities are clear Standard tools to support primary health for prevention and screening Register all Manitobans with an enhanced My Health Team 2.0 to ensure every patient has access to an inter-professional health “hub” from their home community Enhance pain management services through alternate modes of care delivery (i.e., virtual consults, and self-management)

Provincial view of the future vision

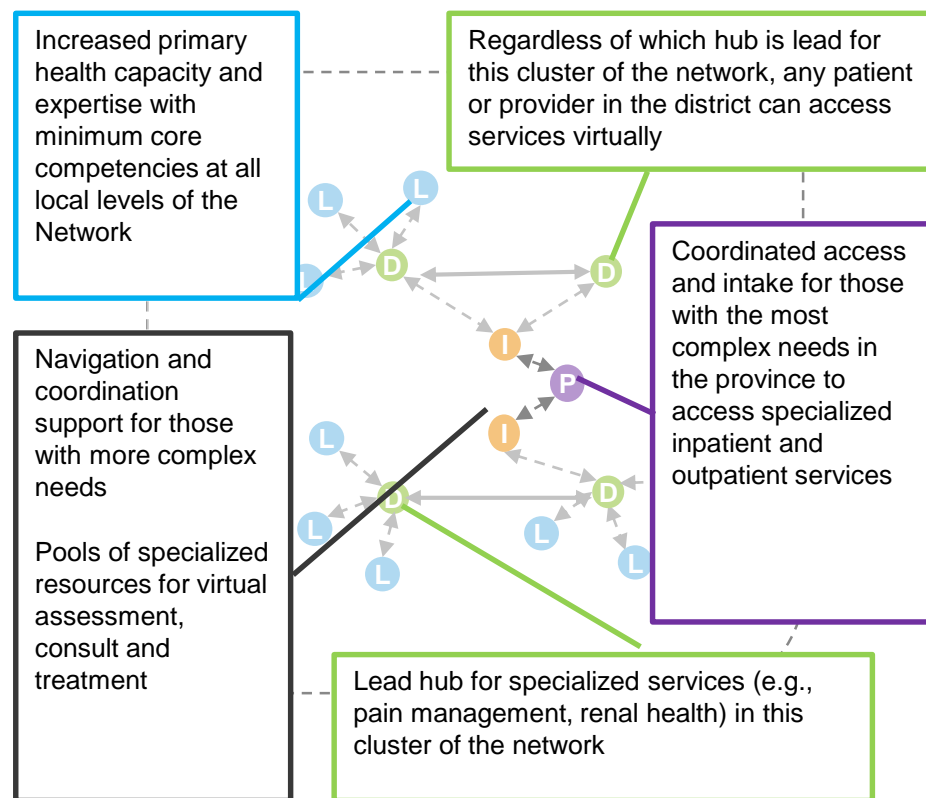
Future Vision: Manitoba will coordinate planning for service models, standards, pathway changes, and provider roles to

- Improve patient access to coordinated care pathways from primary health to specialists
- Build up capabilities for early identification, assessment, intervention, and patient self-management
- Address care for patients with specialized needs
- Enable professionals to practice to full scope of work

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

- Enhanced **delivery and coordination of care closer to home** as the foundation of the future model with enhanced **inter-professional teams**
 - Enhanced My Health Teams serve as a “**hub**” for patients in **their home community/region to enhance local access** on an ongoing basis for chronic needs (e.g., re-access with relapse, symptom management for flare-ups) and reduce need for travel to specialists (e.g., **Insulin Mentorship Program**)
 - **Extended reach of specialized capabilities** at all Network levels through **virtual, mobile**, and other remotely delivered models (e.g., Patient centred specialist medical homes; Manitoba Diabetes Integration Program mobile team outreach to First Nation populations)
- **Standardize and coordinate care** within and across all Network levels
 - Consistent use of **standardized care pathways** (i.e., COPD INSPIRED, Diabetes System of Care in WRHA, Renal nephrology pathway) in alignment with leading practices
- Develop, expand, harmonize **education and self-management tools/programs** to enable consistent patient engagement in their care management on an ongoing basis (e.g., teleCARE/teleSOINS diabetes clinics; arthritis education; Dial a Dietitian; Healthy Eating Toolkit, COPD Action Plans, Get Better Together)
- **Standardize access for the most complex needs** to specialized resources (e.g., provincial MS clinic; rheumatologist; endocrinologist) **Improve patient access** to their own health data

Illustrative example of network hubs working together



Provincial view of the future vision

Other key features of the future vision include, but are not limited to:

Support enhancement of capabilities and optimize scope of practice and bridge the gap between specialists and primary care providers

- **Primary health and community health team capabilities** are enhanced and consistently **supported provincially** (e.g., Rapid Access to Consultative Expertise, shared care models, Extensions for Community Healthcare Outcomes (ECHO), Manitoba Patient Access Network, staffing guidelines for services)
- **Standardize prevention, screening, early intervention, and treatment** through the inter-professional team (e.g., primary health, psychologists, community, public health, educators,)
- **Increase outreach to Indigenous** and patient populations in rural/remote and Northern areas (e.g., Aboriginal Diabetes Initiative, First Nations and Inuit Home and Community Care, First Nations Child and Family Services, Nursing Stations)
- Increase **coordination between services to improve access to provincial and federal prevention and wellness programs** (e.g., Canada Prenatal Nutrition Program, Jordan's Principle, Families First Program, Healthy Baby Healthy Child, community health works, etc.)
- Create a foundation of work with primary care providers including access, **shared health records, hours of availability**

Service standards and provider roles | High Impact, Low Volume

Service standards and provider roles are outlined across the Network Model

	Service Standards	Provider Roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Provincial clinical governance to provide standards and quality assurance for services including diagnostics • Provincial specialized clinics with a hybrid in-person / virtual delivery model (e.g., expand on MS clinic model for specific diseases such as rheumatoid arthritis, lupus, IBD, Tick-Bourne Disease) 	<ul style="list-style-type: none"> • Inter-professional teams with specialized expertise across sub-specialties (i.e., endocrinologists, rheumatologists, gastroenterologists) will provide treatment for patients with high complexity cases <ul style="list-style-type: none"> • Advisory role to generalists at district and local hubs of the network (e.g., provide guidelines for symptoms and early diagnosis of disease;) using in-person or virtual methods • Dedicated itinerant model to support patients and providers at intermediate and district hubs of the network
Intermediate Referral Hub	<ul style="list-style-type: none"> • Clinics for acute flare ups and specialized long-term disease management (i.e., Chronic Pain Clinic) 	<ul style="list-style-type: none"> • Inter-professional teams with specialized expertise across sub-specialties to coordinate care for patients of low to moderate acuity • Specialists will periodically return to Provincial hub for training to expand care for patients outside of Winnipeg • Indigenous Health Patient Services provide culturally appropriate services, resources and education for Indigenous patients and families within WRHA with linkages to their respective communities.
District Health Hub	<ul style="list-style-type: none"> • Enhanced My Health Teams will serve as a “hub” for patients in their home community/region to enhance local access on an ongoing basis for chronic needs and reduce need for travel to specialists <ul style="list-style-type: none"> • Coordination for patient to receive long-term disease management with providers at local hub to generate access closer to home 	<ul style="list-style-type: none"> • Generalists (i.e., Allied health, pharmacists, psychologists etc.) to provide tertiary prevention to stabilize and minimize acute flares
Local	<ul style="list-style-type: none"> • Standard tool kit to support primary health providers in accessing appropriate resources for patient self-care, warning signs and symptoms, and patient self-management of disease 	<ul style="list-style-type: none"> • Standard screening and early intervention programs through primary health providers • Provide follow-up and long-term disease management through inter-professional teams (e.g., pharmacists, nurse practitioners, physician assistants, psychologists, OT/PT etc.) • Partner with community organizations to support prevention, wellness, and disease management (i.e., Health eating programs, Dial a Dietitian, Recreation, Massage Therapy, smoking cessation etc.) • Enhanced use of IT self management

Service standards and provider roles | Prevention oriented, high volume

Service standards and provider roles are outlined across the Network Model

	Service Standards	Provider Roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Standard discharge and transfer to community including screening for re-admissions • Virtual methods will be standardized various applications including: a single source of patient information (i.e., EMR), communication tools (i.e., telehealth), education tools, eConsult, and technology for home monitoring that will be used at all hubs of the network • Delivery of tertiary and end-stage care (e.g., kidney transplant) 	<ul style="list-style-type: none"> • Inter-professional teams with specialized expertise across sub-specialties (i.e. endocrinologists, rheumatologists, podiatrists, respirologists) will collaborate to develop & manage treatment plans for patients with high complexity/ cases • Provincial resource team to provide virtual consults to providers across the province
Intermediate Referral Hub		<ul style="list-style-type: none"> • Inter-professional teams with specialized expertise across sub-specialties to coordinate care for patients of low to moderate acuity/ comorbidities • Mobile teams and clinics travel to district and local hubs of the network to provide care for specialized populations (i.e., First Nations Manitoba Diabetes Integration Program, resource team to support home dialysis or hemodialysis at federal health stations)

Service standards and provider roles | Prevention oriented, high volume

Service standards and provider roles are outlined across the Network Model

	Service Standards	Provider Roles
District Health Hub	<ul style="list-style-type: none"> • Enhanced My Health Teams will serve as a “hub” for patients in their home community/region to enhance local access on an ongoing basis for chronic needs and reduce need for travel to specialists <ul style="list-style-type: none"> • Coordinate and provide care through various primary health providers using defined pathways and transition points between providers for short-term and long-term disease management (e.g., allied health, primary health physicians, psychologists, etc.) • Coordinate access and inform patients and patient care providers on federal and provincial community programs • Consistent access to specialty clinics and programs (Insulin Mentorship Program, Community-based dialysis clinics, support groups, Cardiac Rehab- Home-Based program) to keep patients closer to home 	<ul style="list-style-type: none"> • Generalists (i.e., Allied health, pharmacists, psychologists, etc.) to provide tertiary prevention to stabilize and minimize acute flares
Local	<ul style="list-style-type: none"> • Standard tool kit to educate and support primary health providers in accessing appropriate resources for patient self-care, warning signs and symptoms, and patient self-management of disease (e.g., Diabetes Canada web site, Diabetes Compendium) • Provincial expansion of INSPIRED Program for COPD patients to improve self-management and reduce reliance on hospital care • Provincial expansion of Rapid Access to Consultative Expertise phone lines and eConsult to build primary care capacity in the community 	<ul style="list-style-type: none"> • Partner with community organizations and complimentary services to support prevention and wellness (i.e., Canada Prenatal Nutrition Program, National Native Alcohol and Drug Abuse Program, First Nations and Inuit Home and Community Care, Mental Health and Addictions, Recreation, Manitoba Fitness Council)

Service standards and provider roles | Multiple Chronic Disease

Service standards and provider roles are outlined across the Network Model

	Service Standards	Provider Roles
Provincial Referral Hub	<ul style="list-style-type: none"> • Standard discharge and transfer to community including screening for re-admissions (COPD Risk for Readmission tool) • Virtual methods will be standardized various applications including: a single source of patient information (i.e., EMR), communication tools (i.e., telehealth), education tools, eConsult, and technology for home monitoring that will be used at all hubs of the network (telehomecare) 	<ul style="list-style-type: none"> • Inter-professional teams with specialized expertise across sub-specialties to assess and treat high complexity cases (i.e., gastroenterologist, neurologist, rheumatologist) • Provincial resource team to support providers across the province and consult on cases throughout the hubs as needed (i.e., Project ECHO) <ul style="list-style-type: none"> • Coordinate with district and local hubs through My Health Teams
Inter-mediate Referral Hub		<ul style="list-style-type: none"> • Inter-professional teams of general internists to assess and care for patients of low to moderate acuity <ul style="list-style-type: none"> • Provide tertiary prevention and patient management of disease and minimize acute flares
District Health Hub	<ul style="list-style-type: none"> • Enhanced My Health Teams will serve as a “hub” for patients in their home community/region to enhance local access on an ongoing basis for chronic needs and reduce need for travel to specialists <ul style="list-style-type: none"> • Coordinate follow-up and long-term disease management with inter-professional teams (e.g., internists, allied health, primary care physicians, psychologists, telecare, etc.) • Coordinate efficient follow-up process post-discharge from acute care to reduce readmissions (i.e., automatic 7-day follow-up) • Consistent access to specialty clinics and programs (e.g., Chronic Pain Clinic, pulmonary and cardiac rehab programs, Get Better Together support group model) to keep patients closer to home 	<ul style="list-style-type: none"> • Generalists (i.e., Allied health, pharmacists, psychologists , etc.) to provide tertiary prevention to stabilize and minimize acute flares • Work with Social Services to support patient and caregivers
Local	<ul style="list-style-type: none"> • Provincial expansion of Rapid Access to Consultative Expertise phone lines to build primary care capacity in the community and provide quick access to specialist support • Standard tool kit to support primary health providers in accessing appropriate resources for patient self-care, warning signs and symptoms, and patient self-management of disease (e.g., COPD and CHF Action Plans) 	<ul style="list-style-type: none"> • Primary care homes with inter-professional primary health teams supporting physicians (i.e., Nurse practitioner, allied health, social work, spiritual care, Indigenous Health Patient Services) • Partner with community organizations to support prevention and wellness (e.g., Canadian Obesity Network, Commit to Quit Smoking Cessation, Living Well with Pain, Support Services for Seniors, Seniors without Walls etc.)

Opportunities for innovative service delivery

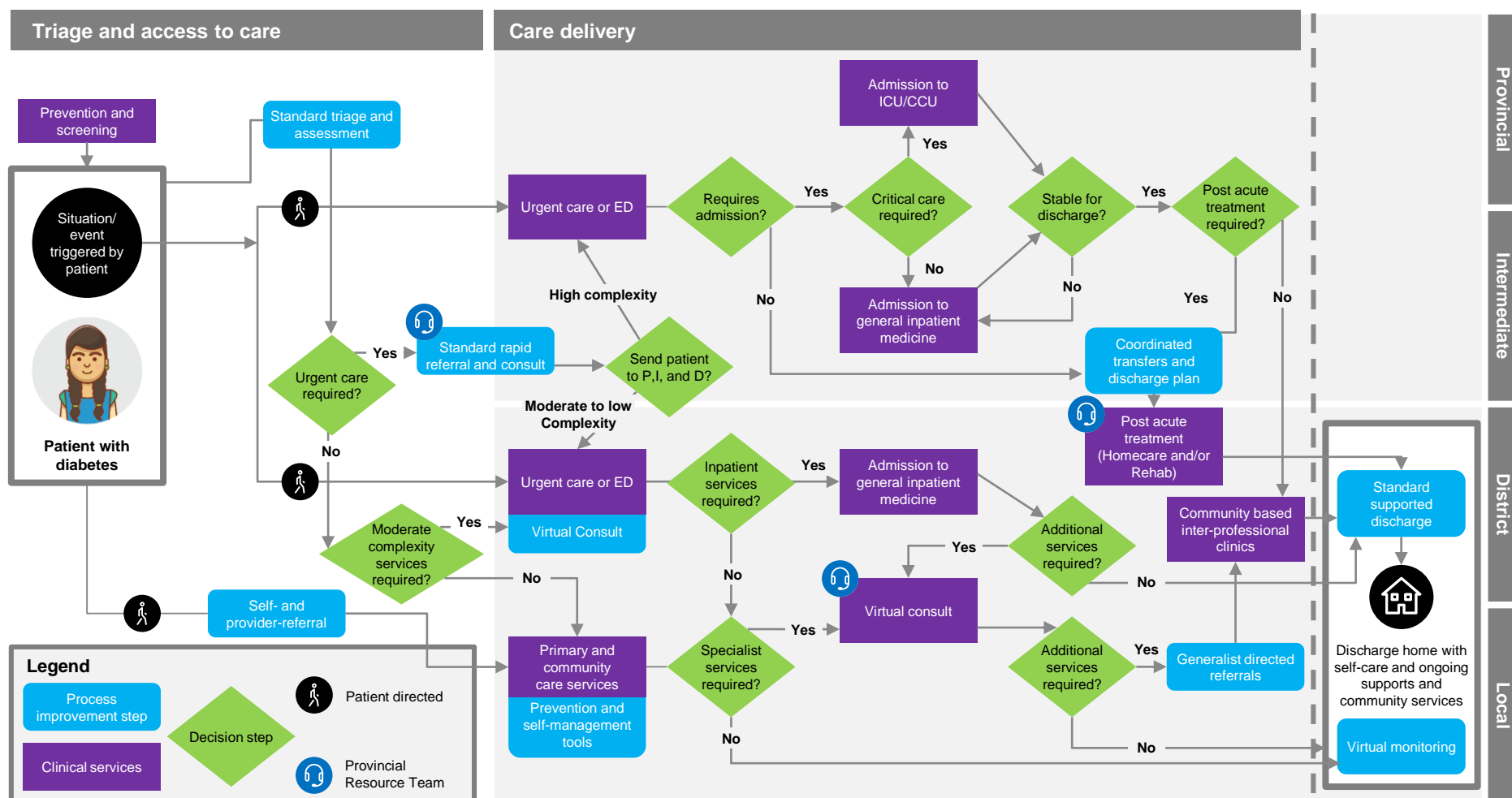
Innovative service delivery and improved access to care can be achieved through digital technology, including associated information and technology requirements, as well as integrated support services including diagnostics, laboratory, patient transport, Emergency Services, infrastructure and equipment.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

Digital Health	<ul style="list-style-type: none"> Enhanced My Health Teams will require a platform for virtual documentation Video-conferencing hubs that reduce travel for patients in northern and remote communities and support health care providers using Project ECHO Patient and caregiver monitoring (e.g., self-management apps, smart watches tracked by care providers)
Diagnostic Services	<ul style="list-style-type: none"> Build up capacity to utilize point-of-care testing in local hubs to enhance patients' self-management of chronic disease (i.e., diabetes, congestive heart failure, and anticoagulation) through monitoring and analyzing medication outcomes
EMS/Patient Transport	<ul style="list-style-type: none"> <i>There are no major EMS/Patient Transport considerations that are unique to this PCT</i>
Infrastructure and Equipment	<ul style="list-style-type: none"> Funding from health authority to support development of specialist clinics (e.g., MS clinics, IBD clinics) Equipment for Home-based treatment (e.g., Home dialysis)
Prevention	<ul style="list-style-type: none"> Expanded community capacity to manage population effectively (e.g., COPD system of care, spirometry testing; patient registries)

Key Performance Indicators

1. Reduced number of unnecessary transfers to Winnipeg and improve access to specialist consults through expanded use of alternate modes of care delivery (i.e., virtual, itinerant care models)
2. Increased number of Manitobans registered with an enhanced My Health Team to ensure every patient has access to an inter-professional health "hub" from their home community
3. Increase number of patients with diabetes who are able to self-manage care through education and skill building tools to reduce reliance on health providers
4. Improved access and coordination of care through increased number of inter-professional care team models

Appendix – Future Provincial Clinical Services Pathway – Diabetes



Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

**SENIORS AND REHABILITATION 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

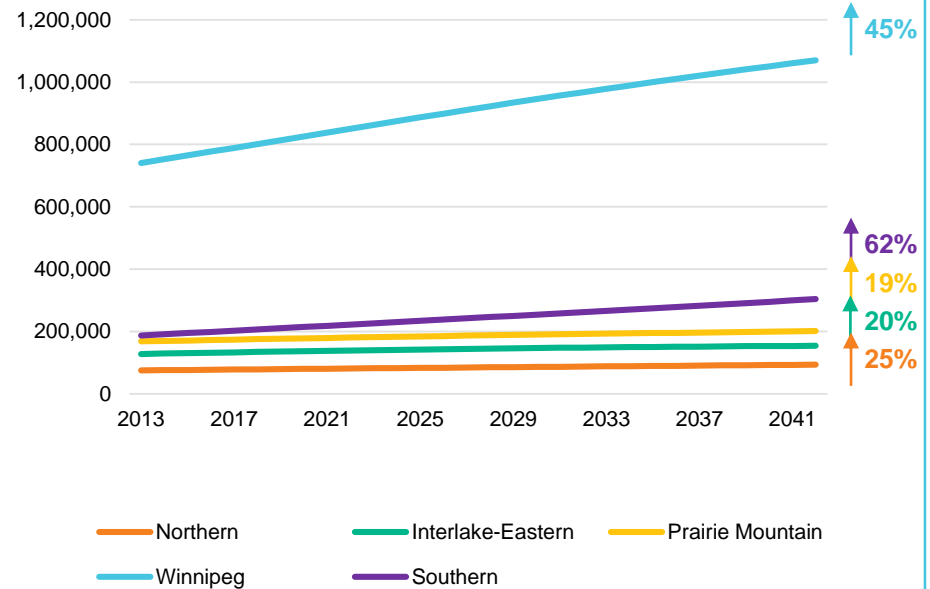
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

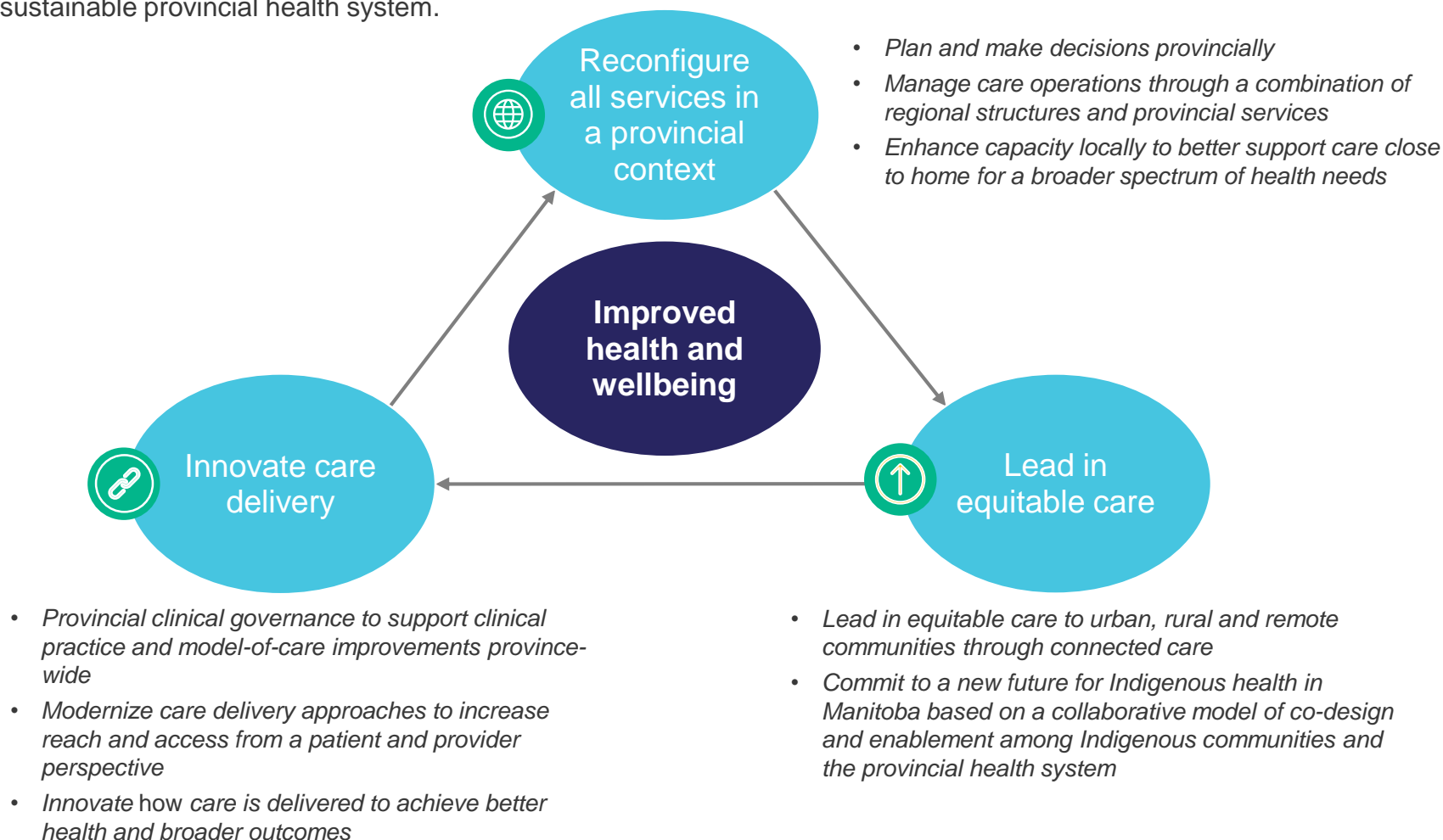
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

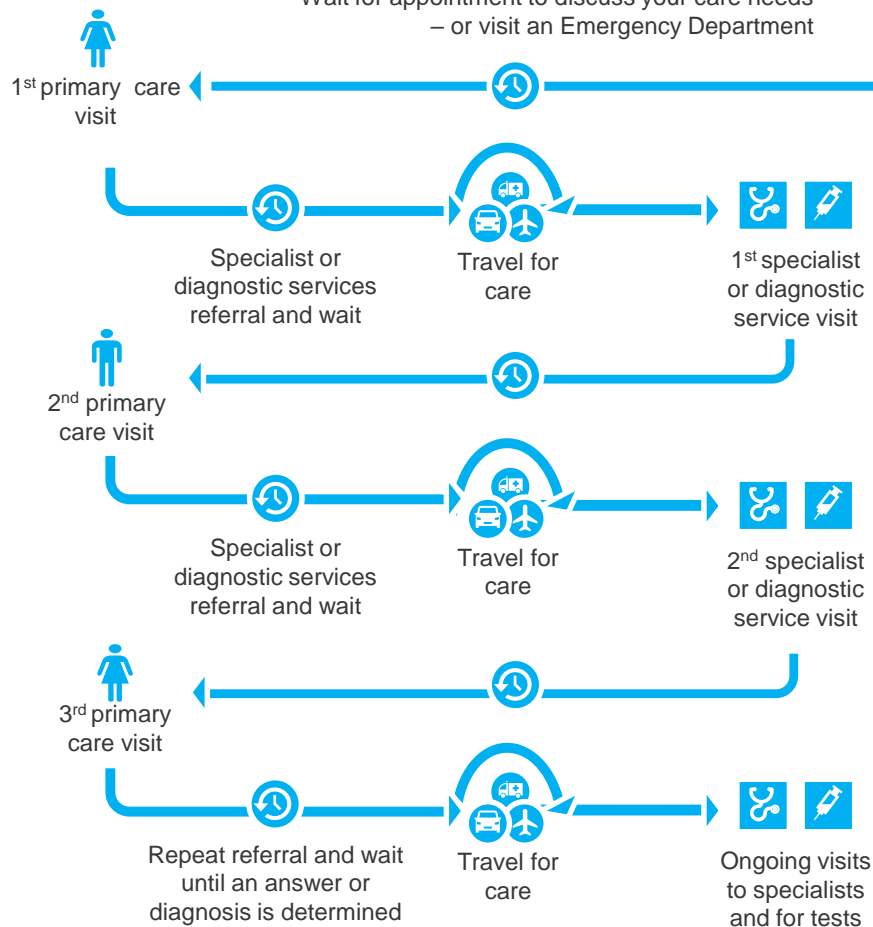
IN THE FUTURE

- 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?

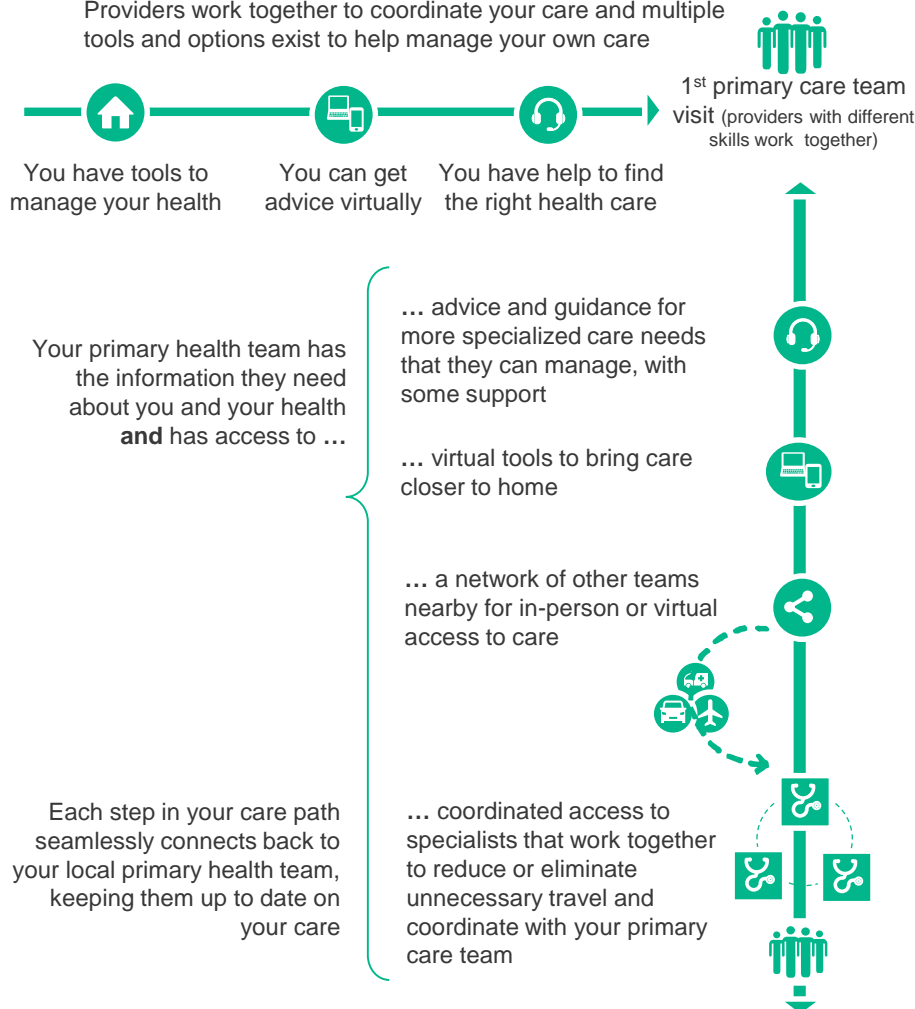
TODAY

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

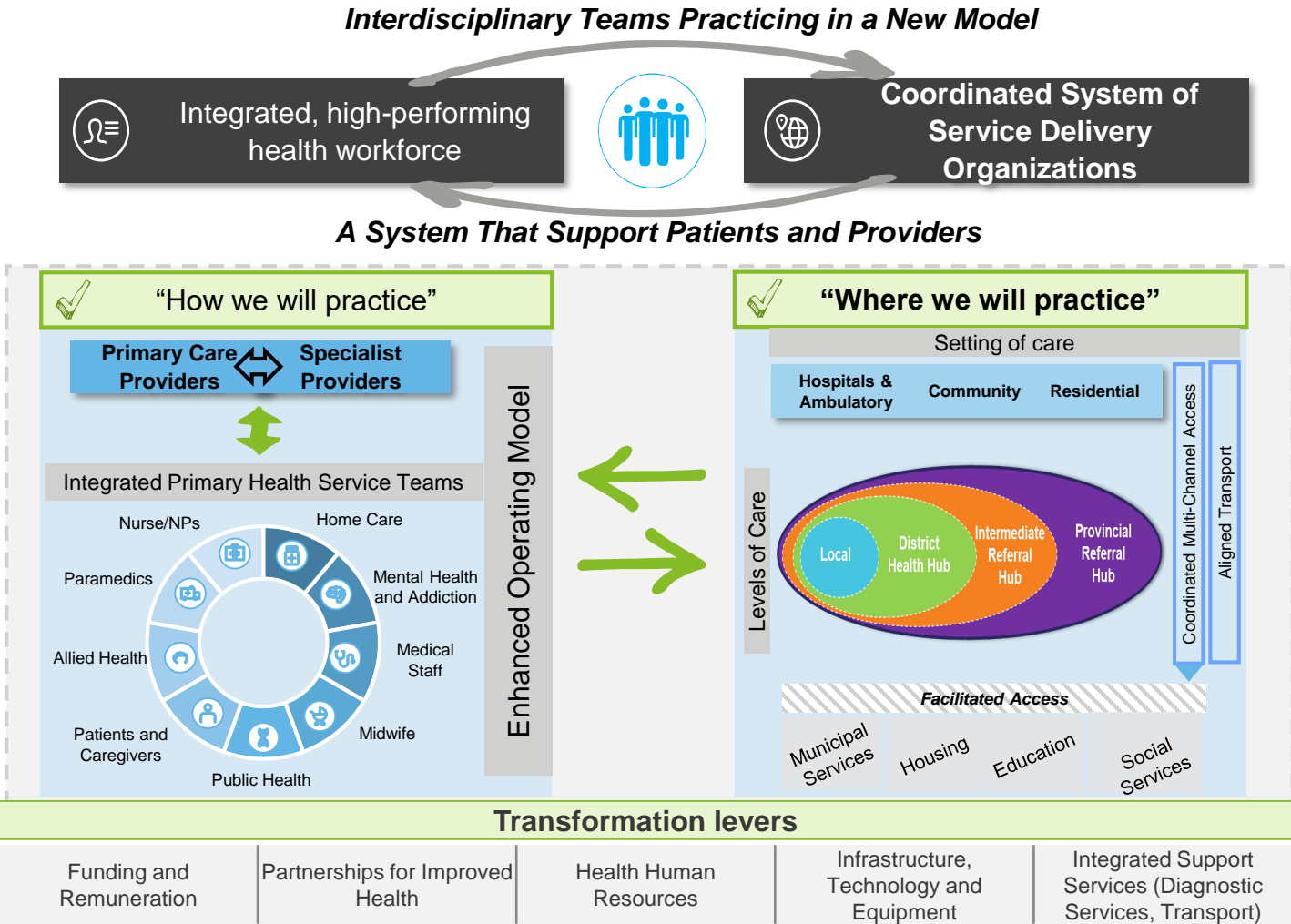


IN THE FUTURE

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



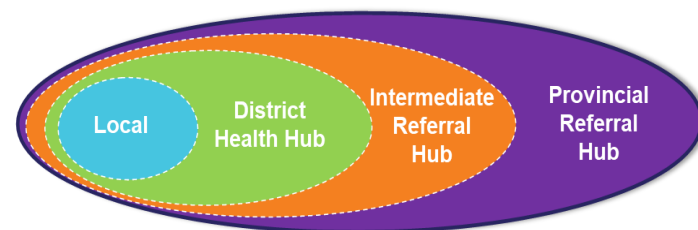
An integrated network for accessing and delivering services is core to the new provincial model



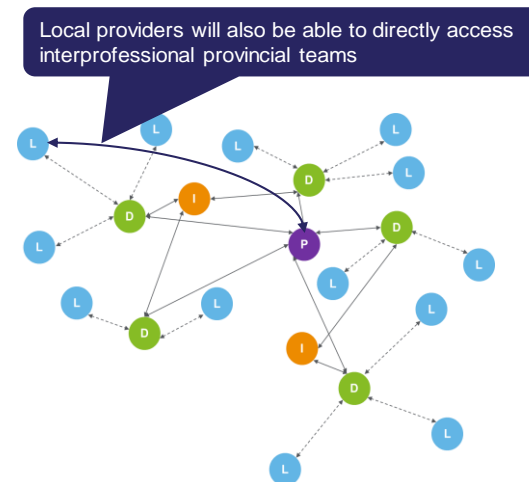
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



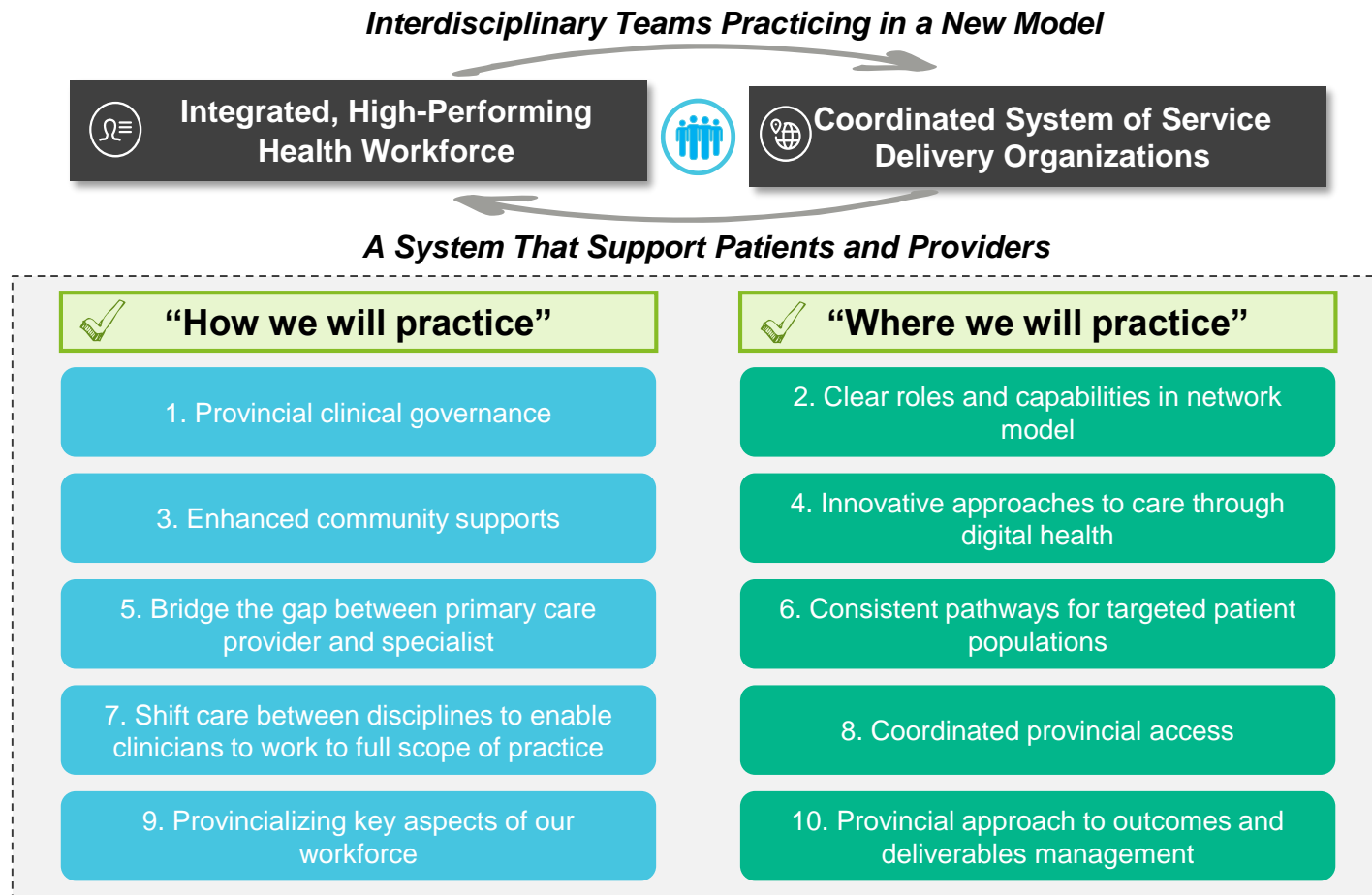
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
<p>Enhanced</p> <p> 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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p> <p> Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p> <p>Provincial:</p> <p>24/7 Emergency Department</p>		
	<p> General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	<p> Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p> <p> Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
<p>Core</p> <p> Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p> <p> District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			<p> Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Seniors and Rehabilitation

Current state and case for change

Manitobans face challenges with equitable access to appropriate seniors and rehabilitation services across the province – there is opportunity to consider alternate modes and settings of care to improve access to limited resources.

Manitoba has implemented community programs/initiatives to support its growing older adults population

- Over the next 20 years, Canada's older adults population is expected to grow by 68%, with the population in Manitoba expected to increase two times its current size (CIHI, 2017)
- Manitoba has implemented several programs to support older adults in the community longer include Functional Independence Program, Home Independence Program, Priority Home, Program of Integrated Managed-Care of the Elderly (PRIME)

Lack of equitable and timely access to seniors and rehab care across RHAs, with many individuals waiting in alternative levels of care

- ~58% of older adults LOS in Northern is ALC (FY17/18), which is nearly double the provincial average at 32%
- An average of 3.5 days are spent waiting for rehab admission in WRHA, and an average of 9 days are spent waiting for discharge (FY16/17)
- Inconsistent types of specialized geriatric services across the continuum of care - Lack of appropriate units and care resources for special populations (i.e., specialized care units, behavior units, access to mental health resources)

Seniors Inpatient Admissions by RHA, FY17/18

	# Total Admissions	Average Total LOS	Average Acute LOS	% of Stay that was ALC
Manitoba	28,265	18.1	12.2	32.2%
Northern	538	24.0	10.2	57.6%
Interlake-Eastern	2,145	27.1	12.6	53.6%
Prairie Mountain	5,934	20.0	12.6	36.9%
Winnipeg	16,401	14.8	11.7	19.2%
Southern	3,247	25.0	13.7	45.2%

Source: MHSAL – Discharge Abstract Database

Limited access to rehab services close to home as a result of challenges in recruiting and retaining staff, and minimal alternative models of access available (i.e., digital/virtual)

- There is variation in the total number of FTEs across regions with 20,954 in Winnipeg, and only 1,671 in Northern
- There are 874 total physiotherapists in Manitoba, where 73% are in WRHA, 9% in SH-SS, 9% in PMH, 7% in IE and 1% in NRHA
- In FY17/18, there were 397 MBTelehealth sessions for rehabilitation, compared to 8,472 total oncology sessions, and 1,982 psychiatry sessions

FTEs across Regions, 2018

Region	Total EFT	Percentage	Ratio of FTEs to population
NRHA	48.4	3.6%	1 : 1490
IERHA	41.45	3.1%	1 : 3080
PMH	143.54	10.7%	1 : 1150
WRHA	1029.71	76.4%	1 : 700
SHSS	84.43	6.3%	1 : 2270

Source: Shared Health

Current state and case for change

There are inconsistent processes for intake into settings of care, where many individuals are waiting in rehab beds or on wait lists – there is opportunity to establish provincial standards and navigation supports to ensure appropriate placement

Inconsistent processes for assessment, referral, triage, as well as gaps in alternate settings of care

- In WRHA, 15% of clients spent an average of ~20 days waiting for placement into residential care (PCH)
- In FY17/18, 3,496 individuals were identified as eligible for LTC placements, of which 32% remained on wait list at the end of that fiscal year
- 33% of Manitoba's older adults in the continuing care system show low to moderate needs and could potentially have remained at home with the appropriate supports
- Priority Home promotes home as the primary discharge destination and supports higher needs patients in the community including earlier discharge planning and centralized home care service

Long Term Care Wait List Volumes, FY17/18

RHA	Total Eligible Persons Panded for Placement			Cumulative Total Number of Persons on Wait list ending March 31 st		
	PCH	CC	SH	PCH	CC	SH
IERHA	394	24	47	154	14	69
NRHA	94	20	6	45	26	2
PMH	717	1	12	214	8	1
SHSS	376	0	75	302	0	41
WRHA	1334	60	336	136	14	95
Total	2915	105	476	851	62	208

Source: Provincial Summary, LTC Dashboard

Variable navigational support, clarity of available services, and variations in coordination of post-acute care

- In WRHA, over 2,200 days in rehab were spent waiting for home care and PCH

WRHA Reasons Waiting for Discharge, FY18/19

Reason waiting for discharge	Cases	Total LOS	Avg Total LOS	Active LOS	Avg Active LOS	Days Waiting for Admission	Avg Days Waiting for Admission	Days Waiting for Discharge	Avg Days Waiting for Discharge
Services - Home Care	203	9,816	48.35	8,703	42.87	603	3.11	1,113	5.48
Location - Residential Care (LTC/Nursing Home)	58	4,478	77.21	3,344	57.66	255	4.55	1,134	19.55
Other services	21	1,117	53.19	686	32.67	47	2.76	431	20.52
Personal - Informal Support	21	740	35.24	661	31.48	86	4.10	79	3.76
Location - Other	11	1,067	97.00	674	61.27	42	6.00	393	35.73
Home Modifications/Equipment - Equipment	10	434	43.40	360	36.00	36	4.50	74	7.40
Location - Assisted Living/Supportive Housing	9	607	67.44	395	43.89	31	4.43	212	23.56
Inpatient medical/nursing care	8	257	32.13	238	29.75	16	2.00	19	2.38
Personal - Other	8	439	54.88	364	45.50	50	6.25	75	9.38
Location - Transitional Care/Convalescent Care	6	306	51.00	255	42.50	8	1.60	51	8.50
Home Modifications/Equipment - Other	4	200	50.00	189	47.25	24	6.00	11	2.75
Location - Acute care	3	178	59.33	145	48.33	38	12.67	33	11.00
Location - Complex Continuing Care/Chronic Care	2	227	113.50	120	60.00	1	0.50	107	53.50
Location - Boarding House/Rooming House	2	101	50.50	94	47.00	1	1.00	7	3.50
Home Modifications/Equipment - Home Modifications	2	161	80.50	86	43.00	5	2.50	75	37.50
Services - Community Services	1	46	46.00	38	38.00	1	1.00	8	8.00
Unknown	1	20	20.00	19	19.00			1	1.00
Source: NRS	370	20,194	54.58	-	-	-	-	-	-

Current state and case for change

There is opportunity for Manitoba to establish provincial standards and protocols for select populations to reduce total LOS and ensure individuals are in the appropriate settings and closer to home, where possible

Inconsistent care delivery for select populations, resulting in long length of stay

- The average ALC % LOS relative to total for patients with dementia ranges across regions from 73% to 88%. This is much higher than the general senior population whose proportion of ALC stay ranges from 19% to 57% across regions.
 - This may be due to long PCH wait-times, a lack of appropriate resources for this population, and a lack of overall resources in the community to accommodate the needs of patients with dementia and behavioural challenges
- The average LOS for inpatient rehab in WRHA is greater than the national median (NRS) across all client group types.
 - Note that national comparators may serve different populations which should be interpreted with caution.

Dementia Inpatient Admissions by RHA, FY17/18

	# Total Admissions	Average Total LOS	Average Acute LOS	% of Stay that was ALC
Manitoba	1,012	44.0	10.1	77.0%
Northern	37	17.4	4.6	73.7%
Interlake-Eastern	110	39.4	10.0	74.7%
Prairie Mountain	540	49.7	13.5	72.9%
Winnipeg	141	37.1	5.4	85.6%
Southern	184	40.5	5.0	87.6%

Source: MHSAL – Discharge Abstract Database

Rehab Inpatient LOS by RCG, FY16/17

RCG Summary Group	Admissions (FY16/17)	Avg. WRHA LOS (16/17)	NRS Median LOS (16/17)
Grand Total	1964	48.8	22
Orthopedic Conditions	689	45.3	20
Stroke	287	54.3	29
Medically Complex	251	49.6	21
Debility	212	57.2	20
Spinal Cord Dysfunction	134	39.8	31
Brain Dysfunction	109	41.6	30
Pain Syndromes	48	40.7	17
Amputation of Limb	47	44.4	28
Cardiac Conditions	46	59.2	15
Arthritis	37	65.3	18
Major Multiple Trauma	32	55.9	26
Neurological Conditions	30	45.6	27
Pulmonary Conditions	27	52.6	20
Other Disabling Impairments	15	52.9	14 (Other RCGs)
Burns			27
Congenital Deformities			

Source: NRS, CIHI

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	<ul style="list-style-type: none"> Challenges recruiting and retaining staff to support rehab services closer to home Challenges in the distribution of available therapy across the province, with variation in the distribution of total allied health FTEs across regions Minimal use of telehealth for rehabilitation services 	<ul style="list-style-type: none"> Virtual delegated care models, including virtual group classes to improve access outside WRHA Case coordinators to improve system navigation and access to appropriate services Development of inter-professional collaborative teams with primary health (e.g., MyHT2.0) Expand scope of work for select providers to enhance care giver support (e.g., Paramedics, rehab therapy assistants, allied health)
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> Variable access to timely seniors and rehab care across regions, with many individuals waiting in ALC Variable navigation supports and coordination of post-acute care Inconsistent processes for assessment, referral, triage, as well as gaps in alternate settings of care Inconsistent types of specialized geriatric services across the continuum of care Promote dedicated education and training to prioritize elder friendly care and meet the needs of the growing population 	<ul style="list-style-type: none"> Standard coordinated access into seniors and rehab services and housing options across the Network, including in acute and post-acute, home care and PCH settings Standard and shared assessments to ensure consistent and appropriate entry in housing supports, and to provide proactive intervention to prevent healthcare utilization Alternative, affordable housing models to support individuals in the community longer and provide care closer to home (i.e., transitional care units) Provincial expansion of existing programs to improve functional outcomes and keep individuals home longer Central PCH wait lists accommodating equitable use of resources

Provincial view of the future vision

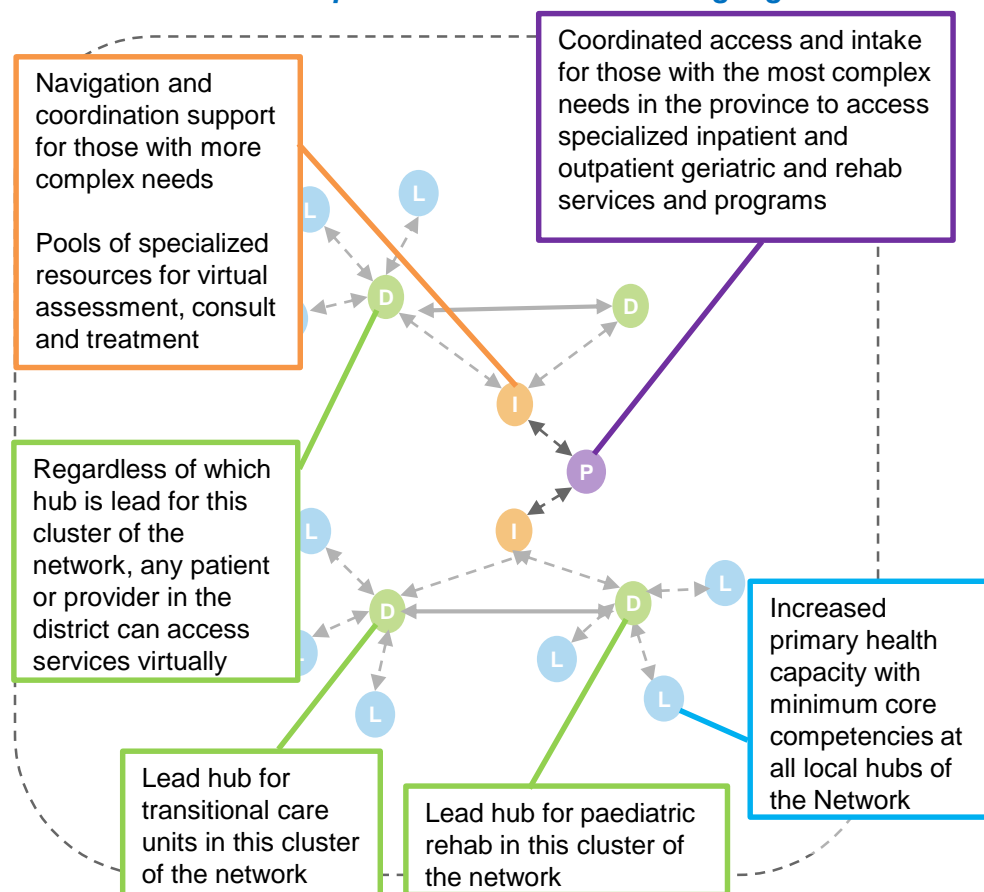
Future Vision: Manitoba will establish an integrated, coordinated system with linkages between all seniors related, and rehab related services. It is anticipated that the future model will result in:

- Improved access and coordination of seniors and rehabilitation services
- Appropriate placement into suitable environments, and individuals maintained in the community longer
- Improved primary health capacity to support service delivery closer to home

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

- Sub-acute units to support older adults and rehab needs closer to home (including transitional care, convalescent care)
- Enhance capabilities at Local and District Hubs to provide coordinated care for lower complexity and healthy aging needs closer to home
 - Expand existing community initiatives and alternative housing models (i.e., Priority Home) to keep older adults home longer
 - Standard intake and assessment to ensure appropriate housing placement and coordination between settings
 - Promote dedicated education and training to prioritize elder friendly care and meet the needs of the growing population
- Standardize capabilities at Intermediate and Provincial Hubs for higher complexity needs
 - Blended coordinated intake and 'no wrong door policy' to increase coordination and access
 - Enhance capacity for specialized outpatient rehab programs (i.e., amputation, SCI, ABI, etc.)
- Virtual care tools to extend the reach of specialists outside WRHA and provide an alternate mode of assessment and consults (i.e., virtual delegated care)
- Consistent tools to support system navigation across the continuum (i.e., online tools for self navigation, enhanced role of care coordinators)

Illustrative example of network hubs working together



Service standards | Seniors

	Service standards
Provincial Referral Hub	<ul style="list-style-type: none"> Provincially coordinated system for assisted living and supportive housing to ensure consistency across settings of care (i.e., home care, PCH) Coordinated intake and access to standardized and specialized older adults supports for higher need patients (e.g., WRHA Geriatric Rehab program, gerontologist, geriatric mental health teams) Standardized pathways for older adults, including standard frailty scales to identify frail older adults <ul style="list-style-type: none"> Standardization and proactive stratification of older adults by complexity, acuity, and risks (e.g., for dementia, falls, medication) using standardized assessments (i.e., Inter-RAI)
Intermediate Referral Hub	<ul style="list-style-type: none"> Coordinated inpatient geriatric rehab needs, geriatric mental health needs, and assessment unit for frail older adults Specialized geriatric units for less complex older adults with collaborative care models (i.e., Acute Care for Elders units, geriatric mental health units, geriatric rehab)
District Health Hub	<ul style="list-style-type: none"> Virtual access to expertise at Intermediate/Provincial Hubs, including e-consults and virtual care Provincially consistent services and standards across settings for specialized populations (i.e., dementia, behavioural challenges) <ul style="list-style-type: none"> Specialized care units/behavior units with consistent access to mental health resources (e.g., psychologists) Sub-acute care units, including convalescent, post-acute and transitional care, to support individuals closer to home <ul style="list-style-type: none"> Includes rehab therapists to support transitions to the community and home Coordinated intake and access to specialized community skill building programs (Functional Independence Program, Home Independence Program, Priority Home/Pathway to Home) including virtual access
Local	<ul style="list-style-type: none"> Alternate housing models and provincially standard intake and design of PCHs to support access and appropriate care delivery <ul style="list-style-type: none"> Standard assessment to ensure appropriate panel Co-locating of individuals with similar conditions to support independence and improve patient outcomes Minimum level of knowledge and education for providers in community Standard dental prevention and screening across settings of care Community programs to provide services for older adults support wellness and healthy living (i.e., Meals on Wheels, Falls Prevention Program) Enhance homecare through home and remote monitoring technologies and through community skill building programs Provincial expansion of Rapid Access to Consultative Expertise phone lines to build primary care capacity in the community Support structure for patient's families to keep patient's closer to home for longer periods of time (e.g., Dementia care giver support)

Provider roles | Seniors

Provider roles	
Provincial Referral Hub	<ul style="list-style-type: none"> Specialized geriatric expertise at Provincial Hub to provide in-person and virtual education outreach and virtual consultations to other hubs in the Network System navigators/care coordinators for those with more complex needs
Intermediate Referral Hub	<ul style="list-style-type: none"> Specialized geriatric expertise at Intermediate Hubs, with education outreach and virtual consultations to District and Local hubs
District Health Hub	<ul style="list-style-type: none"> Outreach teams including Geriatric Program Assessment and Geriatric Mental Health Teams to support care in community to reduce patient travel (e.g., for frail older adults) and provide follow-up and assessments for programs or services Shared Care models with geriatricians and primary care providers to provide comprehensive geriatric care in the community (i.e., enhanced MyHT) Promote dedicated education and training to prioritize elder friendly care and meet the needs of the growing population
Local	<ul style="list-style-type: none"> Integration of older adults care into enhanced MyHT to act as a “hub” for patients in their home community to enhance local access for older adults needs and reduce need for travel <ul style="list-style-type: none"> Integration of allied health, psychologists/psychiatrists, and GPAT teams Integration of priority home and home care Enhanced linkages with community partners

Service standards | Rehabilitation

	Service standards
Provincial Referral Hub	<ul style="list-style-type: none"> Consistent virtual tools to support specialized rehab practitioners to provide access across the Network Coordinated intake and access and to specialized rehab programs/care teams (e.g., ABI, Amputee, NMSK, SCI, Stroke, etc.) including standard comprehensive assessment pre-admission to ensure appropriate placement <ul style="list-style-type: none"> Standard criteria for referral and intake, and consistent awareness on admission criteria for specialized rehab programs Specialized outpatient rehab clinics for select populations (i.e., amputation, stroke, failure to cope) Provincial resource to view available resources and best practices across province
Intermediate Referral Hub	<ul style="list-style-type: none"> Coordinated intake and access to rehabilitation programs/care teams Supported flow of long-stay patients back to community, with ongoing rehab supports Outpatient rehab clinics for special populations to reduce unnecessary admissions
District Health Hub	<ul style="list-style-type: none"> Transitional care units to support patient care once rehab needs are met, to reduce bed block of patients waiting for housing placement Virtual access to expertise between the facilities at other hubs, including e-consults and virtual care Standard placement (i.e., transitional care units) for patients who do not meet rehab or PCH admission criteria Access to specialized mental health resources Expand existing skill building programs (i.e., Functional Independence Program, Home Independence Program, Priority Home) to get individuals back home sooner
Local	<ul style="list-style-type: none"> Use the learnings from Jordan's principles and improve access to Indigenous Communities Virtual access to specialized expertise at Intermediate and Provincial centres, including e-consults and virtual care <ul style="list-style-type: none"> Technology enablement to provide home and remote monitoring, and virtual assessments Consistent access to rehab services across settings of care, including home care and long-term care (e.g., programs available after-hours) and therapy assistants Online tools to support self navigation for lower complexity clients in bilingual services

Provider roles | Rehabilitation

Provider roles	
Provincial Referral Hub	<ul style="list-style-type: none"> Specialized rehab expertise, including OT, PT, SLP, Audiology , Pharmacy and Social Work at inpatient and outpatient Provincial centres, with education outreach and virtual consultations and assessment to other hubs in the Network
Intermediate Referral Hub	<ul style="list-style-type: none"> Rehab therapists including OT, PT, SLP, Audiology and Social Work at Intermediate centres to support moderate and lower complexity clients and provide education outreach and virtual consultations and assessments to District and Local hubs Case coordinators to support system navigation for patients who require multiple specialists and travel to patient when necessary
District Health Hub	<ul style="list-style-type: none"> Multidisciplinary teams (e.g., allied health and primary health providers) to provide community based rehab programs Cross training of non-regulated health professionals, including home care and rehab assistants (via remote and telehealth or in person) to increase access to rehab and to better support specialized populations
Local	<ul style="list-style-type: none"> Integration of allied health and home care providers with enhanced My Health Teams to act as a “hub” for patients in their home community to enhance local access for rehab needs and reduce need for travel Enhanced capabilities of primary health providers through continued training and education (e.g., training home care assistants at other hubs in the Network) <ul style="list-style-type: none"> Cross-training of non-regulated health professionals, to improve access to rehab and to better support specialized population (i.e., Failure to Cope) Choosing Wisely (e.g., polypharmacy, inappropriate Antipsychotic prescribing)

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 Seniors and Rehabilitation PCT as they are unique to those outlines in the Provincial chapter. Further, Key Performance Indicators have been outlined to assess the implementation of this model.

Digital Health	<ul style="list-style-type: none"> Leverage telehealth and virtual care tools to support consultation, assessments, and treatments where feasible to share expertise across the Network and improve access to care
Diagnostic Services	<ul style="list-style-type: none"> Coordinated diagnostic services available in Local and District Hubs to reduce patient transports
EMS/Patient Transport	<ul style="list-style-type: none"> Patient transport requirements will need to consider the increased needs of older adults and rehab patients who will be returned to community earlier in their recovery, as well as the most appropriate type of transportation services
Infrastructure and Equipment	<ul style="list-style-type: none"> Future infrastructure requirements will need to align with the seniors and rehab model of care and incorporate sub-acute care units to reduce LOS and provide care closer to home – sub-acute units will provide transitional care, convalescent care, rehabilitation, and others Available equipment across settings of care will need to be considered to ensure smooth transitions into the community (e.g., accommodation for bariatric needs)
Prevention	<ul style="list-style-type: none"> Provincial prevention strategies will be used to prevent older adults and rehab related admissions, for example falls prevention strategies (e.g., medication management to reduce risks of polypharmacy) and self-management prevention efforts post-rehabilitation

Key Performance Indicators

1. Improved quality and outcomes of seniors and rehabilitation care
2. Increased consistency in access to enhanced local hubs and core local hub services
3. Reduced ALC days for home care and PCH
4. Expanded capacity for home care – both medical/consultative as well as rehabilitative/restorative (e.g., in-person or virtual home-based care)
5. A one-third reduction in the number of older adults who reside in PCH, and shifting them to the community with ongoing supports
6. Skill building programs (FIP, HIM, Priority Home, elder-friendly care) expanded to all regions contributing to reduced acute LOS

Manitoba's Clinical & Preventive Services Plan

Investing in Better Care, Closer to Home

CANCER AND PALLIATIVE CARE 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

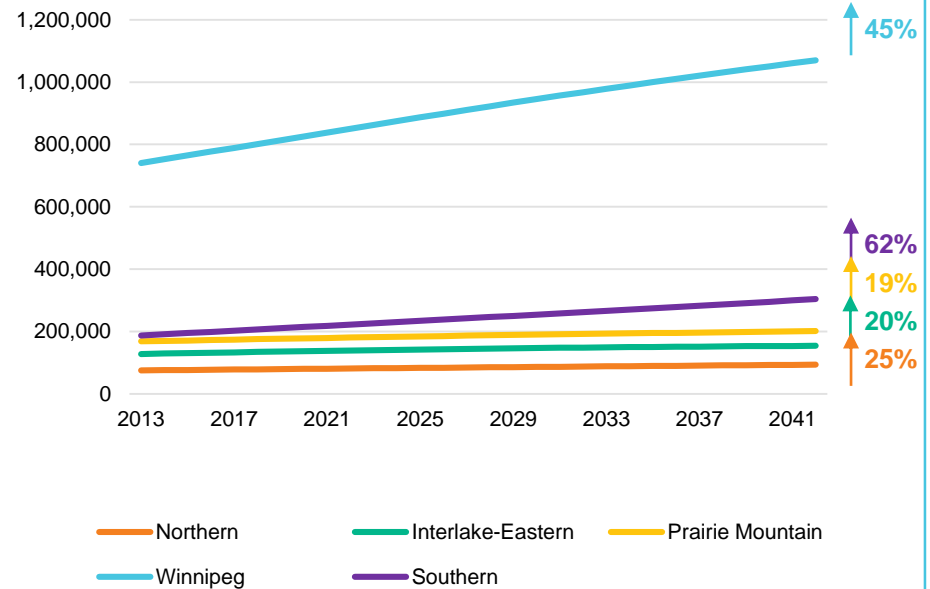
Manitoba's Indigenous population makes up **18% of the population**, the highest of any province in Canada. This population is also younger than the rest of the province



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

Manitoba Population Growth and Projections by RHA



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



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%)

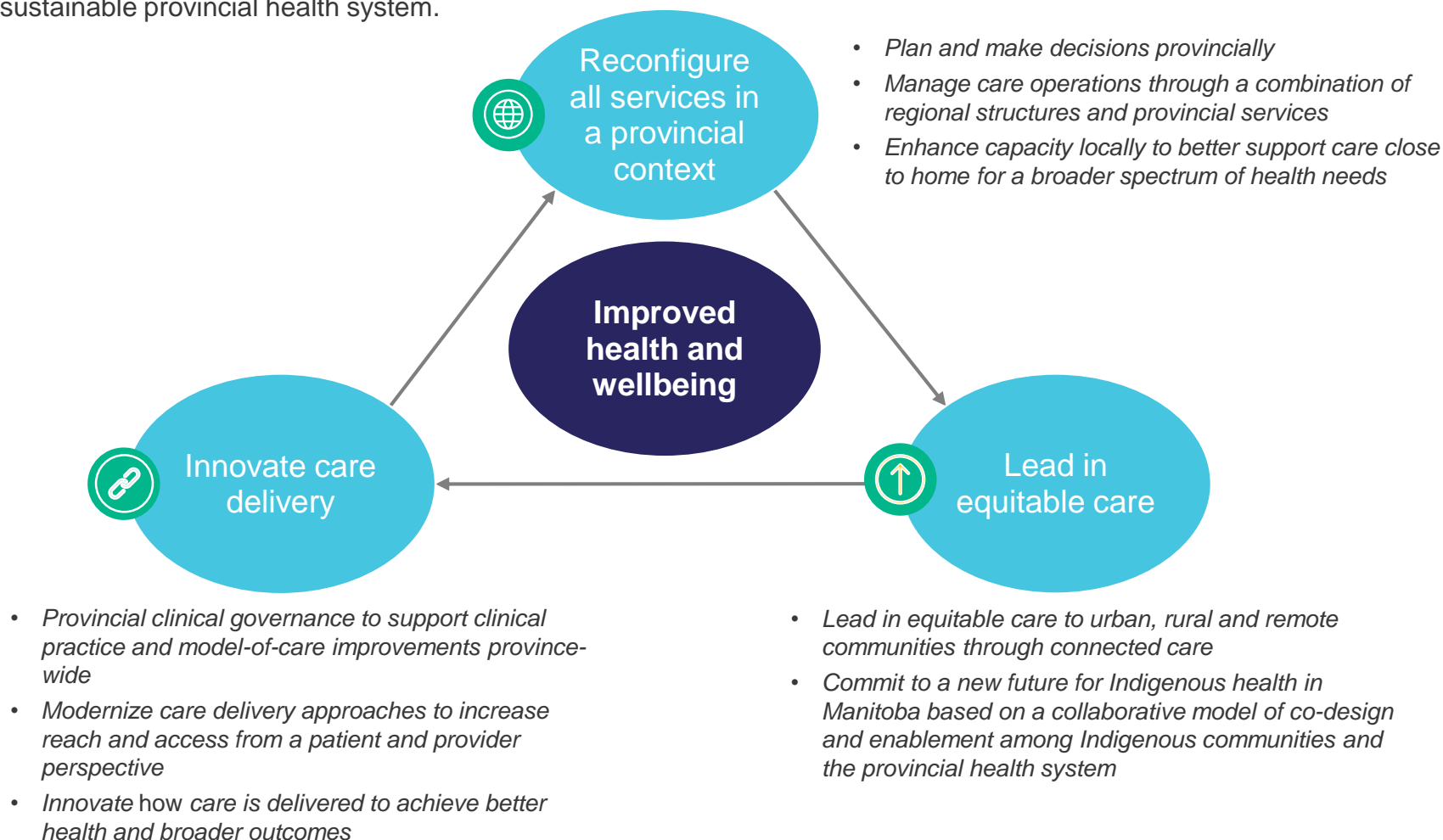
20+ Regulated health professions under one umbrella act (*The Regulated Health Professions Act*) with 21 categories of reserved acts



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.



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

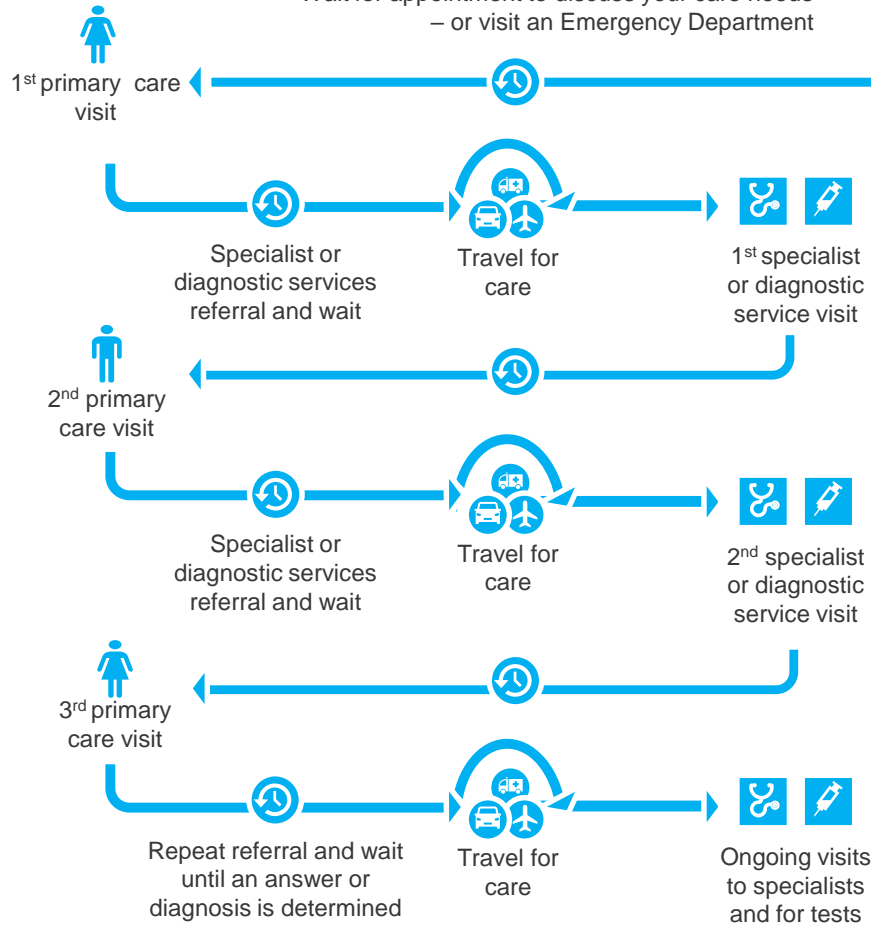
IN THE FUTURE

- 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?

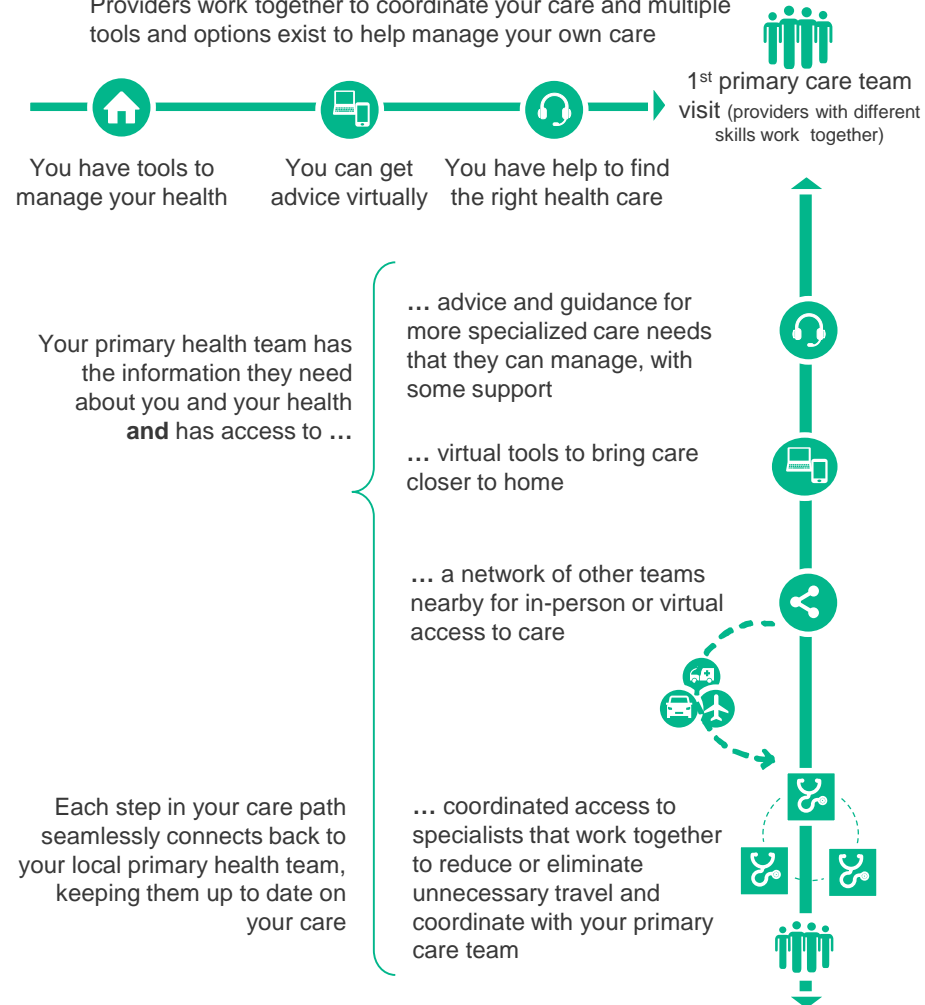
TODAY

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

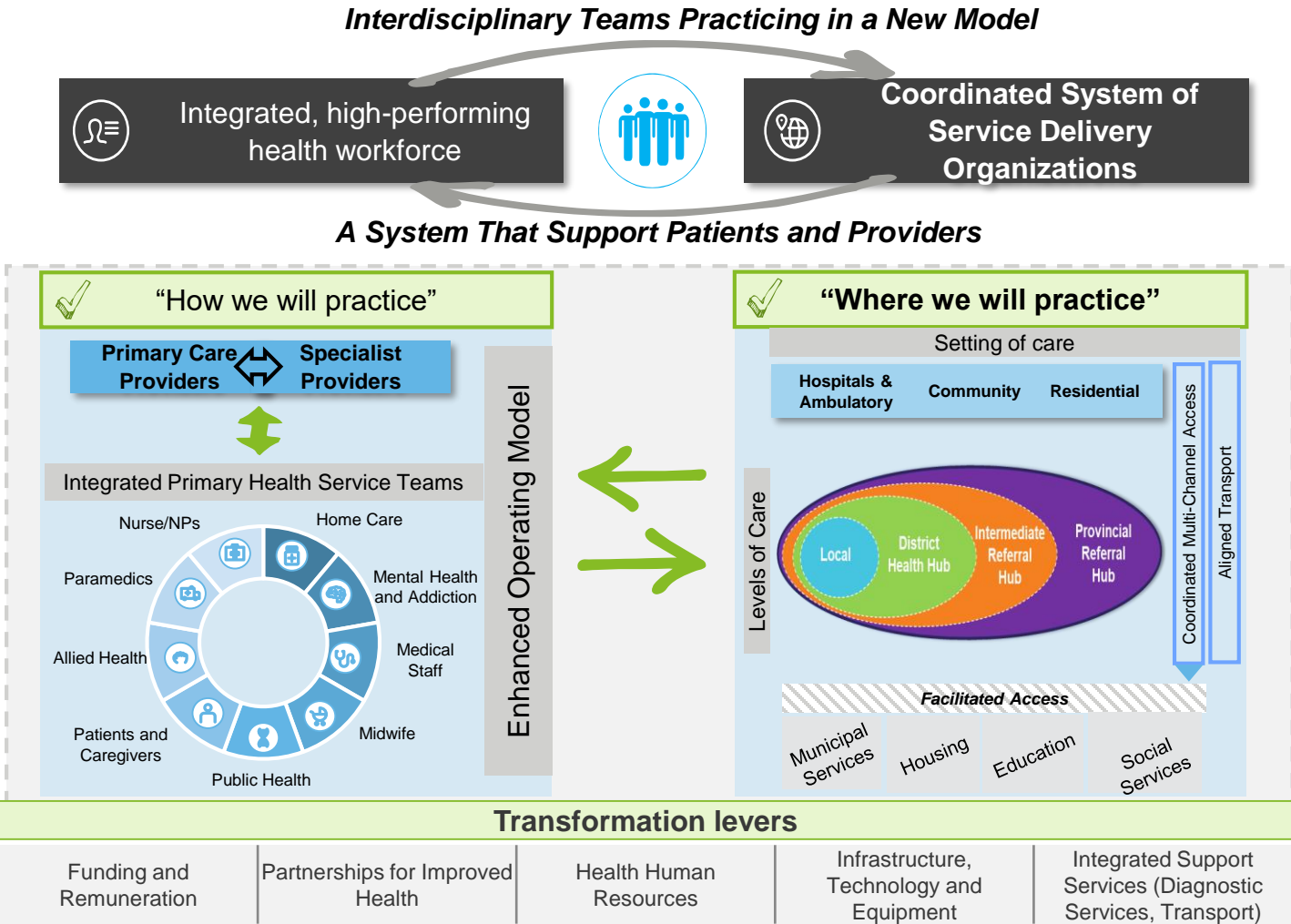


IN THE FUTURE

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



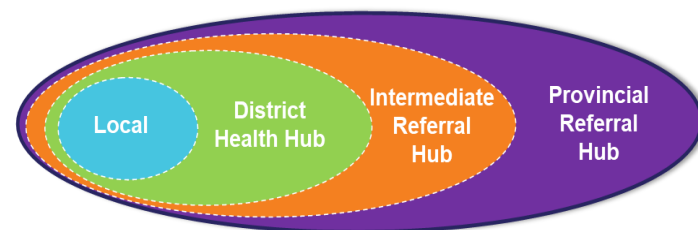
An integrated network for accessing and delivering services is core to the new provincial model



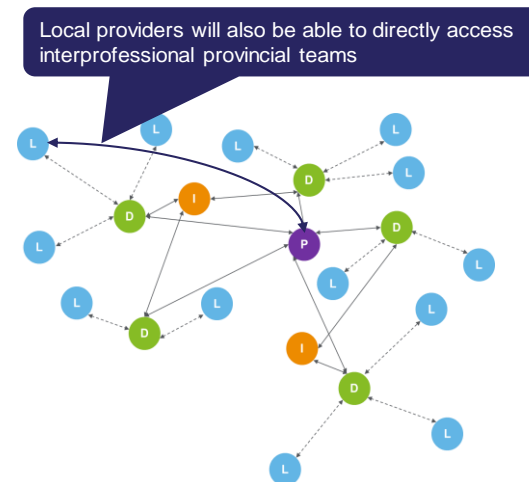
Defining one provincial system with enhanced local capacity and effective access to specialized care province-wide

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



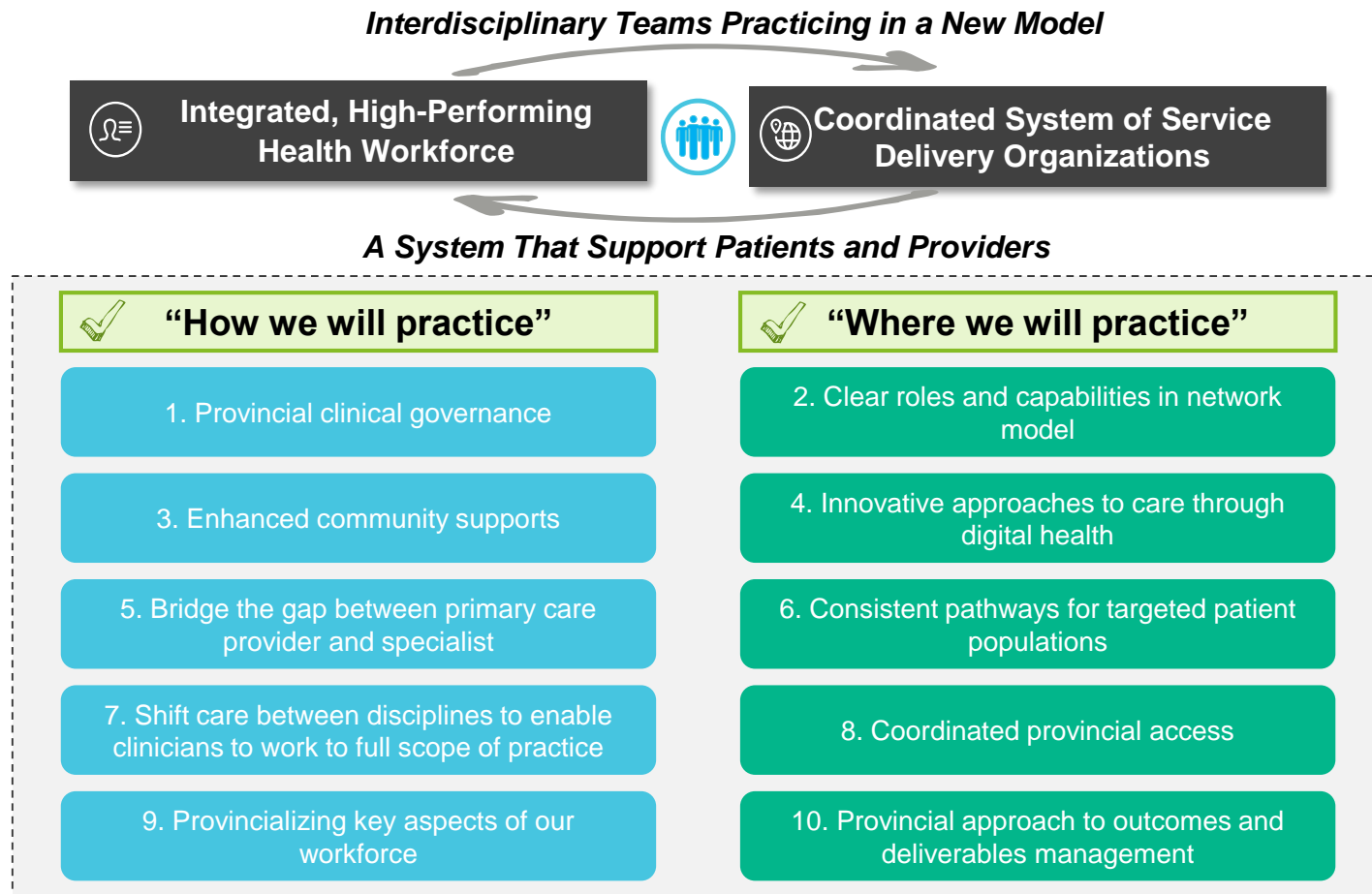
Capabilities across local area hubs will be standardized along a spectrum, with flexibility to meet with population needs

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
<i>Low acuity community-based care</i>	<i>Low to moderate acuity community-based and inpatient care</i>	<i>Moderate to high acuity inpatient and medical/surgical care</i>	<i>High acuity/specialty medical and surgical care</i>
 <p>Enhanced</p> <p>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</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p> <ul style="list-style-type: none"> My Health Teams, new care models (e.g., collaborative emergency centres in Nova Scotia, advanced care centres in Australia) 	<p>Core:</p>  <p>Urgent care during set hours for lower acuity patients</p> <p>Enhanced and Intermediate:</p> <p>24/7 Emergency Department</p>		<p>Provincial:</p> <p>24/7 Emergency Department</p>
	 <p>General inpatient and ambulatory care with observation and monitoring capabilities, as well as targeted services</p>		
	 <p>Enhanced:</p> <p>Special Care Unit</p>	<p>Intermediate:</p> <p>Intensive Care Unit (ICU)</p>	<p>Provincial:</p> <p>ICU with specialized capabilities</p>
	<p>Core:</p>  <p>Elective surgery, primarily with Family Practice Anaesthesia (FPA)</p>	<p>Enhanced and Intermediate:</p> <p>Elective and emergency surgery with FPA or FRCPC</p>	<p>Provincial:</p> <p>Elective and emergency surgery with FRCPC</p>
 <p>Core</p> <p>Local primary care providers will be the main point of contact with the health system for most patients (e.g., Home Clinics)</p> <p>Increased focus on prevention and screening with proactive population health management capacity</p>	<p>Specialist Services may include:</p>  <p>District: Level I Nursery, community cancer care, primary stroke centre, and/or select areas of programmatic focus</p>	<p>Intermediate:</p> <p>Level II Nursery, radiation therapy, general rehabilitation, moderate- to high-risk obstetrics and/or primary stroke centre</p>	<p>Provincial:</p> <p>Intensive rehabilitation, and specialized mental health services, high-risk obstetrics and neonatal</p>
			 <p>Provincial Services such as:</p> <p>Major trauma, thoracic services, comprehensive stroke care, specialty cancer care</p>

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



Cancer and Palliative Care

Current State and Case for Change | Palliative Care

Despite inconsistency in access, palliative care admissions are growing across the province.

There is a strong basis for palliative care in both rural and urban Manitoba

- While there is variation in availability of palliative care across regions (see below), regions have developed programs to meet the palliative care needs of their populations.
- For example, SHSS has developed a palliative care model that has strong involvement of primary care providers who are supported by a specialized team of palliative physicians and nurses.
- Interlake-Eastern RHA has recently initiated a pilot palliative care models that utilize community paramedics to enhance care at home.
- WRHA has also developed a strong program that provides consultation and care services with adult and paediatric programs
- Manitoba has supported the creation of the Canadian Virtual Hospice which provides support and information for patients, families, providers, researchers and educators

Variation in availability of comprehensive palliative care across regions

- Palliative care cases reported in to MHSAL vary in their characteristics (FY17/18): The proportion of cases that are oncology-related range from 61% in PMH to 83% in IERHA
 - The proportion of clients who are over the age of 75 ranges from 30% in NRHA to 55% in both PMH and SHSS
 - The proportion of deaths that happen in acute care ranges from 22% in WRHA to 77% in both IERHA and SHSS
- The only hospices in the province are in Winnipeg

Palliative Care Services, FY 17/18

	Location of Death				
	Home	Acute Care	PCH	Palliative Care Unit/ Bed	Hospice
MB	18%	42%	4%	34%	3%
NRHA	21%	39%	9%	30%	0%
IERHA	21%	77%	3%	0%	0%
PMH	7%	43%	12%	38%	0%
WRHA	21%	22%	2%	50%	5%
SHSS	18%	77%	3%	0%	0%

Data Sources: MHSAL - Continuing Care Branch

Note: Rates based on patients identified by the regional program as requiring and receiving palliative care. There are likely inconsistencies and gaps in how each region identifies palliative care patients

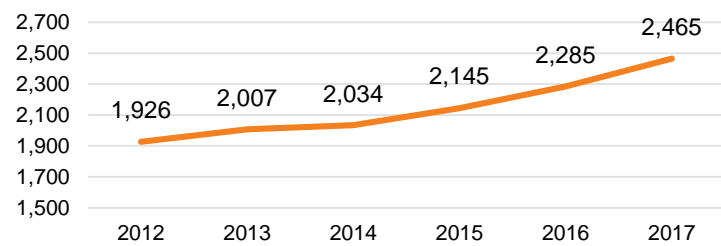
Current State and Case for Change | Palliative Care

Despite inconsistency in access, palliative care admissions are growing across the province.

Inpatient admissions for palliative care have been increasing

- Palliative care admissions have grown by 28% since FY 12/13. This may be partially attributed to increased awareness and identification of patients requiring palliative care
- Of patients who died in acute care in FY 16/17, 30% had been hospitalized for palliative care and 73% had a designation of palliative care on their record within their last year of life (CIHI)

Palliative Care Admissions, Manitoba, FY 12/13 to FY 17/18



Source: MHSAL – Discharge Abstract Database

Palliative Care Inpatient Admissions, FY 17/18

	Total Admissions	Total Length of Stay (LOS)
Manitoba	2465	21.8
Northern	49	21.4
Interlake-Eastern	164	27.9
Prairie Mountain	428	22.3
Winnipeg	1528	20.1
Southern	296	26.8

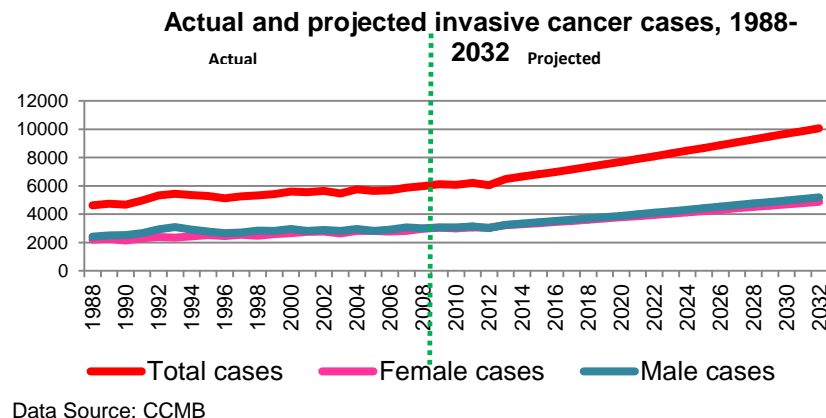
Source: MHSAL – Discharge Abstract Database

Current State and Case for Change | Cancer Care

Manitoba faces increasing cancer rates and inequities in health outcomes across regions

Manitoba faces increases in cancer diagnoses over the next 15 years however treatment and outcomes are improving

- There was a 26% increase in the number of Manitobans who were diagnosed with cancer between 2006 and 2016
- In 2016, 6,481 Manitobans were diagnosed with cancer which is expected to grow by another third by 2023
- One-year and five-year relative survival is higher in Manitoba for colorectal and lung cancer than the national estimate



Early identification can lead to more effective treatment and outcomes however there is variation across regions

- Provincially, cancers of the lung and bronchus are more likely to be diagnosed at late stage. There is little variation across regions in these cancers.
- Patients in PMH are more likely to be diagnosed at late-stage for prostate cancer
- Patients in NRHA are more likely to be diagnosed at late stage for colorectal cancer and experience higher mortality rates than the rest of the province.

Current State and Case for Change | Cancer Care

Manitoba is a leader in colorectal cancer screening but faces challenges reaching patients in the Northern region

People living in Manitoba's North face inequitable access to screening

- Patients in NRHA are less likely to be screened for all three cancer screening programs (breast, cervical, colorectal)

	% of eligible patients screened		
	Breast (2016-17)	Cervical (2015-17)	Colorectal (2016-17)
MB	56%	65%	53%
<i>National Target</i>	70%	80%	<i>no target</i>
NRHA	51%	55%	38%
IERHA	52%	66%	54%
PMH	58%	65%	54%
WRHA	57%	66%	54%
SHSS	52%	63%	54%

Data Source: CCMB

Access to systemic treatment is available to patients close to home

- CCMB's 16 Community Cancer Programs (CCPs) deliver care across the cancer continuum and enable people living outside of Winnipeg and Brandon to receive chemotherapy at a hospital closer to home reducing the need from travel
- CCMB has estimated that in 2017/18, patients and families saved over 13.3M km of travel due to the CCPs
- CCP activity for 2017/18 is shown in the table at right. No significant changes in volume were seen from the previous year

Utilization of Community Oncology Program

	2017/18
Total physician visits (excluding radiation oncologist visits)	14,704
Outpatient Treatments (including IV chemotherapy, subcutaneous injection, bladder instillation, oral treatment support and other transfusions and treatments)	16,420
New patient referrals to community cancer program	1,071

Data Source: CCMB

Current State and Case for Change | Cancer Care

Manitoba faces increasing cancer rates and inequities in health outcomes across regions

The rate of cancer patients receiving surgery varies by region but has remained stable over time

- Over 50% of patients receive a surgical treatment within one year of diagnosis (compared to systemic therapy at 39% and radiation therapy at 28%)
- Manitoba performs consistently or better than national comparators on most surgical quality metrics. For example it has seen significant improvement in individuals with colon cancer who underwent a resection and had at least 12 lymph nodes removed..
- One identified area for improvement is to reduce the rate of invasive breast cancer who underwent axillary clearance and had no positive nodes

Length of stay for Manitoba's

- Of the non-palliative cancer inpatients, just over half (52%) were medical inpatients with the remaining 48% being surgical patients.
- Medical inpatients have an ALOS of 17 days, notably longer than that of surgical patients at 10 days
- The length of stay for Manitoba inpatients has remained stable since 2015 but there is variation across disease groups with breast and gynecology days increasing in FY 16/17

Manitoba Cancer Inpatients (includes both medical & surgical inpatients), FY 16/17

	All Cases		Non-Palliative Cases	
	Discharges	ALOS (days)	Discharges	ALOS (days)
MB	9,000	14.6	6,500	10.9
NRHA	430	13.0	360	10.4
IERHA	1,000	13.8	760	10.2
PMH	1,570	15.7	1,200	12.7
WRHA	4,720	14.6	3,340	10.5
SHSS	1,290	14.6	900	10.5

Data Source: CCMB - DAD

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

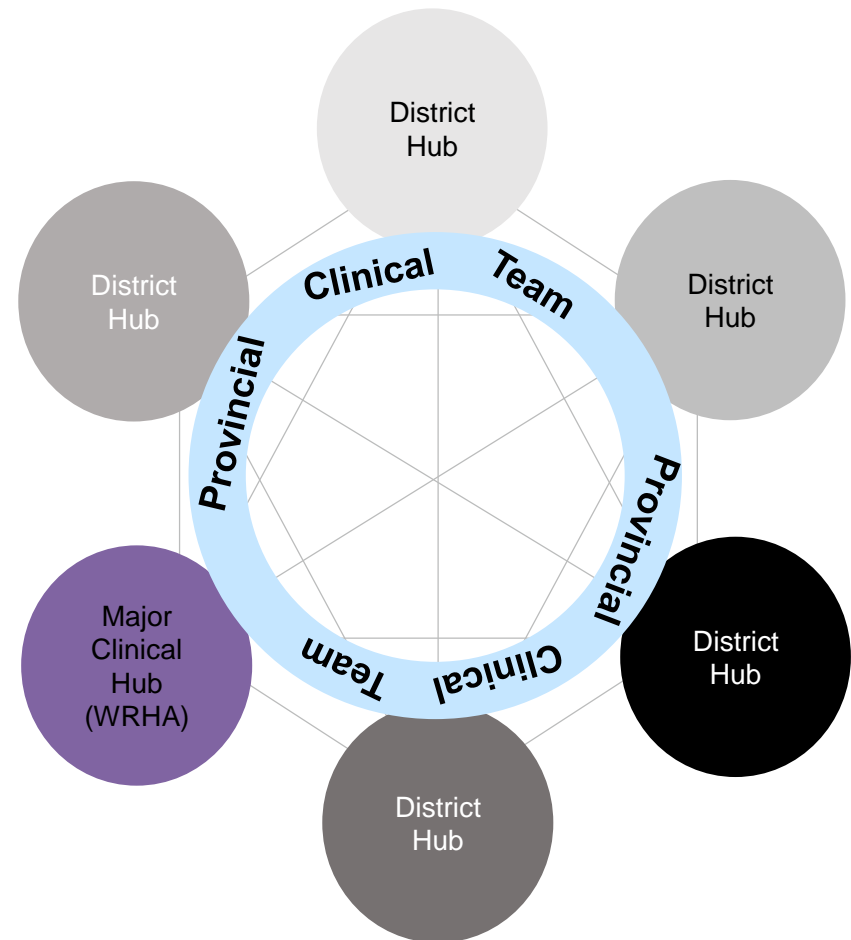
	Highlights of Current State	Highlight of Future State
Service Model – Highly Effective Teams	<ul style="list-style-type: none"> Challenges with recruitment and retention or linking specialized resources to those in rural and northern communities Variation in availability of specialized palliative care providers leading to inconsistent access Inconsistent and uncoordinated collaboration between specialists and generalists (e.g., specialists and palliative care and community providers) leads to fragmented care. 	<ul style="list-style-type: none"> Optimize scopes of practice of the inter-professional team (e.g., NPs, PTs, OTs) to enable community-based palliative care Create a provincial clinical governance network for palliative care to support provider education and standard development Partnership with community organizations in remote communities to support uptake of screening and prevention programs
Service Standards and Pathways – Coordinated Delivery Systems	<ul style="list-style-type: none"> Lack of standardization results in repetition of tests and care, inequities of access and different care pathways for patients System and processes do not consistently support communication between providers and with patients on patient status, care plan, and outcomes Inconsistent definitions of palliative care result in variable access to programs and services Lack of program transparency means providers and patients do not always know what services are offered where and the right pathway of care Variation in cancer screening rates with significantly lower rates in NRHA 	<ul style="list-style-type: none"> Designate provincial hubs for specialized care including a dedicated inpatient oncology ward and a surgical oncology network to support surgical quality across the province. Expand capacity of Intermediate and District hubs to provide low-moderate complexity care (e.g., CCP sites) Standardized pathways across Network levels based on stratified patient need, alignment to patient transfer pathways, and timely repatriation Align program requirements to enable earlier engagement with palliative care in the patient journey Enhanced virtual care tools to support palliative care providers and patients 24/7 Palliative care is provided to patients and their families, irrespective of the patient's location

Model of care for Palliative Care

Future Vision: A coordinated and integrated network of palliative care services to improve patient outcomes and improve system efficiencies.

Key features of the future vision of a Provincial Palliative Care Program include:

- **Provincial multidisciplinary palliative care team** who provide specialized support and consults to district teams, local providers, patients and families
 - Rather than co-located in one entity or site, resources are based in a virtual distributed model with palliative specialists from targeted District Hubs across the province
 - Dedicated provincial role to drive standardized education, through outreach support or provincial session to District and Local hubs across the province
- **District palliative care teams** provide expertise to support local providers, patients and families in the coordination and delivery of care. Teams have standardized care but vary based on capabilities based on regional/local characteristics.
- **Build capacity in Local teams** – comprised of enhanced My Health Teams, primary care, nurses, NPs, paramedics, PCH, and home care – to support palliative patients and their families, regardless of setting
 - Standardized EMS protocols for patients with known Advanced Care Plans, including administration of medications
- **Provincial clinical governance network** that supports the establishment of standards and expectations, provincial education and system planning
 - Collaborate with CCMB to support earlier palliative care discussion with cancer patients and guidance to providers to facilitate this effectively
- Enhanced use of **virtual tools** to bridge Network levels and support consistent communication across providers, families and patients

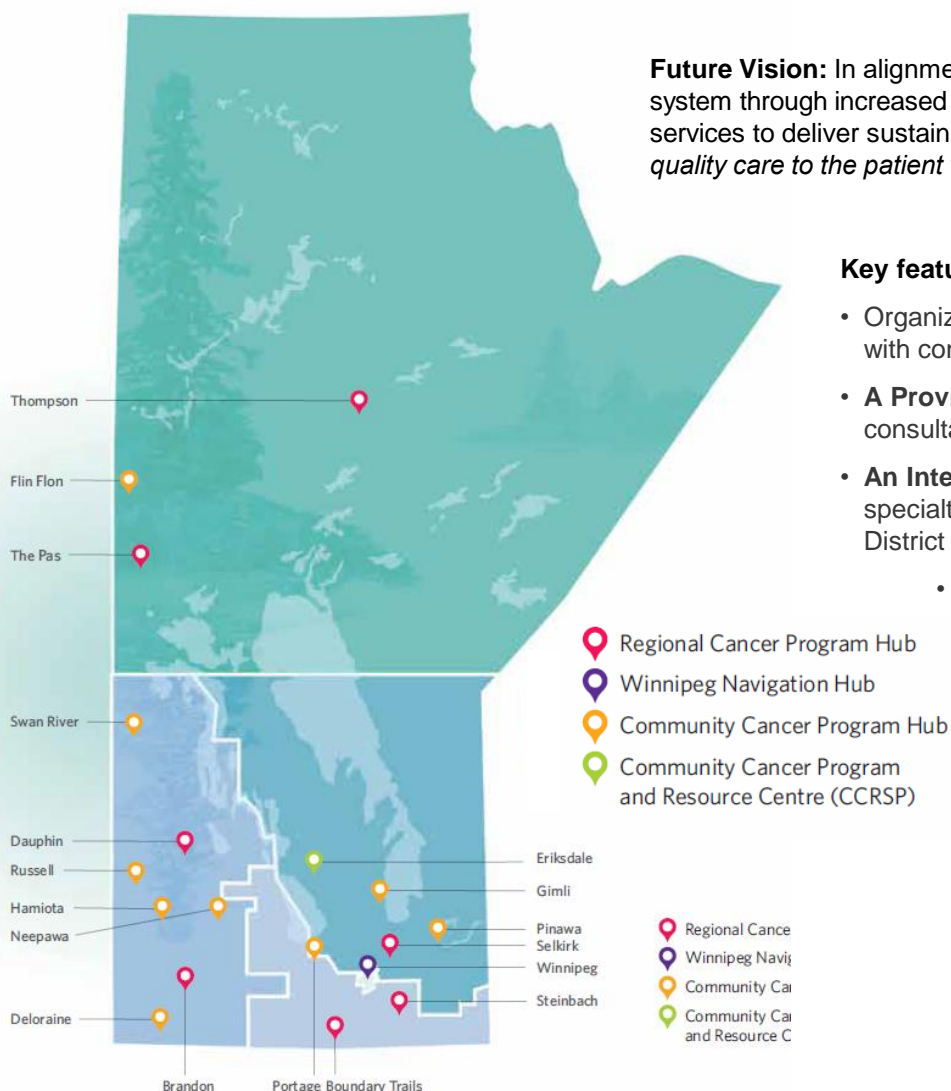


Service standards and provider roles | Palliative Care

	Service standards	Provider roles
Provincial Referral Hub	<ul style="list-style-type: none"> Centralized access (e.g., eConsult) to support practitioners throughout the Network <ul style="list-style-type: none"> Standardized pathways, tools and templates for referrals available on Shared Health website Weekly telehealth clinic to support virtual visits with providers and their patients Ability to access patients' Advanced Care Plans Enhanced psychosocial capabilities, including family assessments Clinical Governance Network sets provincial standards, informs HHR planning, scales up regional models to whole province, and monitors outcomes <ul style="list-style-type: none"> Evidenced-based principles established from national standards or (i.e., Canadian Hospice Network) or other jurisdictions Provincial database to monitor outcomes 	<ul style="list-style-type: none"> Dedicated multidisciplinary team with specialized palliative care expertise to support health professionals and families with advice 24/7 Provincial education program to advance culture and competencies of palliative care among providers <ul style="list-style-type: none"> Dedicated Lead to coordinate and support education across the Network Regular virtual Palliative care rounds to present interesting cases and educational topics in key areas <ul style="list-style-type: none"> Recordings available on Shared Health website
District Health Hub	<ul style="list-style-type: none"> Enhanced psychosocial capabilities, including family assessments Alternate models for Hospice to best meet the patients' needs, including co-location with existing entities Build palliative care home care services (HCA, SLP, OT, Dietitian) 	<ul style="list-style-type: none"> Multidisciplinary teams, which may have different capabilities, that can support across District hubs and local teams <ul style="list-style-type: none"> Physicians, NPs, RNs, Paramedics, etc.
Local	<ul style="list-style-type: none"> Alternate models for Hospice to best meet the patients' needs, including co-location with existing entities Build palliative care home care services (HCA, SLP, OT, Dietitian) 	<ul style="list-style-type: none"> Primary health providers, home care and paramedics provide support and care for patients and their families, regardless of setting

Enablers: Provincial education requirements for providers, consistent curriculum for all health care professional learners, changes to DPIN to reimburse appropriate treatment (i.e., patients still in active cancer treatment)

Model of care for Cancer Care



Future Vision: In alignment with CCMB's Operational Plan, Manitoba will enhance its cancer system through increased provision of outpatient services and increased multi-disciplinary services to deliver sustainable evidence-based cancer services for all Manitobans. *"Bringing quality care to the patient where we can and where not, bringing the patient to quality care"*

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

- Organization of services for streamlined, appropriate access to available resources with consideration for volumes and geography
- **A Provincial hub** which provides highly specialized acute services and provincial consultation support (e.g., inpatient cancer care and treatment)
- **An Intermediate Referral Hubs** which provide support and access to greater specialty services closer to home and serve as a hub for nearby surrounding District hubs and **standardized pathways** to collaborate with the provincial hub
 - Illustrative capabilities: Radiation therapy, medical oncology,
- **Referral Hubs** with capability to manage lower acuity services
 - Illustrative capabilities: Systemic therapy, biopsy, inpatient care, system navigation
- **Local Services** provides primary and community services including screening and prevention
- **Provincial standardization** of levels of care, triage protocols, and pathways from initial point of contact (i.e., 911 call) to transfer protocols (i.e., by air and land), post-acute, and repatriation
- **Enhanced virtual access to consultations** to support capabilities at Intermediate and District hubs

Future state of the provincial network | Cancer Screening and Prevention

	Service standards
Provincial Referral Hub	<ul style="list-style-type: none"> Provincial clinical leadership sets standards, tracks data and monitors quality, develops communication strategy and oversees asset management Access to high risk screening programs for patients requiring early detection services Manages assets Creates province wide communication strategy Advocates to Government for funding
Intermediate Referral Hub	<ul style="list-style-type: none"> Access to high risk screening programs for patients requiring early detection services
	Provider roles
District Health Hub	<p>“Facilitators”</p> <ul style="list-style-type: none"> Supports local care providers with next steps following a positive screen Provides information and resources for care providers Coordinates Community outreach to underserved populations Ensures accessibility Manages assets including mammography unit, scope suites, CT, MRI Coordinates/ Manages human resources <ul style="list-style-type: none"> Community opinion leader Refugee centre Public health FNIM community leaders Other health care professionals Nurses, social workers, etc.
Local	<ul style="list-style-type: none"> Primary care provider is responsible for: <ul style="list-style-type: none"> Education on the importance of screening and how to access it Delivery of cervical screening including self-collection of HPV test Counselling and guidance Interpretation of data and results for patients Accountable for their performance “Opt out” or delay if appropriate (i.e., if a palliative patient was called for screening) Installation of EMR into their practices with recall prompts (move away from opportunistic screening)

Future state of the provincial network | Acute Cancer Care

Acute Care – Service Standards & Provider Roles	
Provincial Referral Hub	<p>Focus on urgent/emergent care and highly specialized care</p> <ul style="list-style-type: none"> Provincial clinical governance network establishes standard pathways for diagnosis and treatment including a provincial surgical network to support quality measurement and improvement to reduce variation in care Specialized resources for the treatment of high acuity patients including dedicated inpatient oncology care and treatment with access to inpatient palliative care, surgical oncology and rapid access to radiation therapy 24/7 availability for consultation and navigation Rapid diagnostic team to consult on patients with high complexity
Intermediate Referral Hub	<p>Capability to deliver care for those with moderate-high acuity</p> <ul style="list-style-type: none"> Specialized resources for the treatment of moderate-high acuity patients, including: <ul style="list-style-type: none"> 24/7 Emergency Department Inpatient oncology care including medical oncology and hematology specialty services Radiation therapy Dedicated palliative care beds Fixed mammography IV chemotherapy for people on active treatment Diagnostic and biopsy capabilities Navigation support for complex needs. Surgical oncology including breast surgery
District Health Hub	<p>Capability to address lower acuity/complexity needs</p> <ul style="list-style-type: none"> Key capabilities, including: <ul style="list-style-type: none"> 24/7 Emergency Department Low to moderate acuity inpatient services (e.g., symptom management; management of febrile neutropenia) IV chemotherapy and pharmacy admixture (e.g., CCP site) Ability to conduct biopsies and put in central lines Generalist resources for the treatment of low-moderate acuity patients Navigational services for patients following positive screen or diagnosis
Local	<p>Capability to address prevention, screening & education</p> <ul style="list-style-type: none"> Facilities have capabilities to do pump disconnects, symptom management, IVF and basic laboratory functions Primary care teams, including enhanced My Health Teams, provide post acute follow up (including post-surgical) and management to proactively reduce risk of readmission/exacerbation including virtual consultation with provincial/intermediate specialists Telehealth access to specialist consultation and follow-up Generalist resources for the treatment of low acuity patients

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 Palliative Care PCT as they are unique to those outlined in the Provincial chapter.

Digital Health	<ul style="list-style-type: none"> Increasing palliative care in the community will require the use of digital health tools such as virtual monitoring and virtual consults (for families and providers) Initiatives such as Virtual Hospice provide a platform to increase information availability and standard assessment tools Improved connectivity between information systems including laboratory information systems, CCMB information systems and provider and facility EMRs
Diagnostic Services	<ul style="list-style-type: none"> District palliative care teams will require access to diagnostic services, including after-hours access when supporting patients in the community Improved communication between diagnostic services and oncology providers including CCM on the planning and delivery of services
EMS/Patient Transport	<ul style="list-style-type: none"> EMS and patient transfer protocols to align with new capabilities in the network model As a result of an increase in palliative patients remaining in the community, EMS and patient transport teams will need standardized protocols for patients with known Advanced Care Plans, including administration of medications
Infrastructure and Equipment	<ul style="list-style-type: none"> Future equipment requirements will need to align with provincial palliative care standards. In particular, home care teams may require investment for equipment to care for palliative patients in their homes Pharmacy supports are critical to the delivery of systemic therapy therefore Community Cancer Program sites should be aligned with District Hubs and assessed for compliance with relevant standards (e.g., National Association of Pharmacy Regulation Authorities Standards)
Prevention	<ul style="list-style-type: none"> A key role for the Provincial Clinical Governance will be the development of tools and resources to support increased use of Advanced Care Plans Education and promotion for patients, families and care providers will support discussions on palliative care earlier in the care journey to be able to anticipate and plan for changes in health status and care needs as patients decline. Development of tools and resources to support increased use of Advanced Care Plans Alignment of prevention activities with CCMB, public health, RHAs and local providers

Opportunities for innovative service delivery

Key Performance Indicators have been outlined to assess the implementation of this model.

Key Performance Indicators

Palliative Care

1. Reduced inpatient days during last six months of life
2. Reduced ED visits by patients in palliative care program
3. Increased number of days registered in palliative care program (through increased upstream involvement)
4. Reduced PCH transfers to ED in last month of palliation
5. Reduced PCH deaths in acute care

Cancer Care

1. Increase in screening rate for NRHA residents
2. Reduced time from suspicion of cancer to diagnosis and diagnosis to treatment
3. Reduction in rate of late-stage diagnoses
4. Shortened LOS of oncology inpatients
5. Increased compliance with surgical oncology standards