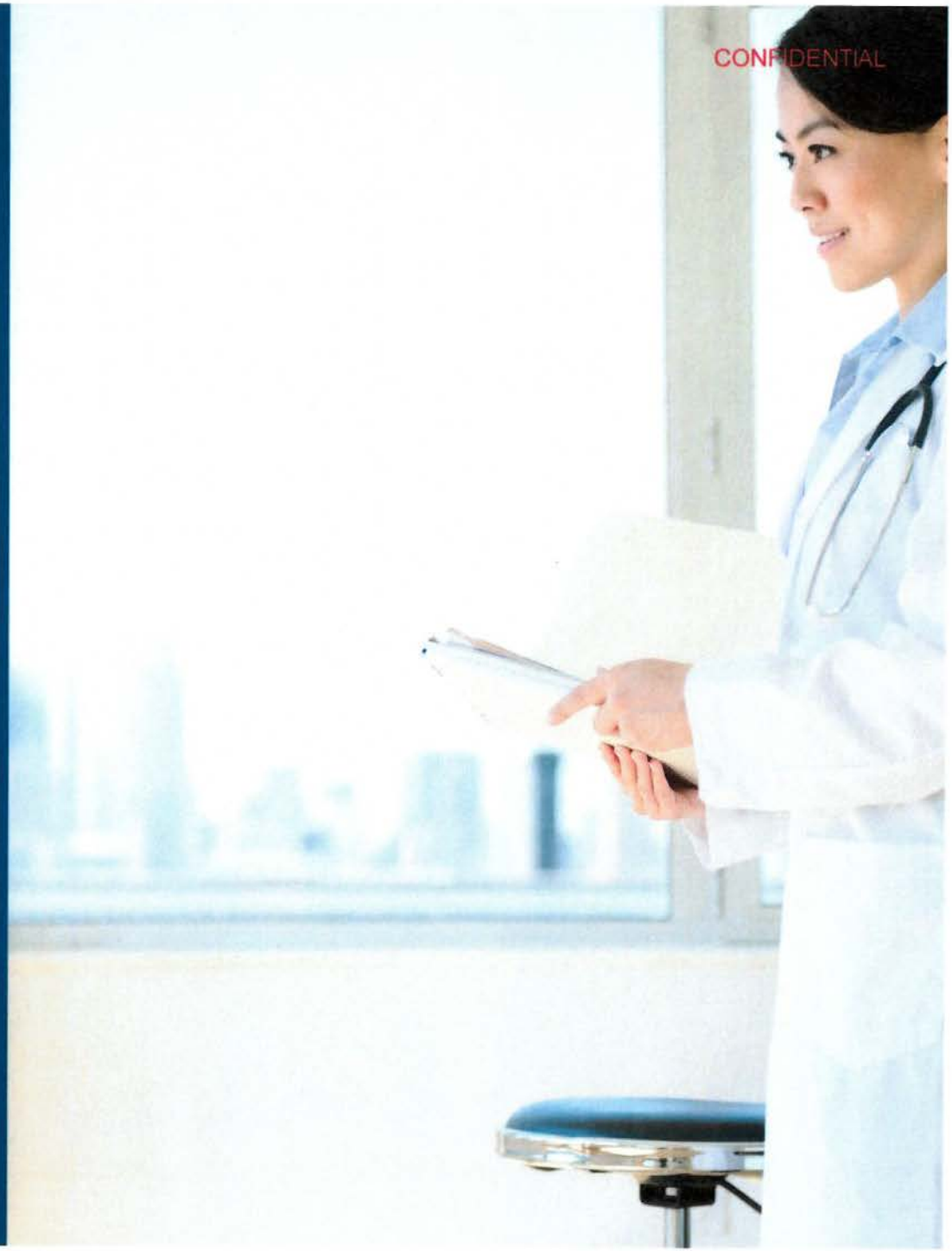
KPMG

Health System Sustainability & Innovation Review: Phase 1 Report

Manitoba Health, Seniors and Active Living and Manitoba Finance

January 31, 2017



Notice

This report (the "Report") by KPMG LLP ("KPMG") is provided to Manitoba Health Seniors and Active Living (MHSAL or the 'Department') represented by Manitoba Finance ("Manitoba") pursuant to the consulting service agreement dated November 3, 2016 to conduct an independent Health Sustainability and Innovation Review (the "Review") of the Department, the Regional Health Authorities (RHAs), and other provincial healthcare organizations.

If this Report is received by anyone other than Manitoba, the recipient is placed on notice that the attached Report has been prepared solely for Manitoba for its own internal use and this Report and its contents may not be shared with or disclosed to anyone by the recipient without the express written consent of KPMG and Manitoba. KPMG does not accept any liability or responsibility to any third party who may use or place reliance on our Report.

Our scope was limited to a review and observations over a relatively short timeframe. The intention of the Phase 1 Report is to provide a scoping document for identifying potential areas of opportunities, of which select opportunities would be further investigated through work plan development in Phase 2. The procedures we performed were limited in nature and extent, and those procedures will not necessarily disclose all matters about departmental functions, policies and operations, or reveal errors in the underlying information.

Our procedures consisted of inquiry, observation, comparison and analysis of Manitoba-provided information. In addition, we considered leading practices. Readers are cautioned that the potential cost improvements outlined in this Report are order of magnitude estimates only. Actual results achieved as a result of implementing opportunities are dependent upon Manitoba and department actions and variations may be material.

The procedures we performed do not constitute an audit, examination or review in accordance with standards established by the Chartered Professional Accountants of Canada and we have not otherwise verified the information we obtained or presented in this Report. We express no opinion or any form of assurance on the information presented in our Report, and make no representations concerning its accuracy or completeness. We also express no opinion or any form of assurance on potential cost improvements that Manitoba may realize should it decide to implement the recommendations contained within this Report. Manitoba is responsible for the decisions to implement any recommendations and for considering their impact. Implementation of these recommendations will require Manitoba to plan and test any changes to ensure that Manitoba will realize satisfactory results.

Table of Contents

KPMG

1. Executive Summary

Executive Summary

Background

- The new Government of Manitoba committed to undertake an independent Health Sustainability and Innovation Review (HSIR or "the Review"), following on from the Fiscal Performance Review underway across all other core government departments, to understand how the cost curve in relation to the growth in healthcare funding could be bent, to improve the efficiency and effectiveness of healthcare services so the health system is sustainable and supports improved health outcomes for Manitobans.
- KPMG was engaged by Manitoba Health, Seniors and Active Living (MHSAL) to support the assessment and to identify areas of opportunity to improve efficiency and effectiveness across Health Insurance Fund (HIF) and MHSAL programs and services without adversely impacting frontline services.
- Additional components of HSIR includes an assessment of the current organizational structure of Winnipeg Regional Health Authority (WRHA) and reflections on the current structure of the provincial health system including MHSAL.

Approach

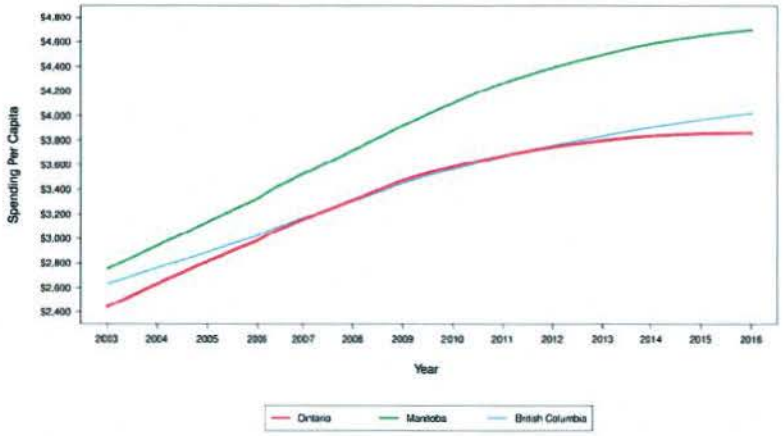
- This Review is proceeding in phases.
  - *Phase 1* (the focus of this report) provides a high-level assessment of the Manitoba Health System, defines a Health Fiscal Performance Review Framework, and identifies areas of significant opportunity for cost improvement.
  - *Phase 2* will involve further investigation and the development of work plans for each of the areas of significant opportunity selected by MHSAL, along with recommendations for successful implementation.
  - *Phase 3* is focused on implementation and ensuring sustainable benefits are realized, over both the short-term (2017/18 fiscal year) and the medium-term (next 3-4 years).
- The in-scope spending for the review is approximately $6 billion based on the 2016/17 Budget for the Department of Health, Seniors and Active Living which is approximately 45% of the total government budget for program expenditures.
- Phase 1 took place over approximately 9 weeks starting in November 2016, and included financial and clinical benchmarking, over 70 stakeholder engagement interviews, a comprehensive document review and KPMG's extensive knowledge of leading practices and the characteristics of high-performing health systems.

Executive Summary (Cont.)

Historical Trend

- Most healthcare programs and services in Manitoba have not been subject to a systemic cost review in a very long time.
- In 2003, per capita health expenses were similar in Manitoba, Ontario and British Columbia (B.C.).
- Manitoba's health expenditures per capita increased by 72% from 2003 to 2016 while Ontario and B.C. had much lower increases in per capita spending.
- Ontario and B.C. have been more successful in constraining cost increases and we have incorporated learnings from their improvement efforts.

Per Capita Healthcare Cost Curves



Source: National Health Expenditure Trends, 1975 to 2016

Manitoba Health System

- There is currently no comprehensive framework in place across the health system which codifies the mandates, accountabilities and roles of MHSAL, RHAs or providers.
- Funding for healthcare programs and services remains largely based on historic global budgets and not linked to population need and with limited incentives to improve quality and efficiency.
- The planning and development of healthcare services, including the development of facilities, has not been based on a provincial clinical services plan and evidence-based care; resulting in sub-optimal development and utilization of clinical facilities.
- Additionally, the organizational structures of the healthcare system are complex for a province of 1.3 million people. This has led to misalignment and duplication of roles and functions across eight Health Agencies including five Regional Health Authorities (RHAs), and multiple provider boards. Reforms which have occurred in other provinces such as consolidation of services, a shift to a patient-centered, commissioning-based model and funding reform has not yet occurred in a significant way in Manitoba.
- As an example, the WRHA is structured as a complex matrix model with misalignment between the roles of MHSAL, programs and providers, which creates a gap in performance management and accountability.
- While some corporate functions such as shared services in Finance, HR, and Laundry have been consolidated at WRHA level; other functions (such as decision support) are dispersed across WRHA sites.
- Manitoba's significant indigenous population requires dual jurisdictional functions between the Federal and Provincial Government which creates additional complexity.

Executive Summary (Cont.)

Opportunities

- Over 300 specific cost improvement opportunities have been identified which have been brought together into 11 areas. These opportunities were identified through data analysis (financial and clinical benchmarking), ideas put forward from over 70 stakeholder engagement sessions, output from on-line surveys, and research based on leading global practice.
  - **For fiscal 2017/18 cost improvement opportunities in the range of $90 million have been identified.** These do not rely on structural and system reforms, rather they are largely tactical cost reductions dependent on policy decisions (e.g., changes to insured benefits and funding programs to be in line with other provinces).
  - **Over the next 3-4 years cost improvement opportunities of over $300 million have been identified.** These more transformational opportunities are dependent on strategic realignment of the health system to be successful. The two most significant areas relate to operational efficiency improvement targeted at core clinical and healthcare services and rationalization of infrastructure.

**Note: medium-term savings do not take into account required investments.*

Area of Opportunity	2017/18 Estimated Potential Cost Improvement	2018/19 and Beyond Potential Cost Improvement	Recommendation
1. Strategic System Realignment	$3M+	$5M+	Immediate Priority
2. Funding for Performance	$24M+	$18M+	Immediate Priority
3. Insured Benefits & Funded Health Programs	$30M+	$9M+	Immediate Priority
4. Core Clinical & Healthcare Services	$7M+	$134M+	2018/19 and Beyond Priority
5. Diagnostic Services	-	$24M+	
6. Healthcare Workforce	$26M+	$42M+	Immediate Priority
7. Healthcare Transportation	$3M+	$0.2M+	
8. Integrated Shared Services	$3M+	$43M+	2018/19 and Beyond Priority
9. ICT Integration & Enablement	$5M+	$29M+	
10. Infrastructure Rationalization	$0.3M+	$62M+	2018/19 and Beyond Priority
11. Alternate Service Delivery	TBD	TBD	

Executive Summary (Cont.)

Path Forward

- In Phase 2, the team will develop work plans for each of the key areas of opportunity, and a Roadmap to support the broader healthcare transformation efforts across the Province.
  - Work plans would involve a deeper dive in each area of opportunity and guide implementation and transformation planning. Each work plan would include: project summary; objectives and scope; governance and team roles and responsibilities; costing and delivery assumptions; breakdown and validation of cost improvement estimates; benefits and costs; key risks; implementation plan; milestones; performance measures and tracking; and communications.
  - The Roadmap will include guidance on the role and structure of the Transformation Management Office that will drive and coordinate the cost improvement efforts, and actions/communications required by the government to support the change efforts. This will include ways to simplify the structure of the Manitoba healthcare system and clarify mandates between the Department, RHAs and facilities.
- There is significant opportunity for Manitoba to create a more efficient and effective healthcare system. Bending the cost curve will require ongoing focus over the next 3-4 years to address both structural and funding gaps, as well as a coordinated approach to capturing and sustaining the savings from the initiatives.
- Immediate Government direction is required to re-align and focus the healthcare system and mandates between the Department, RHAs, and facilities, and to strengthen accountability for performance.

KPMG

2. Objectives & Approach

Phase 1: Objectives & Introduction

Objective of the HSIR:

To identify opportunities to eliminate waste and inefficiency, and improve the effectiveness and responsiveness within the health sector within the next 3-4 years: 2017/18 and 2018/19 and beyond.

Manitoba faces specific challenges with the necessity to bend the cost curve and ensure that its health system is fiscally sustainable while improving the quality of care and achieving better health outcomes. We understand that Manitoba seeks to greater efficiency and effectiveness, it must take into account societal, demographics, and socio-cultural changes, as well as technological shifts.

We understand this independent HSIR is to provide confidential advice to Manitoba in identifying potential opportunities for Manitoba's consideration in its fiscal decision-making. This is a Fiscal Performance Review, not an audit.

The project began November 2016, where the project approach, work plan and schedule was confirmed with the Project Team. An overview of the approach and work plan is outlined in the following pages. Over the course of the first two months, KPMG held 70 interview sessions with government, programs, sites, and providers representatives, including all Assistant Deputy Ministers and management teams, Executive Management teams for WRHA and other RHAs, local health involvement groups, health education institutions, and other healthcare stakeholders.

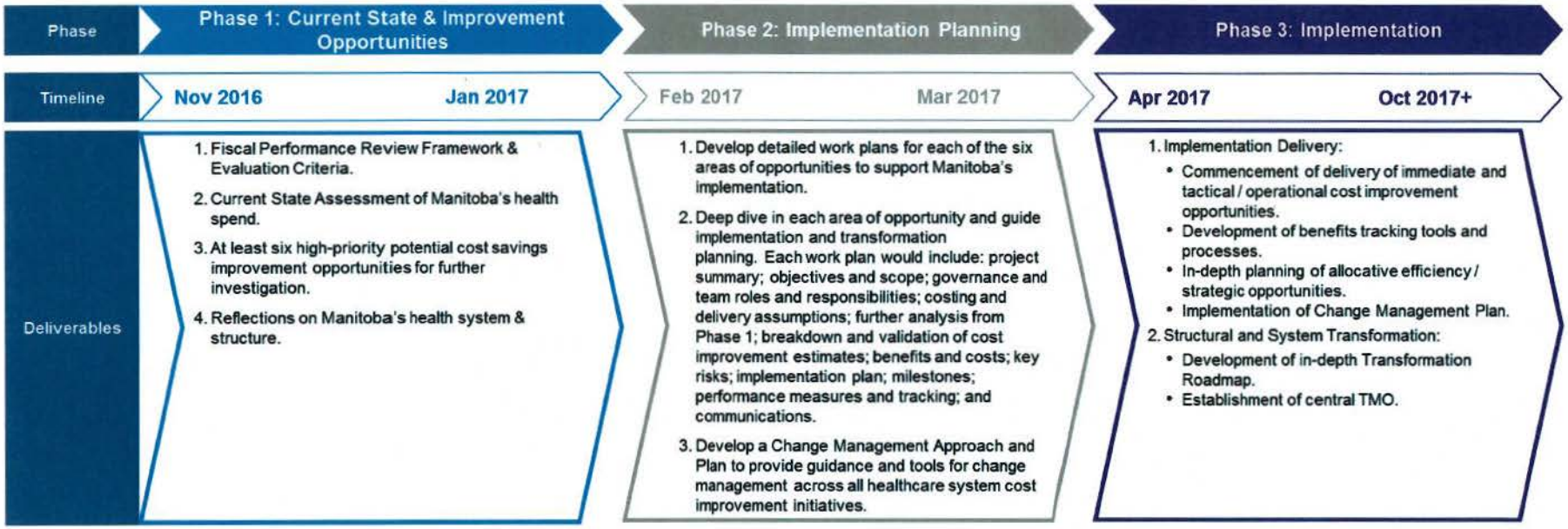
Weekly status reports and meetings were held to assist in keeping the project on-track and to address issues and risks.

MHSAL and the WRHA supplied data and information for KPMG to review and assess.

KPMG, MHSAL, and WRHA worked closely throughout the process. KPMG acknowledges the collaboration of all stakeholders in their participation, sharing of ideas, and providing data and information for the Review.

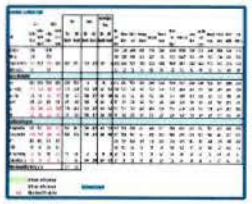
Project Work Plan Overview

Our approach combines KPMG's leading clinical, financial and activity analytical approach with that of Preyra Solutions Group (PSG) who have deep experience of financial and clinical data analysis across multiple Canadian jurisdictions. We followed the two phase approach detailed in the RFP and outlined in the diagram below. As Phase 2 is confirmed, the Government will need to commence preparing for Phase 3 in relation to implementation. This would involve setting up the supporting infrastructure to support implementation including the establishment of a Transformation Management Office.



Approach Methodology

Financial and clinical benchmarking of Manitoba hospitals and system performance.



70+ Stakeholder sessions.

500+ documents and submissions.

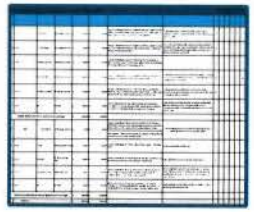
Online surveys from healthcare participants and public.

Current state assessment of healthcare system.

Apply Health Fiscal Performance Criteria.

Apply Sustainability Framework Criteria.

Opportunity Register with 340 opportunities



Assess opportunities for Implementation Effort and Cost (H-M-L).

Apply standard discounting factors for 2017/18 and 2018/19 and beyond.

Confirm timing and implementation considerations where possible.

Rationalize opportunities and assumptions where possible.

11 areas of opportunity with 36 sub-areas

Group opportunities by area and theme.

Sort by Magnitude of Potential Opportunity and Effort to Implement.

Approach Methodology

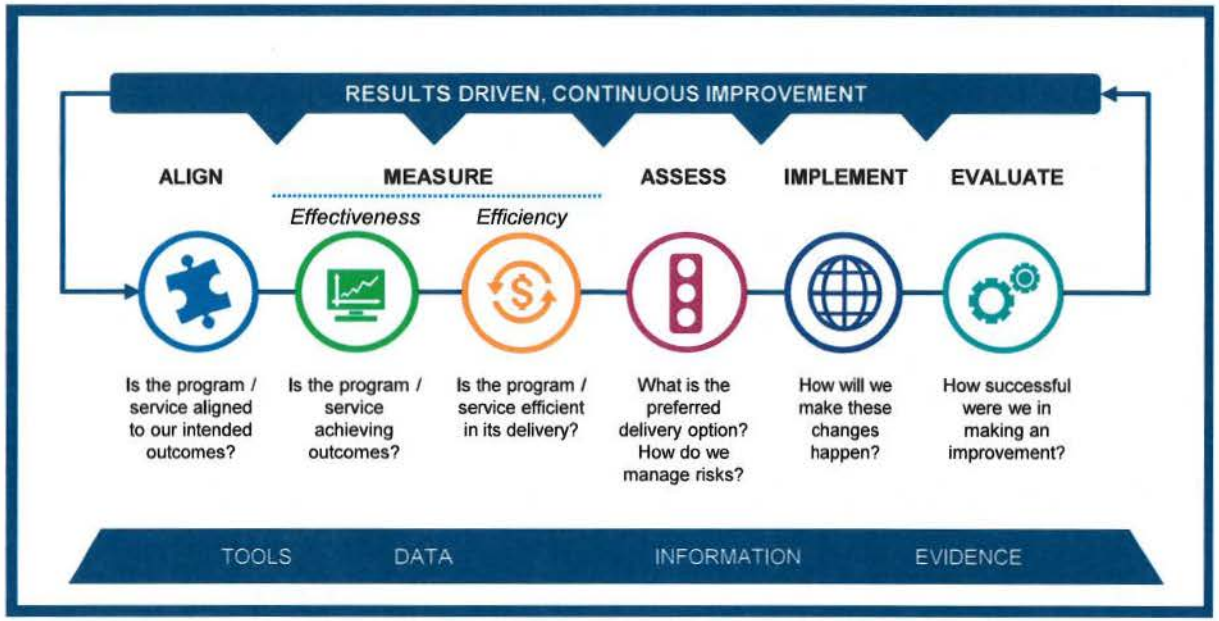
The methodology employed to identify the areas is depicted in the diagram in the previous slide.

- All opportunities identified from financial and clinical benchmarking are derived from a comparison to reference jurisdictions. The potential size of these opportunities have been calculated by the KPMG team.
- Opportunities identified by other HSIR review activities were captured together with the benchmarking results in the tracker. Health system stakeholders were asked to substantiate the level of savings by providing program estimates if these were available or to assist the KPMG team with assumptions to establish a representative sizing value.
- Where possible, KPMG rationalized opportunities to minimize overlap and to ensure that potential savings were not double counted. This activity is dependent on specific scenario or implementation assumptions.
- 181 of 348 total opportunities (52%) have representative savings identified. These opportunities have been grouped by area and subarea to provide a comprehensive model.
- All information and analysis is dependent on information and data provided by Manitoba HSIR stakeholder participants. KPMG has taken steps to ensure that critical information is set out in the section and other relevant areas of this report.
- For each of the 11 areas of opportunity; a description, observations, actions, benefits and potential financial impacts, and a summary of estimated potential cost savings for 2017/2018 and 2018/2019 and beyond is provided.

Health Fiscal Performance Review Framework

The Manitoba healthcare budget for 2016/17 is approximately $6 billion, with an average annual increase of $223 million over the last decade. The rate of actual spending growth is not sustainable. Manitoba faces specific challenges with the necessity to bend the cost curve and ensure that its health system is fiscally sustainable while improving the quality of care and achieving better health outcomes. The Health Fiscal Performance Review Framework is complementary to the Fiscal Performance Review Framework developed for core government, and provides principles and guidelines to place attention and fiscal discipline on all spending, and on the provision of efficient and effective MHSAL programs and services to improve health outcomes for Manitobans and ensuring a sustainable health system.

The Fiscal Performance Review Framework is applied across a series of steps that consist of a set of questions that decision-makers are expected to ask, and provides a guide for how analysis should be approached and evidence-built. The use of reliable evidence, supported by standards and tools, will determine the successful application of this Framework. For a breakdown of each Framework step, please see **Appendix 5**.



To measure financial performance by effectiveness and efficiency, the following two lens are applied for healthcare spending:

1. **Allocative Efficiency**: the extent to which limited funds are directed towards commissioning the right mix of health services in line with the preferences of those commission the services (e.g., doing the right things). This includes assessment of those services not only invested in but services disinvested from. It ensures the healthcare system can effectively evaluate healthcare programs and services and institute the optimal investments/disinvestments on the basis of assessment.
2. **Technical Efficiency:** the extent to which a healthcare provider is securing the minimum cost for the maximum quality in delivering its agreed healthcare outputs. This includes operational performance assessment and the extended to which resources are being wasted (e.g., doing things the right ways). This includes assessment of the health system's capability to optimize those healthcare services already provided through various means of quality improvement.

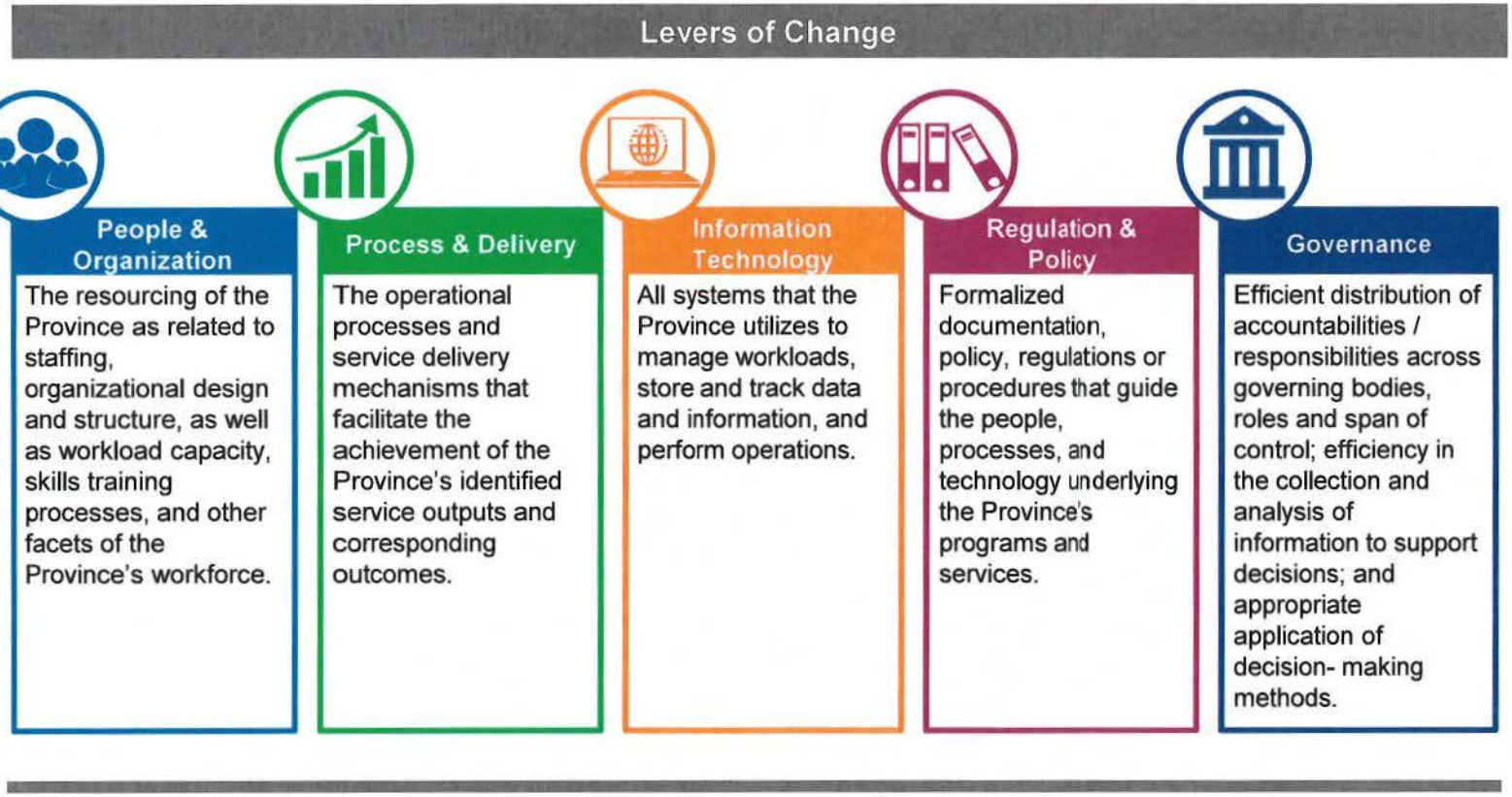
Technical & Allocative Efficiencies

We followed a comprehensive approach based on the measurement criteria set out in the Health Fiscal Performance Review Framework to identify immediate (2017/18), tactical / operational opportunities and medium-term transformation opportunities (2018/2019 and beyond) required to ensure sustainability. Each of the potential key areas of opportunities will be qualified as technical or allocative efficiency.

Lens	Examples	Criteria	Improvement Category	Timelines
Technical Efficiency *'doing things the right way'*	**Potential areas of opportunity for 2017/18** • Tactical cost reduction programs in larger hospitals via opportunities identified through benchmarking. • Consolidation of procurement functions and transformation of Supply Chain. • Improved drugs procurement.	Economy & Efficiency	**Immediately Implementable** *High impact cost management opportunities realized in-year.*	2017/18
			In-Depth Analysis: *Tactical cross-cutting programs across health system.*	2018/19+
Allocative Efficiency *'doing the right things'*	**Areas of potential opportunities in 2017/18 to realize significant savings in a 3-4 year fiscal year timeframe** • Reallocation of funding. • Clinical support services in relation to consolidation/ outsourcing.	Effectiveness	**In-Depth Analysis: Strategic Re-design** *Re-design models of care/service reconfiguration.*	1+ Years
			In-Depth Analysis: Strategic Partnerships *Working with others to deliver existing and new services differently.*	1+ Years

Health Sustainability Criteria

On top of the Fiscal Performance Review Framework, there are various levers with which the Province of Manitoba can effect a change in programs/services to better align with and/or achieve desired outcomes. These include changes in the following areas: People and Organization, Process and Delivery, Information Technology, Regulation and Policy, and Governance.



CONFIDENTIAL

KPMG

3. Health System Current State Assessment

Context / Current Environment

"Manitobans have a right to expect that their government uses public revenues effectively and efficiently to deliver high quality government programs and services at a reasonable and sustainable cost. Manitoba's New Government is working to fulfill that expectation by restoring fiscal discipline with a common sense approach to financial management. Common sense respects the value of taxpayers' money."

"A large part of restoring fiscal discipline is restraining the growth of spending – bending the cost curve – to ensure that spending does not outpace revenue growth. Manitoba's New Government is committed to ensuring that government programs and services become more effective and efficient."

Manitoba Budget 2016

Despite its high expenditures per capita, the second highest among Canadian provinces, and the highest proportion of provincial health expenditures to total government budget, there is significant evidence that existing funding and significant annual increases over the past decade have not translated into proportionate improvements in health outcomes. This suggests opportunities to improve technical efficiency within sectors, and allocative efficiency by optimally reallocating dollars across the care continuum such as between acute care and community-based care.

In response to the opportunities to improve the cost effectiveness of health service delivery, and as an aligned component of the wider Fiscal Performance Review already underway across all other core Departments; the HSIR has been established. The HSIR will review Manitoba health system spending and performance, and provide confidential advice and recommendations to MHSAL and the Finance Department for consideration during development of the next and future provincial budgets.

The objective of the Review is to identify opportunities to improve the cost effectiveness and sustainability of Manitoba's healthcare spending.

The scope of the Review is the Manitoba Healthcare system and its interconnected facets and components. The Review will include population and public health, community healthcare, acute and specialty care, and residential care.

Specific components of the Review also include reviewing structures, roles and functions across the provincial health system to enable sustainable improvement and developing a new organization design and structure for WRHA.

The Review will also take account of alignment and potential synergies with the Fiscal Performance Review across departments for provincial core government expenditures.

The Health Fiscal Performance Review Framework is designed to be supplemental to and align with the Fiscal Performance Review Framework developed in September 2016, to provide a consistent, systemic framework that includes principles, guidelines and criteria for looking at spending across Government and at all levels, whether by Department, program, service, branch or unit.

Approach: Summary

The Current State assessment consisted of the following key components of work:

1

Financial and Clinical Benchmarking across the $6 billion expenditure to identify opportunities for cost improvement in relation to technical and allocative efficiency.

2

Reflections on the Provincial Health System which included:

- Roles of organizations and stakeholders in the health system.
- Processes adopted in the health system to achieve results.
- Structures between and within organizations related to how accountabilities and functions are organized related to health delivery.

3

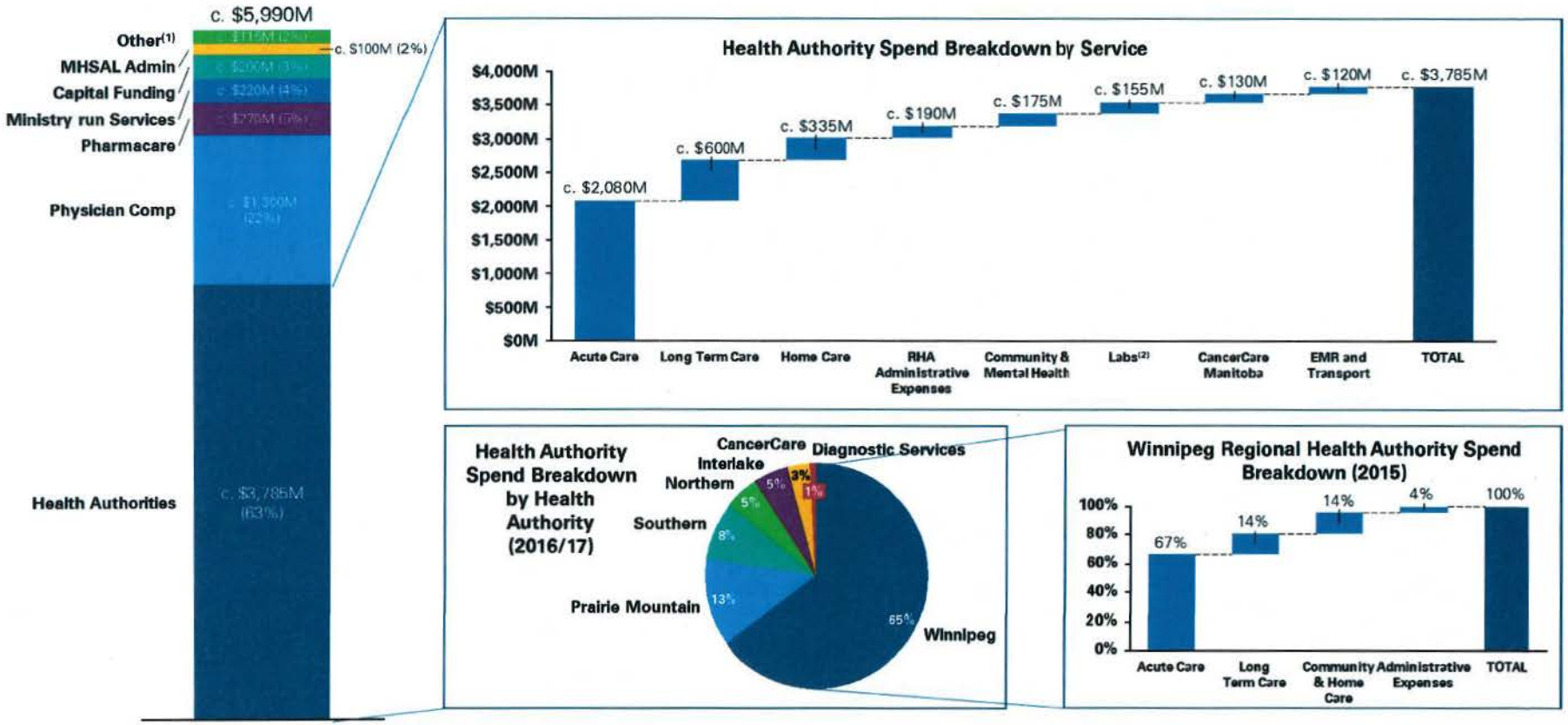
WRHA Current State Assessment which consisted of data analysis to understand the WRHA Current State structure and 30 focused stakeholder interviews.

4

Stakeholder Engagement which consisted of over 70 specific stakeholder engagement sessions, online surveys covering both frontline staff and members of the public and a review of over 500 supporting documents submitted to the HSIR team to support the stakeholder engagement sessions.

Approach: In Scope Expenditure

The in-scope spending for the Current State assessment was approximately $6 billion based on the 2016/17 Budget for MHSAL programs and services.



Notes:

1. Other includes $17.5M for Cadham Labs, $32M for Additions Foundation; $31M for out-of-province physicians; $31M for physician recruitment and retention
2. Lab spend includes direct funding to Diagnostic services ($32.5M) and pass through from Health Authorities ($124M); does not include $17.5M Cadham Labs

CONFIDENTIAL

KPMG

3.1. Health System Current State Assessment: Financial & Clinical Benchmarking

Current State: Health System Expenditures

Main Findings:

In 2003, per capita health expenses were similar in Manitoba, Ontario and B.C.

Manitoba's health expenditures per capita increased by 72% from 2003 to 2016.

Ontario and B.C. had much lower increases in per capita spending than Manitoba.

In 2013, Manitoba spent 23% more than it would have at Ontario's per capita spending rate and 26% more than it would have at B.C.'s rate.

These results imply that Ontario and B.C. successfully constrained cost increases. Our detailed analysis comparing spending and care models in Manitoba and Ontario identify significant improvement opportunities relative to other jurisdictions in Manitoba.

Population, Clinical & Financial Benchmarking

- We compared health service use and cost in Manitoba and Ontario as agreed by the Advisory Committee.
- Our approach included selecting appropriate peer regions and hospitals.
- We matched Manitoba regions and providers to similar ones in Ontario on the basis of the factors shown below:

Population Adjustments

Region Type:

- Urban, Rural, Remoteness and Population Density.
- Proportion Aboriginal, Immigrants and Employed.
- Income Quintile with Cost of Living Adjustment.

Provider Adjustments

- Teaching, Large Community, and Medium/Small Community Facilities.
- Tertiary.
- Region Type.
- Case mix.

Comparing Health System Effectiveness in Manitoba & Ontario

Characteristics	Manitoba	Ontario	MB to ON Ratio
Ambulatory care sensitive conditions (per 100,000 population)	314	269	**1.17**
30-day acute myocardial infarction (AMI) in-hospital mortality (rate)	6.7	7.6	**0.88**
30-day stroke in-hospital mortality (rate)	15.6	14.8	**1.05**
Self-injury hospitalizations (per 100,000 population)	68	63	**1.08**
30-day obstetric readmission rate (%)	2.8	1.7	**1.65**
30-day readmission - patients age 19 and younger (%)	6.5	6.8	**0.96**
30-day surgical readmission rate (%)	6.0	6.8	**0.88**
30-day medical readmission rate (%)	13.6	13.4	**1.01**
Potentially avoidable mortality (per 100,000 population)	224.4	172.9	**1.30**
Avoidable mortality from preventable causes (per 100,000 population)	141.8	107.7	**1.32**
Avoidable mortality from treatable causes (per 100,000 population)	82.7	65.2	**1.27**

Source: http://www12.statcan.gc.ca/health-sante/

- This exhibit shows Statistics Canada's Health System effectiveness measures for Manitoba and Ontario.
- Ontario typically scores higher than Manitoba on these measures.
- Although health system effectiveness comprises more than is captured by these measures, these results imply that Ontario's outcomes are at least as good as Manitoba's despite substantially lower spending.
- While these results compare the two provinces directly, our benchmarking compared similar regions and similar hospitals in the two provinces.

Provincial Health Expense Comparison (2013)

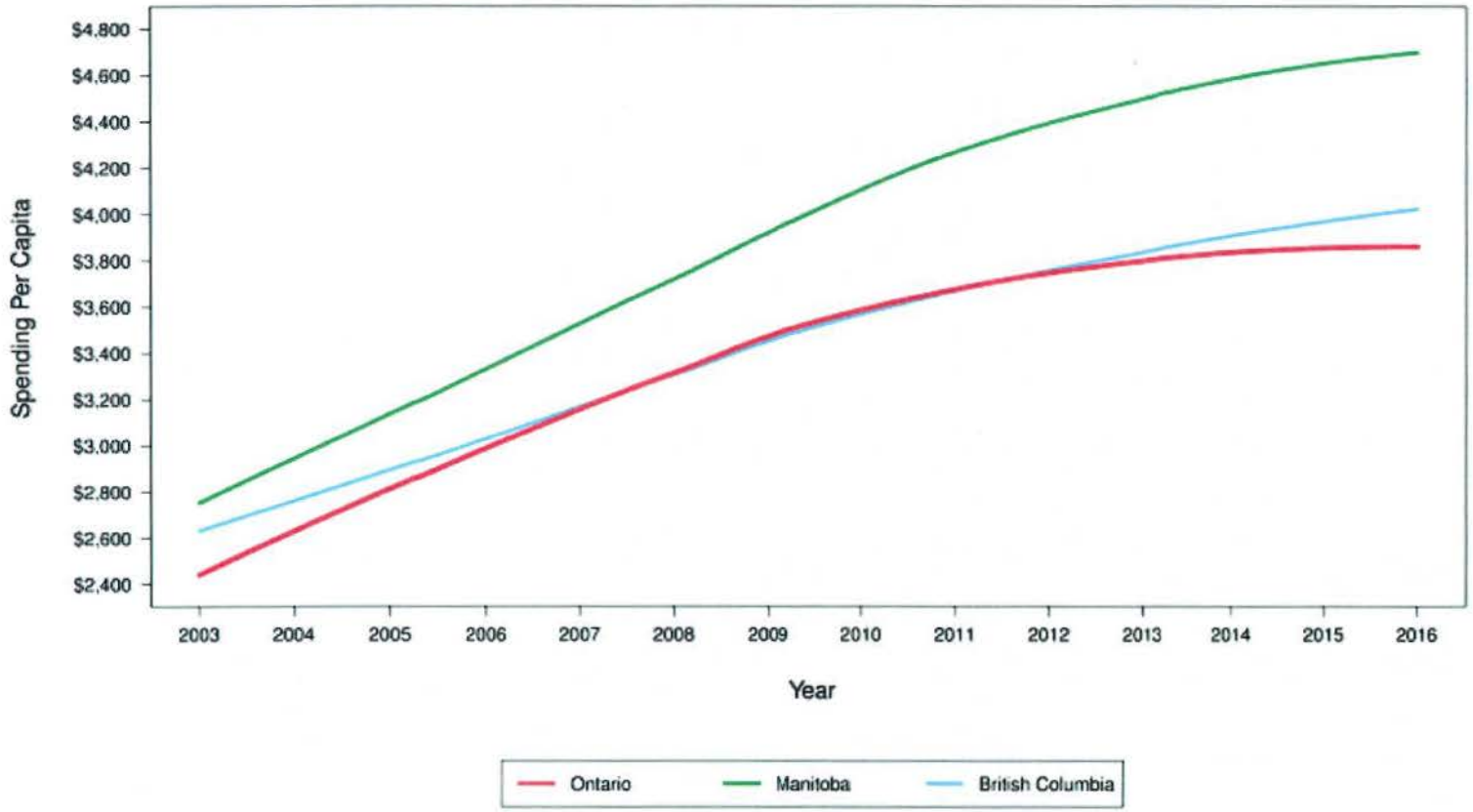
			Ratio of Manitoba Expenses to Manitoba Expenses at per Capita Rate of:			
Expense Category*	Manitoba Expenses (in $millions)		Ontario	Saskatchewan	Alberta	BC
Hospital	$	2,300	1.30	1.09	0.75	1.13
Other Institutions	$	810	**1.58**	1.01	**1.13**	**1.62**
Physicians	$	1,090	0.94	0.98	0.83	1.07
Drugs	$	300	0.75	0.84	0.65	1.28
Capital, Public Health, Administration, Other	$	1,240	**1.49**	1.03	**1.27**	**1.59**
Total Expenses	$	5,740	1.23	1.03	0.88	1.26

*See Appendix 1 for expense category definitions

1. Manitoba spent 23% more than it would have at Ontario's per capita spending rate and 26% more than it would have at B.C.'s rate.
2. Of the four comparator provinces, only Alberta spent more per capita on hospitals than Manitoba.
3. Manitoba spent more on "Other Institutions", which includes Personal Care Homes (PCH), than it would have at the per capita rates of any of the comparator provinces.
4. Manitoba spent less per capita on Physicians than Ontario, Saskatchewan, and Alberta. This combined with physician recruitment and retention issues identified from the stakeholder engagement means that this area is unlikely to provide significant cost improvement opportunities.
5. Ontario and B.C. have successfully bent the cost cure and are the most appropriate benchmark comparators for Manitoba as set out on the next page.

Total Health Expenditures

The per capita cost curves have been bent in Ontario and B.C.



Source: National Health Expenditure Trends, 1975 to 2016

1. In 2003, per capita health expenses were similar in Manitoba, Ontario and B.C.
2. Manitoba's health expenditures per capita increased by 72% from 2003 to 2016.
3. Ontario and B.C. had much lower increases in per capita spending than Manitoba.

Technical Efficiency: Manitoba Hospital Expense Trends

Manitoba Hospital Expense Trends		2012	2016	% Change
Nursing Inpatient	Expenses	$ 550M	$ 636M	16%
	Patient Days	372,147	367,344	-1%
	Cost per Patient Day	**$ 1,478**	**$ 1,731**	**17%**
Emergency Room	Expenses	$ 112M	$ 135M	21%
	Visits	687,370	672,042	-2%
	Cost per Visit	**$ 163**	**$ 201**	**24%**
Operating Room	Expenses	$ 148M	$ 160M	8%
	Cases and Visits	233,344	227,769	-2%
	Cost per Case/Visit	**$ 35**	**$ 700**	**10%**
Laboratory, Diagnostic and Therapeutic Services	Expenses	$ 363M	$ 407M	12%
	Patient Days	372,147	367,344	-1%
	Cost per Patient Day	**$ 976**	**$ 1,108**	**14%**
Ambulatory Clinics	Expenses	$ 179M	$ 211M	**18%**
Administration and Overhead	Expenses	$ 657M	$ 768M	**17%**
Totals	Expenses	$ 2,009M	$ 2,317M	15%
	Patient Days	372,147	367,344	-1%
	Cost per Patient Day	$5,398	$6,307	17%

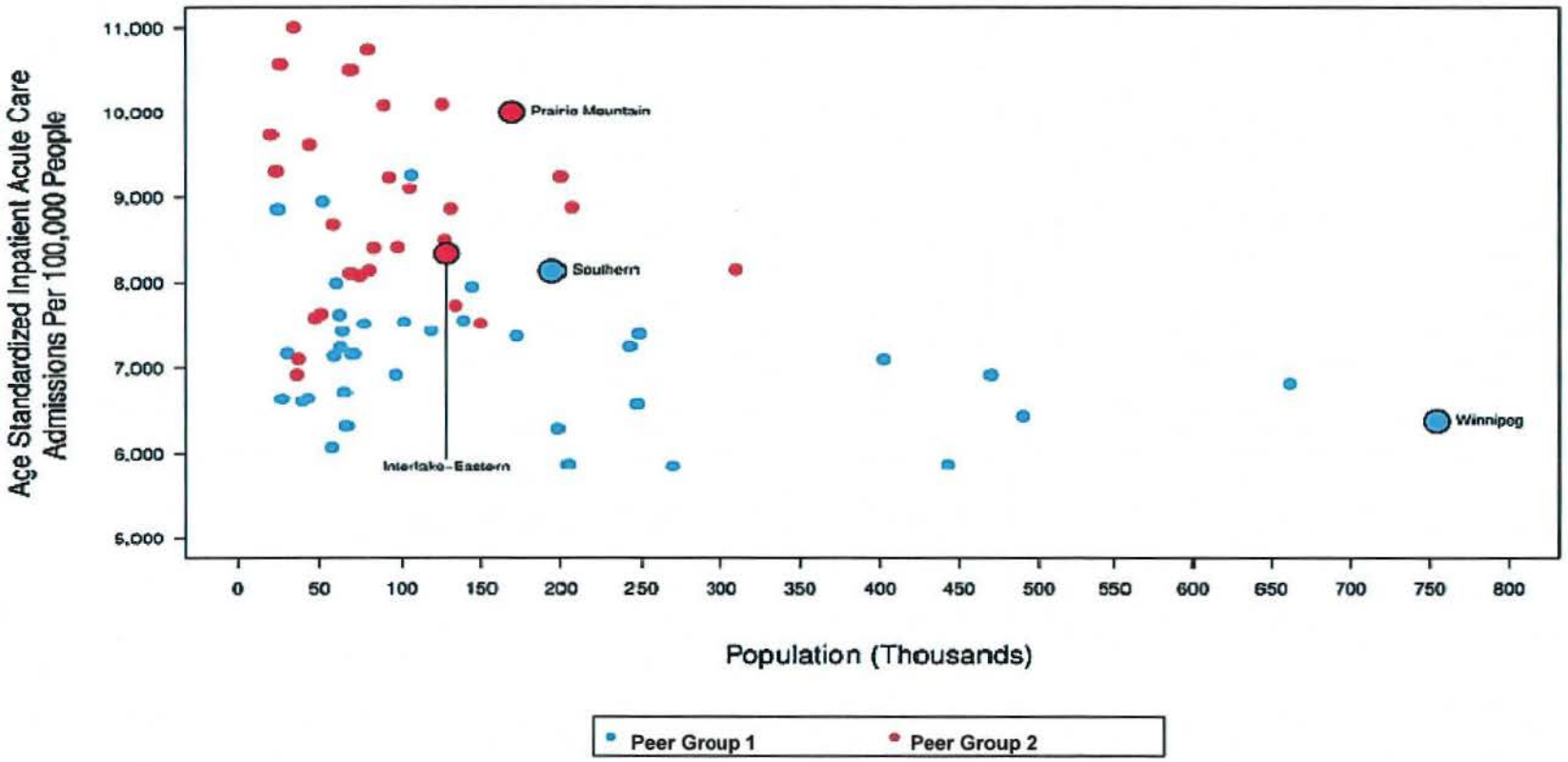
1. From 2012 to 2016, expenses increased significantly while services did not.
2. For example, Emergency Department (ED) expenses increased by 21% while total visits decreased by 2%. The cost per ED visit therefore increased by 24%.
3. Hospital administration expenses increased proportionally to hospital patient care expenses.

Technical Efficiency: Hospital Labour Expense Trends

	2012	2016	Percentage Change
Non-Labour Expenses	$0.80B	$0.88B	10%
Labour Compensation Expenses	$1.21B	$1.44B	19%
Hours	34.8M	36.9M	6%
Hourly Rates	$34.74	$38.91	12%

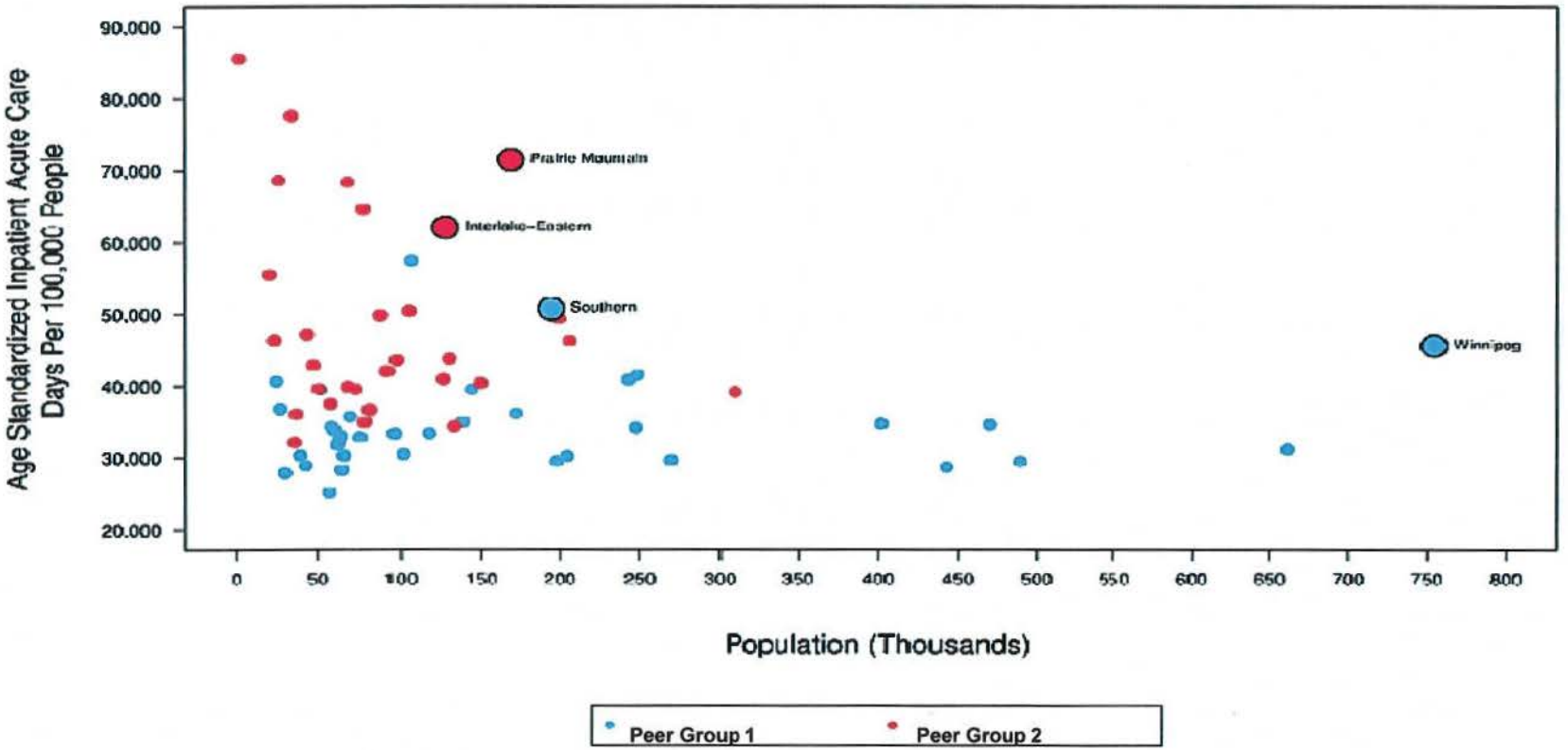
1. Most of the increase in total hospital expenses is due to labour expenses.
2. Labour expenses increased by 19% while non-labour expenses increased by 10%.
3. Most of the increase was driven by hourly wages (12% increase) while hours increased by only 6%.

Allocative Efficiency: The Opportunities to Reduce Hospital Admissions Vary Across the Province



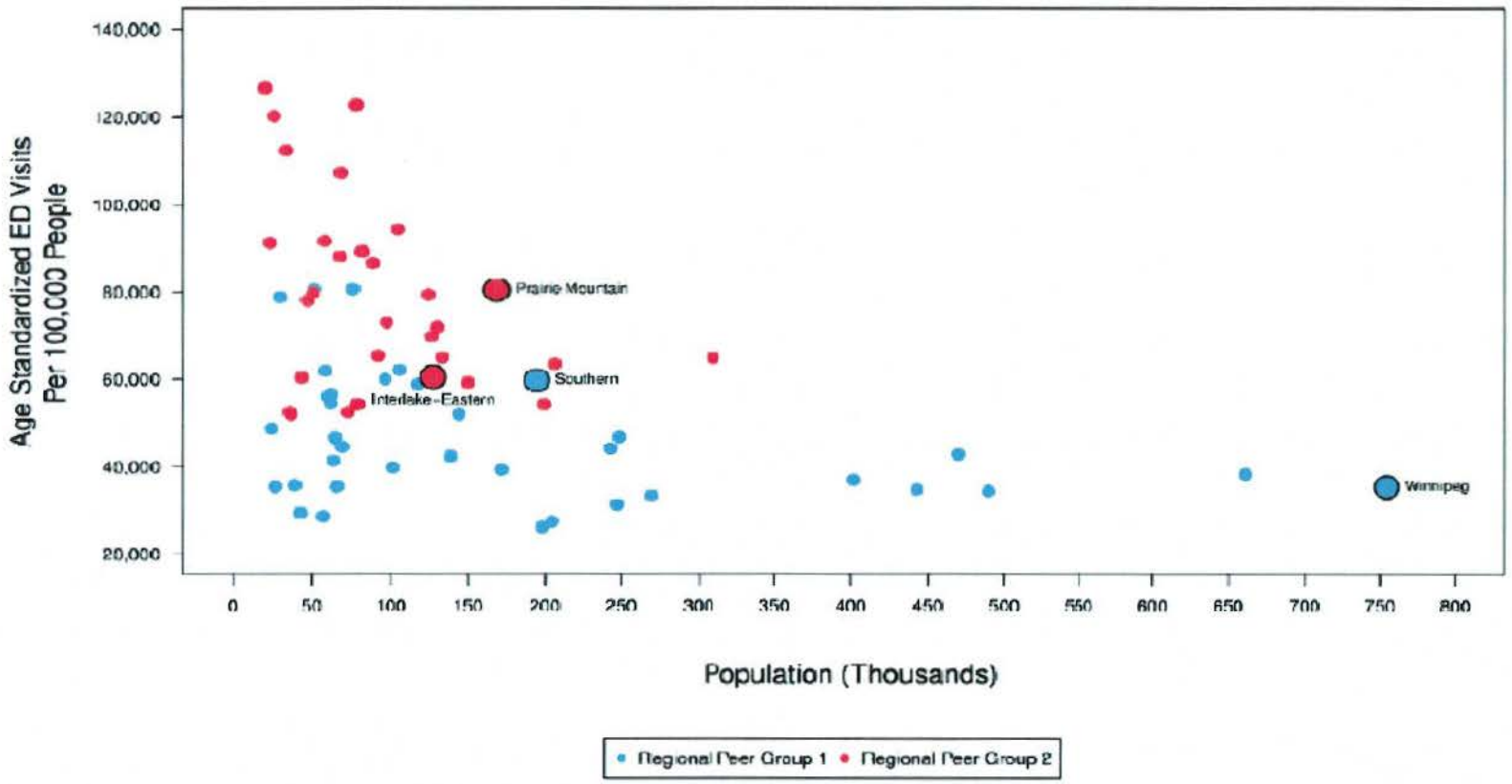
- This exhibit compares age standardized acute hospital admissions in the Manitoba RHAs with those in the peer regions.
- Hospitals in the Prairie Mountain Health and Southern Health-Santé Sud RHAs have the most opportunity to reduce admissions.
- Hospital admissions in the WRHA are low relative to the experience of peer regions.

Allocative Efficiency: There are Opportunities to Reduce Patient Days Across the Province



- This exhibit compares age standardized acute hospital days per capita in the Manitoba RHAs with those in the peer regions.
- Hospitals in all RHAs have high rates of inpatient days per capita relative to their peer regions.
- This finding implies substantial opportunities to reduce hospital lengths of stay in all RHAs.

Allocative Efficiency: The Opportunities to Reduce ED Visits Vary Across the Province



- This exhibit compares age standardized rates of ED use in the Manitoba RHAs with those in the peer regions.
- Hospitals in Prairie Mountain Health and Southern Health-Santé Sub RHAs have the most potential to reduce ED use.
- ED use in the WRHA is low relative to the experience of peer regions.

Allocative Efficiency: Making Better Use of Ambulatory Surgery

RHA	Hospital	Total IP and DS Surgical Procedures	Day Surgery Procedures	Expected DS Procedures at Peer Average	Potentially Avoidable Surgical Admissions
Interlake-Eastern Health	Selkirk & District General Hospital	1,338	1,284	1,242	-42
Northern Health Region	Flin Flon General Hospital	382	347	354	7
	Thompson General Hospital	699	625	636	11
	The Pas Health Complex	170	130	129	-1
Prairie Mountain Health	Brandon General Hospital	6,427	5,918	5,869	-49
	Dauphin General Hospital	1,165	851	1,108	257
Southern Health-Santé Sud	Bethesda Regional Health Centre	758	613	698	85
	Boundary Trails Health Centre	1,788	1,661	1,626	-35
	Portage Hospital	1,082	861	957	96
WRHA	Concordia Hospital	2,436	2,012	2,147	135
	Grace Hospital	3,987	3,724	3,622	-102
	Health Sciences Centre	13,723	11,758	11,449	-309
	Seven Oaks General Hospital	4,752	4,129	4,382	253
	St. Boniface General Hospital	8,695	6,725	7,240	515
	Victoria General Hospital	7,350	6,110	6,481	371
Total		54,752	46,748	47,941	1,193

1. Most hospitals may have opportunities to increase substitution of ambulatory for inpatient surgery.

Allocative Efficiency: Personal Care Homes & Home Care

Effective strategies for improving outcomes and efficiency in the health care sector have to main components:

1. The first is to redistribute care among sectors, increasing the emphasis on long term supports provided in the community. This involves prioritizing populations in each care setting according to those who can benefit the most.

2. The second is for providers in each sector to improve their efficiency by providing effective services at an efficient cost.

Many Canadian provinces consider the efficient allocation of clients to community support, home care and institutional settings as a key health system sustainability strategy. In Ontario, health regions are increasingly focused on routing low level care to community-based services and on serving only the highest need clients in institutional settings.

For example, for lower care need clients:

- Personal Care Home services can often be substituted with a mix of lower cost home care and community-based services.

- Home care services can often be substituted with lower cost community support services, such as adult day programs, homemaking, and transportation.

In this following pages, we examine and quantify the potential to substitute lower cost services for personal care home and home care services.

Allocative Efficiency: Reducing Use of Personal Care Homes

RHA	PCH Homes	PCH Beds	Population 75+	Beds per 10,000 Population 75+	Beds per 10,000 Population 75+ Peer Region Average	Fewer Beds at Peer Average
WRHA	43	5,731	51,305	1,117	946	877
Southern Health-Santé Sud	21	1,229	10,670	1,152	830	344
Prairie Mountain Health	43	2,003	14,517	1,380	1,030	507
Interlake-Eastern Health	16	748	8,377	893	938	0
Northern Region Health	4	155	1,608	964	872	15
Total	127	9,866	86,477	5,505	4,616	1,743

1. All RHAs, except Interlake-Eastern Health, may have the potential to reduce personal care home bed use.

Allocative Efficiency: Reducing Use of Personal Care Homes in WRHA

PCH Level of Care	Share of total PCH days by Level of Care	Estimated PCH Beds at 98% Occupancy	Ontario average distribution by Level of Care	WRHA PCH Bed Reduction at Ontario Average Distribution
High	25%	**886**	**55%**	0
Medium	43%	1,530	31%	422
Low	29%	**1,040**	**14%**	527
Unassigned	4%	130	0%	0
Total	100%	3,585	100%	948

- Resource Utilization Groups (RUG) are used in Canada and jurisdictions worldwide to measure the resource needs for personal care home clients and to fund home care providers. Clients are assigned to one RUGs based on medical, functional and cognitive characteristics. We assigned each RUG to one of three care levels and compared the client distribution between Manitoba and Ontario.
- Low care need PCH clients are often good candidates for transfer to non-institutional community settings.
- 29% of WRHA PCH beds are used for low care need clients, which is high relative to Ontario's 14% level, and suggests significant potential to transfer to non-institutional care settings.

Allocative Efficiency: Making Better Use Of Home Care Resources

- The Method for Assigning Priority Levels (MAPLe) is assigned to all WRHA and all Ontario home care clients. Each client is assigned a MAPLe level, based on their risk for personal care home admission.
- Below compares the MAPLe distribution in Ontario and WRHA.

MAPLe Level	WRHA	Ontario
1.Low & 2. Mild	34%	12%
3. Moderate	30%	34%
4. High & 5. Very High	37%	54%

- Almost 90% of Ontario clients are in the Moderate to Very High levels, compared to 70% in WRHA. More importantly, the high risk groups are 54% of Ontario clients, compared to only 37% in Manitoba.
- These results suggest that, as is now done in Ontario, home care services in Manitoba could focus more on higher risk clients, and diverting lower risk clients to community support services.

Allocative Efficiency: Making Better Use Of Home Care Resources

- Resource Utilization Groups (RUG) are used in Canada and jurisdictions worldwide to measure the resource needs for home care clients and to fund home care providers. Clients are assigned to one of 24 RUG based on medical, functional and cognitive characteristics. Expected home care costs per client in the highest level RUG is fifteen times that of the lowest level RUG.

- We assigned each RUG to one of four levels based on expected cost per client and compared the client distribution between Manitoba and Ontario.

RUG Level	WRHA	Ontario
Low	32%	17%
Medium	37%	32%
High	31%	52%

- In Ontario, 52% of clients are in high acuity home care levels, compared to only 31% in Manitoba.

- Ontario focuses its spending on higher need home care clients, which suggests that lower need Manitoba clients could be cared for with relatively more community support and relatively less home care services.

- Overall, Manitoba provides more home care services per capita than Ontario, and it is likely, based on these analyses, that Manitoba could increase allocative efficiency by using home care services for the highest need, highest institutionalization risk clients, and diverting other clients to community support services.

- Over time, this strategy would increase the share of clients in higher MAPLe and RUG levels, reduce the proportion of lower care people in personal care homes, reduce hospital days, and allow Manitoba to reduce pressure on personal care home and hospital beds in the future.

Allocative Efficiency: Main Findings

These findings are a summary of the allocative efficiency analysis in this section.

ED Visits	Inpatient Admissions	Inpatient Length of Stay	Substitution of Day for Inpatient Surgery	Use of Personal Care Home Beds & Home Care
• Compared to the average of comparator regions, only Southern Health-Santé Sud RHA has opportunities to substantially reduce ED visits.	• Prairie Mountain Health and Southern Health-Santé Sud RHAs may have opportunities to substantially reduce inpatient admissions over time. • Acute hospital admission rates are low in WRHA, roughly at the 25th percentile of peer regions.	• All RHAs have opportunities to reduce hospital lengths of stay. • Achieving the peer average lengths of stay would potentially free up enough beds to fund roughly eight years of population growth and aging.	• Manitoba hospitals typically make good use of day surgery relative to the average practice of peers.	• WRHA, Southern Health-Santé Sud, and Prairie Mountain Health RHAs have opportunities to reduce the use of PCH beds. • At the average PCH bed per capita 75+ of peer regions, these RHAs would have used roughly 1,700 fewer PCH beds. • There are opportunities for PCH future low care need residents to receive care in non-institutional, community care settings • Manitoba could increase allocative efficiency by using home care services for the highest need, highest institutionalization risk clients, and diverting other clients to community support services.

CONFIDENTIAL

KPMG

3.2. Health System Current State Assessment: Reflections on the Provincial Health System

Reflections on the Provincial Health System: Approach

The Current State of the Manitoba health system's organizational framework has been conducted as follows:

1. High-level assessment of legislative, legal, and administrative foundation of key entities operating in the system.
2. Review of organizational structure and functions for MHSAL, WRHA and other health entities.
3. Evaluation of existing governance and decision making processes.
4. Consolidated findings from stakeholder engagement sessions have been incorporated to contextualize the findings.

The strategic levers of change have been used as the basis of the evaluation as follows:

For each lever, organizational maturity level has been assessed using the following standard definitions:

Level 5 Optimized	Level 4 Strategic	Level 3 Integrated	Level 2 Managed	Level 1 Initial
Adaptive, opportunistic, synthesized, proactive, agile, continuously improving.	Aligned, disciplined, predictable, quantitatively managed and controlled.	Defined, structured, measured, competent.	Emerging, managed, standardized, isolated, repeatable.	Ad hoc, inconsistent, limited, reactive.

Provincial System: Current State Maturity Assessment

Based on observations related to each lever, Manitoba's health system maturity has been assessed per the table below.

Criteria	MHSAL	WRHA	Other MB Health System Entities*
People & Organizational Structure	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Process & Delivery	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Information Technology	**Level 1 Initial**	**Level 2 Managed**	**Level 1 Initial**
Regulation & Policy	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Governance	**Level 1 Initial**	**Level 1 Initial**	**Level 2 Managed**
Overall Rating	Level 1 Initial	Level 1 Initial	Level 2 Managed

*Includes CancerCare Manitoba, Diagnostic Services Manitoba, Addictions Foundation of Manitoba, and eHealth Manitoba which are outlined in the current state assessment.

Rating Scale:

- **Level 5 Optimized** — Adaptive, opportunistic, synthesized, proactive, agile, continuously improving.
- **Level 4 Strategic** — Aligned, disciplined, predictable, quantitatively managed and controlled.
- **Level 3 Integrated** — Defined, structured, measured, competent.
- **Level 2 Managed** — Emerging, managed, standardized, isolated, repeatable.
- **Level 1 Initial** — Ad hoc, inconsistent, limited, reactive.

Summary of Organizational Current State Reflections

The table below provides a summary of our reflections against each change lever.

Lever	Description
People & Organization	• The structure of past/current operating agreements and service delivery frameworks/practices codify independence and autonomy of regions and sites instead of encouraging performance as part of a province wide system. • Alignment of planning, core service delivery and clinical delivery programs is required to improve effectiveness and resource utilization but many health leaders are concerned about further centralization because of a bias to local delivery and/or because of their experience with poor centralized execution. • Significant system performance gains cannot be achieved without organizational reform. – Stakeholders are hoping that that HSIR will establish an agenda for bold structural change. – Stakeholders will support strategies that address long standing barriers to system performance even if this requires some level of compromise. – Efforts to engage stakeholders in system wide delivery and integrated service planning are viewed as a positive sign of change.
Process & Delivery	• Overall system is influenced/based/structured around acute care centred delivery and provider centred care models: – This restricts the development of alternate delivery models that emphasize community or preventative care or strategies to pursue integrated delivery with alternate cost structures. • Impact of fee-for-service model and complexity of collective agreements has significant impact on organizational performance: – Provider centric model where physicians operate as "independent contractors". – Limited ability of system leadership of management to influence healthcare service practices, delivery standards or cost structures. – Complexity of collective agreements prevents mobility of healthcare workers and restricts ability to operate as an integrated system. • Relationship of healthcare system to University of Manitoba has an impact on healthcare execution: – Lack of alignment of educational/delivery objectives and independence with existing integrated model. • Most stakeholders agree that alignment of planning, core service delivery and clinical delivery programs is required to improve effectiveness and resource utilization but many health leaders are concerned about further centralization because of a bias to local delivery and/or because of their experience with poor centralized execution: – Some sentiment exists that centralization is a failed proposition (although no specific examples or direct evidence was provided) and does not work and that a decentralized model of delivery at the community level will be more responsive and cost effective. – Some sites/organizations have the perception that they are better at delivering service/value than a regionalized or Provincial-level model but this is not supported by imperial data or evidence. – Rural regions share concern that the WRHA does not have the capacity, capability or focus to address province wide issues.

Summary of Organizational Current State Reflections

Lever	Description
Information Technology	There are significant opportunities to consolidate and integrate service delivery that can be facilitated through organizational realignment including: • Establishment of jurisdiction wide programs with consistent service standards, codes of practice, standard work and consistent measurement frameworks. • Alignment of community level delivery with advanced facilities and sites. • Development of province-wide shared services in a number of areas including: – Health administrative services (Human Resources, Finance, Supply Chain); – ICT management, delivery and support; – Call centre (contact and support desk); – Real estate and facilities management; – Clinical engineering; and – Medical device reprocessing.
Regulation & Policy	• The structure of the *Regional Health Authority Act,* past/current operating agreements and service delivery frameworks/practices codify independence and autonomy of regions and sites instead of encouraging performance as part of a province wide system: – Significant factor impacting performance and integration within the WRHA. – Poorly defined performance metrics and service expectations. • Funding conditions are not consistently defined between funding authorities to achieve a coordinated set of outcomes: – Fundamental structural deficit that is impeding its overall delivery capability and prevents meaningful transformation activity. – Funding approach has not provided adequate support for standard operating increases and escalation. – Funding model incorporates direct and indirect funding support to many organizations. – Scope of organizations included in health funding model has grown scope of delivery commitment to new areas. • Legislative framework contributes to overall system complexity: – Privacy legislation contributes significant administrative overhead that does not directly improve patient privacy and restricts system performance. – Role of regions and hospitals not aligned. – Interpretation of Faith Based Hospital Agreement has evolved beyond oversight of clinical practices and standards of care. – Regulated Health Professions Act is complicated to administer and introduces delivery risk without realized benefits.

Summary of Organizational Current State Reflections

Lever	Description
Governance	• Manitoba's overall health system and governance model is overly complex for a population of 1.3M and is sub-optimal in relation to its structural design: – Active / direct management from political level has impaired decision making and accountability across the system. – Poorly defined and overlapping mandates for most entities in the system and particularly in relation between MHSAL and WRHA. – Too many "authorities" (MHSAL, five RHAs, Diagnostic Services Manitoba, Addictions Foundation Manitoba, CancerCare Manitoba) with no formal organizational alignment or accountability for performance at a system level. – Many independent boards and organizations with competing service delivery mandates. – Reliance on consensus and management by committee for system wide coordination and alignment. – No consequences and accountability for independent action or non-performance. – Funding conditions are not consistently defined between funding authorities to achieve a coordinated set of outcomes. • Incremental design and development of the healthcare system has resulted in a highly complex and siloed delivery environment: – Organizational complexity and fragmentation with five RHAs and three other Health Agencies focused on specific services (CancerCare Manitoba, Diagnostic Services Manitoba and Addictions Foundation of Manitoba) is considerable for a jurisdiction of 1.3M citizens. – Inconsistent clinical standards, practices and level of cares between regions, sites and programs. – Different standards of integration create confusion and contribute to higher costs of delivery and administration. – Competition between different programs and sites – "We execute better than everyone else."

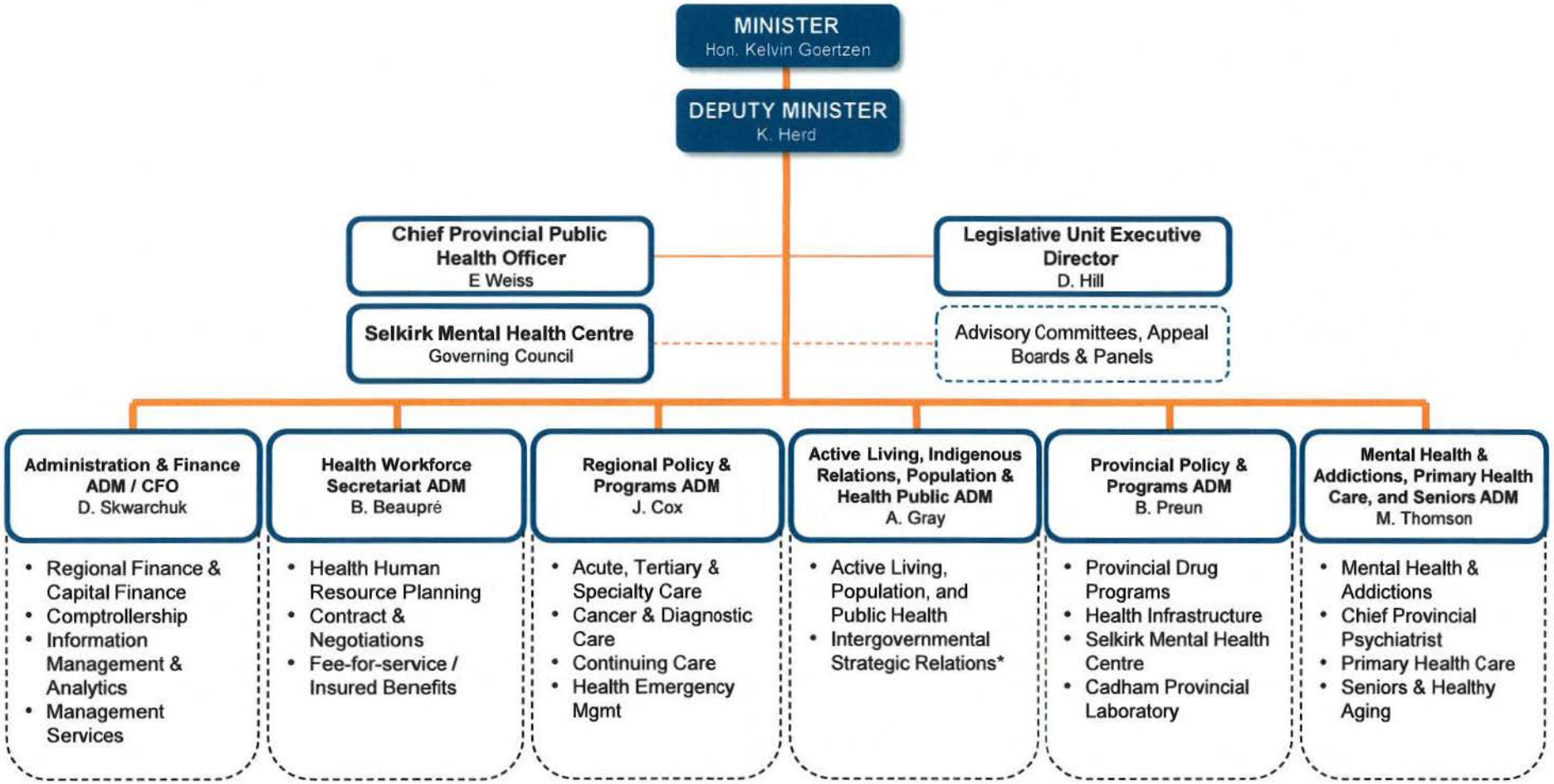
CONFIDENTIAL

KPMG

3.3. Health System Current State Assessment: Manitoba Health, Seniors and Active Living (MHSAL)

MHSAL: Organizational Structure

MHSAL's current structure, as of January 26, 2017, is depicted below. An assessment of the organization is provided over the following slides.



MHSAL: Current State Issues

Lever	Maturity	Findings/Observations
People & Organization	**Level 1 Initial**	• MHSAL has limited capacity and capability to execute its current or a new mandate. – Workforce has limited direct health service delivery exposure. – Workforce has limited exposure to other systems and methods of delivery. – Lack of staff development and performance management across the department. • Department has limited healthcare transformation capacity and experience. • MHSAL retains many health care delivery functions that are not consistent with a departmental mandate in most high performing health systems. These functions are candidates for repositioning within a healthcare delivery organization or for alternate service delivery: – Claims processing and adjudication for Insured Benefits and Health Funded Programs; – Client/Citizen registry; – Selkirk Mental Health Centre Operations; – Cadham Laboratory Operations; – Northern Nursing Stations (3); – Lifeflight Program Operations – Public Health Inspections; – Medical Officers of Health; – Provincial Quick Care Clinics; – Ambulance Fleet Management; – Seniors' Information Line; – Northern Patient Transport Program Administration; and – Blood Services. • MHSAL has approximately 775 FTEs in the Department. • Span of control analysis should be undertaken to identify potential opportunities for improvement as was the case in relation to spans of control analysis undertaken in other government departments as part of the Fiscal Sustainability Review.

MHSAL: Current State Issues

Lever	Maturity	Findings/Observations
Process & Delivery	**Level 1 Initial**	• Policy – Perspective that policy development is administratively focused and not closely aligned with true healthcare delivery challenges / issues. – Many opportunities to realign core policy functions within the organization for improved performance. • Planning and program design – Perspective that the Department has limited planning, program design and oversight capabilities. – Significant limitations identified: capital planning, strategic planning, budget development. • Funding – Department supports a combination of direct and indirect funding processes. – Direct funding agreements have basic performance and service level controls however there are limitations in compliance processes. – Perspective that timeliness of funding approvals and delays associated with the provincial budget development process and funding approvals result in significant delivery challenges at all levels in the system. • Monitoring and performance – Departments maintains initiatives in PEAK alignment solution and coordinates departmental alignment. – Capability to coordinate, manage and report on initiatives at system level is very limited. – Opportunities to capitalize on significant health information assets exist but have not been realized. • Compliance – Environment is reactive and issue oriented instead of programmatic and predictive. – Departmental capabilities to ensure system wide performance and delivery outcomes are limited. – Orientation of OAG and external compliance organizations introduce requirements that the healthcare system is not prepared to support. – Perspective that MHSAL compliance standards are not current and abstractly administrative instead of performance based.

MHSAL: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 1 Initial**	• Mature workforce with limited architecture, planning and solution development capability. • Strong legacy solution support orientation. • MHSAL solutions maintained outside of BTT and eHealth managed environments. • Increasing alignment with eHealth through ICT Strategic Plan recognized as positive step.
Regulation & Policy	**Level 1 Initial**	• Highly complex legislative framework translates into significant compliance orientation in most program areas. • Compliance requirements associated with PHIA legislation add complexity and cost to all processes that most stakeholders do not believe materially increase information security or privacy. • Critical nature of workforce development and labour management functions on all healthcare delivery is universally recognized. – Most stakeholders believe this function is too arm's length from delivery given its direct impact on staff costs. • Many stakeholders identified concerns about the effectiveness and relevance of many regulations and standards given the complexities of current healthcare delivery.
Governance	**Level 1 Initial**	• Role of MHSAL is not clearly defined within the overall healthcare system. – Widely held perspective that MHSAL does not "respect" delegated authority of the RHAs or delivery organizations. – Political governance has been too involved in day to day delivery decision making. • Treasury Board funding and approval processes are not consistent with delegated authorities and introduce a level of complexity. • No formal requirement for integration of services and service delivery at a provincial level. • Efforts to establish Provincial level councils recognized as a positive initiative but not adequate. Inability of these groups to make system wide changes with an emphasis on Health Senior Leadership Council.

CONFIDENTIAL

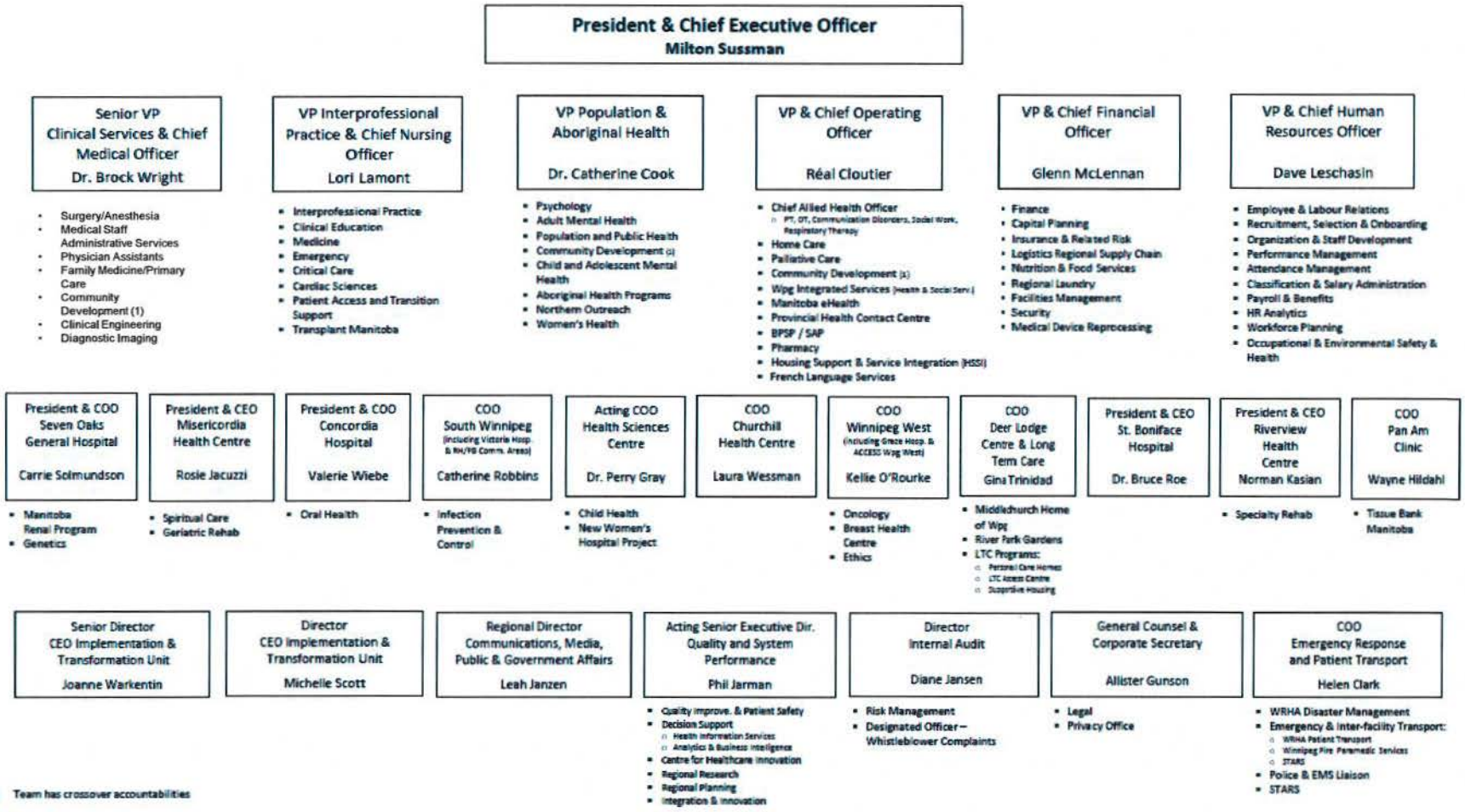
KPMG

3.4. Health System Current State Assessment: Winnipeg Regional Health Authority (WRHA)

WRHA: Organization Structure

WRHA's current structure is depicted below. An assessment of the organization is provided over the following slides.

Winnipeg Regional Health Authority
Organizational Structure – September 2016 - Programmatic Responsibilities



(1) Team has crossover accountabilities

WRHA: Current State Issues

Lever	Maturity	Findings/Observations
People & Organization	**Level 1** **Initial**	• WRHA has limited strong capacity and capability to execute its current or a new mandate. – Lack of staff development and performance management across all parts of the region. – Limitations in leadership capacity in key positions throughout the organization. – Frustrations that the Matrix model acts as an impediment to utilizing exiting capacity and capability effectively. • Region has limited healthcare transformation capacity and experience however there is functional competency in some key service areas: – Project Management Office; – Organizational Change Management and Learning Management; and – Business Redesign/Process Engineering. • Scope of the WRHA has grown to include non-delivery functions that should be retained by the government or better structured within the region. – Non-health social agency funding; – Community and organizational development outside of public health/community health engagement; and – Support of general health and wellness functions. • The WRHA Matrix has never been resolved to provide a model for clear delivery or healthcare. – Role of sites; – Role of programs; – Role of administrative support services and corporate functions; and – Matrix and clinical program integration create/result in patient flow issues and missed service delivery targets/increase wait times.

WRHA: Current State Issues

Lever	Maturity	Findings/Observations
Process & Delivery	**Level 1 Initial**	• Policy – Region has inconsistent policies and procedures from site to site and within some process and program areas. – Efforts to standardize and consolidate processes have had success but with large change management requirement. • Planning and program design – Wide variation in program planning and design capability between sites and programs. – Processes dependent on limited resources and has not been systematized. – Most stakeholders have the perspective that the recent introduction of annual operating plan process has been a significant step forward for the region. – Significant limitations identified: priority setting, capital planning, strategic planning, budget development, program planning, business transformation. • Funding – Region provides funding approval and oversight to all entities and organizations. – Operating and service purchase agreements have limited performance and service level controls defined. – Inconsistencies in operating and service purchase agreements. – Universal perspective that timeliness of funding approvals and delays associated with the provincial budget development process and funding approvals result in significant delivery challenges at all levels in the system. – Limitations in baseline funding and impact of a structural deficit on program delivery. • Monitoring and performance – Perspective that there is a lack of actionable information to support decision making despite significant investment in business and data management systems. – Initial steps to establish a performance monitoring dashboard are viewed positively by stakeholders. – Capability to coordinate, manage and report on initiatives at system level is very limited. – Opportunities to capitalize on significant health information assets exist but have not been realized. • Compliance – Environment is reactive and issue oriented instead of programmatic and predictive. – Regional capabilities to ensure system wide performance and delivery outcomes are limited. – Delivery stakeholders are universal in perspective that WRHA compliance standards are not current and abstractly administrative instead of performance based and supportive.

WRHA: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 2 Managed**	• eHealth delivery has been effective to consolidate major platform systems and infrastructure. • Sites retain ownership of up to 40% of ICT infrastructure at higher cost of ownership and higher risk profile. • Roll out of SAP to all WRHA sites has established a common management platform for core administrative processes. – This solution is managed outside of eHealth. – Opportunities to consolidate other regional entities into the management solution and to extend the capability of the solution have been identified. • Increasing alignment with eHealth through ICT Strategic Plan recognized as positive step. • Lack of alignment on a coordinated strategy to realize information management solutions between parts of the organization.
Regulation & Policy	**Level 1 Initial**	• Highly complex legislative framework translates into significant compliance orientation in most program areas. • WRHA is focused on organizational compliance and standardization that do not improve overall healthcare outcomes. • Compliance requirements associated with PHIA legislation add complexity and cost to all processes that most stakeholders do not believe materially increase information security or privacy. • Critical nature of workforce development and labour management functions on all healthcare delivery is universally recognized. – Most stakeholders believe this function is too arm's length from delivery given its direct impact on staff costs. – No formal policy or regulations acknowledge the role of the WRHA in providing services across the province. These provincial level services are not well understood or documented.
Governance	**Level 1 Initial**	• Board level governance and leadership has been limited. • WRHA is not structured to operate as an integrated region. – Autonomous nature of sites and programs. – Multiple boards and governance not connected to WRHA Board in an integrated manner. – Overlap, redundancy and duplication in executive and management teams. – Unclear accountability or responsibility. • Community foundations impact scope of service delivery and operate outside of control of the region or health system. • Complex relationship between sites, programs and corporate functions. • Concerns with WRHA focus as both a delivery organization and funder.

Understanding Impact of Operating Agreements on Delivery & Culture Within the WRHA

- Status of health delivery organizations as independent and autonomous entities within the WRHA with control of their own governance, assets, structure and vision.
- Separate and distinct governance by an independent board with no direct reporting relationship to the WRHA Board of Directors.
- The WRHA is structured under the *Regional Health Authority Act* through a series of operating and service purchase agreements for all non-corporate sites and facilities.
- This approach has its roots in the formational activity to establish the former Winnipeg Hospital Authority and the Winnipeg Community and Long Term Care Authority. These organizations were integrated to form the WRHA in 1999.
- These agreements set out the relationship between the organization and the region. While there is variation in the agreements, there are common principles and approaches that have been implemented in these agreements.
- While similar agreements do not exist for WRHA owned facilities like Health Sciences Centre, these principles are operationalized in the day-to-day processes of the region.
- This structural reality is a significant factor impacting the performance of the WRHA as a region.
- Some of the key principles established in these agreements include:

> 8.1 The WRHA acknowledges and respects that the Health Corporation is an independent and autonomous entity which has full and unrestricted rights and control of all matters relating to ownership of its property and assets, its corporate structure, and its sponsorship, governance, mission, vision and values, subject to any restrictions imposed by statute or regulations and subject to this Agreement.
>
> 8.2 Consistent with its autonomous governance structure, in fulfilling its obligations pursuant to this Agreement and any applicable legislation, the Health Corporation shall continue to be governed by the Health Corporation Board.

Understanding Impact of Operating Agreements on Delivery & Culture Within the WRHA

9.5 The WRHA, in consultation with the Health Corporation, shall develop, maintain and update Regional Program guidelines and standards for all delivery sites and the Hospital, which shall:

(a) incorporate "best practices"; and

(b) incorporate any applicable prescribed guidelines and standards of professional licensing, regulatory and accrediting bodies.

The WRHA will consider the Health Corporation's input in this regard. Notwithstanding the foregoing efforts at consultation, the WRHA shall maintain absolute discretion in setting the standards that must be adhered to by the Health Corporation and the guidelines that must be taken into account by the Health Corporation, in accordance with Subsection 6.1(e) and this Section 9.5, to the extent that such standards and guidelines relate to matters that fall under the WRHA's mandated authority in the Region.

- This concept is supported by linking funding to performance or service standards established by the WRHA with consultation.
- In practice, the power to establish standards has not been exercised consistently and in many areas stakeholders believe the standards are not outcomes-based but compliance centric.

10.1 The Health Corporation CEO is accountable to the Health Corporation Board. One of the responsibilities of the Health Corporation CEO shall be to communicate, cooperate and work with the WRHA CEO with respect to matters which will have a system-wide impact on planning, resource allocation, finance, quality/standards, program evaluation, and on other issues within the WRHA jurisdiction which have a system-wide impact. Within this context, when normal

- Indirect accountability of site leadership within the overall WRHA governance structure.

15.3 The WRHA shall indemnify, defend and hold harmless the Health Corporation and its officers, directors and employees from and against all costs and expenses of every kind or nature, including legal costs and reasonable lawyers' fees, arising out of or resulting from:

(e) decisions and actions of the Health Corporation CEO in the exercise of Region-wide responsibilities assigned to the Health Corporation CEO by WRHA; or

- Separation of site plans and priorities from decisions made "on behalf of the system" within the region.

Understanding Impact of Operating Agreements on Delivery & Culture Within the WRHA

11.2 If the Health Corporation has surplus operating funding at the end of the fiscal year and:

(a) the Health Corporation has a cumulative operating deficit, then the Health Corporation shall keep 100% of the surplus operating funding for that fiscal year and apply it against the cumulative operating deficit; or

(b) the Health Corporation is in a break even operating position or has a cumulative operating surplus, then the Health Corporation shall keep 100% of the operating funding surplus for that fiscal year within the Health Corporation, provided that the WRHA and the Health Corporation are able to reach a mutual agreement on the use of the operating funding surplus. If the Health Corporation and the WRHA are unable to agree on the use of the operating funding surplus, the operating funding surplus shall be allocated as follows:

(1) Fifty percent (50%) to the Health Corporation; and
(2) Fifty percent (50%) to the WRHA.

11.7 The Health Corporation agrees that if an operating deficit is forecasted or budgeted, the Health Corporation shall notify the WRHA without delay. The WRHA will use its best efforts to assist the Health Corporation to resolve the issue, and the parties shall collaborate on the development and implementation of a plan to eliminate any such operating deficit.

- Reconciliation of funding surpluses and deficits by a prescribed method at the site level.
- In practice, the region has developed capability to manage across the region through consent of the sites but this makes it difficult to manage resources or service delivery in a system-wide context.

11.9 The Health Corporation shall ensure that all costs related to its Ancillary Operations, including but not limited to insurance, taxes, licenses, maintenance and other services, are paid for by revenues from the Ancillary Operations. The Health Corporation may continue to obtain such services as it currently obtains at levels or volumes commensurate with the existing arrangements on behalf of its Ancillary Operations through the WRHA on a cost recovery basis. The Health Corporation shall honour all collective agreements to which they are party pertaining to staff utilized within Ancillary Operations and shall cooperate with the WRHA with respect to negotiating terms and conditions within collective agreements pertaining to such staff and with respect to labour adjustment strategies in the event of contraction of such staff.

- Ancillary businesses controlled by the sites are managed as own source revenues outside of the visibility of the region.
- This gives sites the ability to move ahead with initiatives on an independent basis outside of the system.
- Often these ancillary operation revenues are subsidized by WRHA investment through funding of space, infrastructure and other supports.

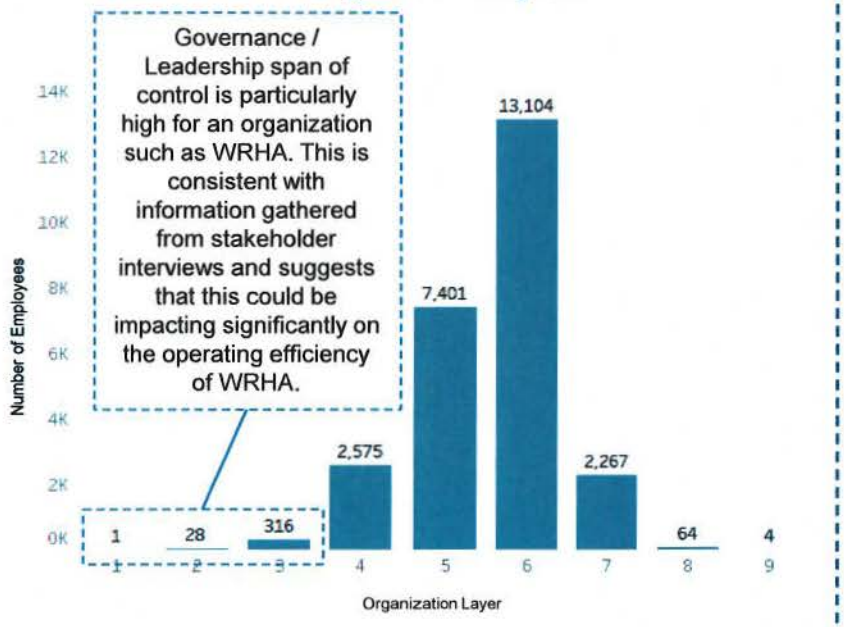
Current State Assessment: WRHA Spans & Layers

A Current State assessment of WRHA's organization structure was undertaken given that this is the largest region by number of staff and overall spend. KPMG utilized WRHA organization data from their core SAP system to undertake the analysis and undertook 30 specific WRHA focused stakeholder interview sessions.

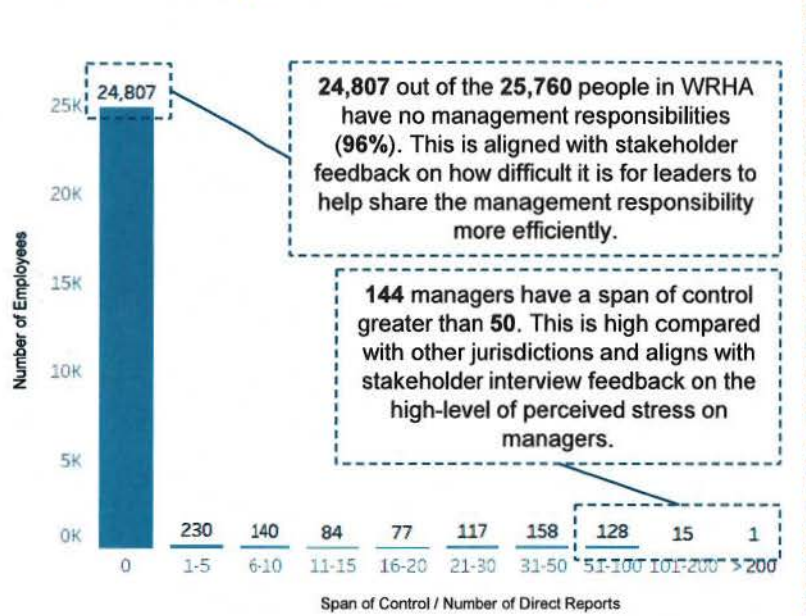
Key findings

- WRHA currently has nine layers of management. This is appropriate given the size of the WRHA. Nine layers is relatively lean compared with other jurisdictions of similar size.
- Our key finding is that there is a high variation on 'span of control' across WRHA from 1:1 to 1:219. There appears to be no consistent number of direct reports per manager for frontline healthcare managers and senior governance members.

Layers Analysis



Spans of Control Analysis



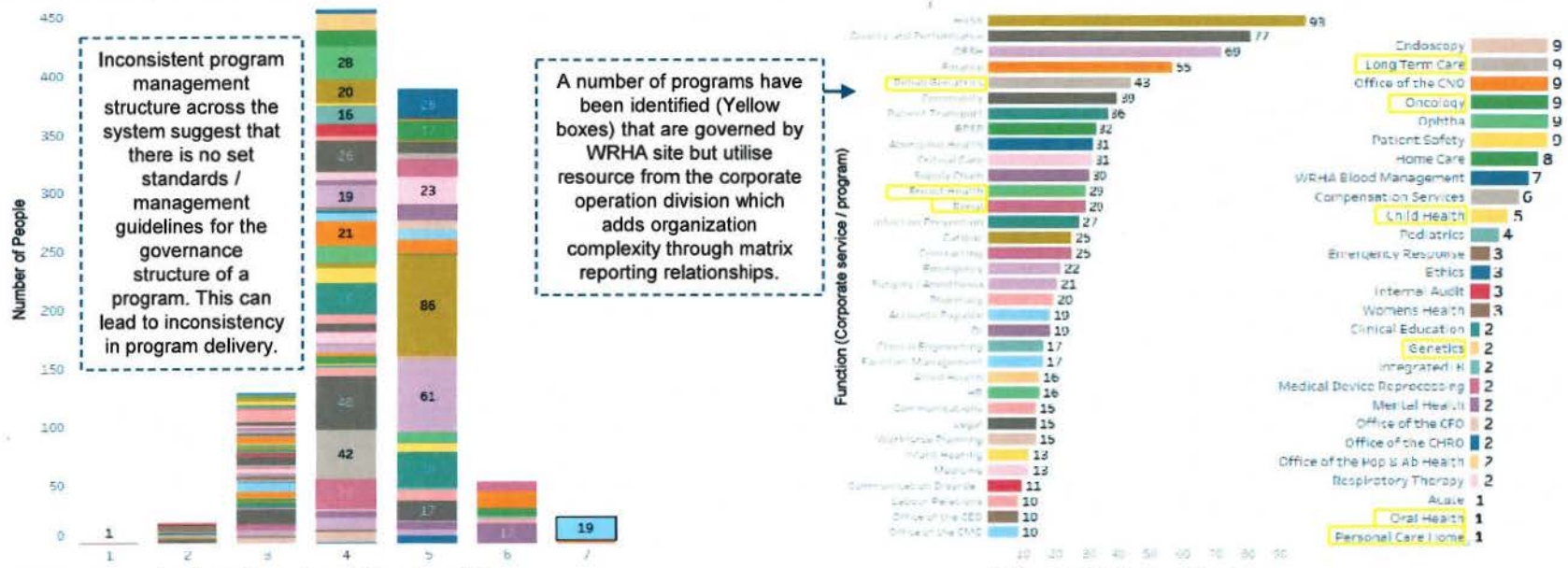
Current State Assessment: WRHA Corporate Matrix

Programs are governed and operate across WRHA at site-, corporate- and Provincial-levels. This adds complexity to reporting relationships by the inception of matrix reporting lines as discussed below.

Key findings

- WRHA is hosting a number of provincial services (such as eHealth) without the formal mandate of being a provincial health authority resulting in tensions with other RHAs.
- WRHA does not have a clinical plan driving its provision and planning of services.
- A number of clinical programs operate as a Provincial-level resource without being structured to support this role in the system raising concerns relating to clinical governance.
- Whilst some corporate functions such as shared services in Finance, HR, and Laundry have been consolidated at WRHA level; other functions (such as Decision Support) are dispersed across WRHA sites. There is also an opportunity to consolidate corporate functions from the other RHAs and Health Agencies (CCB, DSM, AFM) at the Provincial-level.

Corporate Operations Division – Functional Breakdown

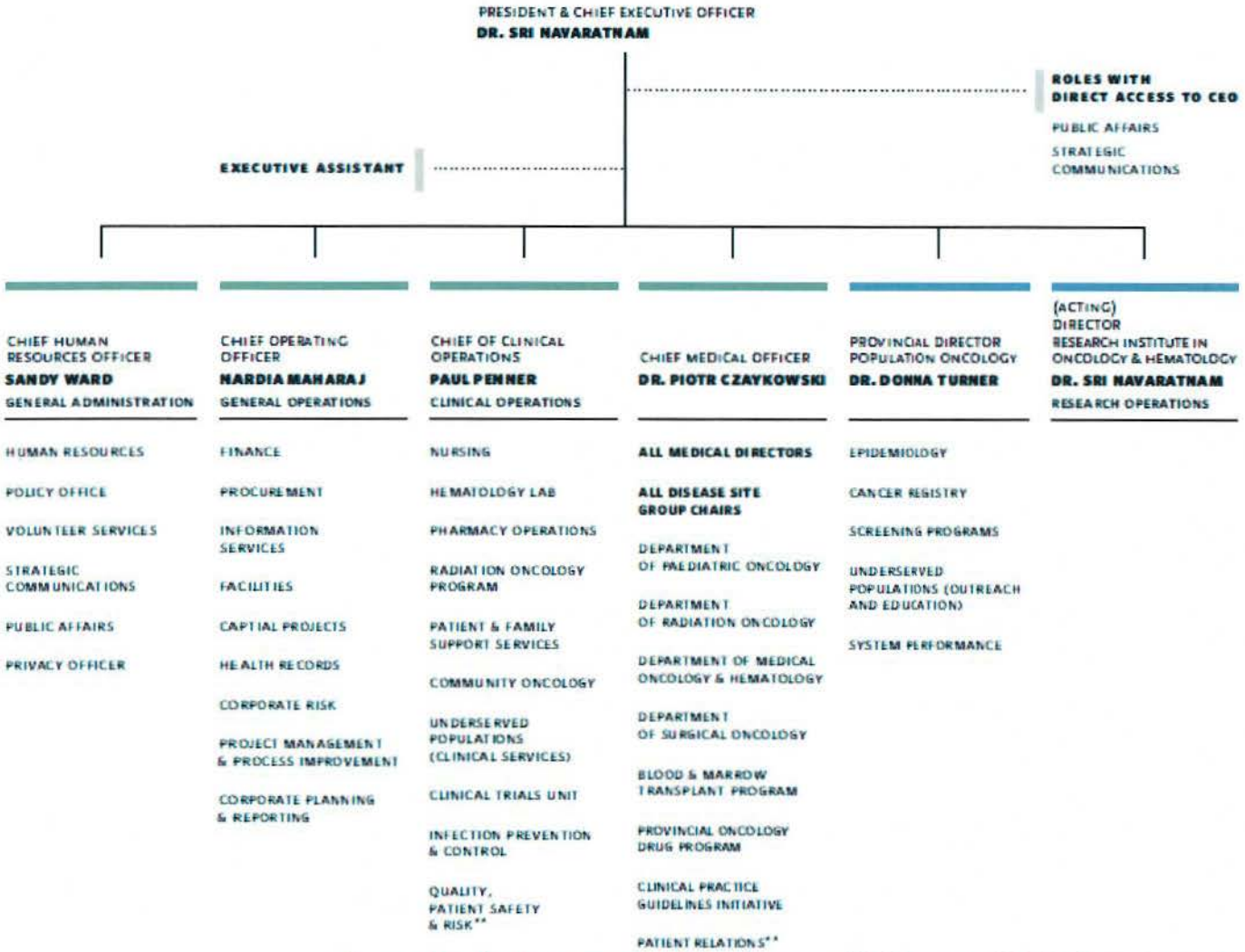


KPMG

3.5. Health System Observations and Reflections: Other Manitoba Healthcare Organizations*

* Includes CancerCare Manitoba, Diagnostic Services Manitoba, Addictions Foundation of Manitoba and eHealth Manitoba

CancerCare Manitoba: Organizational Structure



Source: http://www.cancercare.mb.ca/resource/File/Corporate/CCMB_Organization_Chart-Nov2015.pdf

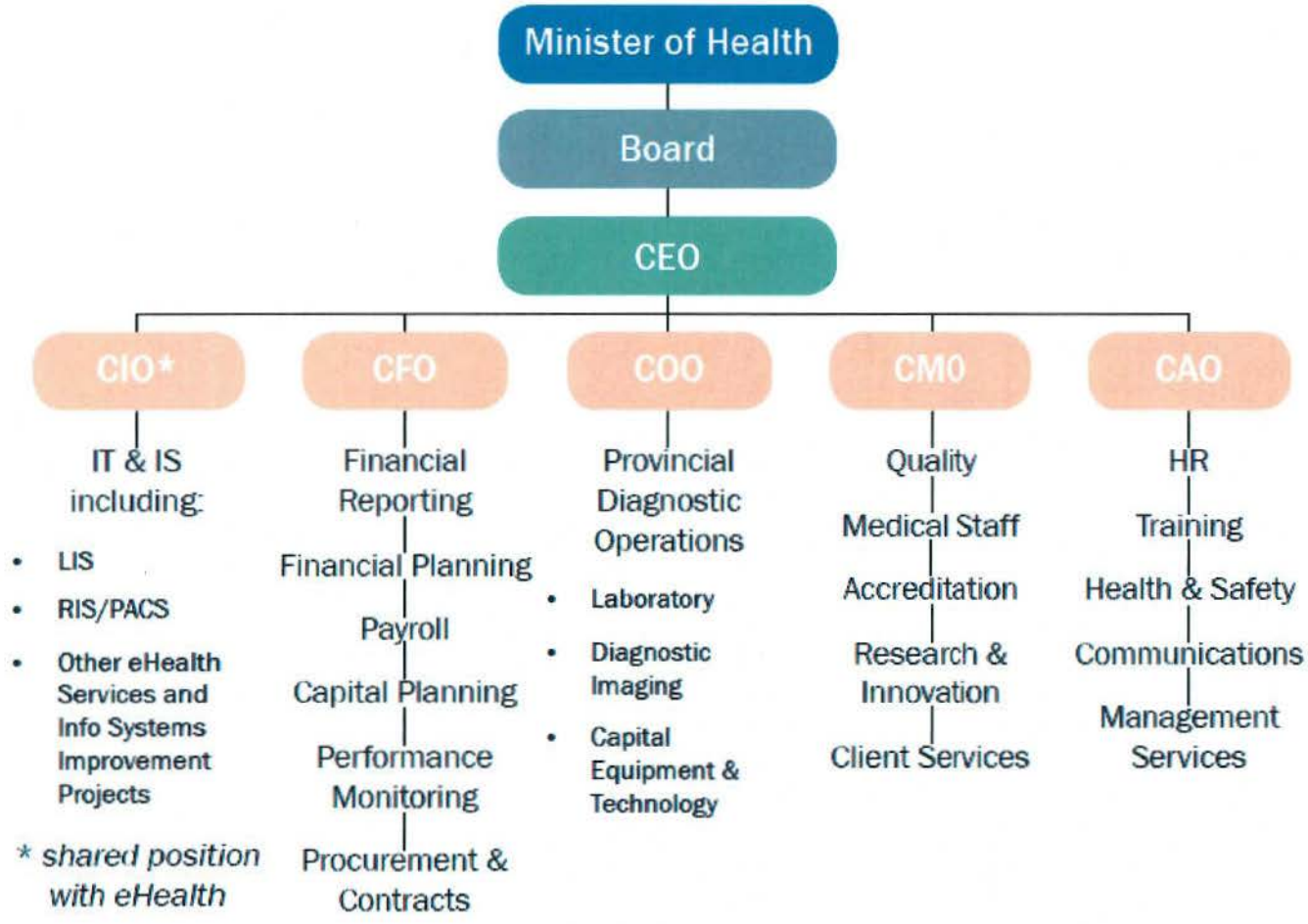
CancerCare Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
People & Organization	**Level 1** **Initial**	• CancerCare has demonstrated service proficiency for outpatient cancer treatment. • CancerCare collaborates with the RHAs, but has not taken steps to coordinate or align its own services within the overall system. • CancerCare strength lies in its clinical delivery experience and disease focused expertise. • Management and administration functions are not differentiators of CancerCare and reinforce autonomy and independence of the organization. • Clinical support to procurement processes for specialized equipment, drugs and facilities is valuable. • No evidence that CancerCare is more cost effective than other Manitoba health care organizations.
Process & Delivery	**Level 1** **Initial**	• CancerCare delivery processes are well established at its own facilities but are not leveraged well across the system. • There are many opportunities to align clinical services for cancer treatment: – Cancer Urgent Care service as offset to ED support; – Outpatient cancer programs in WRHA and other RHAs; – Cancer related surgery; – Rural and remote cancer treatment support. • Stakeholders identified concerns that CancerCare providers will not deliver services outside program controlled sites.

CancerCare Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 1 Initial**	• CancerCare maintains its own administrative and clinical service delivery systems. • There is some coordination with eHealth on network infrastructure and system procurement. • Limited system and data integration with CancerCare systems is a barrier to service integration. • CancerCare ICT delivery capacity is not mature for solution planning, architecture, deployment management and analytics. • Core capabilities are desktop and end user system administration that can be delivered at scale by other organizations in the health system.
Regulation & Policy	**Level 1 Initial**	• CancerCare role to integrate services across the Province is unclear. • Observed tension between CancerCare and provincial oversight and coordination function. • CancerCare does not appear to provide compliance functions. • Stakeholders identified concerns that CancerCare support is considerable when patients are in a CancerCare program and non-existent as a pure system resource. • Approvals are completed by the Department and are not completed in a timely manner. CancerCare Manitoba does not feel empowered to make decisions. • There is a lack of clarity on expectations and measurements. Outcomes and operations reporting does not appear to be an effective way to measure CancerCare performance.
Governance	**Level 1 Initial**	• CancerCare is governed as an independent organization with a separate board and foundation. • Many stakeholders identified concerns about independent actions of the organization to develop its own capability as a stand-alone authority with little integration to the rest of the system. • CancerCare leadership cite lack of a coordinated clinical services plan as the barrier to alignment. • There is a lack of clarity on the role that the Province should play in its capacity as Minister's Representative to direct alignment of the organization's service delivery plan.

Diagnostic Services Manitoba: Organizational Structure



Source: http://dsmanitoba.ca/wp-content/uploads/2016/09/DSM_2015-16AR_Final.pdf

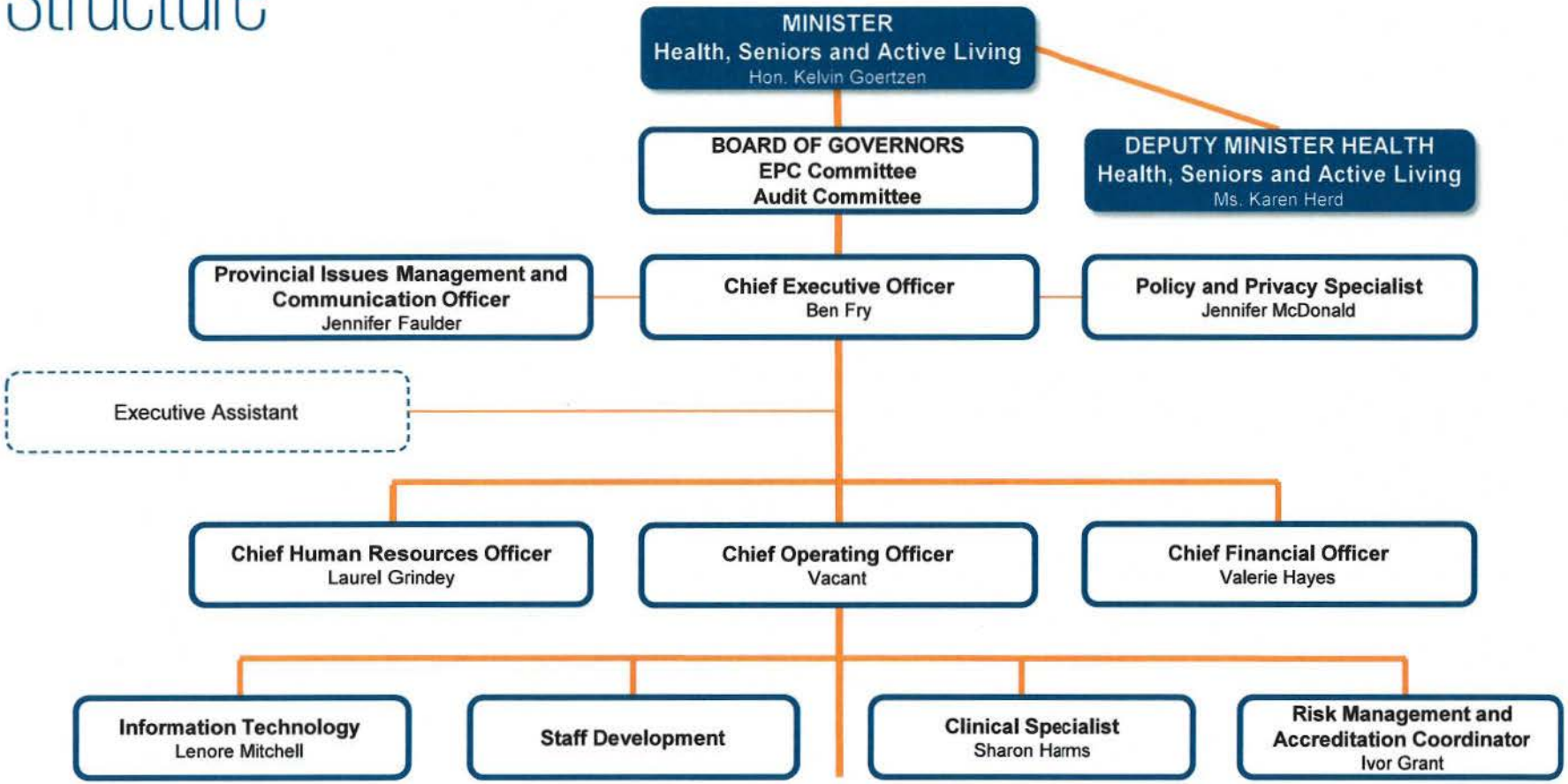
Diagnostic Services Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
People & Organization	**Level 1** **Initial**	• DSM provides delivery for only a portion of the Province's testing and diagnostic services. • Leadership team is focused on developing strategic direction of future state delivery of DSM services with initiatives in place around procurement and Supply Chain Management. • Stakeholders outside of DSM identified concerns that DSM does not have the delivery or management capacity to operate an integrated provincial service.
Process & Delivery	**Level 1** **Initial**	• DSM delivery processes are well established at its own facilities but are not leveraged well across the system. • There are some opportunities to align diagnostics services: – Integration with fee-for-service testing services; – Alignment of hospital and community labs; – Complete rollout and integration of diagnostic imaging to remainder of sites; and – Integration or alignment of Cadham Provincial Laboratory. • Current radiology practice appears to not be contracted effectively and have limited accountability metrics.

Diagnostic Services Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 1 Initial**	• DSM information and clinical systems are not well integrated with the Province's clinical systems. • DSM coordinates ICT delivery with eHealth but maintains its own administrative and clinical service delivery systems. • DSM ICT delivery capacity is not mature for solution planning, architecture, deployment management and analytics. • Core capabilities are desktop and end user system administration that can be delivered at scale by other organizations in the health system.
Regulation & Policy	**Level 1 Initial**	• DSM role to integrate services across the Province is unclear. • Observed tension between DSM and provincial oversight and coordination function. There is room for improvements to the commissioning model. • DSM does not appear to provide a compliance function. • ManQAP initiative and alignment with DSM is not clear. • There is a lack of clarity on expectations and measurements. Outcomes and operations reporting do not appear to be an effective way to measure DSM performance.
Governance	**Level 2 Managed**	• Many stakeholders identified concerns that DSM is more focused on its own organizational autonomy and function than delivery an integrated provincial service. • DSM leadership cite lack of a coordinated clinical services plan and clear delivery direction from the Province as the barrier to alignment. • There is a lack of clarity on the role that the Province should play in its capacity as Minister's Representative to direct alignment of the organization's service delivery plan.

Addictions Foundation of Manitoba: Organization Structure



Addictions Foundation of Manitoba: Current State Issues

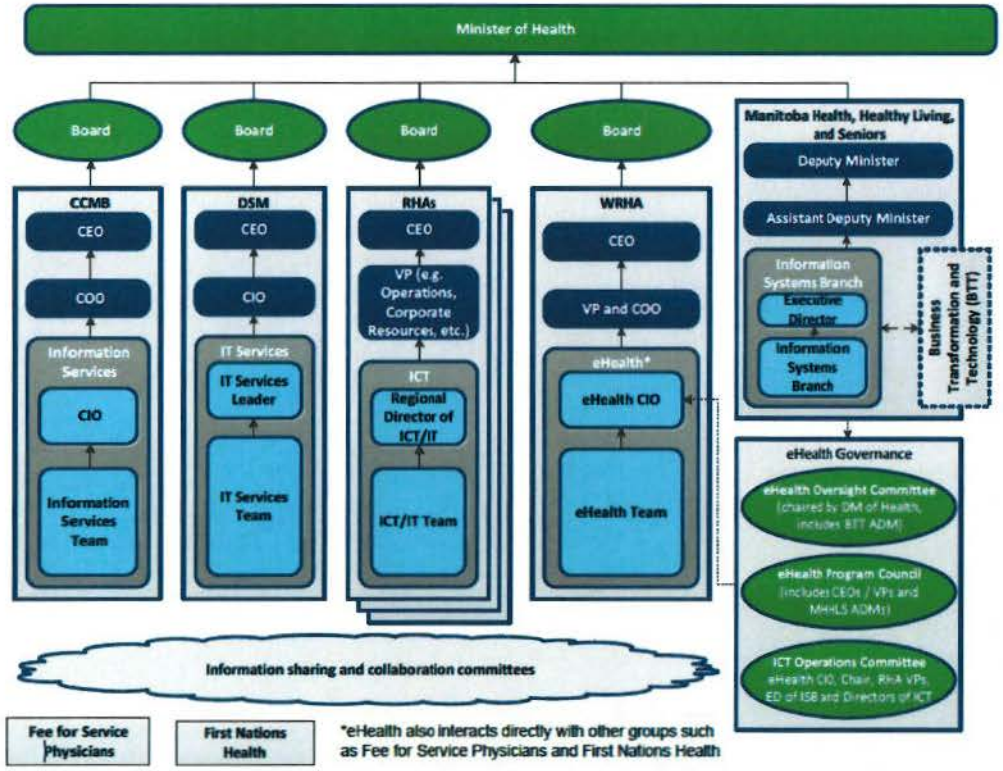
Lever	Maturity	Findings/Observations
People & Organizational Structure	**Level 1** **Initial**	• AFM provides delivery for only a portion of the Province's addictions programs. • AFM has an administration cost of 5.8% of expenditures compared to 4.4% for MHSAL overall.
Process & Delivery	**Level 1** **Initial**	• Stakeholders noted that the current need for services outweighs the resources available within AFM. • Addiction services are currently delivered by a multitude of different services providers. Most of which are much smaller and specialized in size. • There is a lack of integration of AFM programs with clinical addictions and mental health programs across all regions and delivery organizations. • AFM services delivered in AFM facilities are well established compared to services designed as system supports. • AFM services 80% of addictions demand at a cost of $50M where the highest need populations are estimated to cost an additional $15M across the system. Stakeholders suggested that the relative level of financial support should be reallocated from AFM funding to have greater system impact.

Addictions Foundation of Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 1 Initial**	• Current information management system is mostly ad hoc and dispersed. • AFM information and clinical systems are not well integrated with the Province's clinical systems. • AFM currently do not leverage existing healthcare IT such as Telehealth. This could help them to increase the total number / geographical reach of their service.
Regulation & Policy	**Level 1 Initial**	• AFM role to integrate services across the Province is unclear. • The Department quite often comes to AFM to get their assistance in setting policy. AFM is not mandated to provide this level of service. • There are not clear departmental standards for delivery of addictions services. • AFM does not appear to monitor compliance functions. • Stakeholders identified concerns that AFM support is considerate when patients are in a AFM program and weaker as a pure system resource. • There is a lack of clarity on expectations and measurements. Outcomes and operations reporting is not effective to measure AFM performance. • There are opportunities to realign addictions and mental health policy as part of an integrated program.
Governance	**Level 1 Initial**	• AFM is governed as an independent organization with a separate board and foundation. • AFM's current relationship with MHSAL appears to be strong. • AFM leadership cite lack of a coordinated clinical services plan as the barrier to alignment. • There is a lack of clarity on the role that the Province should play in its capacity as Minister's Representative to direct alignment of the organization's service delivery plan.

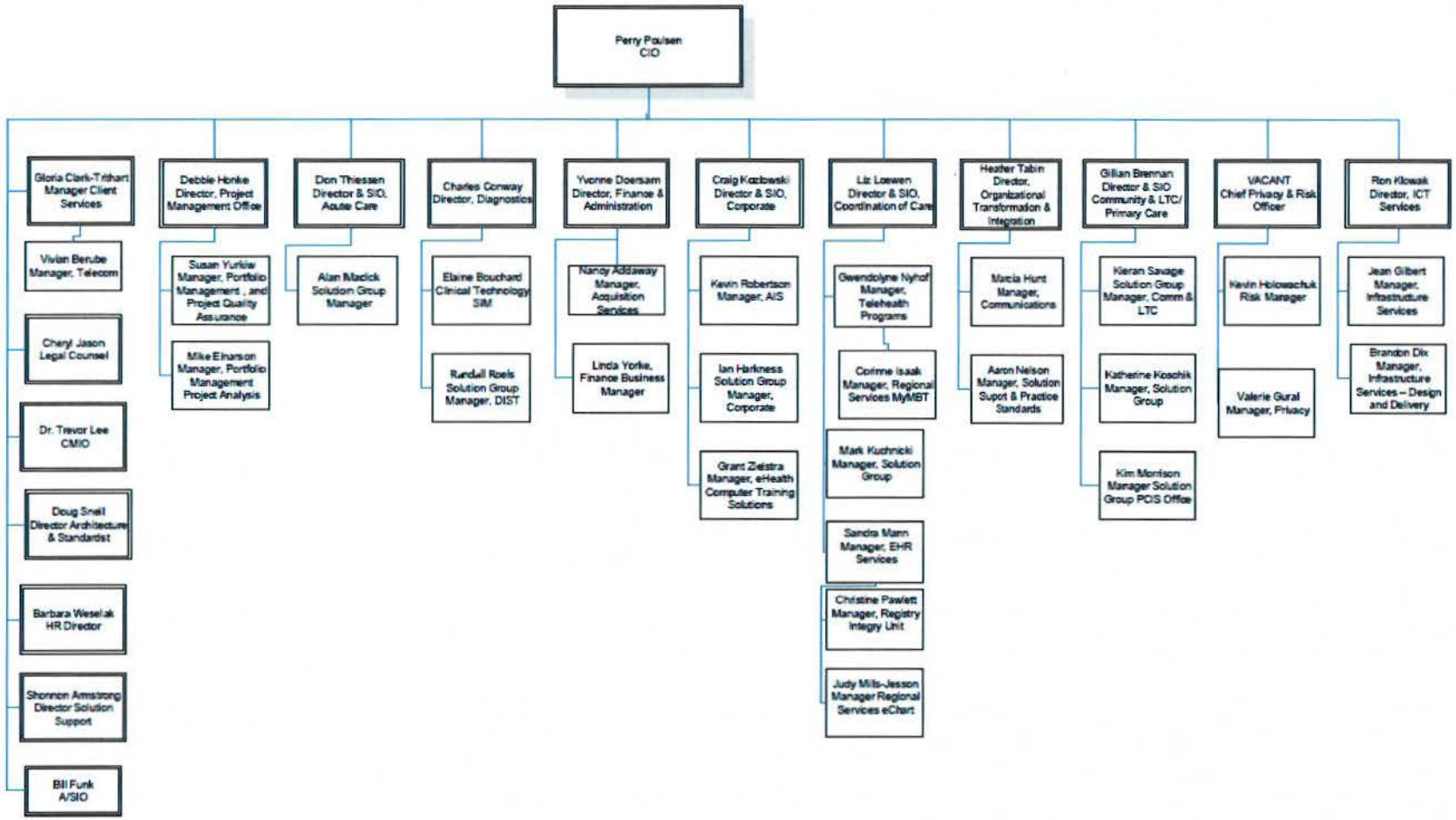
Manitoba's ICT Governance Structure

The governance of eHealth Manitoba is complex and awkward. It incorporates a Provincial-level board and individual delivery boards with all regions and major delivery organizations. This structure was identified by stakeholders as a barrier to integration at the provincial-level.



eHealth Manitoba: Organizational Structure

eHealth's current management structure, as of April 2016, is depicted below. An assessment of the organization is provided over the following slides.



eHealth Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
People & Organization	**Level 2 Managed**	• eHealth is a shared service with strong technical and delivery capability. • eHealth is responsible for only a portion of the Province's health ICT infrastructure. • Key delivery functions are retained by the Province for administrative systems and all health care delivery organizations for many operational systems. • Stakeholders acknowledge that eHeatlh delivery processes are strong despite lengthy delivery cycles and a perceived higher cost. • eHealth administration processes including Supply Chain Management, Finance and HR leverage integrated services provided by the WRHA. • eHealth has collaborated with stakeholders to establish a Provincial level ICT and Information Management & Analysis strategies. • No evidence that eHealth delivery processes are higher cost than other models. Primary issue is that system stakeholders do not reflect the total cost of ownership in their own system planning initiatives.
Process & Delivery	**Level 2 Managed**	• There are opportunities to reduce eHealth reliance on contract resources by moving away from project-based oversight by the Province and making commitments to performance within a longer term delivery plan. • eHealth has a relatively strong organizational maturity for its scope of ICT service delivery. There are opportunities to better align some of these services with the Provincial government (e.g., network, desktop management). • Oversight by central government contributes to delays in funding and project approvals. Other jurisdictions have streamlined these processes to improve predictability and timeliness. • eHealth has not been funded to its established authority and this has contributed to delays in completing the delivery of critical health information systems across the Province.

eHealth Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
Information Technology	**Level 2 Managed**	• eHealth maintains a significant portfolio of application and technology platforms. Key system assets include: enterprise class electronic patient record, RIS/PACs, Admission Discharge Transfer systems and many specialized clinical delivery systems. • A complete risk management assessment of major systems has been completed with all regions and major health delivery organizations. • eHealth delivery methodology includes industry standard methodologies and practices. • eHealth proficiency in these methodologies is strong. There are some opportunities to streamline these processes for more effective delivery and decision-making. • eHealth collaboration with the Province on network and connectivity delivery in rural and northern areas of the Province could be improved. • eHealth collaboration with Canada Health Infoway and other jurisdictions have created opportunities to leverage federal investment.
Regulation & Policy	**Level 1 Initial**	• eHealth role in integrating services across the Province is unclear. It has not been empowered to proceed with full ICT service integration at the region or health care delivery organization level. • Observed tension between eHeatlh and provincial oversight and coordination function. • eHealth does not appear to provide compliance functions. • Approvals are completed by the Department and are not completed in a timely manner. eHealth is not empowered to operate within its established budgetary authority. • There is a lack of clarity on expectations and measurements. Outcomes and operations reporting may not effective to measure eHealth performance. • Establishment of Provincial ICT Plan is a positive step for guiding service alignment.

eHealth Manitoba: Current State Issues

Lever	Maturity	Findings/Observations
Governance	**Level 1** **Initial**	• eHealth governance is extremely complex. It incorporates a Provincial level board and individual delivery boards with all regions and major delivery organizations. This structure is a barrier to integration at the provincial level. • eHealth positioning within the WRHA is a concern for many stakeholders. It contributes to concerns about diminished service priority for non-WRHA initiatives, reduced transparency and a lack of understanding of the organization's role in the system. • eHealth delivery would benefit significantly from clarification of its role as a provincial level service for all health ICT delivery. • Steps should to be taken to better align central government oversight of eHealth delivery functions. Current model has resulted in delays in role out of key systems and increased costs. Leading practices emphasize delivery within an longer term plan window with clear performance management processes.

KPMG

3.6. Health System Current State Assessment: Stakeholder Engagement

Stakeholder Engagement

Over 70 stakeholder meetings were conducted with Manitoban healthcare providers, health system partners, patients, families and care givers. 26,000 Manitobans (patients and healthcare providers) also participated in an online *Have Your Say* survey, hosted for 22 days by the George and Fay Yee Centre for Healthcare Innovation on behalf of MHSAL. Further, there were a six LHIG Focus Groups, independent of KPMG, that provided public input of the 11 key areas of opportunities. Finally, over 500 documents were reviewed.

Themes from engagement and document reviews are outlined over the following slides, in terms of the Sustainability Framework.

A number of promising practices were noted throughout consultations. These practices, such as community paramedic programs, collaborative care models, and indigenous health programs, have been highlighted as opportunities to achieve future economy, effectiveness, and efficiency.

People & Organization

People and Organization refers to the resourcing of the Province as related to staffing, organizational design and structure, as well as workload capacity, skills training processes, and other facets of the Province's workforce.

The following themes were identified in consultations and document reviews:

Ineffective alignment of planning and delivery functions are impeding system effectiveness and resource utilization.

- Alignment of planning, core service delivery and clinical delivery programs is required to improve effectiveness and resource utilization. However, health leaders expressed concern about further centralization due to a bias to local delivery and/or because of their experience with poor centralized execution.
- WRHA is delivering programs across the province without formal scope, mandate, or funding, such as transplant and cardiac services. There is opportunity to formalize provincial services to reduce fragmentation and improve continuity of care across Manitoba.
- Staffing calculations do not reflect current models of care. As a result, staff mix (LPNs, RNs, allied health, physicians) may not be optimized to reflect patient need and achieve desired outcomes across the continuum. The "Have Your Say" survey also identified improving staffing resources as a key opportunity. Stakeholders also identified several opportunities to improve resource utilization, including enabling providers to work to top of scope, granting additional responsibilities to certain disciplines to align with other jurisdictions (e.g., pharmacist prescribing), and leveraging alternative providers such as Nurse Practitioners.
- Rural and remote providers, patients, families and caregivers identified challenges associated with a lack of resources and services, which could be improved through technology (e.g., Telehealth) and flexible resourcing. The Northern Medical Unit was identified as a promising practice to support the availability of primary care providers in rural/remote communities, where 5-6 physicians rotate in and out of the Churchill area. The Unit provides continuity of care to patients, who have access to the same 'community' of providers. Specialists have also demonstrated the ability to provide key services through mobile care; such as eye care services provided through a mobile eye clinic.

System performance gains cannot be achieved without provincial organizational reform to address fragmented capacity.

- The WRHA's matrix structure does not provide a clear delivery model for its corporate functions, sites, or programs, which directly impacts site capacity, flow, and service delivery targets (e.g. wait times). For example, WRHA surgical services were noted to have widely varying capacity (35% at one site), indicating opportunity to evaluate the feasibility of consolidation.
- Stakeholders suggested that there could be consolidation of programs and services within facilities, aligned with findings from the *Clinical and Preventative Service Plan* (report intended to rationalize and map the services needed for Manitobans in a true population-based analysis). Integration of programs and services was a noted challenge across programs and sites in the WRHA. Overall, there was agreement that the system's fragmentation is a barrier to patient navigation to the appropriate provider and facility, which may place unnecessary burden on other parts of the system (e.g., ambulatory-sensitive conditions in ED). Stakeholders will support strategies that address long standing barriers to system performance even if this requires some level of compromise.

Process & Delivery

Process and Delivery refers to the resourcing of the Province as related to staffing, organizational design and structure, as well as workload capacity, skills training processes, and other facets of the Province's workforce.

The following themes were identified in consultations and document reviews:

Operating agreements and service delivery frameworks/practices codify independence and autonomy of regions and sites, instead of encouraging performance as part of a province-wide system.

- There is appetite for greater administrative standardization of provincial services such as Human Resources, Supply Chain (e.g., pharmaceuticals), support functions, Lean management, ICT, real estate and facilities management, clinical engineering, medical device reprocessing, and analytics. Outsourcing could be considered for shared services, while balancing the need for strategic, rather than transactional, relationships with the business.
- A lack of coordination between regions, programs, and sites have contributed to high transport costs within WRHA and across Manitoba. It is noted that there is no contract for air transport services, despite a spend estimated at $70M+ in the North; it is understood that there is a proposal to MHSAL to submit a formal RFP.
- There are jurisdictional gaps with respect to Indigenous populations, reflecting stakeholder observations on disparity in health status and increased healthcare utilization. Jurisdictional gaps include lack of primary care, which impacts chronic disease prevention and management. There are promising practices, such as *Blurring the Lines* in Southern Health-Sante Sud, which has built relationships with First Nations reserves and the First Nations and Inuit Health Branch to successfully address immediate and long-term needs impacting health equity.
- Different standards of integration create confusion and contribute to higher costs of delivery and administration.

Incremental design and development of the healthcare system has resulted in a highly complex and siloed delivery environment.

- Until recently, there has been no master plan or provincial clinical services plan that outlines where and how services are delivered to reduce duplication and improve clinical outcomes (e.g., through the creation of Centres of Excellence). The public and healthcare providers/administrators who participated in the *Have Your Say* survey also noted that the provision of appropriate services is an opportunity for improvement.
- Navigating across the continuum of care was recognized as a challenge by providers, patients, families and caregivers, due to the siloed delivery environment. There is health inequity (particularly related to social determinants of health and indigenous communities) in Manitoba. Opportunities to integrate health and social care, such as building on successes with Early Intervention, were identified as critical to supporting population health.
- The current model restricts the development of alternate delivery models that emphasize community or preventative care or strategies to pursue integrated delivery with alternate cost structures.

Process & Delivery (Cont.)

Process and Delivery refers to the resourcing of the Province as related to staffing, organizational design and structure, as well as workload capacity, skills training processes, and other facets of the Province's workforce.

The following themes were identified in consultations and document reviews:

The system is acute care and provider-centric. The current funding models inhibit care closer to home or in the community.

- 14% of the total health spend is attributed to community or home care, compared to 67% allocated to acute care services. The current funding models do not incentivize providers to deliver care in the community or to reduce hospital admissions. It was noted that there have been efforts to decrease avoidable emergency room visits through programs such as EPIC, a community paramedic project that responds to the top 39 high users of emergency medical services. This program identified $3.2M in savings but these have been difficult to extract.
- Primary care is fragmented; there are numerous types of primary care clinics in close proximity, which is confusing to patient and causes inconsistency in the continuum of care.
- There are challenges in staffing Winnipeg's 6 EDs, which have a high volume of low acuity cases – 46% of ED attendances in 2015/16 were CTAS 4s and 5s (less urgent and non-urgent) as shown in the table below:

Hospital	CTAS 1 & 2	CTAS 3	CTAS 4 & 5	Total
Brandon Regional Health Centre	14%	32%	53%	27,037
Grace Hospital	19%	38%	43%	27,237
HSC Children's	9%	33%	56%	51,909
HSC General	16%	39%	44%	58,615
Selkirk & District Gen Hosp	9%	24%	67%	25,710
Seven Oaks General Hospital	14%	43%	42%	41,311
St Boniface General Hospital	26%	42%	31%	40,156
Victoria General Hospital	19%	45%	37%	31,079
Total	16%	38%	46%	303,054

Process & Delivery (Cont.)

Process and Delivery refers to the resourcing of the Province as related to staffing, organizational design and structure, as well as workload capacity, skills training processes, and other facets of the Province's workforce.

The following themes were identified in consultations and document reviews:

The system is acute care and provider-centric. The current funding models inhibit care closer to home or in the community.

- There is opportunity to decrease the number of EDs in Winnipeg, which would impact services and volumes at each site. A study by the former UK Healthcare Regulator, Monitor (now NHS Improvement) suggests the minimum efficient (economic) scale for an ED is 350,000 attendances per year. Although this is considerably larger than all of Winnipeg's 6 EDs, the majority of scale economies are achieved at 80,000 to 250,000 attendances - EDs of 80,000 attendances or less are below scale and therefore have higher costs per attendance.
- To drive population health reforms, there is opportunity to implement funding levers to shift care "upstream" into the community and that integrate human services to address health equity challenges. There is desire for system-wide incentives to operate cost-effectively across the continuum of care, possibly enabled by funding that follows the patient pathway.
- Fee-for-service was noted as a barrier for effective collaboration across the continuum, although there are examples where promising innovative practices have been adopted within a fee-for-service model to promote collaborative care. For example, the Shared Care model provides a psychiatrist and a counselor to a fee-for-service family physician's office to provide assessments and short-term therapy. An evaluation of the model indicated improved access to mental health services, collaboration among providers, and improved integration of primary and mental healthcare. There is opportunity to add quality-based requirements as part of physician contracts, or the introduction of blended remuneration models to incentivize the achievement of key population health indicators (e.g., improved chronic disease management).

Process & Delivery (Cont.)

Process and Delivery refers to the resourcing of the Province as related to staffing, organizational design and structure, as well as workload capacity, skills training processes, and other facets of the Province's workforce.

The following themes were identified in consultations and document reviews:

Several programs and services lack clarity in terms of their system objectives and improving healthcare outcomes.

- It was observed that there is no clear differentiation in terms of mandate for Access Centres or QuickCare Clinics. For example, Access Centres are not specifically tasked with reducing avoidable admissions, or addressing length of stay through a care at home model.
- Telehealth is not used effectively, and is not part of an integrated care at home model focused on reducing demand for acute care.
- There are a number of programs and projects within the WRHA that are developed in silos, with limited consideration for the impact on other programs, projects, and service. There is no observed process to prioritize projects against strategic priorities, or evidence of a portfolio management approach to managing programs, projects, and their associated benefits.
- There is s a lack of alignment with the educational / delivery objectives and there is large independence with the existing integrated model.

Role and function of community foundations create another level of complexity in the overall delivery system.

- Many stakeholders identified the role of community foundations in the healthcare system as a positive feature but as one that introduces another level of inconsistency.
- They noted that foundations often pursue independent agendas based on priorities not aligned with delivery. This creates challenges for health care delivery organizations and the system as donor funded initiatives create infrastructure that is not appropriately funded for operations or aligned with delivery requirements.
- Some stakeholders identified concerns with the cost effectiveness of these organizations relative to peers in other industries. An evaluation of this point is outside the scope of this review. KPMG was able to verify that foundations have variable operating agreements that may include subsidized rent, access to support and administrative services at low or no cost and management of own source revenues for operations like parking.
- Foundation stakeholders note that their effectiveness is related to their close linkage to the community. They indicated a desire to align their project development activities with delivery and cited the lack of a clear funding plan as a limitation of the system.
- Consideration should be given to the role of foundations and possible realignment within the overall system.

Information Technology

Information Technology refers to all systems that the Province utilizes to manage workloads, store and track data and information, and perform operations.

The following theme was identified in consultations and document reviews:

The eHealth delivery model is effective but significant opportunities remain to further consolidate delivery and lower overall system risk and cost.

- Technology differs across regions and sites, challenging continuity of care and service integration. Telehealth, for example, has not been uniformly integrated across health regions. Although infrastructure is available in most sites consulted, there is opportunity to increase usage to reduce patient transport costs, provide specialized services (e.g. mental health supports) to remote areas, or to provide continuity of care when patients are transferred from Winnipeg to another region.
- Inconsistencies in the deployment of critical systems results in gaps in service capability. Examples include the deployment of an electronic patient care record for the Winnipeg Fire Paramedic Service while other emergency services do not have equivalent systems. This situation impacts the ability of the overall system to manage patients across the continuum of care. Similar impacts can be identified in long term care, home care and in some hospital environments.
- There is a lack of alignment on a coordinated strategy to realize information management solutions between parts of the organization, which has led to fragmentation and a number of ICT solutions across the province. Currently, sites retain ownership of up to 40% of ICT infrastructure at higher cost of ownership and higher risk profile. It was noted that there is no provincial Electronic Health Record (EHR) or solution that integrates existing records, although a common EHR would alleviate current challenges with consistent patient information, safety, and flow across the continuum. Patients and families, including those responding to the Have Your Say survey, expressed frustration that their health story often needed to be re-stated to each provider and indicated that an EHR and greater use of mobile solutions would contribute to system efficiency.
- Complexity of privacy legislation and lack of a system orientation have resulted in a reliance on complicated data sharing agreements to facilitate exchange of patient information across the system. This prevents effective integration of critical management information across the system. For key initiatives that are supported by information, it is common for the initiative to be completed before the data sharing agreements can be finalized.

Regulation & Policy

Regulation and Policy refers to formalized documentation, policy, regulations or procedures that guide the people, processes, and technology underlying the Province's programs and services.

The following themes were identified in consultations and document reviews:

The existing legislative framework contributes to overall system complexity including: confusion over roles and responsibilities, barriers to information sharing, and lack of clarity in roles of regions, sites and programs.

- Policy development is not closely aligned with healthcare delivery challenges/issues. For example, QuickCare Clinics were perceived as a politically-driven mechanism not mandated or aligned with system need.
- Compliance requirements associated with PHIA legislation add complexity and cost to all processes that most stakeholders do not believe materially increase information security or privacy. It is perceived that WRHA organizational compliance and standardization initiatives do not improve overall healthcare outcomes.
- The WRHA roles of regions and hospitals are not aligned.
- Structure of the Regional Health Authority Act, past/current operating agreements and service delivery frameworks/practices codify independence and autonomy of regions and sites instead of encouraging performance as part of a province-wide system.
- The interpretation of *Faith Based Hospital Agreement* has evolved beyond oversight of clinical practices and standards of care.
- The recent introduction of the *Regulated Health Professions* Act has introduced new administration requirements to the system. Stakeholders expressed concerns that this administration effort appears to be increasing patient care delivery risk without realizing the benefits anticipated with the introduction of the Act.
- Fundamental structural deficit that is impeding its overall delivery capability and prevents meaningful transformation activity.
- Funding approach has not provided adequate support for standard operating increases and escalation.
- Funding model incorporates direct and indirect funding support to many organizations.
- Scope of organizations included in health funding model has grown scope of delivery commitment to new area.

The large number of collective agreements (c.169) is viewed as a major barrier to achieving more flexible working practices and to improving productivity and efficiency.

- In a constrained Human Resources environment, the complexity of ~169 collective agreements* is a barrier to the effective use and mobility of healthcare workers, and restricts the ability to operate as an integrated system. There were examples of instances where nursing staff could not provide coverage in other parts of the same facility or within programs in Winnipeg due to the nature of collective agreements; impacts to patients included delayed procedures or longer wait times.
- The WRHA payroll system is not sustainable based on the approximately 113 collective agreements which apply to the WRHA – multiple errors occur at a cost to the WRHA in terms of overpayment and manpower to correct overpayments.

*The 169 collective agreements is a provincial number, and excludes collective agreements with Doctors Manitoba (13) and the Professional Association of Residents and Interns of Manitoba (PARIM)(1). There are 113 collective agreements within the WRHA, excluding Doctors Manitoba and PARIM agreements.

Governance

Governance refers to efficient distribution of accountabilities / responsibilities across governing bodies, clarity in roles and span of control; efficiency in the collection and analysis of information to support decisions; and appropriate application of decision-making methods.

The following themes were identified in consultations and document reviews:

Over reaching and direct engagement by senior officials has impaired decision-making and accountability.

- There were several examples where MHSAL or elected officials became involved in day-to-day decision-making with respect to service delivery, often to the detriment of efficiency, effectiveness, and economy. There are instances where services have been initiated in communities despite lack of appropriate clinical volumes to support safe care. As a result, there is a widely held perspective that MHSAL does not "respect" delegated authority of the RHAs or delivery organizations to make appropriate decisions for the populations that they serve.

Manitoba's overall health system and governance model has poorly defined mandates and lacks an integrated performance management framework.

- Roles and responsibilities between the department and RHAs are not well-defined. In particular, it was noted that the role of the Manitoba Health Department as a governing body could be more effectively defined. There is a lack of understanding of the relationship between the WRHA, the other RHAs, and the Department. It was suggested that decision-making pathways and accountabilities be clarified.
- It was noted that leadership roles and responsibilities overlap between programs and sites, which inhibit the decision-making ability of the organization. There is a reliance on consensus and management by committee for system-wide coordination and alignment.
- A shift away from the WRHA matrix model, in particular an explicit commissioner/provider split with no staff having dual accountability to both a site and a program, was viewed as key enabler to improve clinical governance.
- A performance management framework is required to understand how funding is achieving outcomes for patients. In particular, it was suggested that there be a performance management system for which physicians and facilities would be accountable. However, the availability of data and the lack of an integrated IT solution was a noted barrier to performance reporting.
- There are many independent boards and organizations with competing service delivery mandates.
- There is a desire for funding models that align sites and programs to strategic priorities, as well as incentive systems for budget accountability and reaching performance targets (e.g., % of savings reinvested into the site when budgets are met).
- There is no consistent quality improvement approach at the delivery level, although the WRHA has adopted some early visual management techniques using dashboards. There is appetite for more robust quality improvement programs, with a desire for a "made in Manitoba" approach.

Summary of Observations

The stakeholder engagements combined with our review of documents received drove our initial thinking and provided input for our reflections across the provincial health system aligned to sustainability criteria based on our assessment of high-performing health systems both within Canada and across the globe. A key theme was the need to move beyond a focus just on the organizational structure of the WRHA but to focus on transforming the provincial system as a whole in order to ensure sustainability over the medium-term.

Summary of Main Themes Across the Sustainability Criteria

People & Organization

- Ineffective alignment of planning and delivery is impeding improving system effectiveness and resource utilization.
- Significant system performance gains cannot be achieved without organizational reform (e.g., WRHA Matrix) which must be province-wide given fragmented capacity as opposed to just focusing on WRHA.

Process & Delivery

- Operating agreements and service delivery codifies independence and autonomy of regions and sites.
- Incremental design and development of the healthcare system has resulted in a highly complex and siloed delivery environment.
- The system is acute care- and provider-centric. The current funding models inhibit care closer to home or in the community.
- Multiple services lack clarity in terms of their system objectives and improving healthcare outcomes.

Information Technology

- eHealth delivery model is effective but significant opportunities remain to further consolidate delivery and lower overall system risk and cost.

Regulation & Policy

- The existing legislative framework contributes to overall system complexity including: confusion over roles and responsibilities, barriers to information sharing, and lack of clarity in roles of regions, sites and programs.
- The large number of collective agreements (c.169) is viewed as a major barrier to achieving more flexible working practices and to improving productivity and efficiency.

Governance

- Over reaching and direct engagement by senior officials has impaired decision-making and accountability.
- Manitoba's overall health system and governance model has poorly defined mandates and lacks an integrated performance management framework.

KPMG

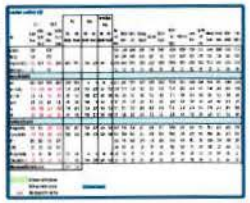
4. Future State & Key Areas of Opportunities Identification

KPMG

4.1. Key Areas of Opportunities Assessment

Approach Methodology

Financial and clinical benchmarking of Manitoba hospitals and system performance.



70+ Stakeholder sessions.

500+ documents and submissions.

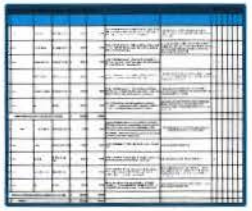
Online surveys from healthcare participants and public.

Current state assessment of healthcare system.

Apply Health Fiscal Performance Criteria.

Apply Sustainability Framework Criteria.

Opportunity Register with over 340 opportunities



Assess opportunities for Implementation Effort and Cost (H-M-L).

Apply standard discounting factors for 2017/18 and 2018/19 and beyond.

Confirm timing and implementation considerations where possible.

Rationalize opportunities and assumptions where possible.

11 areas of opportunity with 36 sub-areas

Group opportunities by area and theme.

Sort by Magnitude of Potential Opportunity and Effort to Implement.

Approach Methodology

The methodology employed to identify the areas is depicted in the diagram in the previous slide.

- All opportunities identified from financial and clinical benchmarking are derived from a comparison to reference jurisdictions. The potential size of these opportunities have been calculated by the KPMG team.
- Opportunities identified by other HSIR review activities were captured together with the benchmarking results in the tracker. Health system stakeholders were asked to substantiate the level of savings by providing program estimates if these were available or to assist the KPMG team with assumptions to establish a representative sizing value.
- Where possible, KPMG rationalized opportunities to minimize overlap and to ensure that potential savings were not double counted. This activity is dependent on specific scenario or implementation assumptions.
- 181 of 348 total opportunities (52%) have representative savings identified. These opportunities have been grouped by area and subarea to provide a comprehensive model.
- All information and analysis is dependent on information and data provided by Manitoba HSIR stakeholder participants. KPMG has taken steps to ensure that critical information is set out in the section and other relevant areas of this report.
- For each of the 11 areas of opportunity; a description, observations, actions, benefits and potential financial impacts, and a summary of estimated potential cost savings for 2017/2018 and 2018/2019 and beyond is provided.

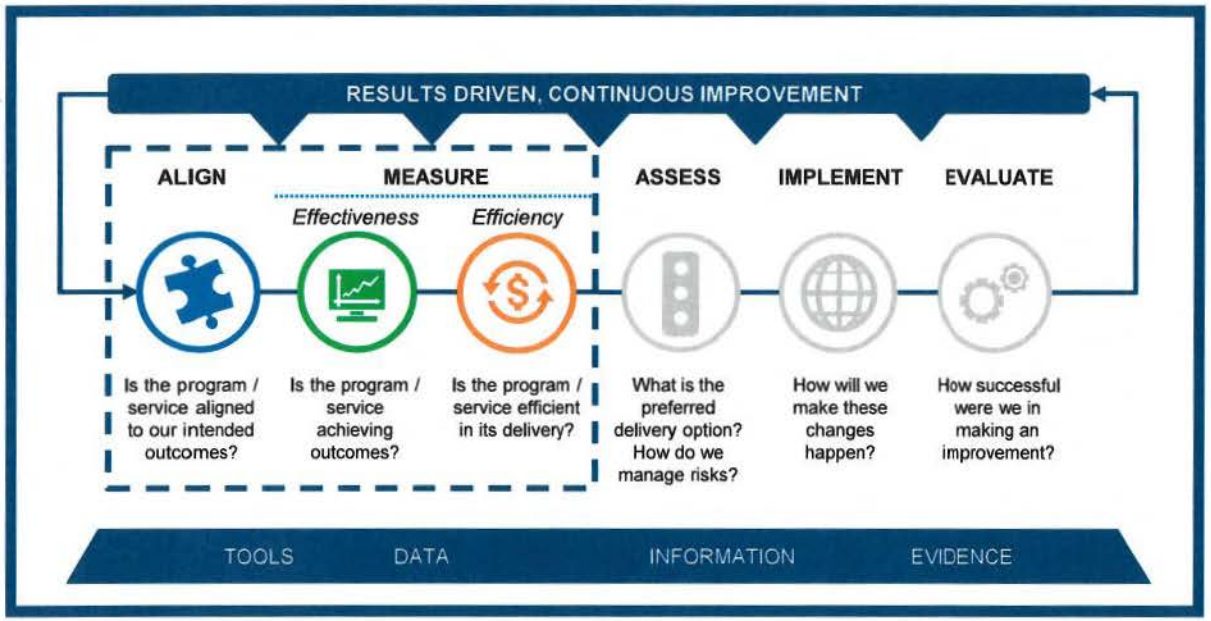
Technical & Allocative Efficiencies

We followed a comprehensive approach based on the measurement criteria set out in the Health Fiscal Performance Review Framework to identify immediate (2017/18), tactical / operational opportunities and medium-term transformation opportunities required to ensure sustainability. Each of the potential key areas of opportunities will be qualified as technical or allocative efficiency.

Lens	Examples	Criteria	Improvement Category	Timelines
Technical Efficiency *'doing things the right way'*	**Potential areas of opportunity for 2017/18** • Tactical cost reduction programs in larger hospitals via opportunities identified through benchmarking. • Consolidation of procurement functions and transformation of Supply Chain. • Improved drugs procurement.	Economy & Efficiency	**Immediately Implementable** *High impact cost management opportunities realized in-year.*	2017/18
			In-Depth Analysis: *Tactical cross-cutting programs across health system.*	2018/19+
Allocative Efficiency *'doing the right things'*	**Areas of potential opportunities in 2017/18 to realize significant savings in a 3-4 year fiscal year timeframe** • Reallocation of funding. • Clinical support services in relation to consolidation/ outsourcing.	Effectiveness	**In-Depth Analysis: Strategic Re-design** *Re-design models of care/service reconfiguration.*	1+ Years
			In-Depth Analysis: Strategic Partnerships *Working with others to deliver existing and new services differently.*	1+ Years

Future State Through the Health Fiscal Performance Review Framework

Cost improvement opportunities identified through the current state assessment were prioritized through the Health Fiscal Performance Review Framework. This allowed us to determine the extent of efficiency and effectiveness achievable, alignment with MHSAL and provincial government objectives, assessing risks and determining the agreed delivery model. The Health Fiscal Performance Review Framework is complementary to the Fiscal Performance Review Framework, developed for the review of all other core government departments, as outlined below. This section focuses on the **Align** and **Measure** components of the Fiscal Performance Review Framework to understand the opportunities and their impacts on potential cost savings and implementation effort in 2017/2018 and 2018/2019 and beyond.



Summary: 11 Key Areas of Opportunity

KPMG has identified over 340 specific cost improvement opportunities which have been brought together thematically into 11 areas or groups of opportunity covering both technical and allocative efficiency with potential for significant cost improvements.

1. Strategic System Realignment

- Re-alignment and focus the roles, responsibilities and accountabilities between the Department, the RHAs, and facilities;
- System policy and planning;
- Performance management and compliance.

2. Funding for Performance

- Explore new models for capital and infrastructure funding;
- Establish commissioning and single payer funding model;
- Coordinate service delivery and funding with other jurisdictions;
- Implement performance-based funding program;
- Implement expenditure management programs.

3. Insured Benefits & Funded Health Programs

- Bring benefits and funded program in alignment with Canadian standards;
- Review inter-jurisdictional coverage agreements.

4. Core Clinical & Healthcare Services

- Reduce unit costs/rates;
- Reduce variability of care/reduce length of stay;
- Shift care from acute to community settings;
- Rationalize and standardize programs and services;
- Rationalize staffing, scope of practice, and scheduling.

5. Diagnostic Services

- Align diagnostics and testing with evidence-based practice;
- Rationalize laboratory and diagnostic programs and sites;
- Reduce unit costs/rates for diagnostics and testing.

6. Healthcare Workforce

- Rationalize collective agreements;
- Enable efficient workforce composition;
- Rationalize healthcare employee benefits;
- Review healthcare provider compensation levels and rates.

Summary: 11 Key Areas of Opportunity (Cont.)

7. Healthcare Transportation

- Review contracted services and procurement practices;
- Review transportation program efficiency, and effectiveness.

8. Integrated Shared Services

- Consolidate health support services;
- Consolidate administrative support services;
- Implement common Program and Transformation Management Office;
- Develop an integrated provincial Supply Chain.

9. ICT Integration & Enablement

- Enable healthcare with ICT investments;
- Develop strategic funding and implementation partnerships;
- Modernize ICT infrastructure and support.

10. Infrastructure Rationalization

- Leverage external/alternative funding and service delivery models;
- Rationalize facilities with system demand;
- Implement new standards for infrastructure delivery.

11. Alternate Service Delivery

- Increase services delivered by private providers;
- Implement new delivery models for claims processing and client registration.

Area of Opportunity #1: Strategic System Realignment

Description

The information contained in this section is directional and is subject to revision based on detailed analysis of foundational legislative and legal frameworks. It also would be subject to completion of detailed planning and financial analysis recommended for Phase II of the HSIR.

When compared to other jurisdictions, both within Canada and globally, Manitoba has one of the most complex healthcare systems for a population of its size. It is characterized by a large number of independent organizations with overlapping jurisdictional responsibility that have limited accountability for delivery and outcomes as part of an integrated system. Governance is fragmented in part due to the large number of independent boards of directors focused on the leadership and stewardship of each organization as a separate entity.

Regionalization has not been effective at delivering all of the benefits envisioned with its introduction in 1997. Established with the intention of creating a more direct level of community accountability for healthcare service delivery, the actions to implement this concept reinforced the growth and development of separate healthcare delivery organizations instead of contributing to the development of a stable system that delivers ensure high quality services in all areas of the Province.

The capacity of the Province's regional health authorities is widely varied. Steps to reduce the number of regions have resulted in some improvements in delivery management capacity but there are critical gaps in capability especially for specialized expertise to oversee clinical service delivery and provide advanced management functions like capital planning or medical device reprocessing. This is particularly true for Interlake-Eastern RHA and the Northern RHA. The capability of individual regions was to be augmented through the shared Regional Health Authorities of Manitoba (RHAM) but this organization has not been effective in leveraging the combined capacity of the system. The recent decision to shut down RHAM operations reinforces this point.

Unfortunately, the steps necessary to effectively consolidate the regions and rationalize governance, management and service delivery structures were not well executed or remain unfinished. Similarly, actions like the consolidation of imaging and testing services through Diagnostics Services Manitoba or the integration of health ICT investments through eHealth Manitoba have not fully achieved intended outcomes because of barriers to complete service integration.

Organizations like CancerCare Manitoba or the Addictions Foundation of Manitoba operate independently within the public system. While these organizations have achieved some clinical service proficiency, they also create significant challenges to service integration because of conflicts between their mandates and those of other organizations in the system. There is not clear evidence that these organizations are more effective at delivering key management services despite leadership claims that they have more cost effective or sustainable operations.

The realities of this organizational complexity contribute to ineffectiveness and inefficiencies in the current system.

Area of Opportunity #1: Strategic System Realignment

Description (Cont.)

The lack of effective integration is particularly true for Winnipeg and the WRHA. Established by the consolidation of the WRHA and the Winnipeg Community and Long Term Care Authority, it is widely acknowledged that the WRHA has never fully integrated as a region. This is in part a result of the 1994 *Faith Based Healthcare Agreement* that reinforced the independent nature of hospitals operated by the Province's major religious groups. This agreement – originally conceived to ensure that these groups could have input on spiritual and community needs as part of health authority system – was operationalized to ensure the autonomous nature of these facilities within the WRHA through a series of operating agreements. Even for sites that have "devolved" their governance to the WRHA as an organization, the principles of independence and autonomy have a significant impact on day-to-day service delivery.

The Province has continued to evolve the WRHA's role in the healthcare system through a series of incremental changes to its mandate. These changes significantly increased the role of the WRHA as a funding organization alongside of its healthcare delivery responsibilities. This has contributed to further imbalance in the system as the WRHA's resources often exceed those of the department. This factor has created significant confusion throughout the system about the role of MHSAL and the WRHA, and in the case of many organizations, significant mistrust of the WRHA because it operates both as a funder and service delivery organization.

MHSAL's capability to provide meaningful oversight and coordination has been eroded by these changes over time. The initial transition of core functions to regional delivery resulted in a significant capability and experience gap at the time of regionalization. Subsequent changes to the department have restored some of this capability but there continues to be limited departmental strength in many fundamental areas including policy development, service planning, delivery oversight and funding.

MHSAL retains a significant number of health care delivery functions that are not consistent with the role of a government department in most high performing health systems. Retaining these functions within the department complicates service integration and misaligns policy, planning, oversight, commissioning and delivery roles.

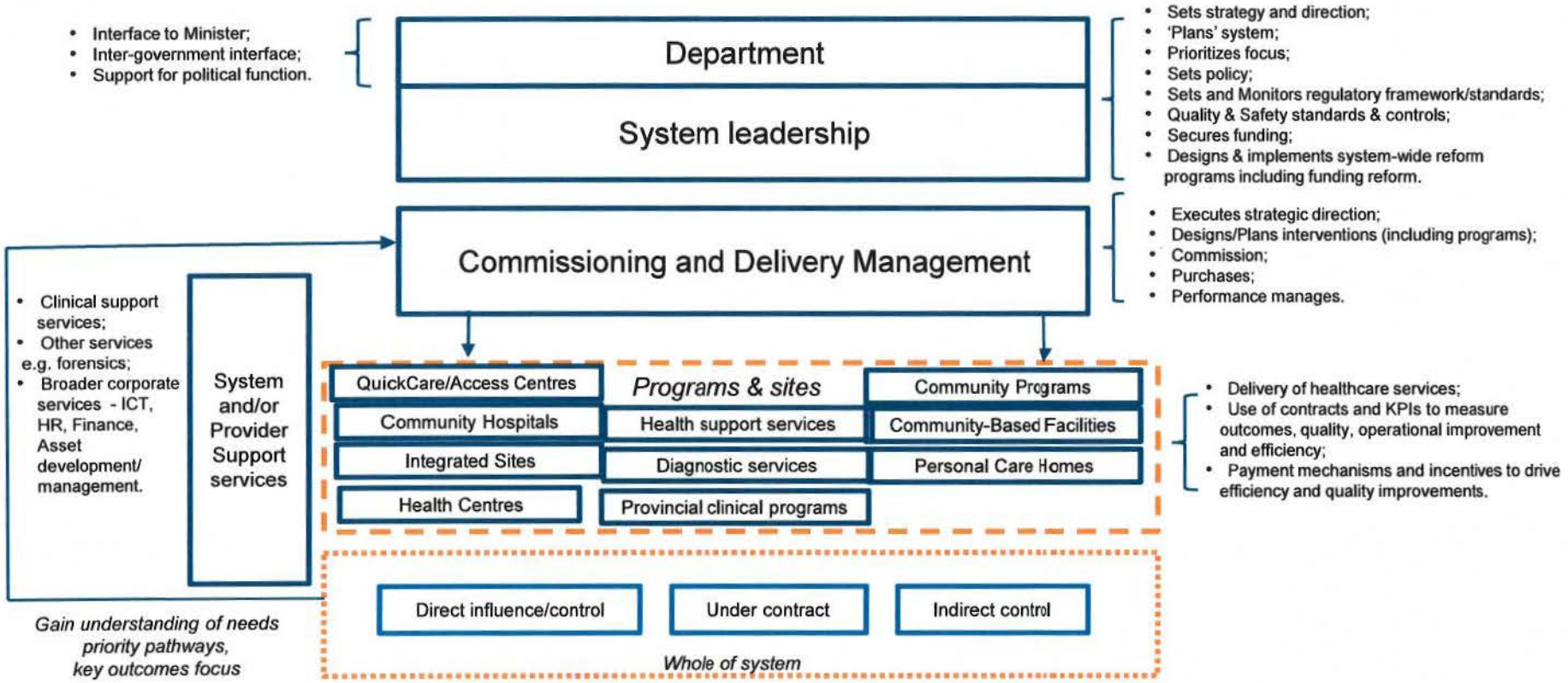
Stakeholders universally confirmed that the structure of the system is a significant barrier to achieving short-term performance gains and longer-term system sustainability.

Other jurisdictions such as Ontario and BC have recognized the importance of structural realignment to bend the curve of long-term healthcare costs. Similarly, high-performing systems in many countries around the world have taken steps to streamline organizational complexity and improve system accountability as an early step in their strategic sustainability plans. They have recognized that failure to address system structure is a major risk area.

The next page seeks to align the roles of MHSAL, RHAs, and Providers with high-performing health systems.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations



Performance Management and Accountability Framework across the provincial system

Area of Opportunity #1: Strategic System Realignment

Description (Cont.)

Given the complexity of Manitoba's environment, a significant realignment is required to simplify the system and strengthen accountability for performance.

KPMG recommends this opportunity as a fundamental enabling condition of long-term system change.

This opportunity area will contribute direct savings through elimination of overlapping governance, leadership, management and delivery functions between all regions and healthcare delivery organizations in the Province.

More important however are the significant efficiency, agility and performance management gains that will be created through a realigned system as well as strengthened capacity of MHSAL to provide strong leadership and oversight to the entire provincial system.

A system realignment is a critical enabler of the Province's ability to realize savings in all opportunity areas identified in this review.

Actions for this opportunity area include:

- Development of a final recommendation for a sustainable health care system for Manitoba including the role of the Department, Regions and health care delivery organizations that incorporates tactical realignment opportunities that can be implemented on a near-term basis.
- Considerations to reduce the overall number of Health Care Delivery Organizations in the system.
- Specific recommendations on the alignment of CancerCare Manitoba, Addictions Foundation of Manitoba, Diagnostics Services Manitoba and eHealth Manitoba within the proposed system structure.
- Development of a high-level realignment road map to guide the transition from current environment to the future state.
- Recommendations about the best approach to activate the system realignment process with emphasis on enabling the Government to establish clear direction and activate the realignment roadmap over a three-year period.
- Recommendations about the governance, structure and resource requirements for a Transformation Management Office to be located within MHSAL to guide the realignment process with a combination of internal and external resources.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations

A process was developed to assess the impacts of realigning Manitoba's health system to each of the three reference models outlined in the following pages with the objective of improving overall system performance and sustainability:

- Potential actions required for realignment of the current Manitoba system have been identified by strategic lever:
  - People and organizational structure;
  - Process and delivery;
  - Information Technology;
  - Regulation and Policy;
  - Governance.
- Sensitive/strategic change opportunities are identified for each alternative.
- The potential impact of the organizational capacity of MHSAL, WRHA and Other Health System Entities is assessed for each alternative.
- The potential impact of each alternative is evaluated against the review criteria:
  - Alignment;
  - Economy;
  - Effectiveness;
  - Efficiency;
  - Implementation/transition risk;
  - Capacity and capability of the health system to execute and sustain the required changes.
- Key reflections about system structure and design going forward are provided in the next section for consideration at this stage in the process.

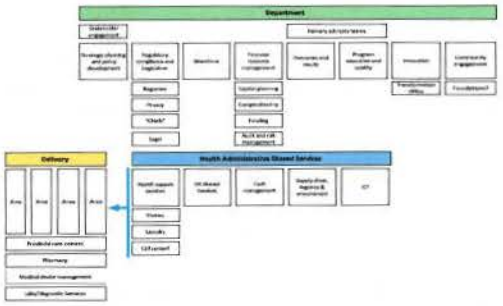
Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

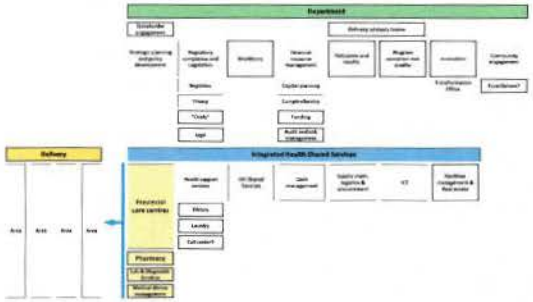
Three reference models have been developed to structure the analysis of reference jurisdictions and to assess the impact of potential changes to Manitoba's health system.

These models are based on the principles of high-performing health systems. Each model separates the role of the Department, Healthcare Delivery Organizations, and Shared Services Organizations as set out below.

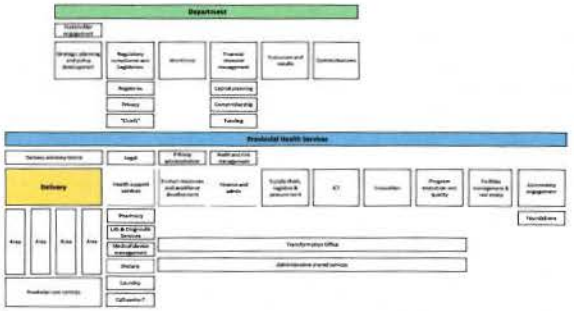
The models represent an increasing level of integration of healthcare delivery and alignment of governance.



Health Shared Services Organization



Integrated Health Services Organization



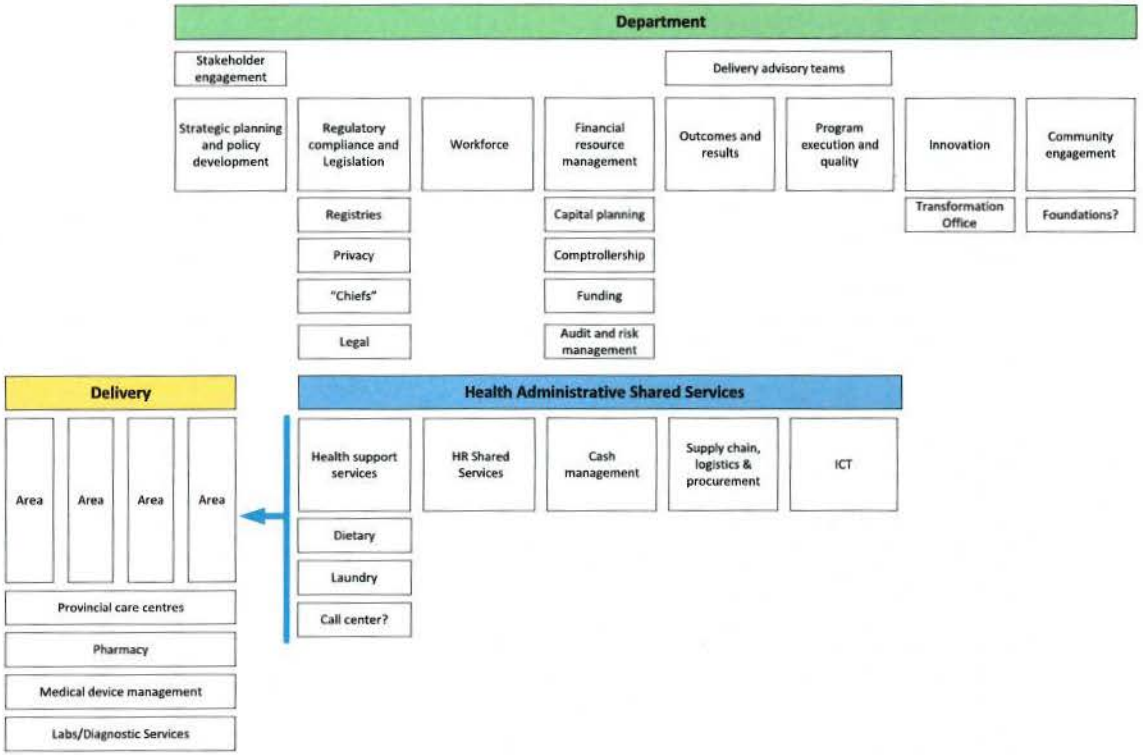
Provincial Health Services Organization

Increasing integration of healthcare delivery and alignment of governance

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Reference Model: Health Administrative Shared Services



Reference Jurisdictions:
Saskatchewan 3S, B.C. PHSA

Key Design Principles

- Establish jurisdiction wide focus on planning, funding and performance.
- Focus healthcare delivery with area or specialty basis.
- Integrate common administrative services to achieve scale and capacity.

Role of Department

- Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes.
- Coordination of program execution and outcomes.
- Manage and monitor system performance through funding agreements.

Role of Delivery Organizations

- Execute service delivery mandate with independent governance and leadership.
- Retain local administrative services and transformation management capability.

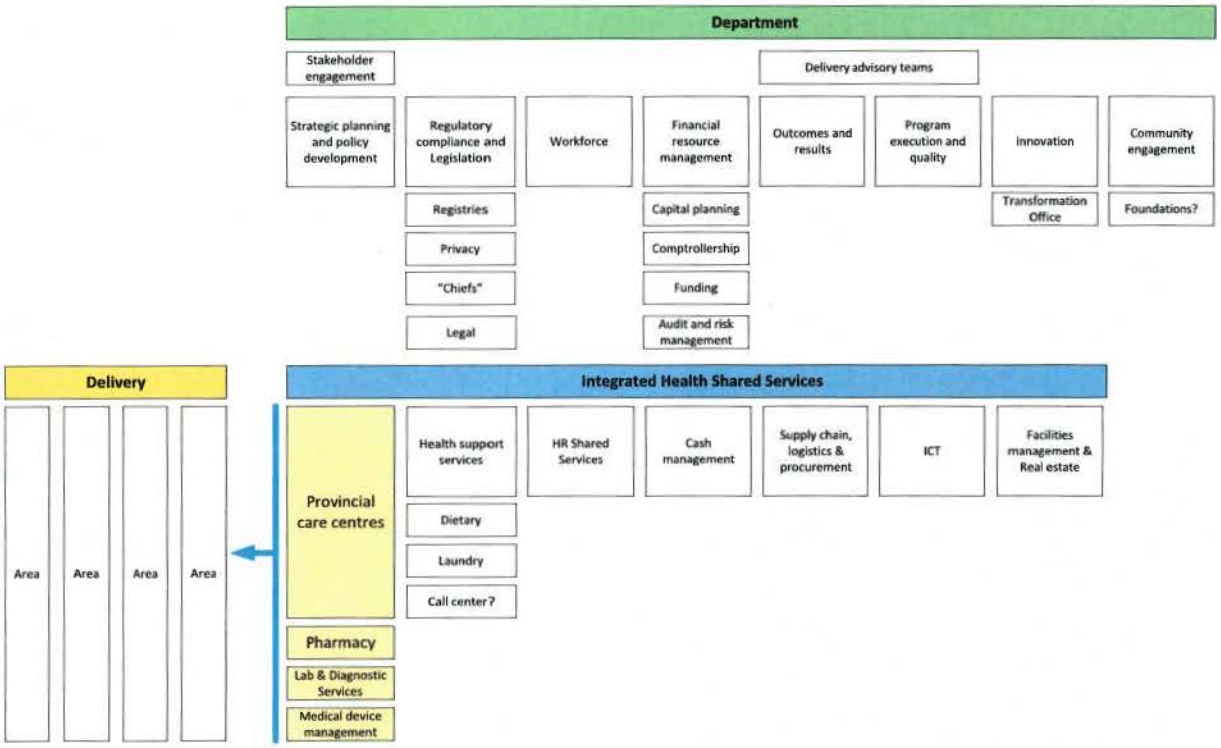
Role of Shared Services Organization

- Integrate and support delivery organizations as service provider.
- Managed with shared governance and SLA/KPIs.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Reference Model: Integrated Health Shared Services



Reference Jurisdictions: Thedacare

Key Design Principles

- Establish jurisdiction wide focus on planning, funding and performance.
- Focus healthcare delivery into areas.
- Integrate jurisdiction wide health delivery services to achieve scale and capacity.

Role of Department

- Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes.
- Coordination of program execution and outcomes.
- Manage and monitor system performance through funding agreements.

Role of Delivery Organizations

- Execute service delivery mandate with independent governance and leadership.
- Retain local administrative services and transformation management capability.

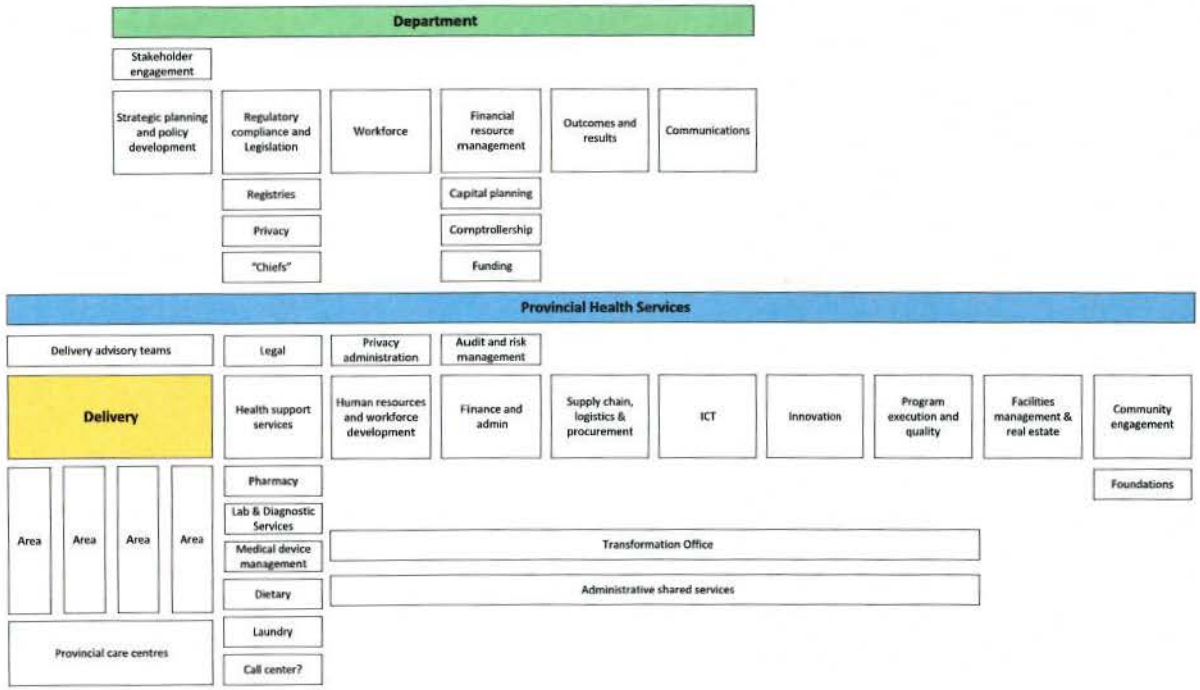
Role of Shared Services Organization

- Integrate and support delivery organizations as service provider.
- Consolidate and integrate whole jurisdiction services and provincial care programs/sites.
- Managed with shared governance and SLA/KPIs.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Reference Model: Provincial Health Services Organization



Reference jurisdictions:
Northern Territory, Alberta Health Services, NHS England
LHINs (Ontario), PHSA (B.C.)

Key Design Principles

- Establish jurisdictional focus on planning, funding, compliance and outcomes reporting.
- Establish corporate delivery organization with mandate to integrate all health, administration/support and transformation services at the jurisdictional level.
- Eliminate redundant and competing governance.

Role of Department

- Centralize critical policy, planning, workforce development, funding, and compliance and outcomes reporting processes.
- Manage and monitor system performance through funding agreements.

Role of Shared Services Organization

- Execute service delivery mandate with independent governance and leadership.
- Integrate all delivery, administrative services and transformation management processes.
- Consolidate and integrate all healthcare delivery programs.
- Consolidate all community engagement and foundation activities.
- Single integrated governance structure.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Based on the Current State assessment, the capability of Manitoba's health care system is in the early stages of operational maturity (see below). This is a significant factor to consider in realignment initiative.

Re-design of any system requires careful consideration to ensure that the implemented changes will actually achieve the intended outcomes. Lessons learned from other jurisdictions underscore the critical nature of this point with respect to health system change. Programs that do not plan for the development of capability and capacity in a structured way often achieve sub-optimal results.

Relative comparison of organizational maturity by lever

Criteria	MHSAL	WRHA	Other MB Health System Entities
People & Organizational Structure	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Process & Delivery	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Information Technology	**Level 1 Initial**	**Level 2 Managed**	**Level 1 Initial**
Regulation & Policy	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**
Governance	**Level 1 Initial**	**Level 1 Initial**	**Level 2 Managed**
Overall Rating	**Level 1 Initial**	**Level 1 Initial**	**Level 1 Initial**

Rating Scale:

- **Level 5 Optimized** — Adaptive, opportunistic, synthesized, proactive, agile, continuously improving
- **Level 4 Strategic** — Aligned, disciplined, predictable, **quantitatively managed and controlled**
- **Level 3 Integrated** — Defined, structured, measured, competent
- **Level 2 Managed** — Emerging, managed, standardized, isolated, repeatable
- **Level 1 Initial** — Ad hoc, inconsistent, limited, reactive

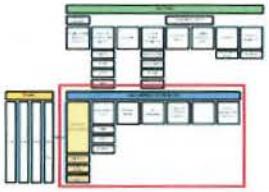
Area of Opportunity #1: Strategic System Realignment

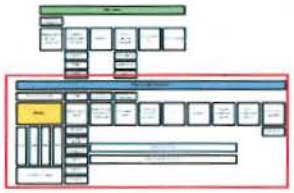
Analysis & Observations (Cont.)

The following chart shows the potential impact on the capability of the Manitoba healthcare system by aligning it to one of the leading practice models.

This analysis demonstrates that there could be significant performance gains associated with higher levels of integration. This has been the basis of decisions made by other jurisdictions like Saskatchewan or Alberta to pursue the integration of all healthcare delivery into a single health services organization.

Potential impact on overall health system organizational capacity by lever





Criteria	Health Administrative Shared Services	Integrated Health Shared Services	Provincial Health Services Organization
People & Organizational Structure	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 4 Strategic
Process & Delivery	Level 1 Initial → Level 2 Managed	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 4 Strategic
Information Technology	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 4 Strategic
Regulation & Policy	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 4 Strategic
Governance	Level 1 Initial → Level 2 Managed	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 5 Optimized
Overall Change In System Capacity	Level 1 Initial → Level 2 Managed	Level 1 Initial → Level 3 Integrated	Level 1 Initial → Level 4 Strategic

Rating Scale:

- **Level 5 Optimized** — Adaptive, opportunistic, synthesized, proactive, agile, continuously improving
- **Level 4 Strategic** — Aligned, disciplined, predictable, quantitatively managed and controlled
- **Level 3 Integrated** — Defined, structured, measured, competent
- **Level 2 Managed** — Emerging, managed, standardized, isolated, repeatable
- **Level 1 Initial** — Ad hoc, inconsistent, limited, reactive

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

The following chart identifies the conceptual actions required to realign Manitoba's system to the respective reference models. Sensitive change opportunities are identified for each option in the final section of the table. The specific actions required to activate the recommended system design will be defined in Phase 2 of the HSIR.

Levers Of Change	Health Administrative Shared Services	Integrated Health Shared Services	Provincial Health Services Organization
People & Organizational Structure	• Consolidate all policy, planning, funding and oversight functions at departmental level. • Standardize regional delivery for core services. • Consolidate jurisdiction level services into centers of excellence. • Streamline role of WRHA as a region.	• Consolidate all policy, planning, funding and oversight functions at departmental level. • Standardize regional delivery for core services. • Consolidate jurisdiction wide services into integrated provincial organization. • Realign role of WRHA as a region.	• Streamline all policy, planning, funding and oversight functions at departmental level. • Establish a single provincial integrated health delivery organization.
Process & Delivery	Replace site based delivery support for: • Dietary; • Laundry; • ICT; • Supply Chain; • Transactional Human Resources shared services; • Transactional Financial shared services; • Health contact/call center. Retain site/program delivery accountability: • Management and administration; • Health program delivery; • Business transformation and change.	Replace site based delivery support for: • All level one services; • Facilities management and real estate; • Provincial care centres; • Laboratory program; • Integrated diagnostics and laboratory services; • Medical device management. Retain site/program delivery accountability: • Management and administration; • Health program delivery; • Business transformation and change.	Replace site based delivery support for: • All level one services; • All level two services; • Business transformation and change; • Management and administration. Retain site/program delivery accountability: • Health program delivery.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Levers Of Change	Health Administrative Shared Services	Integrated Health Shared Services	Provincial Health Services Organization
Information Technology	• Consolidate all ICT delivery into single organization for all sites. • Shift to single integrated enterprise management and administration solution. • Eliminate local site ICT delivery role. • Consolidate eHealth and Information System Branch (ISB) functions.	• Consolidate all ICT delivery into single organization for all sites. • Shift to single integrated enterprise management and administration solution. • Eliminate local site ICT delivery role. • Consolidate eHealth and ISB functions. • Opportunities to include advanced ICT functions like clinical engineering.	• Consolidate all ICT delivery into single organization for all sites. • Shift to single integrated enterprise management and administration solution. • Eliminate local site ICT delivery role • Consolidate eHealth and ISB functions. • Opportunities to include advanced ICT functions like clinical engineering. • Establish single clinical/administrative analytics environment.
Regulation & Policy	• Redefine role and focus of WRHA as healthcare delivery organization. • Realignment of region and site operating agreements. • Develop and implement service purchase agreements for shared services. • Restore all agency funding and oversight functions to MHSAL.	• Redefine role and focus of WRHA as healthcare delivery organization. • Realignment of region and site operating agreements. • Develop and implement service purchase agreements for shared services. • Restore all agency funding and oversight functions to MHSAL. • Changes to legislation and acts for provincial care centres and jurisdiction wide services.	• Legislation and regulations to establish provincial health services organization including changes to RHA and Hospitals Acts. • Develop and implement performance based funding framework agreement.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Levers Of Change	Health Administrative Shared Services	Integrated Health Shared Services	Provincial Health Services Organization
Governance	• Consolidate performance optimization and transformation capabilities at the Provincial-level. • Consolidate all shared services management under a single board. • Retain/refocus RHA and provincial care centre boards and management teams.	• Consolidate performance optimization and transformation capabilities at the Provincial-level. • Consolidate all shared services and provincial centre management under a single board. • Retain/refocus RHA boards and management teams.	• Restructure MHSAL as policy, funding and oversight organization. • Consolidate all RHA and site boards into a single organizational structure. • Focus delivery organizations on integrated care program execution. • Redefine role of site governance on patient care, practice standards and delivery execution.
Sensitive/Strategic Change Opportunities	• Consolidation of HR and Finance transactional process teams into a single organization. • Extension of health support services to all regions. • Integration of ISB and eHealth into a single delivery organization. • Shift delivery related functions like Cadham Labs and Selkirk Mental Health Centre (SMHC) to appropriate delivery organization. • Repositioning CancerCare and Addictions Foundation of Manitoba. • Opportunities to leverage alternate delivery for: administrative shared services execution, Supply Chain Management (SCM).	• Consolidate all health administrative shared services actions. • Consolidation of HSC, SBGH, CancerCare, AFM and DSM boards into governance under single delivery organization. • Incorporation of additional health support services with high delivery cost including things like medical devices, pharmacy and diagnostic services. • Opportunities to leverage alternate delivery for: diagnostic, lab, pharmacy, real estate.	• Consolidate all health administrative shared services actions and integrate health shared services plus. • Consolidation of all RHA and site boards into a single delivery organization. • Integration of foundations and community outreach into an integrated program. • Opportunities to change configuration of facilities with emphasis on Winnipeg. • Potential rationalization of hospital sites. • Opportunities to leverage alternate delivery for: system transformation, Public Private Partnerships (P3), additional health delivery services.

Area of Opportunity #1: Strategic System Realignment

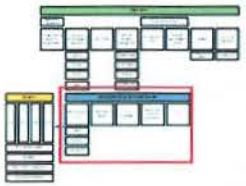
Analysis & Observations (Cont.)

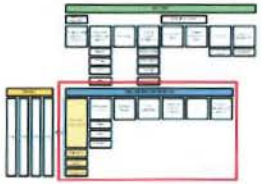
The following chart assesses the impact of strategic system realignment against the HSIR criteria.

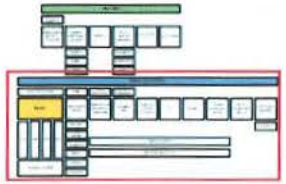
This analysis clearly shows that integration at the provincial scale may result in a better strategic result overtime that there are considerable risks associated with initiatives that move to this level of integration in a single step.

A made in Manitoba hybrid model is an option that balances improvement gains against Manitoba's capability and overall system realignment risk.

Potential improvement effect by sustainability review criteria







Criteria	Health Administrative Shared Services	Integrated Health Shared Services	Provincial Health Services Organization
Alignment	Neutral / Uncertain (3)	Moderately Positive (4)	Moderately Positive (4)
Economy	Neutral / Uncertain (3)	Moderately Positive (4)	Moderately Positive (4)
Efficiency	Neutral / Uncertain (3)	Moderately Positive (4)	Strongly Positive (5)
Effectiveness	Moderately Positive (4)	Moderately Positive (4)	Strongly Positive (5)
Implementation/Transition Risk	Moderately Positive (4)	Moderately Negative (2)	Strongly Negative (1)
Capacity and capability to execute	Neutral / Uncertain (3)	Neutral / Uncertain (3)	Moderately Negative (2)
Overall Rating	Neutral / Uncertain (3)	Neutral / Uncertain (3)	Moderately Positive (4)

Made in Manitoba Hybrid to balance improvement gains against capability and implementation risk.

Rating Scale: Strongly Positive (5); Moderately Positive (4); Neutral / Uncertain (3); Moderately Negative (2); Strongly Negative (1)

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

Based on this analysis, the following reflections on strategic realignment of Manitoba's health care system have been developed:

- Given the complexity of Manitoba's environment, a significant realignment is required to simplify the system and strengthen accountability for performance. This is a fundamental requirement and it should be considered an enabling action for all other opportunities identified in Phase 1. Not moving forward with system realignment will reduce the ability of the government to achieve gains in many areas and in some cases will reduce identified benefits to negligible levels.
- Efforts by the Department to initiate provincial level councils are a positive step. They have been effective at increasing communication and improving alignment between stakeholders. They have not been effective in achieving standardization or achieving consensus on sustainable resource allocation across the province. High-performing health systems have moved beyond consensus based decision making to professional management structures with clear accountability for system delivery and performance management.
- Realigning and refocusing MHSAL as a department is a fundamental first step. The capability of the department needs to be strengthened to provide effective leadership, direction and oversight to the system. The priority areas for consideration as part of this activity would include:
  - Strategic consolidation and alignment of all policy and planning functions combined with a rationalization of staff and accountabilities.
  - Move all departmental delivery functions into an alternate model or to a healthcare delivery organization.
  - Build capacity of the department to provide system-wide support to planning, commissioning, monitoring and compliance functions.
- The highest level potential for efficiency and economy measures can only be achieved with realignment of core departmental and WRHA functions. Overlap and duplication between the funding and commissioning roles of the WRHA and department contribute to a lack of clarity in the system. There will be a positive impact for all system participants by realignment in this area.
- The highest probability of success would involve refocusing the WRHA as a delivery region with similar accountabilities to other regions in the Province. Strategies to evolve the WRHA into a provincial level organization are possible but will face a significant level of opposition from stakeholders throughout the Province. Consideration needs to be given to the reality that the WRHA has the strongest capacity in many functional and administrative areas. Regardless, it is critical to address the inherent conflicts of the WRHA as both a service provider and health care delivery organization.
- There is strong system-wide understanding of the need for strategic change. There is recognition that this will mean fundamental realignment of services and may challenge organizational roles or functional responsibilities at the leadership level. Despite this realization, stakeholders universally expressed hope that the government would take the necessary steps to address known delivery issues and introduce a bold new vision for healthcare in Manitoba.

Area of Opportunity #1: Strategic System Realignment

Analysis & Observations (Cont.)

- The impacts of delegated funding and approval processes should be carefully considered as part of the realignment design process. Treasury Board approval process are not designed to be responsive to the demands to day-to-day healthcare delivery. Approaches that strengthen the role of the department as a commissioning entity need to be considered to achieve realignment of WRHA and MHSAL functions. This may include a requirement to define specific delegated authority provisions within the Health Services Insurance Fund as well as approaches to manage authority for capital and operating funding programs within the context of Treasury Board's oversight role for all provincial government departments.
- There is potential to realign the highest value system-wide functions into an integrated service delivery organization with emphasis on:
  - Health support services: Dietary, Laundry, Diagnostic Services, Call Center.
  - Administrative support services: Human Resources, Finance, Supply Chain, Capital Planning, Facilities Management and Real Estate, Communications, Legal.
  - ICT service delivery: Clinical, Administrative, Infrastructure, Medical Device Management, Clinical Engineering.
- Core clinical delivery planning and oversight require careful consideration. The *Provincial Clinical and Preventive Services Planning for Manitoba* report has clearly identified the fundamental requirement for a province wide clinical services plan in order to structure all service delivery. There are different configurations of program oversight and delivery that could be pursued within the Department or an integrated health service over time. Priority should be placed on evaluating opportunities to realign delivery for:
  - Tertiary healthcare facilities – Health Sciences Centre and St. Boniface General Hospital.
  - Programs at a Provincial level including services delivered by CancerCare Manitoba, Addictions Foundation of Manitoba and Diagnostics Services Manitoba.
- A strategically realigned system needs to consider the role of First Nations in the healthcare system. The current environment has not achieved good results for the Indigenous population. Consideration should be given to options that build a true sense of partnership in delivery leadership with Indigenous communities to improve trust and accountability. This would include consideration of opportunities to establish an Indigenous Health Care Authority through collaboration with First Nations communities and the Federal Government. This is an engagement and partnership strategy that is showing positive results around the globe in improving outcomes for First Nations communities and improving sustainability.
- Any successful system realignment program needs to recognize the limited transformational capability in all regions and healthcare delivery organizations in Manitoba. There are a wide range of resources available throughout the system that could be aligned to support this type of initiative, however, there is limited experience in successfully leading large change programs to completion. This perspective has been validated by many stakeholders throughout all parts of the healthcare system.

Area of Opportunity #1: Strategic System Realignment

Actions

- It is critical for the Government to reset expectations and operating parameters for all stakeholders that they operate in an integrated system with limited resources is necessary to achieve any meaningful sustainability and efficiency gains. To effectively action this area, the following areas require considerations:
  - Amend the RHA Act and other legislation together with all operating/service delivery agreements to remove inconsistencies and barriers to integration;
  - Change the Independent and Autonomous status for all Regions and Health Care Delivery Organizations;
  - Address the impacts of collective agreements and structure of healthcare delivery organizations as Employers;
  - Align and clarify the role of University of Manitoba Faculty of Health Sciences in healthcare delivery;
  - Align the role and scope of Community Foundations to support the overall healthcare system as a partner;
  - Alignment of CancerCare Manitoba, Addictions Foundation of Manitoba, Diagnostics Services Manitoba and eHealth Manitoba within the proposed system structure;
  - Clarify the role, function and scope of management for all Health Care Delivery Organizations throughout the system;
  - Reduction in the total number of Health Care Delivery Organizations throughout the system;
  - Simplify the role, function and number of boards required to oversee the system.
- Realigning and refocusing MHSAL as a department to provide effective leadership, direction and oversight to the system with an emphasis on:
  - Span of control to identify potential opportunities for improvement consistent with reviews for other government departments as part of the Fiscal Sustainability Review;
  - Strategic consolidation and alignment of all policy and planning functions combined with a rationalization of staff and accountabilities;
  - Move all departmental delivery functions into an alternate model or to a healthcare delivery organization;
  - Build capacity of the department to provide system-wide support to planning, commissioning, monitoring and compliance functions.

Area of Opportunity #1: Strategic System Realignment

Actions

- There should be clear direction to all stakeholders to shift accountability of all regions towards oversight and execution of healthcare delivery within defined performance based agreements and away from accountability as independent operating organizations.
- There should be consideration of an approach to provide for commissioning and contracting for delivery of provincial level services during the initial stage of system realignment.
- Establish and activate a Transformation Management Office with strong delivery leadership and support from resources with experience in healthcare system realignment and value realization.
- Establish a Strategic System Realignment governance team or leadership council with accountability for supporting the Phase 2 HSIR phase and overseeing the implementation of the strategic transformation program through to completion. The composition of this group should be focused to align the various interests across the system. To ensure effective leadership, this group should be no larger than 10-12 individuals. Recommendations on the focus, structure and alignment of this group will be provided in Phase 2.

Area of Opportunity #1: Strategic System Realignment

Benefits & Potential Financial Impacts

- Reduction and consolidation of RHAs and Health Care Delivery Organizations.
- Reduction and elimination of Boards with overlapping mandates that do not contribute value to healthcare system performance.
- Elimination of redundant leadership and management positions that do not contribute value to healthcare system performance.
- Realignment of MHSAL to provide stronger leadership, focus, direction and control functions across the healthcare system.
- Significant effectiveness and agility benefit across the entire healthcare system.
- Better integration of administrative, clinical and clinical support services for all programs across the system.
- Realignment of focus for Health Care Delivery Organization governance on service delivery, patient care and service standards.
- Rationalization of capabilities between MHSAL and WRHA and associated rationalization of staff and accountabilities.

Timeframe: **Short and medium-term**

- **2017/18**: $3M+
- **2018/19 and beyond:** $5M+
- **Total: $8M+**

Area of Opportunity #1: Strategic System Realignment

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)	
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond
Performance Management and Compliance	-	-	$0.5M	$0.7
System Policy and Planning	$2M	-	$0.7M	$5M
TOTAL: $8M+	**$2M**	-	**$1M+**	**$5M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	M	• Direct cost savings will based on final system design recommendation and rationalization of staff and associated salaries and benefits. • Strategic level effectiveness gains.
Effort to Implement Criteria *(Alignment/ Risk)*	H	• Clear alignment to HSIR review capability. • Fundamental enabler to realization of all other system improvement opportunities. • High-level organizational change and transformation management. • Requires significant Transformation Management Office capability through phased implementation program.

Area of Opportunity #2: Funding for Performance

Description

- This opportunity area consists of a number of coordinated actions to realign Manitoba's approach to funding with an aim on improving system effectiveness and strengthening funding to improve system performance. This area includes:
- Coordinating service delivery and funding with other jurisdictions such as:
  - Reconfiguring funding relationships for populations serviced by Manitoba from NW Ontario and Nunavut;
  - Aligning funding with INAC and FNHIB in support of health care services and facility delivery in First Nations communities; and
  - Accessing federal funding from Health Canada for joint initiatives like integrated health, population and community health initiatives.
  - Establishing a single payer funding model for all health funded organizations and agencies such as:
  - Evaluating provincial grants and funding programs provided directly by MHSAL and those through WRHA;
  - Moving all operating and service purchase agreements for all health funded agencies into an integrated process; and
  - Evaluation of funding provided by other government departments to health funded organizations to remove overlap and to clarify accountability. For this area, there would be an emphasis on Justice, Healthy Child and Families/Social Services.
- Exploring new models for capital and infrastructure funding such as:
  - Private Public Partnerships (P3) models that reduce the upfront requirement for capital investment; and
  - Syndicate based funding of major capital projects or infrastructure revitalization.
- Exploring the potential for fundamental funding reform of healthcare services including population and activity-based models.
- Implementing expenditure management programs to contain delivery costs on a short timeframe.
  - KPMG has not incorporated significant expenditure management program initiatives in the opportunity analysis;
  - These programs could have an impact on service and delivery outcomes over the short term if not appropriately focused and targeted;
  - Savings included in this area are based on typical annual expenditure management initiatives that are part of normal annual management processes in all Manitoba health regions. No expenditure management initiative has been evaluated for MHSAL as a department in this analysis;
  - Through discussions with MHSAL officials, we understand that a $50m expenditure management target was set with RHAs in 16/17 and the department implemented quarterly tracking of status with the last update showing tracking at $33m savings achieved.

Area of Opportunity #2: Funding for Performance

Description

- We note the scope of the HSIR project provided direction that front-line services and delivery should be maintained. Analysis of this opportunity area includes expenditure management initiatives to align with this direction.
  Implementing performance-based funding models that emphasize outcomes and streamline decision making such as:
  - Shifting funding for health delivery organizations from block funding to performance-based funding agreements with established service expectations and measures;
  - Initiating performance-based budgeting and management processes to facilitate annual capital and program planning across the system; and
  - Alignment of core approval and funding processes between Treasury Board, MHSAL and the province's health care delivery organizations to balance accountability and stewardship of public investments with the need for timely operational delivery.

Area of Opportunity #2: Funding for Performance

Analysis and Observations

- The Department supports a combination of direct and indirect funding processes. There is clear evidence that funding provided by MHSAL and through the WRHA is provided to the same entity with conflicting restrictions and inconsistent performance parameters. This is compounded when there is additional funding provided to these same agencies from other government departments.
- It is widely recognized that there should be a significant reduction in administrative overhead for all system participants by realigning all funding processes into a single payer model. There is evidence in many jurisdictions that this has resulted in better outcomes from coordinated funding programs and that there are significant efficiencies that can be achieved.
- The current funding model causes confusion over responsibility and accountability across the continuum of care.
- Realignment between government departments with an emphasis on Justice and Families (Social Services, Housing) will improve transparency of the actual cost of health care delivery and strengthen accountability across the entire system.
- Timeliness of funding approvals and delays associated with the Provincial budget development process and funding approvals result in significant delivery challenges at all levels in the system. Treasury Board approval processes, while necessary to ensure central government oversight and accountability, are not designed to be responsive to the demands of day-to-day healthcare delivery. Approaches that strengthen the role of the department as a commissioning entity need to be considered to achieve realignment of WRHA and MHSAL functions. This may include a requirement to define specific delegated authority provisions within the Health Services Insurance Fund as well as approaches to manage authority for capital and operating funding programs within the context of Treasury Board's oversight role for all provincial government departments.
- All system stakeholders identified concerns about central government decisions to place spending limits on specific areas of healthcare funding where there are established cost escalation factors and inflation. This would include areas like step-up scale wage increments, consumables, and pharmaceuticals (especially high cost drugs for cancer treatment). These decisions are intended to shift the focus of the system towards better reallocation of resources in the rest of the system but have not achieved the intended outcomes. Instead, they cause health care delivery organizations to operate from the position of a perceived structural deficit.
- Leading practice funding approaches have taken steps to establishing global funding targets and service expectations at the policy level and shifted the responsibility for implementation decisions to the department and commissioning functions. This approach in other jurisdictions such as Ontario, England and Australia, has been supported by rigorous performance management and tracking primarily through the development of 3-4 fiscal year Long Term Financial Models (LTFM) which set out annual projected revenue and capital budgets and cost improvement targets at both a regional and at a provider/site level which are required to be submitted for approval to commissioners with powers to intervene both where the cost improvement plan is not considered to be robust or in the event of under delivery of required cost savings.

Area of Opportunity #2: Funding for Performance

Analysis and Observations

- Existing operating and service purchase agreements have basic performance and service level controls, however, there are limitations in compliance processes and outcome measurement. This has resulted in mixed results with respect to measuring return on investment as well as in quantifying the cost effectiveness of purchasing decisions. Similarly, it is difficult to enforce consequences or accountability for individual actions undertaken by any single health care organization or for general non-performance in the entire system.
- There are some opportunities to re-establish service and funding relationships with adjacent jurisdictions serviced by the Province of Manitoba with an emphasis on Nunavut and NW Ontario. The Department has initiated some activity in this area. Similarly, there is potential to leverage investment available from the federal government in First Nations health, public and population health. In certain cases, these opportunities can be activated through established programs or by coordinating service delivery with the local federal agency leadership.
- Funding conditions are not consistently defined across the system achieve an coordinated set of outcomes as in the case of other provinces such Service Accountability Agreements between Local Health Integration Networks (LHINs) and healthcare providers in Ontario.
- Annual funding letters and instructions as part of the overall provincial budgeting process do not set out sufficiently clear expectations or outcomes. Stakeholders clearly identified a desire for central government to consider providing a multi-year funding target and to accelerate communication of annual targets to earlier in the financial year and allow projections to be made on a 3-4 year funding cycle. This would significantly improve the ability of the system to develop plans and budgets that meet expectations. Multi-year planning windows are increasingly becoming a feature of many health system budgeting processes. They support the implementation of more formal program-based budget evaluation processes that cannot be completed easily within the timeframes of Manitoba's existing budget development process.
- There are also opportunities, in alignment with leading practices in other jurisdictions, to improve the current annual budget setting processes between Treasury Board, MHSAL and the RHAs. This could include signaling annual savings targets earlier (for example, setting an initial savings target for 2018/19 by April/May 2017) and allowing greater transparency between MHSAL and the RHAs in relation to identifying and assessing cost improvement opportunities; enabling a collective rapid review of opportunities and ensuring RHAs are focusing on the right opportunities in the right areas.
- A significant effort is expended by all entities in the system to manage provincial and federal taxes between entities. There would be a significant reduction in unnecessary administrative effort within the healthcare system to consider approaches to streamline the administration of provincial taxes within the system. Improvements in this area would not impact the Province's overall tax revenues since these taxes are generally funded by the system to the government as a whole with no corresponding net revenue.

Area of Opportunity #2: Funding for Performance

Analysis & Observations

- Many jurisdictions are exploring or adopting innovative financing models for healthcare infrastructure development and realization. This includes evaluation of P3 delivery as well as alternate methods for securing financing instead of traditional capital funding from the treasury.
- There is also the opportunity for Manitoba to explore fundamental funding reform for all health care services in a similar way in which Ontario embarked on its Health System Funding Reform (HSFR) program. The key features of HSFR are:
  - Includes hospital, home care and personal care homes;
  - Combines global budgets, population and activity based funding;
  - Ensures funding adjusts for changing population needs and characteristics;
  - Recognizes difference in regional characteristics such as rural and indigenous populations.
- The incentives achieved by a HSFR program are:
  - Ensures the right level of services is delivered at an efficient price;
  - Manages both utilization per capita and cost per provider;
  - Incremental use of these funding models results in substantial behaviour changes by providers and health agencies, which include the five RHAs;
  - Day surgery incentive model accelerated shift from inpatient to day surgery. There is little opportunity left in the system with activity-based funding for substitution of day surgery for inpatient surgery;
  - Length of stay reductions for both medical and surgical patients;
  - Number of patients treated have increased whilst the costs of providing inpatient care has been growing more slowly achieved by reducing length of stays;
  - Increased use of community services;
  - Improvement in nursing sensitive measures for selected conditions (fall, pressure sores, urinary tract infections, and pneumonia);
  - Hospital readmission rates have remained in the same range as before the introduction of HSFR;
  - Improved data quality and completeness.

Area of Opportunity #2: Funding for Performance

Analysis & Observations

- Population and activity-based funding models are now being implemented in:
  - Alberta;
  - B.C.;
  - Ontario.
- Appropriate design and implementation includes:
  - Adjustment for population morbidity;
  - Adjustment for provider teaching, tertiary and remoteness;
  - Gradual implementation;
  - Adequate stakeholder consultation;
  - Proper education and rollout.
- If implemented properly, funding reform can result in substantial benefits with little disruption to the Manitoba healthcare system.
- Performance based funding models require significant coordination across the system. There are opportunities to phase in this capability as the overall system's maturity increases. Health System Funding Reform (HSFR) in Ontario has retained a global funding component (30%), with 30% activity based and 40% population based though a process of gradual implementation over the past 5 fiscal years to avoid an excessive funding 'shock' to the healthcare system over 1-2 fiscal years. It should be noted also that Ontario's increased administrative expenditure of 5.5% compared to 4.4% admin spend in Manitoba may at least be partly to do with an increased requirement for analysis and data analytics.
- Systems with advanced capabilities require investment over a sustained period of time but these investments are supported through reinvestment of incremental savings on an annual basis. Investment was required in Ontario both in relation to the development of HSFR and supporting its implementation through the development of extensive training support and in data analytics
- Specific analytical tools that have required development include significantly improving the quality of MIS data; service component tools for hospital to better understand their results acute inpatient and day surgery care and to benchmark against peer hospitals; the development of case costing tools for use by each healthcare provider in Ontario and the development of digital order sets for each Quality Based Procedure.
- **Given the significant investments that would be required in administrative, management and analytical capability that would be required in embarking on fundamental funding reform as opposed to focusing on performance management and incentives utilizing the existing funding models, this will be considered carefully in Phase II with a definitive recommendation made in April 2017.**

Area of Opportunity #2: Funding for Performance

Actions

Several possible actions to address funding for performance were identified by stakeholders and based on leading practice:

- Explore new models for capital and infrastructure funding.
- Explore the potential for fundamental healthcare funding reform and models such as HSFR in Ontario with a recommendation at the end of Phase 2 (April 2017).
- Review existing operating, service purchase and grant funding processes to establish an integrated single payer funding model.
- Undertake a review of service delivery and funding commitments with other jurisdictions and the federal government.
- Explore improvements and recommendations to improve the current annual budget setting processes between Treasury Board, MHSAL and the RHAs.
- Explore the Implementation of performance-based funding program in a staged process.
- Consider necessity of a short-term expenditure management programs with rigorous performance management and monitoring (at least monthly) by the department to achieve immediate fiscal targets.
  - This could include an aggressive "Red Pen" review with all RHAs instructed to provide line-by-line details of all discretionary budgets for review, challenge and potential elimination. Other immediate approaches could include escalation of financial and budgetary controls in terms of authorization and approval of expenditure.
- Evaluate processes associated with the administration of provincial and federal taxes within the health care system to reduce bureaucracy that does not add value and eliminate overhead.
- Consider opportunities to provide a multi-year financial target and to accelerate annual budgeting processes to enable more effective system planning processes.
- Evaluate and implement a program-based budgeting and performance measurement process across the system.

Area of Opportunity #2: Funding for Performance

Benefits & Potential Financial Impacts

Benefits associated with funding for performance include:

- Alignment of funding processes.
- Coordination with other jurisdictions.
- Delineation of MHSAL, RHAs, and provider responsibility and accountability.
- Focus on performance, results and value for money.

Timeframes: Short- and medium-term

- **2017/18:** $24M+
- **2018/19 and beyond**: $18M+
- **Total:** **$42M+**

Note: This areas of opportunity fits with a system realignment contemplated in #1.

Area of Opportunity #2: Funding for Performance

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Establish Single Payer Funding Model	$ 0.6M+	$ -	$ 1M+	$ -	$ 1.6M
Implement Expenditure Management Programs	$ -	$ -	$ 22M+	$ -	$ 22M
Coordinate Service Delivery and Funding with Other Jurisdictions	$ -	$ -	$ -	$ 6M+	$ 6M
Implement Performance-Based Funding Program	$ -	$ 12M	$ -	$ -	$ 12M
Explore New Models for Capital and Infrastructure Funding	$ -	$ -	$ -	$ -	$ -
Totals:	**$ 0.6M+**	**$ 12M+**	**$ 23M+**	**$ 6M+**	**$ 42M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	M	• FY2017/18 cost savings are based on typical in year expenditure management processes. • A more aggressive expenditure management program could be considered to achieve 2017/18 savings targets but these will have an impact on service delivery. • Medium-term cost savings are expected to be derived from improved coordination with other jurisdictions, the implementation of performance-based funding mechanisms, and ongoing expenditure management at the RHA level.
Effort to Implement Criteria *(Alignment/ Risk)*	L	• Changes to a jurisdiction's overall funding environment can be implemented through process and commissioning changes. • Approaches to pursue advanced performance management require investments in technology and organizational capacity over the longer term. • Coordination with other jurisdictions will require a moderate effort over the medium-term due to stakeholder engagement and detailed program and funding assessments.

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Description

This opportunity area focuses on the alignment of Manitoba's Insured Benefits under the Canada Health Act and other benefits funded under various health programs with current practice and coverage standards in other jurisdictions. It also includes a review of processes to manage coverage and service provision with other jurisdictions.

Key areas identified for potential benefit realignment include to:

- Coordination of Manitoba's overall drug program benefits with Pan Canadian Pharmacare standards and option to incorporate additional coverage and to increase existing copayment or deductible levels;
- Elimination of special drug coverage not supported by other provinces;
- Changes and/or introduction of deductibles for cancer drugs in line with other jurisdictions;
- All ancillary coverage programs including coverage for prosthetics, Orthotics, Seniors Eye Glasses, Telecommunication Devices, Hearing Aids, Orthopedic shoes and infant contact lenses;
- Implementing evidence based standards for access to program services for things like portable home oxygen and diabetic test strips. These standards could also be augmented with the introduction of deductibles or funding limits;
- Introduction of a means test for housekeeping services for patients being serviced in an authorized home care program;
- Introduction of deductibles or a fee for consumables for outpatient services that have typically been delivered at no cost including WRHA Adult Day Care, Sleep Lab, Ostomy, Occupational Therapy and Physiotherapy services;
- Reclaiming/charging/tracking equipment for patients who access these services outside of formal home care program (aids, devices etc.);
- Extending family supported living program as an alternative to retaining patients in long term care institutions for recovery and rehabilitation; and
- Increasing respite support to families as an offset to institutional support services.

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Description

Key areas identified to improve inter-jurisdictional benefit administration include:

- Reevaluating the relationship with AITru – A US based healthcare delivery organization – that has been contracted to provide primary and emergency care support to residents of SE Manitoba; and
- Review of reciprocal billing arrangements with adjacent jurisdictions (NW Ontario/SK,Nunavut) and the federal government.

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Analysis & Observations

- Most stakeholders identified realignment of Manitoba's Insured Benefits and Funded Health Program benefits as a potential area for cost savings. For all benefits identified in this area, Manitoba's coverage is no longer consistent with that provided in other jurisdictions. There is clear evidence that proposals have been advanced by MHSAL for many of these areas under the previous government.
- There is a potential tension between the reduction of these benefits and long term population and public health objectives. Many stakeholders identified opportunities to repurpose savings from insured benefit programs as part of public and population health initiatives. These investments have been shown to have a good long term return on investment in many jurisdictions but they do not result in immediate cost savings and the business case is hard to establish in purely financial terms. Some of the potential reinvestment areas identified by stakeholders included things like:
  - Funding for self care devices for citizens as an offset to facility based services for birth control, insulin injection etc.; and
  - Funding for foot care to designated populations as an offset to clinical treatment for complications resulting amputation and disability support at the institutional level.
- Stakeholders identified opportunities to implement innovative programs that would take advantage of new management approaches or technology. There is evidence that other jurisdictions and private insurers have initiated pilot projects or limited programs in some of these areas including things like:
  - Precision drug management benefits;
  - Advanced benefit programs for long term health and wellness (e.g. fit bit/tracker, home health monitoring); and
  - Preventative genomics screening.
- Most stakeholders identified the relationship between benefit levels and care models targeted at disadvantaged and high needs populations. There is clear evidence that longer term care strategies are required to have a significant impact on benefits costs for these groups.
- MHSAL has identified opportunities for reconfiguration of the Pharmacare program. This requires significant effort on an national level to achieve optimal results. As part of this initiative, there are opportunities to improve the cost structure of the program by improving procurement processes. These opportunities are covered in the Shared Service Opportunity area.
- Inter-jurisdictional coverage agreements can be updated to reflect the current level of services provided by Manitoba to residents of other jurisdictions and with the federal government for First Nations.
- Stakeholders identified concerns with the AITru contract with respect to delivery cost structure as well as inconsistent administration of coverage and services to Manitoba eligible under the contract. A key consideration in the long term is the requirement for this service relationship given proximity of care facilities in South Eastern Manitoba.

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Actions

Several possible actions to address insured benefits and funded health programs were identified by stakeholders, jurisdictional reviews, and based on leading practice:

- Aligning benefits and funded program with Canadian standards
- Consider opportunities to introduce copayments and deductibles for many benefits
- Consider changes to the Pharmacare program that might include the introduction of deductibles, copayment amounts and changes to coverage for special drugs
- Undertake a review of inter jurisdictional coverage agreements could include, but not be limited to:
  - Evaluating the AITru delivery relationship;
  - Reviewing reciprocal billing arrangements with other jurisdictions.

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Benefits & Potential Financial Impacts

Benefits associated with insured benefits and funded health programs include:

- Reduction in insured benefit costs and administration;
- Alignment with Canadian standards;
- Recovery of costs associated with jurisdictional billing agreements.

Timeframes: Short- and medium-term

- **2017/2018:** $30M+
- **2018/2019 and beyond:** $9M+
- **Total:** **$39M+**

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Bring Benefits and Funded Programs in Alignment with Canadian Standards	$ 14M	$ -	$ 15M	$ 8M	$ 37M
Review Inter-Jurisdictional Coverage Agreements	$ -	$ -	$ 0.5M	$ 1M	$ 1.5M
Totals:	**$ 14M+**	**$ -**	**$ 16M+**	**$ 9M+**	**$ 39M+**

Key Evaluation		
Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	H	• High in the short-term compared with other opportunities identified. • Significant reduction in cost of benefits to healthcare services across the province.
Effort to Implement Criteria *(Alignment/ Risk)*	M	• Policy decisions and changes required, but relativity low amount of implementation time and efforts. • Some funded health benefits require system programming changes to implement them in addition to coordination with system delivery partners. • Implementation risks include public perception with changes to benefit levels and coverage.

Area of Opportunity #4: Core Clinical & Healthcare Services

Description

Core Clinical and Healthcare Services refers to the reconfiguration of the healthcare delivery model to improve effectiveness of core service delivery and shift the model of care away from acute care centered facilities to community- and population-based care.

- Until now, there is no master plan or provincial clinical services plan that outlines where and how services are delivered to reduce overlap and duplication and improve clinical outcomes (e.g., through the creation of Centres of Excellence), while recognizing the recent completion of *Provincial Clinical and Preventive Services Planning – Doing Things Differently and Better.* This has resulted in:
  - Incremental design and development of the healthcare system and a complex, siloed delivery environment, including:
    - Inconsistent clinical standards, practices and levels of care between regions, sites and programs.
    - Different standards of integration, creating confusion and contributing to higher costs of delivery and administration.
    - Competition between different programs and sites, further complicated by the WRHA matrix model.
    - Specialized programs, such as transplant, renal and cardiac, providing care that is provincial in scope without a formal mandate or resourcing.
    - A lack of provincial repatriation agreements or provincial bed registries.

Area of Opportunity #4: Core Clinical & Healthcare Services

Description (Cont.)

The overall system is structured based on acute care delivery and provider-centered care models.

Globally, there is a significant shift in the delivery of healthcare through hub and spoke models of care. These models typically refer to a structure including primary, secondary and tertiary care settings, in which larger centers like hospitals act as hubs connecting to local care in the community. In this way, patients receive more convenient care in a local setting instead of within a hospital. Hub and spoke models have become a very effective method of organizing primary, secondary and tertiary care to generate benefits both for the patient and healthcare system. In addition to reducing costs, increasing access and improving quality, the hub and spoke model is an important and necessary consideration in creating a fully-integrated and patient-centered healthcare system.

Manitoba's health system is based on an acute care model, which is costly and does not meet the needs of its diverse, geographically disparate population:

- Acute, community, and human services are not well-integrated. There are not sufficient programs or processes in place, such as coordinated discharge planning, to prevent acute care re-admissions.
- There are no alternate delivery models that emphasize community or preventative care or strategies to pursue integrated delivery with alternate cost structures. There are limited promising practices in place, such as community paramedic programs, that have not been expanded beyond their current scope.
- There is no integrated primary care strategy aligned with population needs (e.g., chronic disease management, Indigenous health). While there are several primary care programs and models (e.g., QuickCare Clinics, ACCESS Centres), the specific mandate and expected outcomes are not well-defined. The impacts of these programs have not been measured sufficiently to understand their impacts on population health indicators. The numerous types of primary care clinics in close proximity is confusing to patients and causes inconsistency in the continuum of care.
- Technology has not been leveraged to provide community-based care, such as remote home monitoring.
- There is the potential to expand transitional care and supportive living options in Manitoba, which would reduce Alternate Level of Care beds and provide sustainable alternatives to Personal Care Homes (PCHs).

Area of Opportunity #4: Core Clinical & Healthcare Services

Description (Cont.)

- Canadian Triage and Acuity Scale (CTAS) is used in all hospitals in Manitoba and across Canada for all incoming patients. The system categorizes patients by both injury and physiological findings, and ranks them by severity from 1–5 (1 being highest). The model is used by both paramedics and ED physicians and nurses, and also for pre-arrival notifications in some cases. The model provides a common frame of reference for physicians, nurses and paramedics. It also provides a method for benchmarking given its application across all provinces in Canada. CTAS Levels:
  - Level 1: Resuscitation;
  - Level 2: Emergent;
  - Level 3: Urgent;
  - Level 4: Less Urgent;
  - Level 5: Non Urgent.
- Clinical staff are not working to full scope of practice, and clinical teams are not optimized to support patient- and population needs in an efficient and effective way.
  - There are no staffing guidelines to outline optimal skill mix (e.g. RN/LPN/allied health provider), staff rotations, or nurse/patient ratios.
  - In general, the composition of care teams do not leverage each discipline in the most effective way. Although there are pockets of interdisciplinary collaboration, clinical teams are typically physician-centric.
  - Primary care models do not provide incentives or resources for providers to deliver after-hours care, which could be used divert CTAS 4/5s from ER or improve access to primary care.
  - Collective agreements impact how staff are utilized most effectively across the system.
- The WRHA Matrix has not been resolved to provide a model for clear delivery or healthcare, including:
  - Role of sites;
  - Role of programs;
  - Role of administrative support services and corporate functions;
  - Matrix and clinical program integration create/result in patient flow issues and missed service delivery targets/increase wait times.

Area of Opportunity #4: Core Clinical & Healthcare Services

Methodology

We compared health service use and cost in Manitoba and Ontario as agreed by the Advisory Committee. Our approach included selecting appropriate peer regions and hospitals. We also matched Manitoba regions and providers to similar ones in Ontario on the basis of the factors shown below:

Population Adjustments

Region Type:

- Urban, Rural, Remoteness and Population Density;
- Proportion Aboriginal, Immigrants and Employed;
- Income Quintile with Cost of Living Adjustment.

Provider Adjustments

- Teaching, Large Community, and Medium/Small Community Facilities;
- Tertiary;
- Region Type;
- Case mix.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations

- Staffing calculations (in terms of the numbers per role and grades) do not reflect current models of care. As a result, staff mix (LPNs, RNs, allied health, physicians) may not be optimized to reflect patient need and achieve desired outcomes across the continuum.
- There are no staffing guidelines for all services to support how professionals are allocated to different care settings. There are staffing guidelines in Long Term Care, however, these should be reviewed to ensure clinical staff are enabled to work at full scope of practice.
- Alignment of planning, core service delivery and clinical delivery programs is required to improve effectiveness and resource utilization. However, health leaders expressed concern about further centralization due to a bias to local delivery and/or because of their experience with poor centralized execution.
- WRHA is delivering programs across the province without formal scope, mandate, or funding, such as transplant and cardiac services; this has caused tension in other RHAs. Formalizing provincial services would reduce fragmentation and improve continuity of care across Manitoba.
- WRHA's matrix structure does not provide a clear delivery model for its corporate functions, sites, or programs, which directly impacts site capacity, flow, and service delivery targets (e.g., wait times). For example, WRHA surgical services were noted to have widely varying capacity (35% at one site), indicating opportunity to evaluate the feasibility of consolidation.
- Integration of programs and services was a noted challenge across programs and sites in the WRHA. This lack of integration is a barrier to patient navigation to the appropriate provider and facility, which may place unnecessary burden on other parts of the system (e.g., ambulatory-sensitive conditions in ED).
- Rural and remote providers, patients, families and caregivers identified challenges associated a lack of resources and services, which could be improved through technology (e.g., Telehealth) and flexible resourcing.
- Providers are not incentivized to provide care in the community.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

- System performance gains cannot be achieved without provincial organizational reform to address fragmented capacity.
- There are six EDs in Winnipeg despite feedback that certain centres are operating below capacity.
- Opportunities to integrate health and social care, such as building on successes with Early Intervention, were identified as critical to supporting population health.
- There is no standard approach to quality improvement.
- Efforts to standardize services in the WRHA are impacted by the matrix structure.
- There are policy gaps with respect to the services that First Nations patients are able to access closer to home.
- Technology differs across regions and sites, challenging continuity of care and service integration. Telehealth, for example, has not been uniformly integrated across health regions. Although infrastructure is available in most sites consulted, there is opportunity to increase usage to reduce patient transport costs, provide specialized services (e.g., mental health supports) to remote areas, or to provide continuity of care when patients are transferred from Winnipeg to another region.
- There is a lack of alignment on a coordinated strategy to realize information management solutions between parts of the organization, which has led to fragmentation and a number of ICT solutions across the province.
- There is no provincial Electronic Health Record (EHR) or solution that integrates existing records, although a common EHR would alleviate current challenges with consistent patient information, safety, and flow across the continuum.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

- The roles of RHAs and hospitals are not aligned.
- Compliance requirements associated with PHIA legislation add complexity and cost to all processes that most stakeholders do not believe materially increase information security or privacy.
- The role and mandate of MHSAL is not clearly defined within the overall health system. This has led In the past, based on the stakeholder engagement undertaken, to the involvement of MHSAL and elected officials in decisions related to day-to-day service delivery resulting in management staff being distracted from their operational and strategic roles.
- Community foundations impact scope of service delivery and operate outside of control of the region or health system.
- WRHA is not structured to operate as an integrated region, due to:
  - Autonomous nature of sites and programs;
  - Multiple boards and governance not connected to WRHA Board in an integrated manner;
  - Overlap, redundancy and duplication in executive and management teams;
  - Unclear accountability or responsibility.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

The following five opportunities represent the highest opportunities for cost-savings for core clinical and healthcare services. The potential cost savings shown are both high-end estimates and discounted estimates.

Opportunity	Potential Cost Savings (High End Estimates)	Potential Cost Savings (Discounted Estimates)	Page Reference
Use of Personal Care Home Beds	$ 72M	$ 18M	141
Reduction in Acute Care Lengths of Stay	$ 46M	$ 12M	139
ED Cost Improvements	$ 30M	$ 8M	149
Reduction in Nurse Hours per Patient Activity	$ 12M	$ 3M	151
Reduction in Nursing Administration	$ 8.7M	$ 2M	154

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

ED Visits:
We examined use of ED care on a standardized per capita basis in each RHA to similar regions in Ontario. Main findings include:

1. Southern RHA has Manitoba's highest use of ED care on a per capita basis and 46% more visits than expected at the peer region average age standardized visit rate. This finding implies substantial opportunities to reduce use of EDs over time in Southern RHA.
2. Prairie Mountain had approximately 3% more ED visits than expected at the peer average age standardized rate and may therefore have some opportunities to reduce ED visits.
3. WRHA had 14% fewer visits than expected at the peer region age standardized rate and therefore likely has few opportunities to substantially reduce ED use.
4. Interlake RHA had 22% fewer visits than expected at the peer region age standardized rate and therefore likely has few opportunities to substantially reduce ED use.
   Notes: The results shown here do include Quick Care Clinic or Access Centre visits. Given lack of patient specific data on ED visits from hospitals outside WRHA, we had to assume that all ED visits at non-WHRA hospitals were for residents of the hospital's RHA.

RHA	Annual ED Visits	Expected ED Visits	Potentially Avoidable ED Visits	Potential Cost Improvement	QuickCare Visits	Access Centres Visits
Southern Health-Santé Sud	115,141	79,061	36,080	$5.0M	10,307	
WRHA	266,640	309,428	0	$0M	63,265	28,867
Prairie Mountain Health	136,159	131,601	4,558	$0.6M		
Interlake-Eastern RHA	76,523	98,321	0	$0	12,192	
Total	**594,463**	**618,411**	**40,637**	**$5.6M**	**85,764**	**28,867**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Acute Inpatient Admission Rates:
We examined inpatient admission rates for acute inpatient care by hospital and RHA by making use of the detailed patient demographic, geographic, and clinical data captured in the Discharge Abstract Database. We compared admission rates by RHA to similar regions in Ontario. Main findings from this analysis include:

1. WRHA has low acute care admission rates relative to the size and age of its population and therefore does not likely have opportunities to substantially reduce admission rates.
2. Prairie Mountain RHA had 17% more acute admissions than expected at the peer average age standardized rate. This finding implies substantial opportunities to reduce inpatient hospital resource use over time. The figures for Brandon General Hospital require further validation in Phase 2.
3. Southern RHA had 14% more acute admissions than expected at the peer average age standardized rate. This finding implies substantial opportunities to reduce inpatient hospital resource use over time.

RHA	Hospital	Annual Admissions	Expected Admissions	Potentially Avoidable Admissions	Potential Cost Improvement
Prairie Mountain Health	Brandon General Hospital	4,610	4,042	568	**$ 1.7M**
	Dauphin General Hospital	1,547	1,229	318	**$ 1.0M**
Southern Health-Santé Sud	Bethesda Regional Health Centre	1,148	1,005	143	**$ 0.5M**
	Boundary Trails Health Centre	1,961	1,719	242	**$ 0.7M**
	Portage Hospital	1,342	1,164	178	**$ 0.5M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Acute Inpatient Lengths of Stay:
We benchmarked lengths of stay in Manitoba hospitals to Ontario peer hospitals, adjusting for differences in case mix using the CMG+ system. Main findings include:

1. Lengths of stay in Manitoba are typically substantially longer than the average of their Ontario peers.
2. Improve lengths of stay to the average of Ontario peer hospitals would have reduce inpatient use by roughly 400 beds.
3. Improving lengths of stay represents an substantial opportunity to make better use of Manitoba's health resources. For example, Manitoba would be able to meet the acute bed needs of roughly 8 years of population growth and aging.

			Average Length of Stay		Potentially Conservable Beds			
RHA	Hospital	Annual Admissions	Actual	Expected	Acute	ALC	Total	Potential Cost Improvement
Interlake-Eastern RHA	Selkirk & District General Hospital	1,801	7.4	5.0	9	3	12	$ 1.2M
Northern Health Region	Flin Flon General Hospital	909	4.9	4.6	1	0	1	$ 0.18M
	The Pas Health Complex	1,505	4.1	4.1	1	-1	0	$ 0.03M
	Thompson General Hospital	3,520	4.3	3.4	10	-1	9	$ 1.5M
Prairie Mountain Health	Brandon General Hospital	8,187	6.8	4.4	44	10	54	$ 7.2M
	Dauphin General Hospital	2,250	6.0	5.1	10	-4	5	$ 0.6M
Southern Health-Santé Sud	Bethesda Regional Health Centre	2,488	5.0	3.5	6	4	10	$ 0.9M
	Boundary Trails Health Centre	4,317	4.3	3.4	10	1	11	$ 1.0M
	Portage Hospital	2,180	7.5	4.1	10	10	21	$ 1.8M
WRHA	Concordia Hospital	3,781	9.6	6.8	24	5	28	$ 2.8M
	Grace Hospital	4,918	9.2	6.2	38	3	41	$ 4.4M
	Health Sciences Centre	27,202	5.6	4.5	87	-1	86	$ 13M
	Seven Oaks General Hospital	3,555	11.4	6.9	40	3	43	$ 4.8M
	St. Boniface General Hospital	23,331	4.9	4.6	24	-4	19	$ 3.0M
	Victoria General Hospital	3,972	10.1	6.9	31	4	35	$ 3.4M
Total		**93,916**	**6.2**	**4.8**	**346**	**30**	**376**	**$ 45.9M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Day Surgery Substitution for Inpatient Surgery:
We examined the propensity for Manitoba hospitals to favour day surgery over inpatient surgery by comparing day surgery use at Manitoba hospitals with that at Ontario peer hospitals. Main findings include:

1. Manitoba hospitals typically make good use of day surgery to avoid inpatient admissions.
2. St. Boniface General, Victoria General, and Dauphin General hospitals may have material opportunities to make better use of day surgery to avoid inpatient admissions.

Potential Cost Improvement	Hospital	Total IP and DS Surgical Procedures	Day Surgery Procedures	Expected DS Procedures at Peer Average	Potentially Avoidable Surgical Admissions	Potential Cost Saving Improvement
Interlake-Eastern RHA	Selkirk & District General Hospital	1,338	1,284	1,242	-42	$ -
Northern Health Region	Flin Flon General Hospital	382	347	354	7	$ 13K
	Thompson General Hospital	699	625	636	11	$ 12K
	The Pas Health Complex	170	130	129	-1	$ -
Prairie Mountain Health	Brandon General Hospital	6,427	5,918	5,869	-49	$ 0
	Dauphin General Hospital	1,165	851	1,108	257	$ 210K
Southern Health-Santé Sud	Bethesda Regional Health Centre	758	613	698	85	$ 51K
	Boundary Trails Health Centre	1,788	1,661	1,626	-35	$ -
	Portage Hospital	1,082	861	957	96	$ 58K
WRHA	Concordia Hospital	2,436	2,012	2,147	135	$ 90K
	Grace Hospital	3,987	3,724	3,622	-102	$ -
	Health Sciences Centre	13,723	11,758	11,449	-309	$ -
	Seven Oaks General Hospital	4,752	4,129	4,382	253	$ 190K
	St. Boniface General Hospital	8,695	6,725	7,240	515	$ 530K
	Victoria General Hospital	7,350	6,110	6,481	371	$ 249K
Total		**54,752**	**46,748**	**47,941**	**1,193**	**$ 1.4M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Use of Personal Care Home Beds:
We compared the supply of PCH beds in Manitoba's RHAs to similar regions in Ontario. Main findings include:

1. Manitoba has roughly 20% more PCH homes per capita for its 75+ population than similar regions in Ontario.
2. WRHA, Southern Health-Santé Sud, and Prairie Mountain Health RHAs have the highest numbers of beds per capita, and represent the areas for significant potential cost improvement.

RHA	PCH Homes	PCH Beds	Population 75+	Beds per 10,000 Population 75+	Beds per 10,000 Population 75+ Peer Region Average	Fewer Beds at Peer Average	Potential Cost Improvement
WRHA	43	5,731	51,305	1,117	946	877	$ 36M
Southern Health-Santé Sud	21	1,229	10,670	1,152	830	344	$ 14M
Prairie Mountain Health	43	2,003	14,517	1,380	1,030	507	$ 21M
Interlake-Eastern RHA	16	748	8,377	893	938	0	$ -
Northern Health Region	4	155	1,608	964	872	15	$ 0.8M
Manitoba	**127**	**9,866**	**86,477**	**5,505**	**4,616**	**1,743**	**$ 72M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Use of Personal Care Home Beds: we examined and quantify the potential to substitute lower cost services for personal care home and home care services.

PCH Level Of Care	Share Of Total PCH Days By Level Of Care	Estimated PCH Beds At 98% Occupancy	Ontario Average Distribution By Level Of Care	WRHA PCH Bed Reduction At Ontario Average Distribution	Potential Cost Improvement
High	25%	**886**	**55%**	-	
Medium	43%	1,530	31%	422	$ 9M
Low	29%	**1,040**	**14%**	527	$ 11M
Unassigned	4%	130	-	-	
Total	100%	**3,585**	**100%**	948	$ 20M

1. Resource Utilization Groups (RUG) are used in Canada and jurisdictions worldwide to measure the resource needs for personal care home clients and to fund home care providers. Clients are assigned to one RUGs based on medical, functional and cognitive characteristics. We assigned each RUG to one of three care levels and compared the client distribution between Manitoba and Ontario.
2. Low care need PCH clients are often good candidates for transfer to non-institutional community settings.
3. 29% of WRHA PCH beds are used for low care need clients, which is high relative to Ontario's 14%.
4. We estimated the potential for allocative efficiency improvements by reducing low and medium PCH use to the Ontario average and using a funded rate of $115 per PCH day.
5. These results are consistent with the PCH beds per capita 75+ results and imply that there substantial opportunities to improve use of PCH resources by moving some clients to lower level of care settings.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Making better use of Home Care Resources: the Method for Assigning Priority Levels (MAPLe) is assigned to all WRHA and all Ontario home care clients. Each client is assigned a MAPLe level, based on their risk for personal care home admission.

The table below compares the MAPLe distribution in Ontario and WRHA.

MAPLe Level	WRHA	Ontario
1.Low and 2. Mild	34%	12%
3. Moderate	30%	34%
4. High and 5. Very High	37%	54%

1. Almost 90% of Ontario clients are in the Moderate to Very High levels, compared to 70% in WRHA. More importantly, the high risk groups are 54% of Ontario clients, compared to only 37% in Manitoba.
2. These results suggest that, as is now done in Ontario, home care services in Manitoba could focus more on higher risk clients, and diverting lower risk clients to community support services.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Making better use of Home Care Resources: RUG are used in Canada and jurisdictions worldwide to measure the resource needs for home care clients and to fund home care providers. Clients are assigned to one of 24 RUG based on medical, functional and cognitive characteristics. Expected home care costs per client in the highest level RUG is fifteen times that of the lowest level RUG.

We assigned each RUG to one of four levels based on expected cost per client and compared the client distribution between Manitoba and Ontario.

RUG Level	WRHA	Ontario
Low	32%	17%
Medium	37%	32%
High	31%	52%

1. In Ontario, 52% of clients are in high acuity home care levels, compared to only 31% in Manitoba.
2. Ontario focuses its spending on higher need home care clients, which suggests that lower need Manitoba clients could be cared for with relatively more community support and relatively less home care services.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Making better use of Home Care Resources: Ontario Community Care Access Centres have introduced new client care models that focus on clients with substantial limitations in performing activities of daily living. The ADL score is often used in the case management decision. Clients with low ADL scores are diverted to community support services, clients with moderate RAI scores are often waitlisted or diverted to other community services, and those with higher ADL scores are prioritized for home care services.

We assigned each WRHA client an ADL level, and compared the distribution with Ontario.

ADL Level	WRHA	Ontario
1	65%	41%
2	24%	31%
3	9%	19%
4	2%	8%

1. Consistent with the lens provided by the MAPLe and RUG analysis, Manitoba clients are less likely than Ontario clients to be highly dependent on support with activities of daily living; 27% of Ontario clients are highly dependent compared with 11% in Manitoba.

Use of Personal Care Home Beds and potential for substitution with Home Care: Overall, Manitoba provides more home care services per capita than Ontario, and it is likely, based on these analyses, that Manitoba could increase allocative efficiency by using home care services for the highest need, highest institutionalization risk clients, and diverting other clients to community support services.

Over time, this strategy would increase the share of clients in higher MAPLe and RUG levels, reduce the proportion of lower care people in personal care homes, reduce hospital days, and allow Manitoba to reduce pressure on personal care home and hospital beds in the future.

Next, we combine these results with the spending analysis to quantify the allocative efficiency improvements.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Use of Personal Care Home Beds and potential for substitution with Home Care: At the Ontario per capita spending rate, Manitoba would spend $175M less: $105M less in Personal Care Homes and $70M less in Home Care.

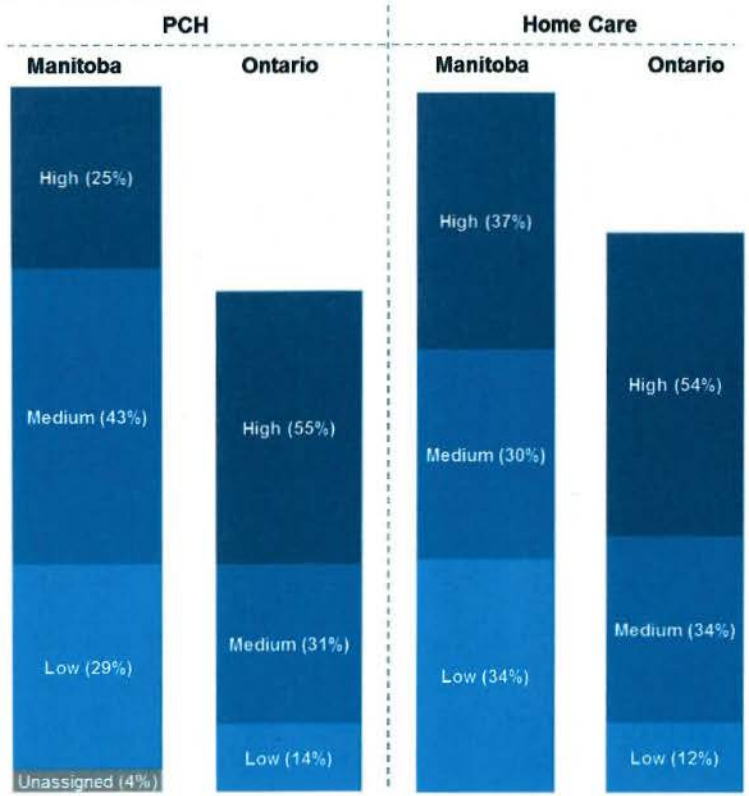
Care Setting	Ontario Spending Per Capita	Manitoba Spending Per Capita	Difference Adjusted to System Dollars
Personal Care Homes	$ 228	$ 308	-$ 105M
Home Care	$ 189	$ 242	- $ 70M
Personal Care Homes and Home Care	**$ 417**	**$ 550**	**-$ 175M**

1. At the Ontario per capita spending rate, Manitoba would spend $175M less: $105M less in Personal Care Homes and $70M less in Home Care.
2. This $175M would not be a net saving because of the need fund additional community services that would to substitute for the avoided PCH and home care services.
3. The following pages examine the potential to increase the substitution of community services for Personal Care Homes and Home Care services, by examining the types of patients who currently receive personal care and home care services.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Use of Personal Care Home Beds and potential for substitution with Home Care: When we further examine the differences in overall spending on Personal Care Homes and Home Care between Ontario and Manitoba, we find they are attributed to the high proportion of low and medium care clients.



1. On the next page, we examine the potential cost improvement from increasing the substitution of lower cost community services for low care and medium low care in Personal Care Homes and Home Care.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Use of Personal Care Home Beds and potential for substitution with Home Care: The table below shows the overall potential net effect savings opportunities between moving low care and medium low care patients from Personal Care Homes to Home Care and to the community; moving medium care patients from home care to the community and moving low care home patients to the community.

Initiative	Personal Care Home	Home Care	Community Support Services	Combined
Move **low care** and **medium low care** patients from Personal Care Homes to Home Care and to the Community.	↓ **-$105M**	↑ **$26M**	↑ **$26M**	↓ **-$53M**
Move **medium care** patients from Home care to the Community.	**n/a**	↓ **-$26M**	↑ **$22M**	↓ **-$4M**
Move **low care home care** patients to the community.	**n/a**	↓ **-$70M**	↑ **$35M**	↓ **-$35M**
Overall Effect	↓ **-$105M**	↓ **-$70M**	↑ **$83M**	↓ **-$92M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Consolidating Proximal Small Rural EDs:
We examined the potential to improve resource use by consolidating proximal small rural EDs. Main findings include:

1. There are two potential sources of savings from consolidating EDs: a) economies of scale in costs per visit; b) reduction in the fixed costs by consolidating departments.
2. Our analysis of unit costs at Manitoba's small rural EDs found no strong evidence for economies of scale in unit costs. Put differently, cost per ED visit did not decrease with ED total visits among small Manitoba EDs.
3. Our analysis found that fixed cost savings from consolidations are likely negligible compared to those associated with the potential to reduce unit costs.

Summary of ED Cost Improvement Opportunities

1. The results of all our ED analysis imply the following prioritization: 1) improve ED unit costs; 2) reduce ED visits in Southern RHA; 3) after the first two priorities have been achieved, consider consolidating proximal small rural EDs.

Cost Improvement Opportunity	Approach	Potential Cost Improvement
Reduce ED visits	Compare standardized ED visit rates across peer regions	**$ 5M**
Cost per visit efficiency	Benchmark unit costs	**$ 24M**
Merging small proximal EDs	Estimate economies of scale and fixed cost improvements	**$ less than 1M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Consolidating larger EDs, ORs and Diagnostic Imaging: Current Manitoba experience demonstrates limited evidence for economy of scale in the Emergency Room, Operating Room and Diagnostic imaging unit costs in the short-term.

	Potential Savings From Reducing Volumes	Unit Cost Savings	Savings From Economies Of Scale (Short-term)	Potential Service Disruption (Short-term)
Emergency Room	$ 5M	$ 24M	Low	High
Operating Room	$ -	$ 27M	Low	High
Diagnostic Imaging	$ 19M	$ 17M	Low	High

1. Our benchmarking analysis found substantial cost improvement opportunities from reducing costs of these services as currently organized.
2. We also found the potential for cost improvement by reducing use of Emergency Room and Diagnostic Imaging.
3. Given these findings and the potential for disruptions in the short-term from consolidations without extensive clinical engagement and a required whole system reconfiguration approach, the case to support consolidation is weak from a short-term cost improvement perspective.
4. Consolidation should be considered in the context of medium to longer-term sustainability in the context of a strategic configuration of services underpinned by the provincial clinical services plan as set out in Area of Opportunity #10: Infrastructure Rationalization.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

The financial benchmarking method has four steps:

1. For each Manitoba hospital, establish a set of peer hospitals based on similarity in size, teaching mission, tertiary services, and region type.
2. For each peer group, establish a benchmark that is both aspirational and achievable.
3. Measure the difference between each hospital's performance and the benchmark.
4. Estimate cost improvements at 25% to 50% of the difference.

Since 40% of Ontario peer hospitals meet the benchmark and Ontario hospitals typically have lower nurse to patient ratios than Manitoba, we feel that the Ontario 40th percentile is both achievable and aspirational.

Since we recognize that the benchmark may be achievable only in the longer term, we estimated cost improvements between 25% and 50% of the difference between each hospital's performance and the benchmark. Our analysis included accounting for nursing overtime and agency costs.

Nurse Hours per Patient Activity ($90M cost improvement opportunity)

We compared the hours per patient day, visit and surgical case in each department, hospital and RHA to the 40th percentile of Ontario peers.
Medical Inpatient, Surgical Inpatient, ICU, Pediatric and Obstetrics departments:

1. Nurse hours per patient day are higher than Ontario peers 40th percentile across all Manitoba hospitals.
2. Teaching hospitals nursing hours per patient day are 42% to 55% higher than to Ontario peers, translating into potential cost improvement opportunity of $28M.
3. Northern Health Region hospitals nursing hours per patient day are 110% to 200% higher than Ontario peers, translating into potential cost improvement opportunity of $5M.
4. Prairie Mountain Health hospitals nursing hours per patient day are 30% to 100% higher than Ontario peers, translating into potential cost improvement opportunity of $6M.
5. Manitoba hospitals have a lower occupancy rate in general compared to Ontario hospitals, particularly hospitals in the Northern Health Region. Lower occupancy rates result in standby capacity and increased labour hours per patient day.
6. Closure of unused beds and reductions in nurse hours per patient day across nursing inpatient areas could can translate to $58M in cost improvement across the province.

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Nursing Hours per ED Visit:

1. Nursing hours per ER visit is more than double that of Ontario peers (3.6 hours per visits compared to 1.5 hours per visit on average) in most hospitals in Manitoba.
2. Reductions in nursing hours per ED visit to Ontario peer 40th percentile could generate up to $21M in potential cost improvement across the province.

Nursing Hours - Operating Room:

1. Operating room nursing hours per surgical case is on average 30-120% higher than the 40th percentile of Ontario peers for most hospitals.
2. Reductions in nursing hours per surgical case to Ontario peer 40th percentile could generate up to $12M in cost improvement across the province.

Nurse Hours per Patient Activity Cost Improvement Opportunities

RHA	Nursing Inpatient	Emergency	OR
WRHA	$ 44M	$ 13M	$ 8M
Prairie Mountain Health	$ 6M	$ 1M	$ 3M
Interlake-Eastern RHA	$ 1M	$ 1M	$ -
Northern Health Region	$ 5M	$ 3M	$ -
Southern Health-Santé Sud	$ 2M	$ 3M	$ 1M
Manitoba	$ 58M	$ 21M	$ 12M

Area of Opportunity #4: Core Clinical & Healthcare Services

Nurse Hours per Patient Activity

		Medical Inpatient		Surgical Inpatient		ICU		Operating Room		Emergency Room	
		Nurse Hr / Day	% from Peer 40th PCTL	Nurse Hr / Day	% from Peer 40th PCTL	Nurse Hr / Day	% from Peer 40th PCTL	Nurse Hr / Case	% from Peer 40th PCTL	Nurse Hr / Visit	% from Peer 40th PCTL
Interlake-Eastern RHA	Selkirk & District General Hospital	8	10%	9	47%	-	-	8	13%	2.7	118%
Northern Health Region	Thompson General Hospital	14	111%	-	-	-	-	-	-	3.5	155%
	The Pas Health Complex	15	124%	-	-		-	-	-	3.8	180%
	Flin Flon General Hospital	21	204%	-	-	-	-	-	-	4.5	229%
Prairie Mountain Health	Brandon General Hospital	8	29%	10	32%	37	81%	12	120%	3.1	94%
	Dauphin General Hospital	8	16%	11	68%	31	103%	-	-	1.4	12%
Southern Health-Santé Sud	Portage Hospital	7	6%	11	56%	-	-	12	34%	2.3	55%
	Bethesda Regional Health Centre	7	6%	11	52%	-	-	11	26%	3.9	159%
	Boundary Trails Health Centre	7	5%	11	60%	-	-	14	59%	2.8	87%
WRHA	Seven Oaks General Hospital	8	20%	8	12%	31	33%	13	112%	3.9	121%
	Grace Hospital	7	7%	10	36%	33	42%	6	-6%	4.8	176%
	Victoria General Hospital	7	3%	11	41%	29	25%	8	33%	4.0	131%
	Concordia Hospital	7	0%	8	1%	24	3%	12	95%	4.1	135%
	Health Sciences Centre	11	55%	12	43%	27	0%	13	15%	4.3	134%
	St. Boniface General Hospital	10	42%	12	50%	38	43%	15	33%	4.8	165%

Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Nursing Administration ($9M cost improvement opportunity):
We compared Manitoba nursing administration expenses as a percent of total direct hospital expenses to Ontario average.

1. The percentage of nursing administration expenses varies across Manitoba hospitals, and is higher than Ontario average in about half of Manitoba hospitals.
2. The two teaching hospitals in the WRHA have a higher percent of nursing administration relative to Ontario peers (6% compared to 3%), and make up 80% of the total nursing administration cost improvement opportunity.

Nursing Administration Cost Improvement Opportunities

RHA	Hospital	Nursing Admin Cost Improvement	
WRHA	Health Sciences Centre	$	3.6M
	St. Boniface	$	3.2M
	Victoria Hospital	$	0.1M
	Grace Hospital	$	0.5M
Prairie Mountain Health	Brandon Hospital	$	0.5M
	Dauphin Hospital	$	0.5M
Southern Health-Santé Sud	Portage Hospital	$	0.2M
	Boundary	$	0.1M
	Bethesda RHC	$	0.1M
Total		**$**	**8.7M**

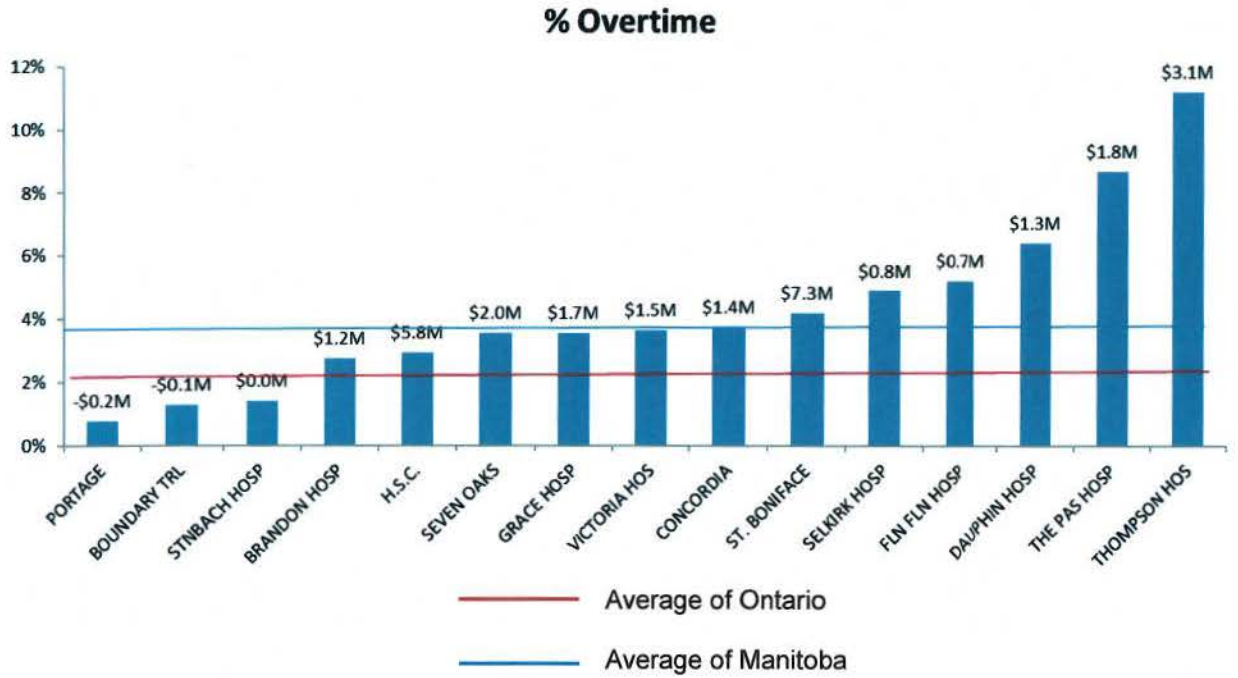
Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Overtime ($14M cost improvement opportunity)

We compared the percentage overtime in Manitoba relative to Ontario peers and found a significant opportunity.

1. The average percentage overtime in Manitoba hospitals is 3.6% compared to 1.6% in Ontario.
2. Overtime as a percentage of labour expenses are higher than Ontario average in 12 of the 15 hospitals examined.
3. At Ontario average 1.6% overtime, of Manitoba's hospitals could reduce their overtime premium expenses by $14M.



Area of Opportunity #4: Core Clinical & Healthcare Services

Analysis & Observations (Cont.)

Therapeutic Services ($4M cost improvement opportunity)

We compared the cost of an therapy attendance day (unit cost) and the number of therapy attendance days per patient day or visit (utilization) for each therapy department across Manitoba hospital and Ontario peer hospitals.

1. Cost improvement opportunities were found in Physiotherapy and Occupational Therapy.
2. High use of physiotherapy in outpatient clinics relative to Ontario peers translates into a $2M cost improvement opportunity.
3. A higher cost per attendance day in Occupational Therapy relative to Ontario peers translates into a $1.5M cost improvement opportunity.

Therapeutic Services Cost Improvement Opportunities

RHA	Physiotherapy	Occupational Therapy	Respiratory Therapy
WRHA	$ 2.0M	$ 1.4M	$ 0.5M
Northern Health Region	$ 0.1M	$ 0.1M	$ -
Total	**$ 2.1M**	**$ 1.5M**	**$ 0.5M**

Area of Opportunity #4: Core Clinical & Healthcare Services

Actions

The *Provincial Clinical and Preventive Services Planning for Manitoba* report is recognized as a key dependency to transforming core clinical and healthcare services. It is anticipated that a provincial service plan will have a significant impact on drug wastage, capital costs, infrastructure to meet quality and safety standards (e.g., MDRD, systemic chemotherapy) following the recent completion of the report mentioned.

Possible actions to address core clinical and healthcare services were identified by stakeholders and based on leading practice:

- Reduce unit costs/rates, including but not limited to the following services:
  - Nursing services.
- Shift care from acute to community settings, including but not limited to:
  - Reduce acute hospital admissions and lengths of stay;
  - Shift laboratory testing and diagnostics to the community;
  - Adopt remote monitoring;
  - Improve discharge planning and integration with community-based services;
  - Reduce ED visits for CTAS 4/5 patients.

Area of Opportunity #4: Core Clinical & Healthcare Services

Actions

- Rationalize and standardize programs and services, including but not limited to:
  - Realign the WRHA clinical matrix;
  - Revise the WRHA bed map;
  - Standardize medical and surgical supplies.
- Rationalize staffing, scope of practice, and scheduling, including but not limited to:
  - Reduce nurse to patient ratios, where safe/appropriate;
  - Adopt full scope of practice;
  - Increase service expectations for primary care providers;
  - Reduce overtime hours and premiums by reviewing and modifying staff attendance and scheduling, where appropriate;
  - Increase substitution of ambulatory for inpatient surgery;
  - Adjust nursing rotations;
  - Rationalize interdisciplinary teams;
  - Cohort like patients to ensure nurse to patient ratios are matched with patient resource intensity;
  - Close beds and/or change staffing model during holidays and slow times;
  - Implement cross training to enable integrated staffing nursing between obstetrics, nursery and pediatrics;
  - Implement cross training to enable integrated staffing between day surgery and post-surgical recovery.

Area of Opportunity #4: Core Clinical & Healthcare Services

Benefits & Potential Financial Impacts

- The benefits realized from core clinical and healthcare services require medium-term transformation and include:
  - Improved integration of healthcare services across the continuum;
  - Improved patient flow;
  - Improved staff utilization and reduction in overtime costs;
  - Access to primary care services;
  - Redistribution of services to the most appropriate setting, including the provision of care closer to home;
  - Reduction in costs.

Timeframes: medium-term

- **2017/2018:** $7M+
- **2018/2019 and beyond**: $134M+
- **Total: $141M+**

Area of Opportunity #4: Core Clinical & Healthcare Services

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Rationalize and Standardize Programs and Services	$ 6M	$ 1M	$ -	$ 0.7M	$ 7.7M
Rationalize Staffing, Scope Of Practice, and Scheduling	$ 0.25M	$ 53M	$ -	$ 10M	$ 63.25M
Reduce Unit Costs/Rates	$ -	$ 3M	$ 0.7M	$ -	$ 3.7M
Shift Care from Acute/Institutional to Community Settings	$ -	$ 11M	$ -	$ 55M	$ 66M
Totals	**$ 6.25M+**	**$ 68M+**	**$ 0.7M+**	**$ 66M+**	**$ 141M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	H	• Core clinical and healthcare services represent the area of opportunity with the highest cost-savings, with significant benefits of efficiency and effectiveness of healthcare services.
Effort to Implement Criteria *(Alignment/ Risk)*	M	• This opportunity represents a fundamental shift in how care is delivered and how providers are utilized across the system.

Area of Opportunity #5: Diagnostic Services

Description

This opportunity consists of the following core areas:

- Rationalizing diagnostic service programs and delivery sites.
  - This could include integration of all diagnostic and testing service delivery into a coordinated provincial program as there is clear potential to consolidate diagnostic and imaging services delivery across all Manitoba healthcare organizations. There is also an opportunity to expand the service delivery scope for community testing services provided by the private sector to include other aspects of hospital diagnostic testing particularly in rural areas. [redacted].
- Aligning diagnostic service delivery with evidence-based practice.
  - This would include expansion of initiatives like the *Choosing Wisely* Initiative, while acknowledge the considerable change management required to achieve savings; as well as alignment of all diagnostics services with a Provincial-level clinical services plan.
- Reducing the unit costs of laboratory and diagnostic services.
  - This consists of initiatives to examine the costs of delivery diagnostic services by assessing labour, consumable and service delivery models for laboratory and diagnostic imaging with the objective of lowering the overall cost of diagnostic services. Clinical benchmarking identified significant opportunities to reduce costs through this type of initiative in the medium-term.

Area of Opportunity #5: Diagnostic Services

Analysis & Observations

- Diagnostic services and testing include all analytical tests and imagery services in support of clinical delivery.
- Delivery of these services is provided through 3 service channels:
  - Diagnostic Services Manitoba delivers hospital laboratory services at 82 sites in Manitoba as well as managing the delivery of diagnostic imaging to all rural health regions. DSM is also responsible to support capital planning and procurement of diagnostic services equipment on a provincial scale.
  - Community diagnostic laboratory services are provided as part of the fee-for-service delivery model with the largest providers being Gamma Dynacare and Unicity Laboratories.
  - Provincial public health testing services are delivered through the Cadham Provincial Laboratory. Cadham operates as a stand-alone organization funded directly by the MHSAL.
- Opportunities were identified for better integration of diagnostic imaging and testing services throughout the province. For example, the scope of testing is not well managed and there are opportunities to significantly realign the scope of testing required to treat patients. Key issues for evaluation include additional or duplicative testing that occurs at handoffs between service providers or as patients move between sites throughout the region.
- Initiatives like *Choosing Wisely* were widely acknowledged as a positive step to address the issue of unnecessary testing. This initiative provided evidence-based education to providers about the limitations of Vitamin D deficiency tests resulting in an overall reduction in unnecessary testing.
- The requirement for better integration of testing and diagnostic imaging results into the Province's EMR solution was identified, to increase efficiency. Similarly, there were noted limitations in the information management environment for diagnostic imaging in the Southern Health Region (a priority to improve overall integration at a Provincial-level). The adoption or EMR solutions and automated test information sharing has been influenced by the preferences of individual providers or groups of providers. There is need for a provincial clinical service standard to reinforce the requirement for sharing of testing and diagnostic imaging information. This requirement was also highlighted in the *Provincial Clinical and Preventative Service Planning for Manitoba*.
- There is a requirement to improve funding and scope of delivery for the Manitoba Quality Assurance Program (ManQAP). ManQAP provides accreditation of laboratory and diagnostic imaging facilities through a relationship with the College of Physicians and Surgeons of Manitoba. Specifically, there are opportunities to improve the effectiveness of diagnostic services across the program by leveraging ManQAP into other areas including point of care testing, sleep lab, nuclear medicine and other similar areas. These type of initiatives would improve overall standards and coordination but would not result in immediate delivery savings.

Area of Opportunity #5: Diagnostic Services

Actions

Several possible actions to address diagnostic services were identified by stakeholders and based on leading practice:

- Consider opportunities to expand and extend the use of the *Choosing Wisely* initiative.
- Consider opportunities to expand the delivery of diagnostic services provided by fee-for-service providers with an emphasis on community-based laboratory services as well as limited hospital based testing in rural areas. Key contracts for these services are set for renewal in early 2017/18 as agreement for community laboratory services will expire March 31, 2017.
- Review configuration of existing diagnostic and testing service delivery to reduce and consolidate sites into a more efficient model across the province.
- Transfer accountability for Cadham Provincial Laboratory to an existing health authority or integrated provincial testing service.
- Opportunity to explore consolidation of Cadham Provincial Laboratory, DSM, and labs under existing private contracts, in terms of governance and a potential contract with a private sector provider.
- Initiate program to align testing delivery with the provincial clinical services plan.
- Realign fee-for-service tariffs to reduce expenditures for unnecessary and duplicative testing.
- Take steps to complete the roll out of Province-wide diagnostic imaging solution and integration of diagnostic services information into the an integrated provincial EMR.
- Reduce unit costs and rates for diagnostic services and laboratory testing.

Area of Opportunity #5: Diagnostic Services

Benefits & Potential Financial Impacts

The benefits realized from diagnostic services are expected to be realized in the medium-term, including:

- Reduction in costs for unnecessary and duplicative tests
- Rationalization of diagnostic services deliver sites and facilities
- Improvements to patient experience and accessibility of diagnostics services.

Timeframes: Medium-term

- **FY 2018/19 and beyond:** $24M+
- **Total: $24M+**

Area of Opportunity #5: Diagnostic Services

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Rationalize Laboratory and Diagnostic Programs/Sites	$ -	$ 4M	$ -	$ 0.5M	$ 4.5M
Align Diagnostics and Testing With Evidence-Based Practice	$ -	$ 0.9M	$ -	$ -	$ 0.9M
Shift Care from Acute to Community Setting	$ -	$ 0.5M	$ -	$ -	$ 0.5M
Reduce Unit Costs/Rates for Diagnostics and Testing	$ -	$ 18M	$ -	$ -	$ 18M
Totals:	$ -	**$ 23M+**	$ -	**$ 0.5M+**	**$ 23.5M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	L	• Potential cost savings are lower than other opportunities.
Effort to Implement Criteria *(Alignment/ Risk)*	M	• Reviewing contract arrangements, commissioning structures, and shifting care to the community are expected to demand a moderate effort.

Area of Opportunity #6: Health Workforce

Description

Opportunities identified in this section are subject to a wide range of collective agreements and other negotiated contracts. Depending on the situation, realization of benefits is subject to renegotiation of these agreements or implementation through administration processes in the existing agreement. In addition, employer practices and policies have the effect of creating legal obligations on the part of the employer. These practices can be implemented through a combination of notice and policy change but often require some form of compensation to accommodate changes to new or standardized policies. To the extent possible within the scope of HSIR PI, these considerations are factored into this opportunity area by adjustments to the level of potential savings level and by evaluating the complexity, costs and timing associated with their implementation.

2017/18 cost savings opportunities reflect opportunities to implement initiatives that have had initial work completed by the department, require only administrative policy changes with limited negotiation or require regulations to be updated.

Manitoba's health workforce includes a diverse range of professionals, including physicians, nurses, and allied health professionals. As with all health systems, workforce size, composition and compensation contribute to the largest component of cost within the health system. Manitoba spends a higher proportion of its healthcare expenditure on its workforce at 69% compared to 65% in Ontario. In hospitals, Manitoba spends 63% of its healthcare expenditure on its workforce compared to 59% in Ontario. While in personal care homes, Manitoba spends 82% of its healthcare expenditure on its workforce compared to 73% in Ontario. This opportunity area highlights potential improvements 5 key areas to improve the structure and cost effectiveness of Manitoba's health care workforce by:

- Reducing the complexity and number of the collective agreements in all employment sectors by:
  - Moving towards a single employer structure across all healthcare delivery organizations with standardized contracts, HR management and payment policies;
  - Reducing the number of collective bargaining units and collective agreements; and
  - Rationalizing the Province's labour relations management capability together with adjustments to the employer supported supports for labour as part of the bargaining and labour management processes.
  - Addressing inconsistences in the levels of employment benefits paid to healthcare workers compared to their peers in other jurisdictions and the rest of the Province's public sector by:
- Reviewing the effectiveness and cost competitiveness of the Health Employees Benefit Plan (HEBP) and Health Employee Pension Plan (HEPP) including but not limited to:
  - Improving the integrations of HEBP/HEPP administration processes with all employers;
  - Evaluating opportunities to move from a Defined Benefit to Defined Contribution pension; and
  - Eliminating or adjusting high cost benefit provisions under HEPP such as adjusting HEPP's Magic 80 formula to age 55 minimum retirement or recently introduced HEPP COLA plan.

Area of Opportunity #6: Health Workforce

Description

- Evaluating employment related allowances and benefits across the system including:
  - Overtime and excess vacation accumulator banks;
  - Pre-retirement leave benefits;
  - Subsidized parking for all health care workers;
  - Academic allowances for training that is a primary job expectation; and
  - Evaluating alternatives to introduce alternate benefits that have higher value to employees and can be delivered at a lower cost like Health Benefits Spending Accounts (HBSA).
- Evaluating opportunities to pursue the cost of Worker's Compensation Board coverage in healthcare by addressing inconsistencies in WCB practices for health worker claim approval and the potential for the health system to self insure for work related injury claims.
- Introducing policy and legal changes that allow employers to enforce current employment practice violations between current health care employers in the short term with an emphasis time and attendance, overtime and benefit accumulators between entities in the WRHA.
- Improving the overall framework and tools for managing the composition of the overall health workforce by:
  - Evaluating composition of full and part time positions to get better delivery management and to reduce reliance on overtime;
  - Reviewing scope of practice for physician assistants, nursing and allied health care providers to reduce reliance on high cost medical resources;
  - Evaluating opportunities to reduce the use of Agency nursing in rural areas, home care and personal care homes;
  - Streamlining processes to certify and integrate internationally trained workers into areas in the system with high demand requirements; and
  - Considering options to establish an integrated physician and health care recruitment capability across the entire system.
- Strengthening the integration and models of professional provider compensation to achieve consistency with other jurisdictions and improve the relationship between provider compensation and system performance by:
  - Evaluating compensation models and service integration with Fee For Service providers including:
  - Securing commitment for provider cost savings negotiated in the last contract;
  - Considering requirements to align provider compensation with clinical service delivery standards established in the clinical services plan;

Area of Opportunity #6: Health Workforce

Description

- Reviewing Manitoba Physician's Manual for opportunities to further streamline physician claims and eliminate tariffs that do not reflect current clinical practice or compensation strategies in other jurisdictions; and
- Considering opportunities to assess fees for Physicians providing fee for service care in publically funded facilities that are currently accessed at no cost.

- Reviewing the accountability and processes for managing medical remuneration for all medical providers.
- Reducing or eliminating compensation to chiropractors by including it as an insured benefit. This practice is not consistent with other jurisdictions in Canada.
- Implementing changes to pharmacy compensation including;
  - Moving dispensing fees to transaction based pricing and away from a percentage of drug cost model in combination with the introduction of a cap or eliminating wholesale drug distribution charges; and
  - Standardizing the fees for the full scope of pharmacy services.

Area of Opportunity #6: Health Workforce

Analysis and observations

- Manitoba's workforce is managed in one of the most complex environments for a jurisdiction of its size. The environment includes 50 legal entities with formal employer status in addition to employees of the Provincial government and other related health care entities. These employers do not have consistent employment policies and practices. Across these entities there are 169 collective agreements covering nursing, allied health and clinical support staff and separate negotiated agreements with physicians and other professional health care providers. This reality impacts every aspect of service delivery and inconsistencies between the standards in these practices and agreements are one of the largest contributors to cost in the healthcare system.
- The complexity of ~169 collective agreements is a barrier to the effective use and mobility of healthcare workers and restricts the ability to operate as an integrated system. Approximately 113 of these collective agreements in the WRHA.
- The complexity introduced by the administration of these agreements impacts management and supervisory capacity, costs of payroll and benefit administration and service delivery initiatives from clinical programs through to ICT delivery. There were examples of instances where nursing staff could not provide coverage in other parts of the same facility or within programs in Winnipeg due to the nature of collective agreements; impacts to patients included delayed/cancelled procedures (e.g. in cardiac catheterization labs) or longer wait times.
- There does not appear to be a physician engagement strategy which is viewed as an enabler to system-wide change. This is critical to effect changes to system performance indicators or targets.
- In general, there is a perception that regulatory colleges are not engaged by MHSAL in the most optimal manner, with some Colleges providing more advice and insight than others.
- Incentivizing healthcare providers to work in rural or remote settings is an ongoing issue, similar to other remote areas of Canada. Although some flexible healthcare resourcing models have been adopted, professionals may be reluctant to work at rural sites without adequate work experience, access to mentors, and equipment and supports that facilitate safe patient care.
- Any future efforts for provincial clinical planning should include a strategic recruitment and workforce component.
- All health care delivery organizations including long term care facilities and community health agencies universally identified the challenges created by this labour environment with respect to standardizing care and providing better service integration for patients.

Area of Opportunity #6: Health Workforce

Analysis and observations

- All health care delivery organizations including long term care facilities and community health agencies universally identified the challenges created by this labour environment with respect to standardizing care and providing better service integration for patients.
- Other jurisdictions, such of Alberta and Saskatchewan have substantially reduced the number of employers in their system by consolidating regions and health delivery organizations. This has been supported with a strategic rationalization of collective agreements across their healthcare system with the aim of simplifying and integrating the system.
- Manitoba health care organizations have typically not been supported to adjust rotations and positions within the provisions of existing collective agreements to reduce the reliance on part time positions some times with capacity as low as 0.2 or 0.3 FTE levels. Adjusting rotations (in part to create a higher FTE role) under most agreements requires staff to be laid off and rehired into the new rotation. Because of this practice, many organizations have a large number of "unfunded positions" that they would like to introduce while at the same time part time resources are engaged to support work requirements at overtime cost levels. There would be a significant benefit to the system of supporting health care delivery organizations with making necessary adjustments to staff rotations.
- Labour representatives consulted as part of HSIR Phase I indicated that they have consistently advanced this alternative to the previous government but the concept was rejected because it would contribute to growth in the overall FTE count of the public service. They suggested that while this would reduce the overall number of roles under agreements that they traditionally have had mandates to increase full time employment positions. Most management stakeholders agreed that this was a necessary change for the system but noted that employees have taken advantage of the environment for a long time and that there will be some significant resistance to this change in some parts of the system.
- All stakeholders identified potential for a review of scope of practice for all health care system providers in coordination with the clinical services plan. They identified many areas where physician assistants, nurse practitioners or allied health care professionals could provide equivalent services to the system at a reduced cost compared to medical resources. Some stakeholders identified resistance from Nursing and Physician colleges as a barrier to scope of practice changes. Similarly, many stakeholder identified concerns with administrative effort from their early experience with the *Regulated Health Professions Act* for improvement. With refinements, this Act could be used as an enabler to improve interdisciplinary collaboration across the continuum of care by permitting practitioners to work to full scope. The Act is being implemented in a phased approach, with Colleges being transitioned into the Act.
- Formal pension and healthcare benefits in the system are not significantly out of line with other jurisdictions however there are many opportunities to standardize employment related benefits associated with leaves, accumulators and more policy related items like parking allowances. Some of these benefits require collective bargaining changes to implement.
- Many stakeholders suggested that there were opportunities to evaluate the performance of the Health Employees Benefit Plan and Health Employee Pension Plan. A detailed review of the cost performance of these entities was beyond the scope of the Phase I review. Evaluation of HEBP and HEPP operations seem to indicate a relatively effective delivery cost and advantages associated with the trust based risk management structure that underlines the Pension Plan itself. KPMG did identify a number of areas for consideration including:

Area of Opportunity #6: Health Workforce

Analysis and observations

- Process and administrative integration with HEBP and HEPP and the employers resulting in excessive administrative effort. HEBP/HEPP management have implemented a very formal policy of shifting delivery accountability to employers. This contributes to frustration on the part of some stakeholders about their performance. [redacted].
- Manitoba has a significant unfunded liability across the system for preretirement leave of $297M. This practice has been identified as a significant issue for all healthcare delivery organizations. It was identified as one area where employees can take advantage of the system to fund early retirement while still working in the system. All management stakeholders suggested the overall level of benefit is not consistent with other health systems and should be scaled back or eliminated altogether. KPMG estimated that 30% of this liability could be eliminated through negotiating changes or cancellation of the benefit with current employees. There will be a requirement for some level of investment to offset this liability as part of any change process.
- The WRHA has achieved a milestone with the implementation of an integrated human resource management shared service supported by the administration of payroll for the regions 26,000 employees on SAP. The shared service rollout has faced a number of challenges associated with the roll out of this type of service. Recent reports and attention that has been given to overpayments (while not to be minimized) do not reflect the fact that the level of overpayments by WRHA sites before consolidation into a shared service was not quantified and that most management stakeholders agree were significantly higher than after the implementation. Still, the service requires a dedicated effort to stabilize and standardize service delivery and this activity is being actioned by WRHA leadership. This shared service and the supporting information system has the technical and business foundation to support the entire healthcare system. There is interest in this from most non-WRHA health care delivery organizations. This potential strategy is described in more detail in the Shared Services Opportunity area.
- All stakeholders identified opportunities to recruit and retain medical and health care delivery providers especially in rural and Northern Manitoba. There is evidence of competition between rural areas for providers and some of this competition results in employment contracts that contribute to system cost and non standardized delivery (e.g. Hiring a surgeon into a rural area requires a facility with an operating room to be available that may not be dictated based on demand or safe clinical practice). Stakeholders identified concerns with the Province's ability to manage and execute on physician recruitment. Some suggested that there may be opportunities to leverage the private sector as part of an integrated recruitment program where the province coordinates demand and service planning and the private sector partners execute the recruitment process.
- Despite these concerns, Manitoba's overall physician workforce grew by 582 physicians since 2005 to a 2016 total of 2768 doctors. The physician workforce still faces significant turnover due in part to high stress work environments with limited clinical service support in rural and northern regions.

Area of Opportunity #6: Health Workforce

Analysis and observations

- There is support from stakeholders to integrate the Province's recruitment and labour management services into an integrated service that could be leveraged by all health care organizations. Labour relations functions are shared between the Province's Manitoba Health Provider Network and health delivery organizations. Health delivery organizations can opt out of advice provided by the Province. Often this practice results in further complexity in the overall system. In many instances it causes grievances that result in large financial settlements. An example of this situation resulted in CancerCareMB having to pay $400,000 to settle a claim for practices that were not consistent with provincial regulations.
- Stakeholders universally identified issues associated with the alignment of professional compensation with the broader performance objectives of the system as an opportunity area. Provider compensation is a difficult opportunity area because of the competitive nature of the employment market and within Canada because there is a need to maintain alignment with other jurisdictions.
- The majority of the Province's doctors are engaged as Fee for Service providers that operate as private contractors within the system. This arrangement is typical of all Canadian jurisdictions. The model has some advantages because it shifts the responsibility for infrastructure and operations of clinics to provider businesses. It also creates challenges for the system because there is no mechanism to require providers to meet service standards and there is no mechanism for oversight provider practice effectiveness except through administration of provider billing claims.
- Manitoba's efforts to implement a modern claims processing solution has the capability to support alternate compensation models including blended compensation, outcomes based claim payment and introduction of new rules aligned with clinical service based standards instead of individual tariffs. There is evidence in other jurisdictions of significant financial savings and improved health care outcomes from these models and in particular for primary and some areas of specialty care.
- Some stakeholders noted that the leadership of the College of Physicians and Surgeons on practice standardization is not being delivered at the level it should be to support some of these initiatives. They pointed to the College's notice that it did not wish to participate in the Manitoba Quality Assistance Program as evidence of this point. DoctorsManitoba indicated a willingness and support for these concepts but said that it would need to see the province develop a comprehensive proposal to move forward with these changes.
- There are a number of areas where the administration of claims under the Manitoba Physician's Manual could be streamlined to reduce administration and eliminate tariffs that do not reflect current clinical practice or compensation strategies in other jurisdictions.
- There are opportunities to evaluate the compensation of all professionals in the health care sector. Specific opportunities identified by stakeholders focused on changes to :
  - Chiropractic services coverage levels or elimination of the coverage completely in order to bring Manitoba in line with other jurisdictions. Some clinical system stakeholders suggested that this type of change is counter to scope of practice changes and that there would be savings associated with increased levels of chiropractic coverage.
  - Pharmacy coverage to standardize services for all pharmacy services and to move away from fees based on a percentage of transaction cost. These practices have been changed in other jurisdictions to a standardized fee schedule for transaction/service type.

Area of Opportunity #6: Health Workforce

Actions

Several possible actions to address the health workforce were identified by stakeholders and based on leading practice:

- Consider opportunities to consolidate the number of employers within the health care system and to align human resources policies and standards across the province;
- Undertake process to rationalize collective agreements to simplify the system, standardize administrative requirements and increase mobility throughout the system;
- Evaluate negotiated and employer funded benefits across all sectors;
- Evaluate the potential to terminate or change the preretirement leave benefit across the system and to eliminate this benefit for all new hires;
- Review role and alignment of HEBP/HEPP as a service provider and evaluate key benefit provisions under these plans for cost effectiveness;
- Review policy of relying on part time resources and support health care delivery organizations to adjust rotations for more effective system management;
- Review scope of practice for all service providers with an emphasis of matching safe service delivery with the lowest cost resource;
- Consider opportunities expedite licensing of internationally trained workers into priority areas of the healthcare system;
- Establish an integrated healthcare recruitment program with an emphasis on balancing service demands and fulfillment across the province;
- Consider opportunities to engage the private sector as part of the fulfillment model for physician recruitment;
- Review the Physician's Manual for opportunities to simplify the administration and adjudication of physician claims with an emphasis on eliminating tariffs that are not consistent with current practices or service standards;
- Implement savings negotiated with DoctorsManitoba as part of the last collective bargaining process;
- Review healthcare provider compensation models with an emphasis on aligning Fee for Service providers and other professionals with the broader performance and delivery objectives of the system;
- Consider opportunities to engage with professional colleges to reset established expectations about their regulatory and service oversight functions as set out in Manitoba legislation; and
- Consider opportunities to implement and integrated health employee shared service with a full scope of practices from labour relations, hiring, development, administration and payroll management services leverage foundation from WRHA.

Area of Opportunity #6: Health Workforce

Benefits & Potential Financial Impacts

Benefits and potential impacts of health workforce initiatives include:

- Rationalized and effective staff composition across all delivery organizations;
- Reduction in overtime and sick leave costs;
- Improved interdisciplinary collaboration;
- Improved provider accountability;
- Greater provider mobility across programs and sites;
- Standardized employee benefits;
- Simplification of overall system; and
- Alignment of professional service practice with system performance and delivery expectations.

Timeframes: Short- and medium-term

- **2017/2018:** $26M+
- **2018/2019 and beyond:** $42M+
- **Total:** **$68M+**

Area of Opportunity #6: Health Workforce

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Rationalize Healthcare Employee Benefits	$ 4M	$ 0.6M	$ 1M	$ 28M	$ 34M
Review Healthcare Provider Compensation	$ 14M	$ -	$ 6M	$ 3M	$ 23M
Rationalize Collective Agreements	$ -	$ 3M	$ -	$ 4M	$ 7M
Rationalize Workforce Composition	$ -	$ 3M	$ 1M	$ -	$ 4M
Totals	**$ 18M+**	**$ 7M+**	**$ 8M+**	**$ 35M+**	**$ 68M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	H	• 2017/18 cost savings opportunities reflect opportunities to implement initiatives that have had initial work completed or require only administrative policy changes with no negotiation. • Longer term opportunities have a high savings potential but require collective bargaining or negotiations.
Effort to Implement Criteria *(Alignment/ Risk)*	H	• All employment related changes require a high level of change management • Negotiation processes are protracted and have a high level of complexity • Some employment related benefits will require payouts or settlements as part of any process change • Higher potential cost savings are associated with scenarios that have the highest degree of consolidation. These are complex initiatives that require dedicated effort and commitment. These initiatives are critical to long term system sustainability.

Area of Opportunity #7: Healthcare Transportation

Description

Opportunities in this area directly relate to:

- Effective procurement and contractual arrangements for the provision of transportation in healthcare including:
  - Consolidating and procuring air ambulance services to achieve a standardize service commitment and pricing;
  - Considering options to align air ambulance and patient transportation services with the Federal government to achieve scale and volume discounts;
  - Implementing centralized billing for ambulance and EMS services to improve billing processes and capture lost revenue.
- Reviewing current transportation programs for efficiency and effectiveness.
  - Reconfiguring air ambulance support in line with the 2013 Emergency Services Review;
  - Review Northern Patient Transportation Program for eligibility and compliance with program standards;
  - Review STARS program for coverage and deployment effectiveness and consider relocating STARS to Northern Health Region;
  - Negotiate/realign transportation support with FNHIB and to recapture costs from services not reimbursed;
  - Evaluate opportunities to implement an integrated transportation system for southern part of the province incorporating supplies, laboratory materials and other shared services requiring inter-facility logistics.

Analysis & Observations

- Healthcare transportation services are currently viewed as non-strategic, low-volume spend. In reality, healthcare transportation has significant short-term potential for cost savings and efficiency gains directly related to effective patient care.
- Healthcare across Manitoba currently utilizes transportation services for transporting laboratory specimens, pharmaceuticals, patient records, patients and other medically critical and administrative material between regions and facilities of integrated delivery networks.
- These services are coordinated but not integrated into an effective logistics capability. No analysis has been conducted on the total level of transportation investment from this perspective. All transportation and logistics costs are integrated as part of other system services and are difficult to evaluate.
- RHA's have never performed a formal insource / outsource analysis of transportation requirements across the region.

Area of Opportunity #7: Healthcare Transportation

Analysis & Observations

- All RHA's interviewed displayed inconsistent and fragmented views for contracting transportation services. This has led to inconsistency in patient experience depending on region and inefficient market engagement to leverage market competitiveness and all of province contractual arrangements.
- A lack of coordination between regions, programs, and sites have contributed to high transport costs within WRHA and across Manitoba.
- There are opportunities to consolidate provincial demand for air ambulance and patient transportation through a formal procurement with service providers. This could be completed in partnership or on behalf of the federal government for both organizations. This strategy could be utilized to achieve consistent service delivery standards from all carriers and to improve unit and volume pricing for air transportation across the system.
- There are opportunities to consider integration of Lifeflight operations as part of an alternate service delivery model as part of this type of procurement or on a stand alone basis.
- Strategies to offset the requirement for patient travel from northern and rural areas are described in the ICT Integration Enablement and Clinical Services Delivery opportunity areas.
- Many stakeholders identified concerns with the quality and effectiveness of the Northern Patient Transportation Program. First Nations and Northern stakeholders were very critical of service delivery models that incorporate bus travel combined with air flights. They also suggested that models using technology to provide remote services and strategies to deliver more primary care closer to northern communities should be pursued as an alternate to health care spending. All stakeholders identified concerns with inconsistencies in the administration of the program with respect to companion travel, core trip purpose and other similar policies that would impact program costs.
- A number of service reconfiguration options were identified. These emphasized changes from the 2013 EMS Review with respect to Air Ambulance Services.
- Some stakeholders suggested that the STARS Air Ambulance service did not make a meaningful addition to the EMS capability of Southern Manitoba given the accessibility of treatment centers. They highlighted that this would be particularly relevant in an environment where services were rationalized in rural areas into regional centers with true emergency level care. These stakeholders suggested that there would be significant return from deploying STARS from a northern base of operations where road and facility access is poor and that trip distances could be achieved within the operating and refueling time parameters of the aircraft.
- There are many potential opportunities to align transportation service delivery with the Federal government. Some of these include redirecting federal transportation investments to the construction of healthcare facility construction in Northern Manitoba. These strategies are discussed in the Facility Rationalization opportunity area. Regardless, there are a number of areas where increased program and service coordination may result in lower costs for both levels of government. This may also create a basis to resolve outstanding conflicts with the federal government over outstanding transportation payments to the Provincial government.

Area of Opportunity #7: Healthcare Transportation

Actions

A number of possible actions to address healthcare transportation were identified by stakeholders and based on leading practice:

- Review contracted service procurement practices, including but not limited to:
  - Consolidating all demand for fixed wing transportation services into a single procurement with better services and increased economy for demand.
  - Exploring potential partnerships with FHIB to combine procurement leveraging the demand for both the federal and provincial programs into a coordinated program.
- Review transportation program efficiency and effectiveness:
  - Undertaking a review of the Northern Transportation Program.
  - Reviewing the STARS program for coverage and deployment versus cost of delivery.
- Consider evaluation of integrated transportation costs study in southern Manitoba to establish potential for integrated logistics service.

Benefits & Potential Financial Impacts

- Improved contracting and procurement processes, resulting in reduced costs;
- Improved transportation program efficiency and effectiveness;
- Improved patient experience.

Timeframes:

- **2017/2018:** $3M+
- **2018/2019 and beyond**: $0.2M
- **Total:** **$3M+**

Area of Opportunity #7: Healthcare Transportation

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Review Contracted Service Procurement Practices	$ 1.5M	$ -	$ 0.7M	$ -	$ 2.2M
Review Transportation Program Efficiency and Effectiveness	$ 1M	$ 0.2M	$ -	$ -	$ 1.2M
Totals	**$ 2.5M+**	**$ 0.2M+**	**$ 0.7M+**	**$ -**	**$ 3.4M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	L	• Low compared with other opportunities identified. • Significant gains in efficiency and effectiveness of healthcare service across the province.
Effort to Implement Criteria *(Alignment/ Risk)*	L	• Relatively simple to implement (contract revision, contract realignment) • No significant risks of implementation.

Area of Opportunity #8: Integrated Shared Services

Description

This opportunity identifies functions both back office and clinical services that can be leveraged more effectively and efficiently under an integrated provincial shared services model. Integrated shared services refers to the central provisioning of a common service required by all healthcare deliver organizations in the Province.

Stakeholders identified duplication in many administrative and clinical support services between organizations. Key areas identified by stakeholders can be grouped as follows:

- Consolidating administrative support services. This area includes consolidation of a wide range of functions including:
  - Finance including finance, budget, cash management, comptrollership, reporting and performance management.
  - Human Resources including labour relations, recruitment, and payroll/benefits administration.
  - Real estate including accommodations management, capital planning, facilities management and housekeeping.
  - Legal including legislative and privacy compliance and commercial legal services.
  - Communications including public relations, advertising and production.

KPMG team identified duplication in these functions and noted that there is tension between leveraging centralized services and a desire to maintain control of these functions within each health delivery organization. This results in duplication of core functions between organizations and in the case of many organizations the development of separate organizations with individual policies, procedures and practices that are not consistent from a system perspective.

WRHA has implemented the initial stages of an administrative shared services organization as part of the Business Process Solutions Project. This project leveraged the Province's SAP solution to rollout an integrated management information solution across the core sites and programs in the region. This implementation included the roll out of a Human Resources Shared Service and centralized delivery of key processes in Supply Chain Management, contract management and accounts payable processing. This was a significant effort and the solution and core shared services processes are still in stabilization mode. Benefits from this implementation are beginning to be realized in a number of areas including reductions in Supply Chain costs, better visibility to financial and operational performance and clarity on the overall costs and deployment of the WRHA's workforce.

- Consolidating health support services. This area includes consolidation of functions that support clinical delivery including:
  - Dietary and food services;
  - Laundry;
  - Other clinical support services like medical device reprocessing.

Area of Opportunity #8: Integrated Shared Services

Description (Cont.)

WRHA has delivered dietary and food services through its Regional Distribution Facility to 8 sites Winnipeg sites since its inception in 1998. It also manages the food services operation on site at the HSC campus. Opportunity to extend this service to SBGH will reduce a requirement for significant reinvestment in the dietary services area in the hospital. Redirecting this investment to expansion at the RDF will increase the capacity of the system to support SBGH and set the foundation for expansion to other facilities.

A shared laundry service has been implemented in the WRHA since 2005. The facility has capability to support increased demand and discussions have been initiated with other areas including Selkirk Mental Health Center and Interlake Eastern RHA to provide laundry support services from this location.

PMRHA provides an integrated laundry service from a facility located at the Brandon Regional Health Centre, MHSAL has identified a significant opportunity to establish a common medical device reprocessing capability. Existing facilities at sites throughout the province require significant upgrading to meet clinical and safety standards. The capability and competencies associated with this work are increasingly complex and the services requires more specialized capability than in available in most regions. WRHA has established a conceptual plan to develop a common facility but this would require capital investment and development of an effective transportation model between this facility and regional centers throughout the province.

- **Implementing an integrated provincial healthcare Supply Chain Management (SCM) function**. A SCM function includes contract management, procurement, vendor management, inventory management, warehousing/distribution and expenditure analytics.

WRHA has implemented an integrated Supply Chain and contract management shared service. This includes a centralized distribution facility/warehouse on Emily Street in Winnipeg. WRHA has taken steps to begin consolidating delivery services but accountability for SCM execution is shared between the Logistics Program and individual sites. Final stage implementation of common Supply Chain Management system was completed in 2016 with deployment of the BPSP solution to HSC.

Capabilities to delivery effective Supply Chain execution are not consistent across other healthcare delivery organizations. CancerCareMB and DSM maintain an independent procurement capability for specialized cancer drugs and diagnostic equipment but there are efforts to leverage some of the WRHA expertise in many situations. MHSAL provides support to all medical equipment procurement through the Regional Policy and Programs branch.

All stakeholders identified an opportunity to consolidate the purchasing of all healthcare delivery procurement in order to achieve better price and volume discounts. One mechanism for this would be to maximize expenditure and compliance with the Province's HealthPro contract or equivalent buying group contracts overtime. WRHA logistics estimates this type of consolidation could result in a 2-4% savings on items procured through a centralized model based on its experience to date.

Area of Opportunity #8: Integrated Shared Services

Description (Cont.)

Some stakeholders identified the potential for consolidating Manitoba's demand with other provinces to maximize volume purchasing scale. Key in this regard is pharmaceutical procurement. One vehicle might be the Western Province Economic Cooperation Agreement or the New West Partnership Trade Agreement which Manitoba official joined on January 1, 2017.

- **Establishing a common program and transformation management capability.** This includes project management, organizational change management, quality and lean management, process engineering and analytical skills.
  - These capabilities vary widely between organizations across the province. In aggregate, there are significant resources that could be aligned into an integrated program.
  - The WRHA has the largest capacity through the BPSP Program and initiatives like the Centre for Health Innovation.
  - MHSAL has a strong capability and investment in data resources through its relationship with the Manitoba's Centre for Health Policy Research.
  - There are many opportunities to align and integrate these resources into a single program and to standardize on methodologies to improve overall consistency and integration.
- KPMG has made the following observations about the shared services capability of the Province:
  - Efforts to consolidate some core services in the past especially during regionalization have had some positive impacts. Unfortunately though, the steps necessary to effectively consolidate and rationalize service delivery structures were not well executed or remain unfinished. This has led to pockets of provincially-run services not fully achieving or realizing the full benefits or intended outcomes.
  - There is a high cost delivery structure in particular for administrative shared services and clinical support functions as each organization also supports investments in information technology and services to implement individualized delivery models.
  - WRHA shared services capability is still a low level of maturity. Effort will be required to stabilize that capability as a Provincial-level service. This type of service would be best delivered at a Provincial-level outside of an individual region. Initial emphasis should be placed on transactional services (e.g. payroll, accounts payable processing) that can be executed as a support to delivery organizations. Consideration of a provincial level service would only be undertaken in the context of reducing the overall number of healthcare organizations and agencies, as made clear in Area #1 – Strategic System Realignment.
  - Leading practices support opportunities for a relatively significant benefit from shared services implementation. The level of benefit can be up to 10-20% of standalone costs over time. Shared services implementation is complex and requires dedication and progressive management over time. KPMG financial benchmarking processes validated savings for administrative services consolidation. This potential savings is identified as an opportunity in the tracker.

Area of Opportunity #8: Integrated Shared Services

Analysis & Observations

- Strong willingness in individuals to consolidate and leverage province-wide processes where possible, yet there is a lack of ability to effectively resource and manage the transition to a shared service arrangement.
- Focus on the above back office and clinical services is taking away time, effort and focus of RHAs' core function - provision of healthcare in their region.
- Current collective agreements are seen as barriers to the implementation of shared services.
- Significant variance in ICT capability across the regions is contributing to inefficiency in process and inconsistent adoption of back office and clinical functions.
- Shared services implementation is enabled through standardization of information systems and technology platforms. Currently, all non-WRHA healthcare delivery organizations maintain their own finance and administrative management systems. This makes consolidation of information and process execution very difficult.
- Fragmented back office processes and procedures within each RHA fuel inconsistent application and delivery of service.
- Maturity of back office and clinical potential shared service functions is inconsistently managed for each region.
- Duplication of governance / leadership roles carrying out likewise functions for each RHA that could be run in an integrated shared services function.
- Increasingly all organizations are recognizing the need to leverage enhance expertise and capability that could be consolidated as a shared service. KPMG noted increased acknowledgement of stakeholders that there is a need to consider shared services delivery in order to ensure system sustainability over the longer term.
- Efforts and the part of MHSAL to standardize delivery through various administrative councils is positive. These have resulted in increased alignment and sharing of information on leading practices but have not resulted in significant standardization. Other jurisdictions have moved beyond basic alignment and coordination approaches towards integrated delivery in order to produce meaningful sustainability outcomes.

Area of Opportunity #8: Integrated Shared Services

Actions

Several possible actions to address integrated shared services were identified by stakeholders and based on leading practice:

- Consider opportunities to the following administrative support services consolidated into an integrated Province-wide shared services solution:
  - Finance;
  - Human Resources;
  - Supply Chain Management.
- Consider opportunities to consolidate the following healthcare support services into an integrated Province-wide shared services solution:
  - Laundry;
  - Dietary;
  - Real Estate;
  - Legal;
  - Communications;
  - Facilities Management
  - Medical device reprocessing.
- Implement common program and transformation management capability with the province by undertaking the following actions:
  - Establish an integrated healthcare transformation function to look after the end-to-end delivery of programs and projects for the province. A critical success factor for building up this capability will be to ensure that a common set of principles is adopted to prioritize, govern, manage and effectively resource all transformational initiatives that are undertaken. Consideration of a provincial level service would only be undertaken in the context of reducing the overall number of healthcare organizations and agencies, as made clear in Area #1 – Strategic System Realignment.
  - Consolidate current shared services programs, processes and resource into the one provincial function.
- Develop an integrated provincial Supply Chain Management function to manage system-level commercial activity in a consistent and integrated way. Actions to get there include but are not limited to:
  - Implementation of consistent commercial / procurement capability across the province with robust policies, procedures and guidelines. This will help to ensure consistency of procurement approach, selection process, contract management and performance indicators.
  - Standardization of medical supplies and equipment. This helps to leverage the buying power of both province and where possible, federal.

Area of Opportunity #8: Integrated Shared Services

Benefits & Potential Financial Impacts

Effectively implementing an integrated shared services model will help reduce and improve sustainability over time through:

- Reduced organizational complexity by minimizing the functions carried out for each healthcare delivery organization.
- Increased Supply Chain Management efficiencies by maximizing contractual / procurement processes.
- Reduced business risk by having consolidated functions in one location.
- Standardization of processes across the healthcare system / reduction in complexity over time.
- Insight and visibility into all inputs and resources to improve system and analysis over time.

Timeframes:

- **2017/2018:** $ 3M+
- **2018/2019 and beyond:** $43M+
- **Total:** **$46M+**

Area of Opportunity #8: Integrated Shared Services

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Consolidate Health Support Services	$ 0.25M	$ 11M	$ -	$ -	$ 11.25M
Implement Common Program and Transformational Management	$ -	$ -	$ -	$ -	$ -
Develop an Integrated Provincial Supply Chain	$ 1.5M	$ 13M	$ 1M	$ 12M	$ 27.5M
Consolidate Administrative Support Services	$ -	$ 7M	$ -	$ -	$ 7M
Totals:	**$ 2M+**	**$ 31M+**	**$ 1M+**	**$ 12M+**	**$ 46M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	M	• Opportunities are limited on a short-term basis given the transformative nature of shared services delivery initiatives. • Experience from jurisdictions clearly supports this approach as a significant strategic delivery model that can realize significant effectiveness, economy and efficiency benefits over time.
Effort to Implement Criteria *(Alignment/ Risk)*	H	• Alternative service delivery initiatives are complex and require an advanced organizational maturity to implement and manage effectively. • Long duration of benefits realization. • Significant organization change required. • Significant impact of process, people, organization design. • Requires the move to an effective commissioning model to underpin the implementation of an integrated shared services function.

Area of Opportunity #9: ICT Integration & Enablement

Description

This opportunity reflects the critical nature of ICT delivery as an enabler in all parts of modern healthcare delivery. It consists of the following areas:

- Modernizing ICT Services and Support including steps to standardize ICT system management and support across all healthcare delivery organizations as well as initiatives to modernize key infrastructure.
  - KPMG confirmed that overall ICT delivery and support processes are characterized by a hybrid delivery model with overlapping responsibility on the part of eHealth Manitoba, MHSAL Information Systems Branch, individual healthcare delivery organizations and in some cases Manitoba Finance BTT. These findings mirror those set out in the Manitoba Healthcare ICT Study (2016).
  - Governance of ICT delivery remains fractured. eHealth is responsible for all clinical systems delivery while MHSAL Information Systems Branch retains delivery responsibility for the systems major administrative systems. In addition to these systems, stakeholder participants suggested that individual healthcare delivery organizations retain responsibility for almost one-half of the Province's ICT systems. Stakeholders identified opportunities for collaboration on a wide range of initiatives to infrastructure and network provisioning in northern and rural areas of the province, desktop management, network management as well as system support and management processes. KPMG confirmed opportunities to consolidate ICT delivery through the benchmarking activity and included these in the tracker.
- Enabling healthcare delivery with strategic investments in core management and information systems that facilitate patient care and overall system management capacity. This includes a wide range of systems in all areas of healthcare.
  - Significant benefits that have accrued from implementation of key Provincial-level systems like the EPR, Admission Discharge Transfer system (ADT), Clinical Physician Order Entry (CPOE), Radiology Information System/Photo Acquisition System (RIS-PACS) and SAP Finance / Administration management solution. They noted that efforts to complete the roll out of these solutions across the province is preventing better delivery integration. Some stakeholders identified concerns with the training and change management associated with the deployment of these systems.
  - KPMG validated inconsistencies in stakeholder perspectives with respect to the vision for healthcare system delivery. These inconsistencies effectively create barriers to the establishment of an integrated patient record and the extension of ICT delivery into areas that could reduce the costs of site and population based care. One of the key limitations of the province's ICT delivery model has been the lack of clinical services plan to structure ICT investments and planning. This limitation has been reinforced by the *Clinical and Preventative Service Plan* which provides foundation of a clinical service plan that will guide ICT planning and investment across the province.

Area of Opportunity #9: ICT Integration & Enablement

Description

- A number of core opportunities to make strategic investments in ICT solutions for healthcare include but are not limited to:
  - Implementation of a consumer / Telehealth portal to provide real time access to medical records and offset administrative requirements from the healthcare system for diagnostic results retrieval, or supporting registration processes, etc.
  - Implementation of an integrated data / analytics platform to aggregated clinical and financial information to support system planning and commissioning activities.
  - Expansion of Telehealth and internet based remote medicine solutions to offset the requirements for patient travel and as a support to administrative and clinical services delivery by experts located in other parts of the province.
  - Completion of implementation of eChart and integrated registration systems to manage patient information, diagnostic testing results and administrative processes for patient management across all sites.
- Pursue strategic funding and implementation partnerships to reduce system implementation costs and support strategic initiatives.
  - Stakeholders identified several opportunities for collaboration with Manitoba Finance BTT with an emphasis on leveraging the Province's network and desktop management processes. These are mature services delivered by the Province and there are many possible configurations to leverage this capability from integrated delivery to procurement.
  - Federal Canada Health Infoway funding has been identified as a potential source of funding for many initiatives. This funding is available to jurisdictions that execute projects in their jurisdiction that support the overall Infoway Delivery Plan. Key initiatives that could be funded through this method include iPrescribe/ ePrescribe, STD/HIV tracking, Telehealth Expansion and Consumer Portal Development. This is a leading practice delivery model that has been adopted by several other Canadian jurisdictions.
  - Strategic partnerships with First Nations have been identified for many opportunities. These included but were not limited to investments in northern and rural networking infrastructure and partnerships to implement a shared data center operating systems servicing Indigenous communities.

Area of Opportunity #9: ICT Integration & Enablement

Analysis & Observations

Based on these opportunities, KPMG has developed the following observations about ICT integration and enablement in Manitoba:

- The ICT landscape has changed dramatically over the last thirty years. Healthcare outcomes and capabilities are more than ever underpinned by ICT integration and enablement. This is in line with a global trend that ICT has moved from a support function to being highly integrated throughout all delivery functions. This increased ICT integration has revolutionized the provision of healthcare and back office functions, as ICT is more widely accessible and used for a wider range of services.
- Administrative and clinical business applications as well as investments in strategic infrastructure for areas like patient administration, electronic health records, order entry and integrated diagnostics management information are fundamental to modern health care. High performing health care systems see ICT investments as a strategic alternative to investment in bricks and mortar infrastructure. While the cost of implementing these systems can be high and the projects are complicated, these investments pay significant dividends to the system in terms of the quality of patient care, management of system capacity and overall effectiveness.
- Since the 2015 Manitoba Healthcare ICT study was conducted, progress has begun to be made to increase the maturity of provincial ICT service provision but there remains a long way to go. Manitoba eHealth has begun taking a leadership role in the provision of ICT services but lacks traction on interactions with wider MHSAL / region governance teams to support the effective delivery of ICT solutions across the province.
- There is a fundamental requirement to consolidate ICT planning delivery into a single organization consistent with the Manitoba Healthcare ICT Strategy; recognizing that this could only be considered in the context of reducing the overall number of healthcare delivery organizations in the province as set out in Area #1 Strategic System Realignment. Stakeholders recognize the limitations in WRHA delivery to date, but overall have a favourable perspective on eHealth delivery capability. Manitoba could consider increasing the scope of eHealth to include all ICT planning and delivery in the healthcare system as part of a phased implementation plan. Priority should be placed on consolidation of MHSAL ISB and eHealth operations followed by structure transition of site based ICT resources over a 3+ year period.
- Manitoba has had a relatively low level of ICT investment in healthcare. This has impacted the speed of major system deployments and the realization of an integrated digital foundation in the Province. eHealth annual funding authority was increased to $40M in F2010/11from $25M in F2003/04. This funding authority was established as a dedicated amount within the WRHA's overall global funding approval. Annual expenditures against this authority have averaged $28M per year for the last five years. **Stakeholders identified concerns that changes to eHealth's annual delivery plan and budget by the department and central government have made it difficult for eHealth to achieve its implementation targets for critical health delivery systems like electronic health records or provincial ADT systems.** Leading practice approaches emphasize the importance of maintaining a consistent multi-year funding program for ICT delivery given its critical nature to health care delivery. They also take clear steps to shift accountability and responsibility to the ICT delivery organization and providing oversight through outcome and service level management.

Area of Opportunity #9: ICT Integration & Enablement

Analysis & Observations (Cont.)

- At the same time, individual point solutions have been approved without the necessary planning to support effective delivery. These solutions end up with unfunded support obligations and service levels are often impacted by this lack of coordination. KPMG confirmed many examples of this situation in the delivery of clinical, support and administration systems.
- All health delivery organizations maintained their own ICT solutions and infrastructure to offset solutions provided by eHealth. There is no clear system level accountability for these ICT investments and the delivery model tends to drive custom solutions across the province. This results in pockets of 'Shadow IT' that escalate costs and complexity.
- Collectively, the aggregate environment is characterized by poor levels of service and reactive 'firefighting' rather than a capability-led ICT delivery.
- There is an observed high degree of duplication activities such as planning, design, engineering, analytics, and reporting across all health delivery organizations. This level of complexity further complicates efforts to integrate solutions across the system.
- The pace of innovation in many areas of ICT delivery is significant. There are significant opportunities to traditional ICT delivery that may provide accelerated patient care and system management capability that should be explored including but not limited:
  - Consumer health portal delivery;
  - Mobile computing;
  - Cloud based infrastructure and application delivery;
  - Big data analytics; and
  - Machine learning.

  Stakeholders noted that it has been difficult to establish traction for initiatives that are increasingly common in other healthcare systems. Private sector healthcare providers and many public sector jurisdictions have recognized the potential of strategic investments in these solutions to make up for limitations in their current delivery environment and to accelerate productivity gains to their overall systems. The establishment of ICT innovation funding is a leading practice in many jurisdictions.

Area of Opportunity #9: ICT Integration & Enablement

Analysis & Observations (Cont.)

- ICT Governance is fractured and complex. Efforts to establish a Provincial ICT Plan and coordinate delivery through a Provincial ICT Council are positive but most high-performing jurisdictions are operating at a higher level of capability.
- There is not good visibility into the capabilities and services that could be provided by eHealth. Stakeholders have noted that the incorporation of eHealth within the WRHA structure results in conflicts between delivery priorities.
- There are not consistent policies and procedures to plan, procure and implement ICT initiatives across the province.
- There is no clear project prioritization process for the provision of ICT services, including alignment of ICT to the strategic priorities of the province.
- There are significant challenges associated with remote connectivity and network delivery in Northern Manitoba. This is a complicated multi-faceted problem that is beyond the scope of this review. Priority needs to be placed on network and infrastructure providers who contract with the Province of Manitoba to expand this capacity as part of all contracting processes.

Actions

- Consider opportunities to establish a clear provincial mandate for all ICT delivery through a shared services model by combining MHSAL ISB and eHealth and transitioning other ICT solutions over a 3 year period.
- Consider options to commission eHealth Services on a provincial scale and to realign eHealth outside of the WRHA over time as part of the strategic realignment opportunity in the context of reducing the overall number of healthcare delivery organizations in the province.
- Implement a multi-year capital funding program for ICT investment with a priority on core systems to complete delivery of an integrated health ICT infrastructure across the province within 5 years.
- Consider options to use enabling technology to enhance patient services and improve system management capability.
- Evaluate opportunities to leverage Manitoba Finance BTT capacity for network and desktop management services.
- Consider options to replace legacy systems with solutions maintained by MHSAL to achieve efficiency savings, cost reductions and better platforms for innovation and service delivery.

Area of Opportunity #9: ICT Integration & Enablement

Benefits & Potential Financial Impacts

Strategic enablement and integration of ICT services across the province will increase economy, effectiveness and efficiency with key benefits including:

- Enhanced focus on customer experience.
- Increased focus on strategic ICT investment for the province.
- Increased oversight of the ICT services within the province which will help reduce 'Shadow IT' that is currently escalating cost and complexity.
- Improved ICT service delivery through higher centralized capability.
- Stronger focus on the strategic ICT services that support the overall delivery of healthcare in Manitoba.
- Improved province wide culture of ICT service provision.

Timeframes:

- **2017/2018:** $5M+
- **2018/2019 and beyond:** $29M+
- **Total:** **$34M+**

Area of Opportunity #9: ICT Integration & Enablement

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Total
Enable Healthcare with ICT Investment	$ 0.9M	$ 8M	$ -	$ 6M	$ 14.9M
Modernize ICT Infrastructure and Support	$ 0.2M	$ 3.5M	$ 1.5M	$ -	$ 5.2M
Pursue Strategic Funding and Implementation Partnerships	$ -	$ 3M	$ 2M	$ 8M	$ 13M
Total:	**$ 1M+**	**$ 15M+**	**$ 4M+**	**$ 14M+**	**$ 34M+**

Note: These potential operational cost savings could be offset to some extent by required IT capital investments phased-in over time.

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	M	• Stakeholders were not able to quantify the benefit of ICT opportunities. • Experience from jurisdictions supports that ICT investment can realize significant effectiveness, economy and efficiency benefits over time.
Effort to Implement Criteria *(Alignment/ Risk)*	M	• ICT initiatives are complex and require an advanced organizational maturity to implement and manage effectively, as well as phased-in investments. • Significant impact on process, people, and organization design.

Area of Opportunity #10: Infrastructure Rationalization

Description

Infrastructure rationalization refers the ability to get the best possible infrastructure to support the ever-changing need and requirements of Manitoba's population to support both fiscally sustainable and improved quality of care.

This opportunity presents significant cost saving opportunity for the province but in order to realize the full benefits, system-wide transformational change needs to take place. Three core areas for infrastructure rationalization were identified and explored:

- Implementing new standards for the delivery and provision of healthcare infrastructure. Many stakeholders identified concerns that the Province's existing standards for facility design and construction are not current with leading practices. This is particularly true for uses like long-term community and mental healthcare where standards emphasize institutional standard structures and leading practice has moved to smaller supportive housing models. Savings of up to 20% may be generated from increasing the size of facilities set out in the standard where institutional delivery is the most appropriate method.
- Leveraging external/alternative funding and infrastructure delivery models. Many opportunities were identified to fund infrastructure requirements in through strategic partnerships or alternate delivery models. Some examples include:
  - Focusing efforts of community foundations on delivery of allied health infrastructure like supportive or community housing. This is an area where community foundations would have demonstrated capability to execute capital program delivery and support the necessary capital program development compared to facilities for clinical or diagnostic care where there is an increasing expectation that these facilities should be supported through tax revenues. Some examples would include housing and assisted living projects undertaken by Concordia Hospital Foundation, St. Amant Centre and the Catholic Health Corporation of Manitoba.
  - Leveraging investment of the federal government particularly around service delivery infrastructure for First Nations communities and northern Manitoba. One example of this type of partnership raised by First Nation and Inuit Health Branch (FNIHB) and Indigenous and Northern Affairs Canada (INAC) was collaboration around the development of a delivery alternative to the replacement of the Nursing Station on Cross Lake FN. The Federal government has already approved $40 million based on their own capital program and there would be opportunities to leverage funding in other areas to create a new facility with a business case aimed at reducing patient transportation costs overtime and delivering better community based care. This type of initiative would require support from the provincial government from a policy and aligned funding contribution.
  - Rationalizing infrastructure based on population need and leading clinical practice on quality of care. Stakeholders universally identified this as a significant long-term sustainability requirement for the province. They recognize the sensitivity of access and equity issues but noted that community leaders and the public are increasingly recognizing the need to rationalize infrastructure to improve service mix and improve the quality of care. KPMG validated this perspective in sessions with regional authority directors and the local health involvement groups. Activity by MHSAL working with the Association of Manitoba Municipalities as well as direct engagement with communities have had a positive effect. Facilities which could be rationalized include:
    - Rural EMS facilities in accordance with the 2013 EMS Review.
    - Laboratory and diagnostic services facilities in alignment with clinical service configuration at these sites.

Area of Opportunity #10: Infrastructure Rationalization

Analysis & Observations

- Pharmaceutical facilities.
- WRHA birthing centre through closure or repositioning to another use like dialysis.
- Co-location of Quick Care Clinics and Access Centres.
- Close mature women's center at Victoria Hospital and shift to primary care delivery model.
- Changes to the configuration of Winnipeg Hospitals to improve integration of services and integrated social services delivery.
- Obstetrical site consolidation into regional centers (Potential to reduce essential services by 3 to 4 sites).

- Rationalization of emergency and critical care facilities throughout the Province was a key finding in this section. KPMG benchmarking verified the acute centric nature of the Manitoba healthcare system. Other jurisdictions and most recently Saskatchewan have taken steps to align infrastructure and service delivery at the community, regional and Provincial level.
- One of the critical requirements in facility rationalization planning is to align service delivery and facility composition. This could be supported by the development of standardized facility types based on a clinical services plan following the recommendation of the Clinical and Preventative Service Plan. A key theme in this report and identified by stakeholders in the HSIR Phase I process is the need to strategically shift the system from acute centered care to more community and population based care.
- There are significant challenges in staffing Winnipeg's six EDs, which have a high volume of low acuity cases with 46% of ED attendances in 2015/16 which were CTAS 4s and 5s (less urgent and non-urgent cases) as shown in the table below:

Hospital	CTAS 1 & 2	CTAS 3	CTAS 4 & 5	Total
Brandon Regional Health Centre	14%	32%	53%	27,037
Grace Hospital	19%	38%	43%	27,237
HSC Children's	9%	33%	56%	51,909
HSC General	16%	39%	44%	58,615
Selkirk & District Gen Hosp	9%	24%	67%	25,710
Seven Oaks General Hospital	14%	43%	42%	41,311
St Boniface General Hospital	26%	42%	31%	40,156
Victoria General Hospital	19%	45%	37%	31,079
Total	16%	38%	46%	303,054

Area of Opportunity #10: Infrastructure Rationalization

Analysis & Observations

- A study by the former UK Healthcare Regulator, Monitor (now NHS Improvement) suggests the minimum efficient (economic) scale for an ED is 350,000 attendances per year. Although this is considerably larger than all of Winnipeg's six EDs, the majority of scale economies are achieved at 80,000 to 250,000 attendances - EDs of 80,000 attendances or less are below scale and therefore have higher costs per attendance.
- Consideration of consolidation of EDs in Winnipeg should only be considered in the context of whole system reconfiguration of urgent and acute care and in alignment with the Clinical and Preventative Service Plan.
- In that context, suggested opportunity areas to consider were to consolidate rationalize and reduce WRHA acute care facilities to focus on providing quality care acute related services that meet the populations need. This could be combined with strategies to provide more appropriate Long Term Care (LTC) infrastructure and to shift Alternate Level of Care populations from hospital-based care into other parts of the system. Further, stakeholders identified opportunities to rationalize acute care facilities that offer similar services in a close proximity to each other like Ste. Anne and Bethesda hospital or facilities in other areas of rural Manitoba which do not perform procedures with enough volume to maintain safe clinical delivery capability.
- Limited capability of MHSAL to manage and deliver an effective capital infrastructure program. They acknowledged the political nature of this work under the previous government but also highlighted concerns about the department's capacity with respect to build infrastructure. Similarly, they noted that the WRHA maintains a significant area of expertise with respect to capital planning and program expertise. All stakeholders recognized the need for a Provincial-level infrastructure planning and delivery program.
- Many stakeholders highlighted concerns about the integration of the health capital planning program with the capital and infrastructure planning processes maintained by Treasury Board. Stakeholders identified many situations where delays in project approval processes resulted in significant cost increases as well as highlighting inconsistencies in the processes for large capital equipment. It is unclear what impact the capacity of the health system to meet Treasury Board process and analysis expectations has had in these situations.
- Some jurisdictions have worked to improve alignment of central government processes with the specialized requirements of health care delivery to ensure effective decision making and stewardship investment by the public sector.

Area of Opportunity #10: Infrastructure Rationalization

Analysis & Observations (Cont.)

- All stakeholders noted that there are significant infrastructure liabilities throughout the system as many facilities are at or nearing end of life. This was particularly noted for the province's LTC facilities and some of the principal hospital facilities. The scope and magnitude of this liability has not been adequately quantified by the system based on stakeholder feedback received.

Actions

- Review and update facility and construction standards to provide a more current and appropriate range of infrastructure delivery options.
- Consider and implement recommendations of the 2013 EMS Review.
- Consider opportunities to rationalize facilities and infrastructure based on the development of a clinical services plan. Ensure that this plan considers approaches to define standard configurations of facilities at the community, regional and Provincial level.
- Conduct a review and reconfiguration of emergency and urgent care is required linked to the wider development of a clinical plan based on population need, access in terms of travel times and leading clinical practice including Canadian and international guidance on volume thresholds to ensure clinical quality.
- Integrate capital and infrastructure planning services into a Provincial-level service together with better alignment or integration.
  - Evaluate opportunities to leverage alternate funding and service delivery partnerships with the federal government and other strategic partners.
  - Conduct a facility lifecycle analysis and planning exercise to establish a baseline for all capital and infrastructure planning activities.

Area of Opportunity #10: Infrastructure Rationalization

Benefits & Potential Financial Impacts

Effectively rationalizing infrastructure within Manitoba has significant potential cost savings attributed to:

- Implementing new standards for infrastructure delivery;
- Effectively leveraging external/alternative funding and service delivery models;
- Rationalizing facilities for certain healthcare services based on population needs;
- Better alignment of infrastructure with community and population need;
- More sustainable infrastructure program.

Timeframes:

- **2017/2018:** $0.3M+
- **2018/2019 and beyond:** $62M+
- **Total:** **$62M+**

Area of Opportunity #10: Infrastructure Rationalization

Sub-Area	Potential Technical Efficiency Savings ($M)		Potential Allocative Efficiency Savings ($M)		
	2017/2018	2018/2019 and Beyond	2017/2018	2018/2019 and Beyond	Totals
Leverage External/Alternative Funding and Service Delivery Models	$ -	$ -	$ -	$ 17M	$ 17M
Rationalize Facilities with System Demand	$ -	$ 16M	$ 0.3M	$ 6M	$ 22.3M
Implement New Standards for Infrastructure Delivery	$ -	$ 5M	$ -	$ 18M	$ 23M
Totals:	**$ -**	**$ 21M+**	**$ 0.3M+**	**$ 41M+**	**$ 62M+**

Key Evaluation

Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	H	• Stakeholders were not able to quantify opportunities. • Experience from other jurisdictions would suggest that this area can have significant fiscal sustainability impacts over the long-term. • Significant efficiency and economy opportunities across the province both urban and rural.
Effort to Implement Criteria *(Alignment/ Risk)*	H	• Requires clinical services plan implemented as a prerequisite. • Significant change management risk. • Significant community level engagement and buy in required to implement changes and avoid political opposition. • Impact to organization design, roles and responsibilities and accountabilities.

Area of Opportunity #11: Alternate Service Delivery

Description

- Alternate service delivery refers to providing publically funded healthcare services through strategic relationships with industry and private sector partners.
- Manitoba has had limited experience with alternative service delivery of publically-funded healthcare services.
- The provinces experience includes:
  - Contract delivery of ophthalmology and plastic surgery services through relationships with Western and Maple Surgical Centers.
  - Application Management Service (AMS) service delivery for a limited number of ICT solutions with the most significant relationship being the joint development and implementation of a shared claims processing system for Manitoba Blue Cross and Health Workforce fee-for-service/Insured Benefits Branch.
- Although there is a potential for alternate service delivery to become part of Manitoba's delivery model, there is a risk of a perceived two-tier system. There are examples from jurisdictions where the public sector contracted for delivery of services as part of their commissioning model to gain significant efficiency gains or to access lower cost delivery structures.
- There is a range of opportunities including healthcare service delivery; facility capitalization and development; ICT solution delivery; and transportation.
- There are opportunities to incorporate innovation and commercialization objectives as part of the alternative service delivery model. This would create an opportunity for Manitoba-based businesses to pilot and trial their technology within Manitoba's healthcare system in order to validate it for the broader commercial markets.
- There is potential for broad public-private sector partnerships and P3 delivery models to support investment and reinvestment in critical health sector infrastructure from equipment to major facilities and community care infrastructure.
- There is the potential (as was previously the case in Manitoba) for private sector provision of MRIs to reduce wait times. Other provinces with an option of private MRIs are: B.C., Alberta, Saskatchewan, Quebec and Nova Scotia.
- These opportunities are consistent with leading practices implemented in many jurisdictions on a global basis.
- There are inadequate policy, planning, and compliance mechanisms in place to coordinate contracting with alternate service delivery providers. Greater system-level planning and alignment is recommended prior to identifying how to effectively engage private / industry partners to manage system supply and demand.

Area of Opportunity #11: Alternate Service Delivery

Description (Cont.)

- There are currently no clear metrics to describe the scope of savings associated with alternate service delivery options.
- Some stakeholders pointed to inconsistencies in the financial treatment of alternate service delivery models that negate the impact of the approach as a strategy. For example, projects funded by third parties have been interpreted as capital leases which have the same impact on the government as a self-funded capital project.
- There is a perception that alternate service delivery would not be adopted by the Government because of the sensitive nature of the delivery model.
- This opportunity could be very significant in a long-term sustainability strategy depending on the scope and scale of services that could be accessed by this model.
- This opportunity area is a potential delivery method for some of the other areas of opportunity.

Actions

Possible actions to address alternative service delivery were identified by stakeholders and based on leading practice:

- Consider scope and scale of alternate service delivery approach to define how it should be integrated into a healthcare sustainability strategy if at all.
- Make a determination about consolidating this opportunity as an enabler in other opportunity areas or as part of **Strategic System Realignment.**
- Specific opportunities identified throughout the review included:
  - Leveraging the existing claims processing solution implementation to support other Manitoba claims management processes;
  - Outsourcing the delivery of claims adjudication, payment and client registration services provided by MHSAL Health Workforce;
  - Private sector delivery or operation of existing system infrastructure including QuickCare Clinics, Access Centers or diagnostic testing facilities;
  - Expanding opportunities for private sector delivery for outpatient surgical procedures (Emergency Adult Plastic Surgery, Elective Outpatient Adult Plastic Surgery, Pediatric ENT, Pediatric General Surgery, Cataracts, Other);
  - Expanding opportunities for private sector diagnostic testing services equipment with an emphasis on MRI.
- There are private sector developers who develop, own and operate personal care homes (PCHs). The Province should consider more private sector involvements in PCHs and supportive housing. A segment of the population can afford private sector options and relieve long wait lists for PCHs and reduce pressure on Government finances. Limited public sector resources could continue to focus on existing facilities, new projects could be targeted for seniors who subsidized care.
- Initiate a process to review capitalization and funding policies maintained by the Provincial Comptroller and Treasury Board Secretariat to establish a clear understanding of the potential and requirements for alternate service delivery.

Area of Opportunity #11: Alternate Service Delivery

Benefits & Potential Financial Impacts

- Outsource delivery of administrative functions;
- Lower cost delivery of a wide range of publically funded healthcare services;
- Access to alternate financing and strategic delivery models;
- Integration of innovation and commercialization supports to Manitoba businesses within the healthcare systems.

Timeframes: Short- and medium-term

- **2017/2018:** TBD
- **2018/2019 and beyond:** TBD
- **Total:** TBD

Key Evaluation

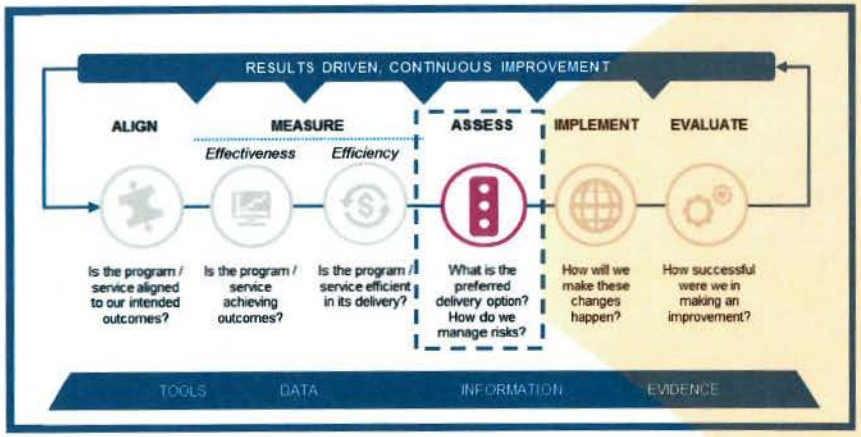
Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	L	• Opportunities are very limited in the short-term basis given the transformative nature of this delivery model. • Experience from jurisdictions supports this approach as a significant strategic delivery model that can realize significant effectiveness, economy and efficiency benefits over time.
Effort to Implement Criteria *(Alignment/ Risk)*	H	• Alternative service delivery initiatives are complex and require an advanced organizational maturity to implement and manage effectively. • This delivery model is politically sensitive within the Canadian healthcare system and initiatives need to be selected and planned carefully to avoid negative perceptions.

KPMG

4.2. Prioritization of Opportunity Areas

Health Evaluation Criteria

The key Health Evaluation Criteria to consider in reviewing areas of opportunity or initiatives to improve performance and costs are consistent with the **Assess** phase of the Health Fiscal Performance Review Framework. A dashboard for applying evaluation criteria consistently across the key areas of cost improvement opportunities is outlined on the following page. This approach is intended to provide a summary overview at a high-level for decision-makers to ensure that the right prioritized set of opportunities are taken forward to Phase 2 for more deep dive analysis and the development of detailed work plans.



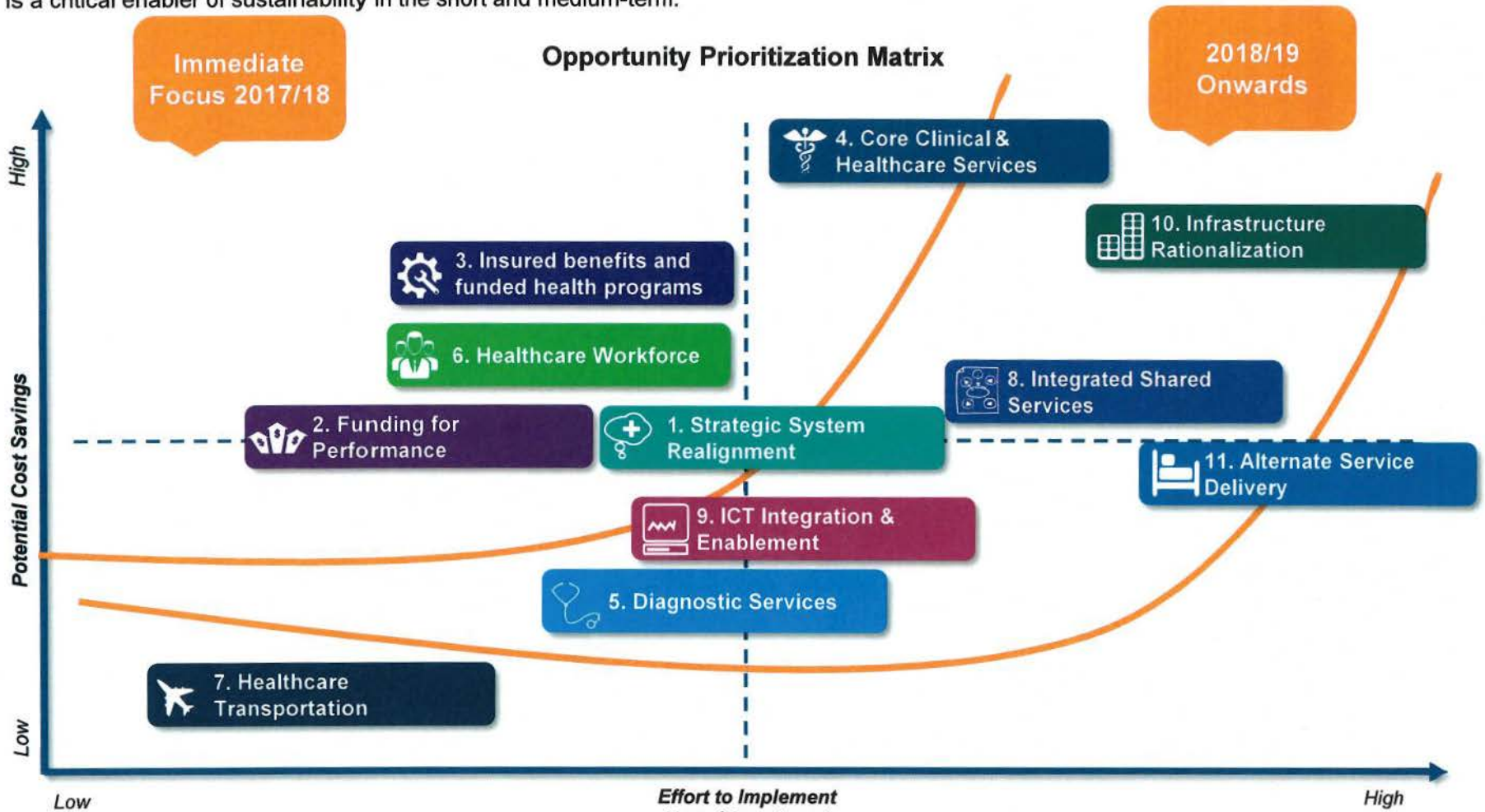
Potential Cost Saving Criteria	Effort to Implement Criteria
Effectiveness The extent and likelihood that the healthcare program or service achieves expected results and intended outcomes for target recipients of the healthcare program or service.	**Alignment** The alignment and consistency with MHSAL and the Government's direction and priorities.
Economy The relative value and affordability of the healthcare program or service for Manitobans.	**Risk** Identification and impact of key risks (e.g., implementation or transition risk) and risk mitigation strategies.
Efficiency The relationship of outputs produced to inputs used (resources, cost) intended for optimal cost of delivery and administration relative to the cost of the program or service.	**Capacity & Capability** The capacity and capability and the right skill sets of the delivering agent, Department, agency or third party to implement and operate effectively and efficiently.

Summary of Key Areas of Opportunities

Area of Opportunity	2017/18 Estimated Potential Cost Improvement	2018/19 and Beyond Estimated Potential Cost Improvement	Potential Cost Saving Criteria *(Effectiveness/ Economy/ Efficiency)*	Effort to Implement Criteria *(Alignment/ Risk/Capacity & Capability)*
1. Strategic System Realignment	$3M+	$5M+	M	H
2. Funding for Performance	$24M+	$18M+	M	L
3. Insured Benefits & Funded Health Programs	$30M+	$9M+	H	M
4. Core Clinical & Healthcare Services	$7M+	$134M+	H	M
5. Diagnostic Services	-	$24M+	L	M
6. Healthcare Workforce	$26M+	$42M+	H	H
7. Healthcare Transportation	$3M+	$0.2M+	L	L
8. Integrated Shared Services	$3M+	$43M+	M	H
9. ICT Integration & Enablement	$5M+	$29M+	M	M
10. Infrastructure Rationalization	$0.3M+	$62M+	H	H
11. Alternate Service Delivery	TBD	TBD	L	H

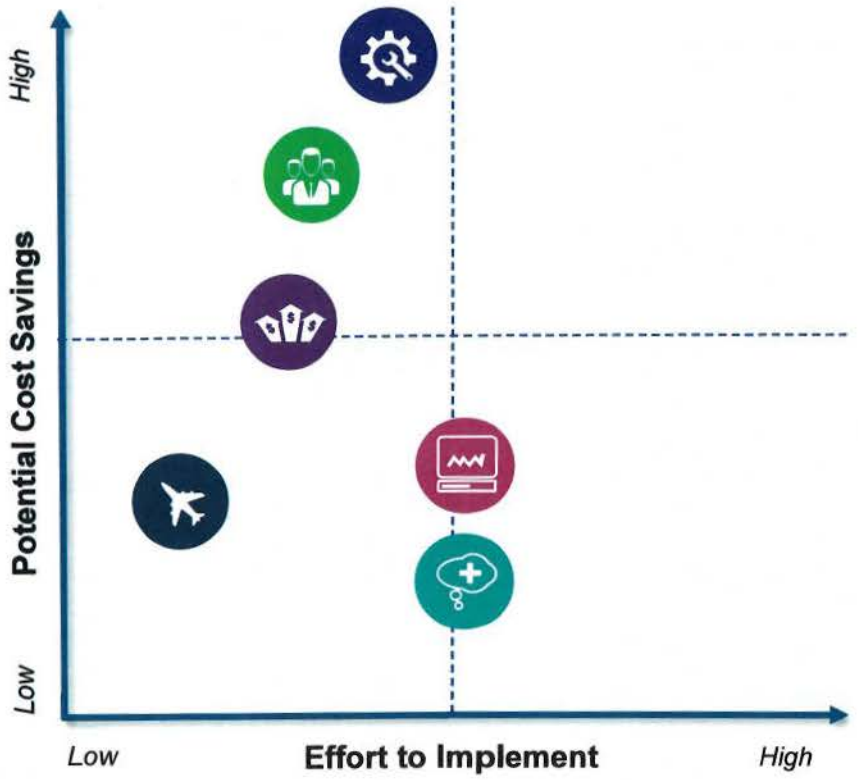
Prioritization of 11 Key Areas of Opportunities

The matrix below identifies they areas of opportunity both in the short-term for 2017/18 where the largest potential areas for cost improvement are Insured Benefits and Funded Health Programs, Health Workforce and Funding for Performance. Core Clinical and Healthcare Services and Infrastructure Rationalization are the largest medium-term (next 3-4 fiscal years), transformational opportunities. Strategic System Realignment is a critical enabler of sustainability in the short and medium-term.



Potential Areas of Opportunity 2017/18

The six areas below represent approximately $90M+ in potential cost savings, depending on Manitoba's decisions, actions, timing and extent of implementation.



Key Opportunities for Savings	Potential Cost Improvements
3. Insured benefits and funded health programs	$ 30M+
6. Healthcare Workforce	$ 26M+
2. Funding for Performance	$ 24M+
7. Healthcare Transportation	$ 3M+
9. ICT Integration & Enablement	$ 5M+
1. Strategic System Realignment	$ 3M+
TOTAL	$ 90M+

Note: Intended to provide an order of magnitude estimates. Actual result are dependent upon Manitoba's decisions and actions.

2017/18 Potential Key Focus Areas of Opportunities

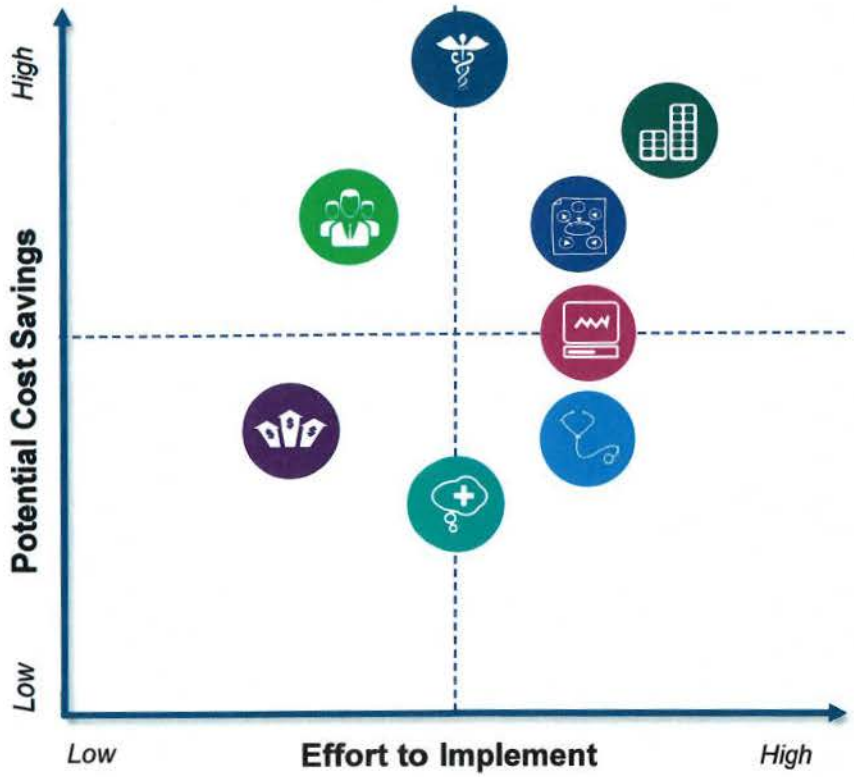
The three areas below represent approximately $80M+ in potential cost savings, depending on Manitoba's decisions, actions, timing and extent of implementation. These areas are not dependent on changes in clinical practice or system change.

Opportunity Sub-Areas	Potential Estimated Savings per Sub-Area*
Insured benefits and funded health programs 1. Bring benefits and funded program in alignment with Canadian standards 2. Review inter-jurisdictional coverage agreements	**1. $29M+** **2. $0.5M+**
Healthcare Workforce 1. Rationalize healthcare employee benefits 2. Review healthcare provider compensation 3. Rationalize workforce composition	**1. $5M+** **2. $20M+** **3. $1.5M+**
Funding for Performance 1. Establish single payer funding model 2. Implement expenditure management programs	**1. $1.6M+** **2. $22M+**

**Note: Intended to provide an order of magnitude estimates. Actual results are dependent upon Manitoba's decisions and actions.*

Potential Areas of Opportunity 2018/19 & Beyond

The medium-term transformational key areas of opportunities identified which are dependent on Strategic System Realignment, represent in the general range of over $300M in potential improvement over the next 3-4 fiscal years dependent on government decisions actions and implementation. Medium-term transformation opportunities do not take into account required investments, which should be a relatively small share of the total potential cost savings.



Key Opportunities for Savings	Potential Cost Improvements
4. Core Clinical & Healthcare Services	$ 134M+
10. Infrastructure Rationalization	$ 62M+
8. Integrated Shared Services	$ 43M+
6. Healthcare Workforce	$ 42M+
9. ICT Integration & Enablement	$ 29M+
2. Funding for Performance	$ 18M+
5. Diagnostic Services	$ 24M+
TOTAL	$ 300M+

Note: Intended to provide an order of magnitude estimates based on approximately 60% of 50% of high-level estimates. Actual result are dependent upon Manitoba's decisions and actions.

KPMG

4.3. Summary of Advice for Consideration

Summary of Advice for Consideration

The list of significant areas of opportunity that have been identified and prioritized during the scoping and assessment phase of the HSIR are summarized below. There represent significant cost savings in the short-term, and larger transformational cost improvement opportunities in the medium-term (next 3-4 years). Cost savings opportunities in the range of $90 million for fiscal 2017/18 do not rely on structural and system reforms, rather they are primarily technical efficiency improvements (efficiency and economy) dependent on immediate policy decisions, for example, changes to insured benefits and funding programs to be in line with other provinces.

- **Areas of Opportunity with Material Potential Cost Improvements in 2017/18:**

3. Insured Benefits & Funded Health Programs	6. Healthcare Workforce	2. Funding for Performance	1. Strategic System Realignment	7. Healthcare Transportation	9. ICT Integration & Enablement	Total Potential Cost Improvement*:
$30M+	$26M+	$24M+	$3M+	$3M+	$5M+	$90M+

**Intended to provide an order of magnitude estimates. Actual results are dependent upon Manitoba's decisions and actions.*

- **Medium-term Transformational Opportunities with Significant Potential Cost Improvements**:**

4. Core Clinical & Healthcare Services	10. Infrastructure Rationalization	8. Integrated Shared Services	6. Healthcare Workforce	2. Funding for Performance	1. Strategic System Realignment	Total Potential Cost Improvement**:
$134M+	$62M+	$43M+	$42M+	$18M+	$5M+	$300M+

***Intended to provide an order of magnitude estimates based on approximately 60% of 50% of high-level estimates. Actual result are dependent upon further analysis in Phase 2 and MHSAL's decisions and actions. Medium-term savings do not take into account required investments.*

- Sub-areas of Core Clinical and Healthcare Services could be accelerated in relation to implementation and start to achieve realization of benefits by the end of 2017/18 and this will be examined as part of the development of detailed work plans in Phase 2.
- Funding for Performance can be rolled into Strategic System Realignment to form one combined area.
- MHSAL and the provincial government may also wish to consider combining ICT Integration and Enablement with Integrated Shared Services and combining Diagnostic Services with both Core Clinical and Healthcare Services in relation to operational improvement and with Infrastructure Rationalization. However this should be considered carefully in the context of current capacity and capability both within MHSAL and the health system in planning and delivering multiple transformation programs in parallel.
- For each of the key areas of opportunity, Phase 2 involves the development of work plans and further analysis for each area to guide implementation planning.

Summary of Advice for Consideration: Six Key Areas of Opportunities for Phase 2 Work Plans

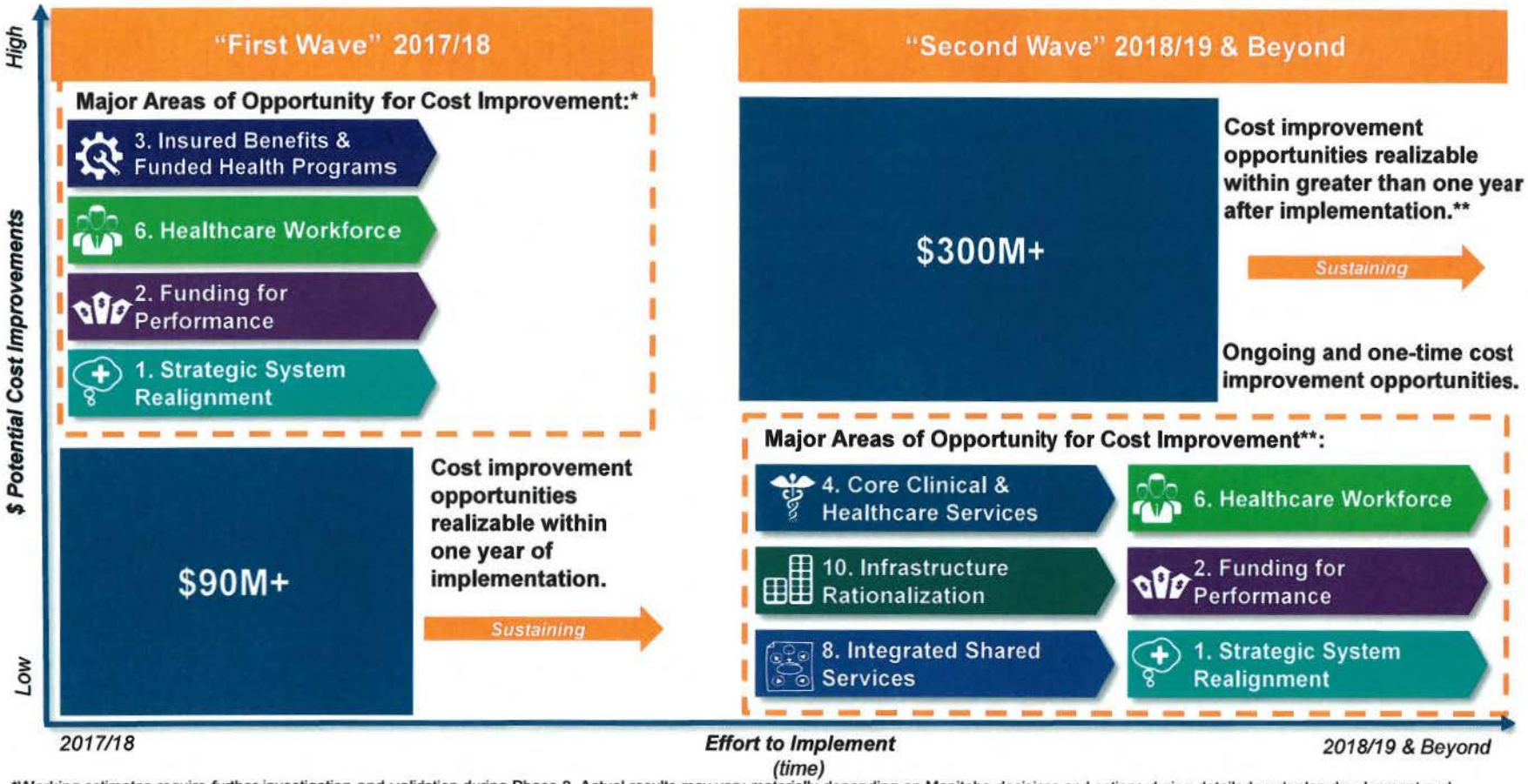
In agreement with the Advisory Committee, the following key areas of opportunity with potential cost improvements are taken forward in Phase 2 for implementation planning and the development of work plans. Note that Funding for Performance will be combined with Strategic System Realignment.

Area of Opportunity	Recommendations for Key Areas of Opportunities
1. Strategic System Realignment	• Immediate action to re-align and focus the roles, responsibilities and accountabilities between the Department, the RHAs, and facilities.
2. Funding for Performance	• Explore new models for capital and infrastructure funding. • Establish commissioning and single payer funding model. • Implement performance-based funding program. • Implement expenditure management programs.
3. Insured Benefits & Funded Health Programs	• Bring benefits and funded program in alignment with Canadian standards. • Review inter-jurisdictional coverage agreements. • Changes to provider and professional compensation.
6. Healthcare Workforce	• Rationalize healthcare employee benefits. • Review healthcare provider compensation.
4. Core Clinical & Healthcare Services	• Reduce unit costs/rates. • Reduce variability of care/ reduce length of stay. • Shift care from acute to community settings. • Rationalize and standardize programs and services. • Rationalize staffing, scope of practice, and scheduling.
10. Infrastructure Rationalization	• Leverage external/alternative funding and service delivery models. • Rationalize facilities with system demand. • Implement new standards for infrastructure delivery.
8. Integrated Shared Services	• Consolidate health support services. • Consolidate administrative support services. • Implement common program and transformation management. • Develop an integrated provincial Supply Chain.

Note: Area of Opportunity 1. Strategic System Realignment and 2. Funding for Performance are packaged into one "key" area of opportunity.

Summary of Advice for Consideration

Targeting Key Areas of Opportunities for Potential Cost Improvement



*Working estimates require further investigation and validation during Phase 2. Actual results may vary materially depending on Manitoba decisions and actions during detailed work plan development and implementation.

**Many opportunity areas have a dependency on immediate system realignment, collective agreement rationalization and the implementation of an integrated clinical services plan. Lack of implementation of these initiatives may reduce benefit realization beyond the low end of the range.

***Many individual opportunities have not been estimated by HSIR participants or the project team. Identified values are aggregated results for initiatives where a value has been assigned organized by opportunity area. Values include a combination of operating and capital cost savings as well as cost avoidance and matched funding from other government jurisdictions and are intended to provide an order of magnitude estimates based on approximately high-level estimates for 2017 of 60% and 2018/19 and beyond of 30%. Medium-term savings do not take into account required investments. Actual result are dependent upon further analysis in Phase 2 and MHSAL's decisions and actions.

Summary of Advice for Consideration

Key Communication Points

- The new Government of Manitoba committed to undertake an independent HSIR, following on from the Fiscal Performance Review underway across all other core government departments, to understand how the cost curve in relation to the growth in healthcare funding could be bent, to improve the efficiency and effectiveness of healthcare services so the health system is sustainable and supports improved health outcomes for Manitobans.
- KPMG was engaged by MHSAL to conduct the HSIR, to identify potential significant (up to six) areas of opportunity to improve efficiency and effectiveness across all healthcare program spending.
- This is a Review, not an audit.
- The in-scope spending for the review is approximately $6 billion based on the 2016/17 Budget for MHSAL programs and services.
- KPMG is working collaboratively with MHSAL and RHAs. With a short timeframe for the Phase 1 assessment, the immediate focus has been on identifying significant short-term cost improvement opportunities for 2017/18 and medium-term transformational opportunities where implementation planning would need to be undertaken from 2017/18 to have a material impact on subsequent three to four fiscal years.
- As part of the Review, KPMG has developed a Health Fiscal Performance Review Framework (aligned to the Fiscal Performance Review Framework developed by KPMG for other core government departments) that is aligned with leading practices. The intention of the Health Fiscal Performance Review Framework is to provide a consistent, systemic framework (principles, guidelines, criteria) for looking at healthcare spending and evaluating healthcare programs across the provincial healthcare system.
- Working collaboratively, KPMG has identified several areas of opportunity, collectively in the range of $90 million in potential cost improvement opportunities in 2017/18.
- In addition, there are other medium-term transformational areas of opportunities that collectively represent over $300 million over 3-4 years in potential cost improvements in the medium-term, as part of a second wave of cost improvement initiatives in 2018/19 and beyond.
- With the Advisory Committee, six key areas have been targeted for the development of detailed work plans for MHSAL and the Government's consideration in proceeding with key cost improvement initiatives.
- The two most significant medium-term transformational areas of opportunity relate to an extensive program of operational efficiency improvement targeted at core clinical and healthcare services, and aligned rationalization of infrastructure.

Summary of Advice for Consideration

Key Communication Points (cont.)

- One of the key findings is that most healthcare programs and services have not been subject to a review focused on cost improvement in a very long time or apparently have never been reviewed.
- There is currently no performance management or accountability framework in place across the provincial health system which codifies the mandates, accountabilities and roles of MHSAL, RHAs or providers, both devolved and non-devolved.
- Funding for healthcare programs and services remains based on historic global budgets and not linked to population need with no incentives to improve quality and efficiency.
- The planning and development of healthcare services, including the development of facilities, has not been based on a provincial clinical services plan and evidence-based care resulting in sub-optimal development and utilization of clinical facilities.
- Additionally, the organizational structures of the healthcare system are complex, leading to misalignment and overlap/ duplication on roles and functions for a provincial population of 1.3 million with eight Health Agencies (including five RHAs), multiple provider boards with a lack of performance management and accountability at all levels. Reforms which have occurred in other provinces across Canada with the objective of achieving sustainability such as consolidation of services at a Provincial-level, a shift to a patient-centered, commissioning-based model and funding reform have not occurred in Manitoba.
- Providers, both devolved and non-devolved, have historically defended their autonomy with the retention of governing boards, while their current agreements with the RHAs do not provide effective performance management or accountability in relation to both improving quality, efficiency and effectiveness.
- Other provinces such as Ontario and B.C. have bent the cost curve. Manitoba needs to start system-wide changes now, with directions and required legislative changes brought underway as soon as possible, along with establishing a Transformation Management Office to drive immediate cost improvement efforts and ensure cost savings are realized in a planned, coordinated and phased-in approach.
- Immediate Government direction is required to strategically re-align, focus and simplify the healthcare system, clarify and codify mandates between the Department, RHAs and facilities, and to strengthen accountability for performance. The key opportunity area, Strategic System Realignment, should commence as soon as possible in 2017/18 and continue over the following fiscal years to enable fiscal sustainability.

Next Steps

Following the completion of Phase 1, for each of the key areas of opportunity, Phase 2 will involve the development of work plans and further analysis for each area to guide implementation planning. Work plans will be developed by KPMG and will involve focused, small teams from KPMG and MHSAL as well as other key healthcare stakeholders where required. As Phase 2 is confirmed, will also need to commence for Phase 3 in relations to implementation. This would involve setting up the supporting infrastructure to support implementation including the establishment of a Transformation Management Office.

Phase	Phase 2: Implementation Planning	Phase 3: Implementation
Timeline	Feb 2017 – Mar 2017	Apr 2017 – Oct 2017+
Deliverables	1. Develop work plans for each of the six areas of opportunities to support Manitoba's implementation of each area of opportunity. 2. Further analysis in each area of opportunity and guide implementation and transformation planning. Each work plan would include: project summary; objectives and scope; governance and team roles and responsibilities; costing and delivery assumptions; further analysis from Phase 1; breakdown and validation of cost improvement estimates; benefits and costs; key risks; implementation plan; milestones; performance measures and tracking; and communications. 3. Develop a Change Management Approach and Plan to provide guidance and tools for change management across all healthcare system cost improvement initiatives.	1. Implementation Delivery: • Commencement of delivery of immediate and tactical/operational cost improvement opportunities. • Development of benefits tracking tools and processes. • In-depth planning of allocative efficiency/strategic opportunities. • Implementation of Change Management Plan. 2. Structural and System Transformation: • Development of in-depth Transformation Roadmap. • Establishment of central Transformation Management Office.

KPMG

5. Appendices

Appendices

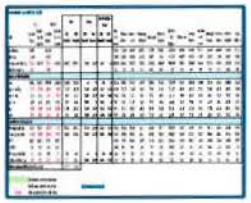
KPMG

1. Long List of Opportunities

Long List of Opportunities: Approach Methodology

Over 300 specific cost improvement opportunities have been identified which have been brought together into 11 areas. These opportunities were identified through data analysis (financial and clinical benchmarking), ideas put forward from over 70 stakeholder engagement sessions, output from online surveys, and research based on leading global practice. These are categorized by opportunity area. Where potential savings have not been identified, these are yet to be costed. As a reminder, we have followed the below methodology for review and consolidation of the opportunities.

Financial and clinical benchmarking of Manitoba hospitals and system performance.



70+ Stakeholder sessions.

500+ documents and submissions.

Online surveys from healthcare participants and public.

Current state assessment of healthcare system.

Apply Health Fiscal Performance Criteria.

Apply Sustainability Framework Criteria.

Opportunity Register with 340 opportunities

Assess opportunities for Implementation Effort and Cost (H-M-L).

Apply standard discounting factors for 2017/18 and 2018/19 and beyond.

Confirm timing and implementation considerations where possible.

Rationalize opportunities and assumptions where possible.

11 areas of opportunity with 36 sub-areas

Group opportunities by area and theme.

Sort by Magnitude of Potential Opportunity and Effort to Implement.

Long List of Opportunities: Approach Methodology

The methodology employed to identify the areas is depicted in the diagram in the previous slide.

- All opportunities identified from financial and clinical benchmarking are derived from a comparison to reference jurisdictions. The potential size of these opportunities have been calculated by the KPMG team.
- Opportunities identified by other HSIR review activities were captured together with the benchmarking results in the tracker. Health system stakeholders were asked to substantiate the level of savings by providing program estimates if these were available or to assist the KPMG team with assumptions to establish a representative sizing value.
- Where possible, KPMG rationalized opportunities to minimize overlap and to ensure that potential savings were not double counted. This activity is dependent on specific scenario or implementation assumptions.
- 181 of 348 total opportunities (52%) have representative savings identified. These opportunities have been grouped by area and subarea to provide a comprehensive model.
- All information and analysis is dependent on information and data provided by Manitoba HSIR stakeholder participants. KPMG has taken steps to ensure that critical information is set out in the section and other relevant areas of this report.
- For each of the 11 areas of opportunity; a description, observations, actions, benefits and potential financial impacts, and a summary of estimated potential cost savings for 2017/2018 and 2018/2019 and beyond is provided.

Area of Opportunity #1: Strategic System Realignment

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]								$				
							$					
								$				
								$				

Area of Opportunity #1: Strategic System Realignment

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
							$					
							$					
							$					

Area of Opportunity #2: Funding for Performance

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				
							$					
							$					
							$					
							$					
							$					
							$					
							$					
							$					
								$				

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												
[redacted]												
[redacted]												
[redacted]												
[redacted]								$				
[redacted]								$				
[redacted]												
[redacted]								$				
[redacted]												
[redacted]							$					
[redacted]							$					

Area of Opportunity #3: Insured Benefits & Funded Health Programs

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
							$					
							$					
							$					
							$					
							$					
							$					

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												
[redacted]												
[redacted]												
[redacted]												
[redacted]												
[redacted]								$				
[redacted]								$				
[redacted]												
[redacted]												
[redacted]												

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
							$					
							$					
								$				
								$				

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
							$					
								$				
								$				
								$				
								$				
							$					
								$				
								$				
								$				
								$				
								$				
								$				
								$				

Area of Opportunity #4: Core Clinical & Healthcare Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				
								$				
								$				
								$				
								$				
								$				
								$				
								$				
								$				

Area of Opportunity #5: Diagnostic Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #6: Health Workforce

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #6: Health Workforce

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												
							$					
							$					
							$					
							$					
							$					
								$				
							$					
								$				
							$					
							$					

Area of Opportunity #7: Healthcare Transportation

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												
[redacted]							$					
[redacted]												
[redacted]							$					
[redacted]												
[redacted]								$				
[redacted]												
[redacted]							$					
[redacted]												

Area of Opportunity #8: Integrated Shared Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]												
[redacted]												
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]								$				
[redacted]												
[redacted]												
[redacted]												
[redacted]								$				
[redacted]								$				

Area of Opportunity #8: Integrated Shared Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]								$				
								$				
								$				
								$				
							$					
								$				
								$				
								$				
								$				
								$				

Area of Opportunity #8: Integrated Shared Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]								$				
							$					
							$					

Area of Opportunity #8: Integrated Shared Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				
								$				
								$				
							$					

Area of Opportunity #8: Integrated Shared Services

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #9: ICT Integration & Enablement

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #9: ICT Integration & Enablement

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #10: Infrastructure Rationalization

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				
								$				

Area of Opportunity #10: Infrastructure Rationalization

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
[redacted]												

Area of Opportunity #11: Alternate Service Delivery

Opp #	Description	Opportunity Area	Sub-Themes	Organization	Geographic Area	Dependency/ Prerequisite	Potential Savings 000's (50%)	Potential Savings 000's (30%)	Technical Allocative	Effort to Implement *(H-M-L)*	Timing/Phasing of Delivery of savings	Implementation costs *(H-M-L)*
								$				
								$				
								$				
							$					

KPMG

2. Current State Assessment: Stakeholder Engagement& Documents Review

Provincial Stakeholder Engagement Interviews

We completed a total of 70 stakeholder meetings, of which 38 where of a Provincial perspective.

Provincial Nursing Leadership Council
Provincial Management Leadership Council (PMLC)
Karen Herd Deputy Minister
ADM: Finance/Admin/Management Services/Legislative Unit/Strategic Planning
ADM: Seniors and Active Living
ADM: Regional Policy & Programs
ADM: Public Health and Primary healthcare
ADM: Health Workforce Secretaruat
ADM: Provincial Policy & Programs
Prairie Mountain Executive Team
Local Health Involvement Group – PMH
Interlake-Eastern Executive Team
Southern Executive Team
Local Health Involvement Group – SHSS
Northern Regional Health Authority
Local Health Involvement Group – NRHA
RHAs of Manitoba
FNHIB and INAC
First Nation Health and Social Secretariat of Manitoba (FNHSSM)
Doctors Manitoba

UM Faculty of Health Science
College of Physicians and Surgeons
College of Registered Nurses of Manitoba
College of Pharmacist/ Chiro/ Opto/ Dental
Manitoba BlueCross
Provincial EMS, Stars Ambulance, Transportation, EMS/ Winnipeg Fire Department
Catholic Health Corporation of Manitoba
AFM Management Team
CancerCare Manitoba Management Team
Diagnostic Services Manitoba Management Team
Alternative Delivery Partnerships Working Group (Maples, Western, Gamma Dynacare, Legacy, Life Sciences Association of Manitoba)
HEB Manitoba/ HEPP/ Workforce
Manitoba Council of healthcare Unions
Outcomes, Quality and Performance Management Working Group
Capital Planning Working Group
ICT/ Clinical Engineering Working Group
WRHA/ Provincial Pharmacy Program
CHI/MCHP
Health Community Relations and Communications

WRHA Stakeholder Engagement Interviews

We completed a total of 70 stakeholder meetings, of which 32 where of a WRHA perspective.

WRHA Hospital COOs and Community Areas (No WRHA Executives)
Chair of WRHA
CEO of WRHA
Sr. VP Clinical Services & Chief Medical Officer
VP Interprofessional Practice & Chief Nursing Officer
VP Population & Aboriginal Health
VP & Chief Operating Officer
VP & Chief Financial Officer
VP & Chief Human Resources Officer
Tertiary Hospital/ SBGH CEO
Tertiary Hospital/ HSC CEO
WRHA Financial Leadership Council
WRHA Material Management Group (Logistics & Supply Chain)
WRHA HR Leadership Council
WRHA Transformation Program (SAP/ OCM/ Process Engineers/OSD/PMO1/PMO2/Quality)
WRHA Shared Services (HR/ FIN/ SCM/ Laundry/ Dietary)

WRHA Surgery/Anaesthesia//Medical Device Reprocessing
WRHA Other Clinical Programs (Infection prevention and control, child health, Women's, Oncology, psychology, Breast Health, Child and Adolescent Mental Health, Critical Care, Diagnostic Imaging, Emergency, Palliative Care, Population and public Health)
WRHA Programs: Aboriginal Health
WRHA Programs (Cardiac, Renal and Transplant)
WRHA Medicine Programs (Family, Geriatric, Internal Medicine, Primary Care)
WRHA Long Term Care/Home Care Programs/ Mental Health
WRHA Leadership Long Term Care/Home Care Programs/ Mental Health
Allied Health Leadership Council (Allied Health Programs)
Community Health Services/Province of Manitoba Families Leadership (Winnipeg Integrated Services
WRHA Flow Improvement – Lori Lamont (Improvement team, Leadership team, Leadership Collaborative – Home Care, Emergency, LTC, etc.)
PHC Leadership Council
WRHA Nursing Leadership Council
Community Health Agencies Network
Community Foundations
WRHA Local Health Involvement Group
WRHA Local Health Involvement Group

Current State Documents Reviewed

Over 500 documents were received for review as part of the engagement, including files within these high-level categories.

- Manitoba Budget Documents
- Manitoba Health, Seniors, and Active Living documents
- Cancercare Manitoba
- Diagnostic Service Manitoba
- Addictions Foundation of Manitoba
- HSAL ICT Study and IM&A Study
- WRHA Organizational Files
- WRHA Operating Plan
- WRHA BPSP Shared Services
- WRHA Enterprise Risk Management
- WRHA Panel and Placement Reports
- WRHA Patient Flow and ED Waits
- WRHA Staff Engagement Scores
- Various Non Identifiable WRHA Files
- Interlake Eastern
- Northern RHA Service Purchase Agreements
- Patient Experience Reports For Emergency and In-patients
- Prairie Mountain Health - Performance Management
- Prairie Mountain Health – Laundry
- Prairie Mountain Health - Org Charts
- Prairie Mountain Health - Wait Times Files
- Prairie Mountain Health - ICT And HER
- Prairie Mountain Health – SPAs and Shared Services
- Health Complex Business Plan – Pimicikamak Cree Nation 2015-2020

KPMG

3. WRHA / MHSAL Current State Structure Reflections

Organization Design WRHA: Span of Control

In addition to the content included in Section 3.4. Health System Current State Assessment: WRHA, we conducted the following analysis on WRHA's organization design and structure.

Explanation of diagram

This diagram below shows the spans of control (on the x-axis) compared to the managerial layer (on the y-axis). The numbers within the box grid show the number of staff managers with that span of control / number of reportees.

Headline

High variation on 'span of control' across WRHA from 1:1 to 1:219. There appears to be no consistent number of direct reports per manager for frontline healthcare managers and senior governance members.

144 managers have a span of control greater than **50**. This is high compared with other jurisdictions and has an impact on the level of perceived stress on managers.

The highest number of direct reports is listed at **219**. This is too high to be confident that the span of control has been structured according to the size of the teams and nature of the service to ensure productive line management is undertaken.

WRHA/MHSAL Current State Structure Reflections

The following slides set out further detail on the organizational structure of WRHA and reflections on a shift to a commissioning-based approach for both MHSA and WRHA.

What is Commissioning?

Commissioning is a term that can be misinterpreted and subject to multiple definitions. One of the clearest definitions is provided by the Institute for Government, which out sets commissioning as the actions of "**assessing the needs of people or users in an area, designing and specifying the services to meet those needs, and choosing the delivery mechanism to secure an appropriate service while making the best use of total available resources.**" The underlying and related Commissioning principles are outlined below.

Commissioning: Common threads

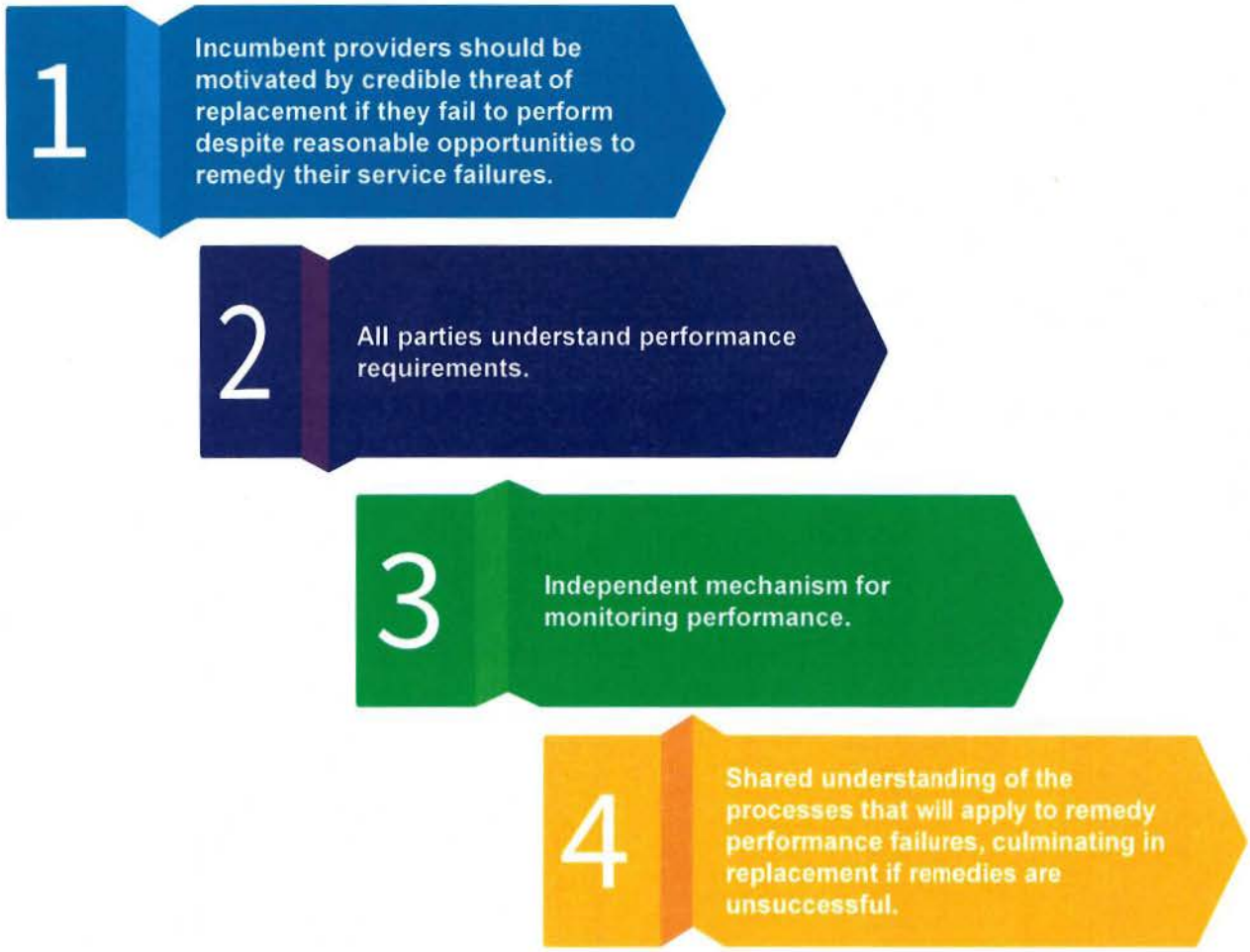
The key common threads that differentiate a commissioning-based approach:

What's different about commissioning from traditional models of healthcare planning?

- Focus on the demand (population-based as opposed to the supply) side of the service equation and user interaction across a system of interventions (e.g. patient journey, care pathway).
- The bridge between/reconciliation of policy and delivery.
- Beyond public vs. third party delivery dichotomies, with emphasis on government role in system design and enablement.
- Joint solution development and continuous provider and user engagement.

Commissioning: Principle of Contestability

Contestability is defined where public service or healthcare providers are benchmarked and failing/challenged institutions or providers face a credible threat of competition and/or replacement. Based on KPMG's experience where contestability has been operationalized, the following impacts are achieved:

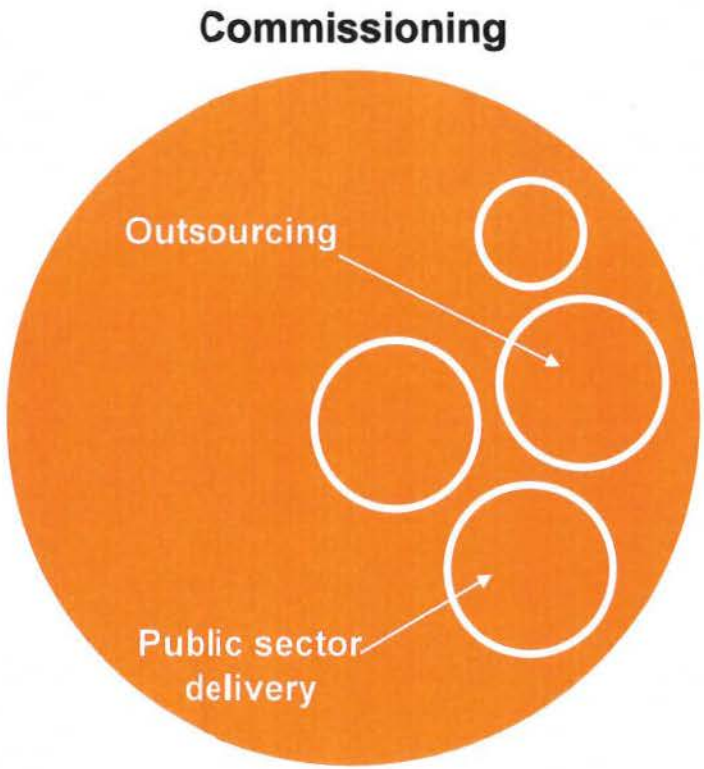


Common Myth: Commissioning is Outsourcing

Commissioning covers a range of service delivery options which can include public, not for profit and private sector providers.

These options vary across a number of factors, including the degree of transformation required, the maturity of the provider market, and public expectations on role of government

Critics mislabel commissioning as outsourcing or utilizing alternative service delivery, when in fact outsourcing is only one among a range of outcomes from a commissioning process.



Commissioning vs. Procurement: Focus

Procurement

Process/Input-Focused

- Traditional procurement is prescriptive and limited in scope: goods and services being procured are defined by government.
- Focus is on inputs (including financial) to procure the government-defined good or service.
- Providers are rewarded for providing or supplying a good or service.

Commissioning

Outcomes-Focused

- Commissioning is outcomes-focused and does not presume a transaction.
- Where transactions do happen, service providers are typically rewarded for achieving outcomes (payment-by-results).
- A focus on outcomes incentivizes providers (government or third parties) to innovate and encourages flexible delivery processes and business models.

Commissioning vs. Procurement: Relationships

Procurement

Arm's Length Commercial Relationships

- Traditional procurement involves limited collaboration with providers.
- Service providers (government or third party) rarely involved in problem definition or solution design.

Commissioning

Active Engagement & Collaboration

- Commissioning involves heavy engagement and collaboration with patients and provider communities.
- Engagement begins early in problem definition stage.
- Active engagement can involve both in-house (government) and external providers.

Commissioning vs. Procurement: Contracting

Procurement

Transaction Based

- Fixed scope / rigid.
- Typically short-term.

Commissioning

Collaboration Based

- Emphasis is placed on effective governance and ongoing relationships with the provider.
- As with contracting for complex healthcare services, governance framework provides clear lines of accountability and is designed to be flexible.

Commissioning vs. Procurement: Roles

Procurement

Government as Contract Monitor

- Government restricts its role to monitoring and enforcing the terms of contract.

Commissioning

Government as System Steward

- **Commissioners are stewards of public markets**: they decide what steps are necessary to ensure that the mixed economy in healthcare service delivery continues to deliver value and the desired outcomes.
- Commissioners decide appropriate level of contestability.

The next page shows an illustrative commissioning cycle that could be applied in Manitoba.

Recommended Commissioning Model

The following provincial-wide recommended commissioning model involves the assessment and understanding of a population's health needs, the planning of services to meet those needs, procuring services on a limited budget, then monitoring the services procured. These steps form the patient-centric commissioning cycle.

Draft Design Principles

The following 7 design principles have been developed based on current state findings and the Health Sustainability Criteria of People and Structure, Process and Delivery, Information Technology, Regulation and Policy & Governance.

Design Principle	Current State Description	Future State Description	Sustainability Criteria Cross Reference	Commissioning Model Cross Reference
Development of Management and Leadership Capability	Current leadership development program does not support the development of the skills and capabilities required to support a leading practice commissioning model.	Develop leadership competencies and capabilities required to effectively support the development and sustainment of a patient / customer centric commissioning model by: • Optimizing current leadership development programs to support the continued growth of leaders in becoming effective commissioners.	• People & Organization 	• Strategic Planning, Procuring. • Contracting Services. • Monitoring and Evaluation.
Separation of Commissioning from Service Delivery	Over reaching and direct service delivery engagement by senior officials has blurred the line between the commissioning function and service delivery. This has had an impact on the accountability of the MHSAL.	Implement clear separation of commissioner-provider functions by: • Raising the maturity of the commissioning function including the required competencies and deliveries. • Implementing a clear ability for service providers to earn autonomy and development of more advanced graded levels of autonomy.	• Process & Delivery 	• Strategic Planning: reviewing service provisions.
Consolidation of Functions and Clinical Programs to Align with Leading Practice	Programs and services are inconsistently governed and managed. WRHA is hosting a number of provincial services without the formal mandate, structure or support of being a provincial health authority. WRHA also does not utilize a clinical plan to drive the provision and planning of services.	Consolidation of functions currently being provided by WRHA and all other RHAs to eliminate duplication of effort and maximize capacity which are best provided at a Provincial-level with the creation of delivery units based on current RHA boundaries focusing on commissioning services for their local patient populations. • Optimize corporate and clinical support services – e-Health, back office, procurement/Supply Chain, Labs/DI. Identification of clinical programs that either are currently defined or should be defined as provincial and therefore commissioned at a Provincial-level with aligned provincial governance (including clinical governance): • Renal; • Cardiac; • Aboriginal Health; • Tertiary Care (HSC, St Boniface's); and • Mental Health, etc.	• Process & Delivery • Information Technology 	• Strategic Planning: reviewing service provision, deciding priorities.

Draft Future State Design Principles (Cont.)

The following design principles have been developed based on Current State findings and the Health Sustainability Criteria of People and Structure, Process and Delivery, Information Technology, Regulation and Policy & Governance.

Design Principle	Current State Description	Future State Description	Sustainability Criteria Cross Reference	Commissioning Model Cross Reference
Development of Payment Mechanisms and Contractual Models	Current fee-for-service funding model is a key barrier for promoting effective collaboration and integration of care that an outcomes based funding model promotes.	A deliberate shift towards outcomes-based funding/contracting across pathways and providers encompassing: • Alignment of system incentives to deliver and integrate care in the most effective and efficient settings, e.g., out-of-hospital. • Increased focus on long-term financial sustainability across the WRHA system and balancing the efficiency agenda with desired outcomes and service quality.	• Regulation & Policy 	• Procuring / Contracting Services.
Moving from a Provider (Acute Care Dominated) Based Planning to Population Based Planning	Focused on providing acute centric services to address population needs. This drives; • Resourcing constraints. • High cost of service. • Lack of ability to address population based needs earlier in the healthcare cycle.	Requirement for a strategic shift to a population based strategic planning model: • Development of a provincial clinical services plan based on population needs (including social determinants) to drive innovation in service delivery and new models care aligned to leading practice reducing pressure on acute care. • Explicit focus on integrating care for patients across the care continuum – right care, right place, right time for the right patients. • Potential development by MHSAL of population based funding models with a shift away from historic budgets.	• Regulation & Policy 	• Strategic Planning: assessing population needs.
Clarity on the Roles/Mandates	• Lack of clarity on roles and responsibilities between the department and RHAs.	Clearly define the role and mandate of the Provincial Health Authority and MHSAL to: • Execute strategic direction. • Implement an effective commissioning model. • Successfully manage performance to improve health outcomes.	• Governance 	• Strategic Planning.

Draft Future State Design Principles (Cont.)

The following design principles have been developed based on Current State findings and the Health Sustainability Criteria of People and Structure, Process and Delivery, Information Technology, Regulation and Policy & Governance.

Design Principle	Current State Description	Future State Description	Sustainability Criteria Cross Reference	Commissioning Model Cross Reference
Development of an integrated performance management and accountability framework	Inconsistency in managing performance across the province makes it difficult to consistently track the performance of service providers. This in turn has an impact on keeping these service providers accountable.	Clear performance management and accountability at the individual, provider, site and program levels. This includes setting and monitoring consistent system-wide standards and performance metrics across all services. This will allow service providers to earn autonomy and develop of more advanced graded levels of autonomy.	• Governance 	• Monitoring and Evaluation.

Commissioning Competencies Required

To effectively support the implementation of a world class commissioning model, we have identified the following 10 core commissioning competencies required by MHSAL and RHA leaders. These are the skills, behaviours and leadership characteristics that we recommend be embedded into the MHSAL and RHA leadership development framework to ensure that current and future commissioning leaders are encouraged and incentivized to build and display.

Sustainability Criteria	Competency Description	Commissioning model cross reference
People & Organization; Process & Delivery: 	**Work effectively with community partners** Work collaboratively with community partners such as local government, RHA's, LTC and third party providers to commission services that optimize health gains and reductions in health inequalities. Core Skills: • Effective partnership development agreements. • Presentation and influencing skills.	• Strategic Planning: Reviewing Service Provisions / Deciding priorities.
People & Organization; Process & Delivery: 	**Collaboration with Clinicians** Clinical leadership and involvement is a critical and integral part of the commissioning process. Commissioners need to be able to build strong relationships with clinical leaders and be able to identify when and how to engage them when defining services and outcomes. Core Skills: • Clinical relations skills. • Effective presentation and influencing skills. • Operational and project management skills.	• Strategic Planning: Deciding priorities.
People & Organization; Governance 	**Market stimulation** Effectively stimulate the health market to meet demand and secure required clinical health and well-being outcomes. Employing knowledge of future priorities, needs and community aspirations, MHSAL leaders will be able to use their investment power to influence improvement, choice and service design through new or existing providers to secure the desired outcomes and quality, effectively shaping the healthcare market and increasing patient outcome. Core Skills: • Develop core formal and informal relationships with existing and potential providers. • Internal and external communication and engagement skills. • Effectively signaling future priorities, needs and aspirations to existing and potential providers. • Negotiation, presentation and influencing skills.	• Procuring / Contracting Services: Designing services.

Commissioning Competencies Required (Cont.)

Sustainability Criteria	Competency Description	Commissioning model cross reference
Process & Delivery; 	**Engagement with public and patients** In order to make commissioning decisions that reflect the needs, priorities and aspirations of the local population, commissioning bodies should build effective communication channels with the public. Core Skills: • Listening and communication skills. • Effective public relation skills. • Presentation skills.	• Monitoring and Evaluation – Seeking Public and Patient Views. • Strategic Planning – Assessing population needs.
Process & Delivery; Information Technology 	**Information management and assessing needs** Manage knowledge and undertake robust and regular needs assessments that establish a full understanding of current and future local health needs and requirements. This helps ensure that the current and future commissioned needs address and respond to the needs of the whole population. Core Skills: • Able to work effectively with medium and long-term planning scenarios. • Information-gathering (of both quantitative and qualitative information) and research skills. • Information analysis skills. • Presentation, negotiation, brokering and influencing skills.	• Strategic Planning – Assessing population needs.
Regulation & Policy: 	**Robust procurement** Secure procurement and contracting processes ensure that agreements with providers are set out clearly and accurately with both the commissioner and the provider being clear about what is expected. This includes implementing effective KPI's. Core Skills • Core procurement process understanding and awareness. • Legal and regulatory skills relevant to tendering and contracting. • Negotiation skills. • Skills in understanding and writing legal, enforceable and fair contracts and specifications. • Costing, Contract and performance measurement and management skills.	• Procuring / Contracting services – Shaping Supply, structure and configuration of services.

Commissioning Competencies Required (Cont.)

Sustainability Criteria	Competency Description	Commissioning model cross reference
Regulation & Policy: 	**Manage contracts effectively** Effectively manage compliance reporting in partnership with providers to ensure value for money and continuous improvements in quality and outcomes are obtained. Successful commissioners need to effectively understand the data required for assessment of providers and its collection via third parties. Core Skills • Stakeholder liaison skills. • Contract and performance management skills. • Information management ability. • Root cause analysis and LEAN review skills. • Presentation and influencing skills.	• Monitoring and Evaluation: Managing performance.
Regulation & Policy: Governance; 	**Make sound financial investments** MHSAL leaders need to ensure that their commissioning decisions are sustainable and provide a sound investment to secure improved health outcomes for both now and the future. Core Skills: • Professional financial management, forecasting and investment skills. • Business case modelling skills. • Impact and risk assessment skills. • short-term and long-term budgeting skills.	• Monitoring and Evaluation: Managing performance. • Strategic Planning: Reviewing service provisions.
Governance; Information Technology 	**Prioritizing investment according to population need** Prioritize investment according to local needs of the RHAs by having a clear understanding of the needs of different sections of the local population. Core skills: • Database and knowledge management skills. • Prioritization and decision-making skills. • Program budgeting and marginal analysis capability. • Presentation and influencing skills.	• Strategic Planning: Deciding priorities.

Commissioning Competencies Required (Cont.)

Sustainability Criteria	Competency Description	Commissioning model cross reference
Governance 	**Promote Improvement and Innovation Opportunities** Through open and effective commissioning and decommissioning decisions, MHSAL could transform clinical and service configurations to meet local needs and secure world class improvements in outcomes and quality. Successful commissioners continuously scan healthcare innovation to identify trends which will help determine future requirements. <u>Core Skills</u> • Relationship management skills with innovators, and current and potential providers. • Information management skills to seek and share information. • Project management skills that assist providers in delivering innovative services. • Negotiation, presentation and influencing skills.	• Strategic Planning: Reviewing service provisions / Deciding priorities.

KPMG

4. Jurisdictional Scan & Reference Models

Reference Jurisdictions

MHSAL has the benefit of observing several health system transformations in Canada and globally over the past years. Each reference jurisdiction, described over the following pages, has taken different approaches to defining the roles, responsibilities, and interactions between payers, system leaders, commissioning functions, and providers.

Several jurisdictions have been identified to illustrate possible elements that could be considered in future system design.

Reference jurisdictions were selected to provide contextual examples of each of the leading practice approaches to system design.

Each jurisdiction is described over the following pages in terms of its system design and key levers:

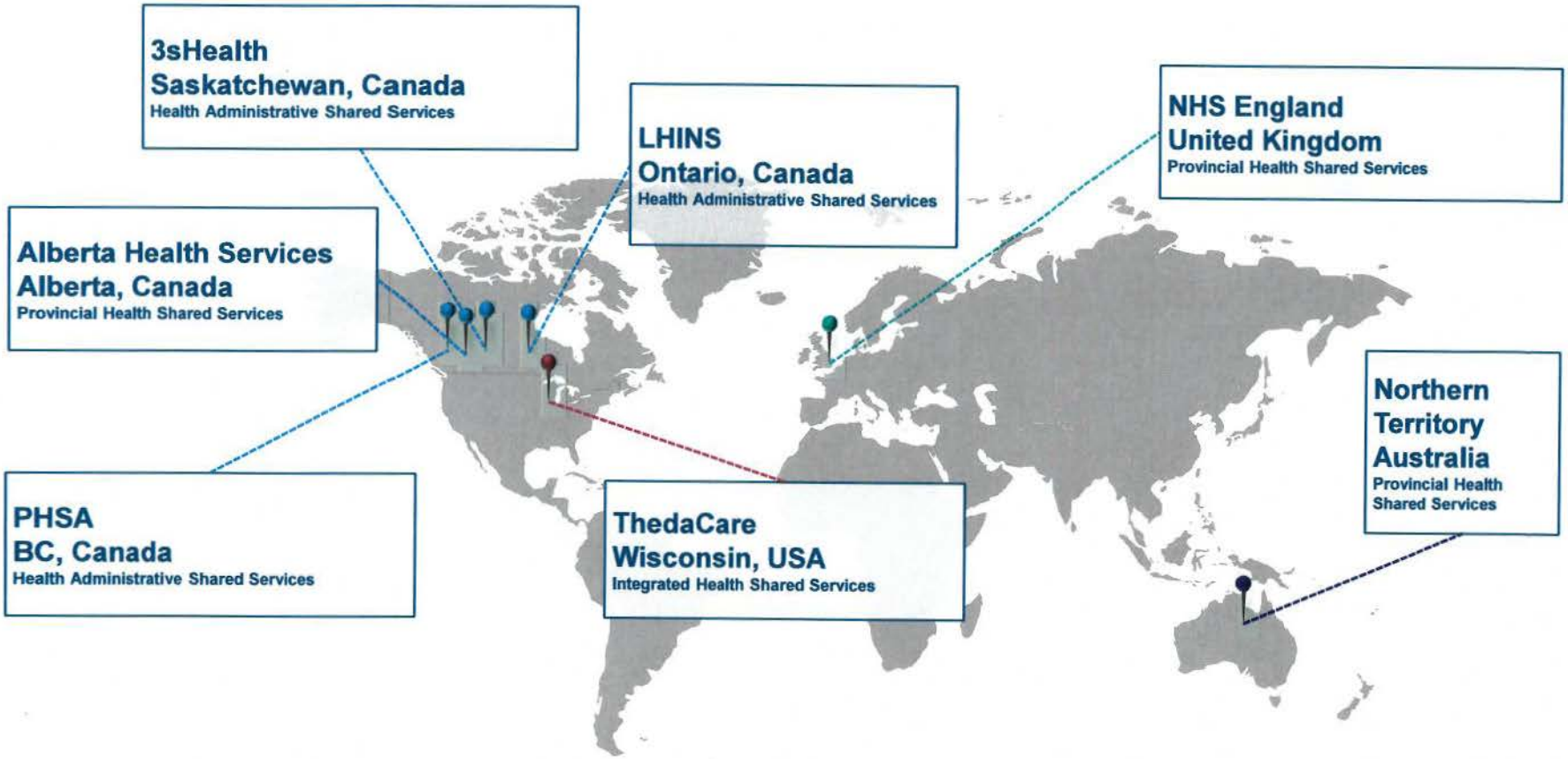
- People and organizational structure;
- Process and delivery;
- Information technology;
- Regulation and policy; and
- Governance.

The findings of this jurisdictional scan are organized in relation to the applicable reference model developed in the previous section.

Principles derived from high-performing elements of each jurisdiction that may guide Manitoba's health system transformation include:

- Clarity in department, delivery organization, and shared service organization mandates;
- Separation of commissioning from service delivery and the levers of reform, including payment mechanisms;
- Alignment of services and supports that benefit from standardization and scale;
- Implementation of robust performance management frameworks; and
- Department-level funding reforms to drive population health.

Jurisdictional Scan: Selected Reference Models



Reference Models: Summary

Reference Model	Key Design Principles	Department Role	Delivery Organization Role	Shared Services Organization Role	Jurisdictional Examples
Health Administrative Shared Services	• Establish jurisdiction wide focus on planning, funding and performance. • Focus health care delivery with area or specialty basis. • Integrate common administrative services to achieve scale and capacity.	• Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes. • Coordination of program execution and outcomes. • Manage and monitor system performance through funding agreements.	• Execute service delivery mandate with independent governance and leadership. • Retain local administrative services and transformation management capability.	• Integrate and support delivery organizations as service provider. • Managed with shared governance and SLA/KPIs.	• 3sHealth, Saskatchewan • Provincial Health Services Association, British Columbia* *exhibits some characteristics.
Integrated Health Shared Services	• Establish jurisdiction wide focus on planning, funding and performance. • Focus health care delivery into areas. • Integrate jurisdiction wide health delivery services to achieve scale and capacity.	• Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes. • Coordination of program execution and outcomes. • Manage and monitor system performance through funding agreements.	• Execute service delivery mandate with independent governance and leadership. • Retain local administrative services and transformation management capability.	• Integrate and support delivery organizations as service provider. • Consolidate and integrate whole jurisdiction services and provincial care programs/sites. • Managed with shared governance and SLA/KPIs.	• ThedaCare, Wisconsin • Alberta Health Services* *designed as an integrated model.
Provincial Health Shared Services	• Establish jurisdictional focus on planning, funding, compliance and outcomes reporting. • Establish corporate delivery organization with mandate to integrate all health, administration/support and transformation services at the jurisdictional level. • Eliminate redundant and competing governance.	• Centralize critical policy, planning, workforce development, funding, and compliance and outcomes reporting processes. • Manage and monitor system performance through funding agreements.		• Execute service delivery mandate with independent governance and leadership. • Integrate all delivery, administrative services and transformation management processes. • Consolidate and integrate all health care delivery programs. • Consolidate all community engagement and foundation activities. • Single integrated governance structure.	• National Health Service England UK • Local Health Integration Networks, Ontario • Alberta Health Services • Northern Territory, Australia • Provincial Health Service Association, British Columbia* *exhibits some characteristics.

Guiding Principles

Lessons learned from reference jurisdictions are detailed below in terms of guiding principles for system design, with implications for the Manitoba Heath System.

Principles	Jurisdictional Reference	Implications for Manitoba Health System
1. Clarity on the separation of roles/mandates of MHSAL, RHAs	• Northern Territory • NHS England • Local Health Integration Networks, ON	• Clarity of roles and responsibilities. The *Clinical and Preventative Service Plan* indicated that effective management and governance are important at each of the hospital, community, regional, and Provincial-levels; and should involve senior management of the RHAs, representatives of the Ministry of Health, Seniors, and Active Living, and healthcare providers and their representatives. In consultations to date, stakeholders have commented on the lack of clarity on roles and responsibilities between the department and RHAs. In particular, it was noted that the role of the Manitoba Health Department as a governing body could be more effectively defined. Stakeholders also commented that there is a lack of understanding of the relationship between the WRHA, the other RHAs, and the Department. It was suggested that decision-making pathways and accountabilities be clarified. • Organizational decision-making. It was noted that leadership roles and responsibilities overlap between programs and sites, which inhibit the decision making ability of the organization. Stakeholders suggested a move away from the matrix model to facilitate decision-making.
2. Commissioning (purchasing) should be formally separated from service delivery, with aligned program of funding reform, including payment mechanisms and performance management to ensure sustainability	• NHS England • Local Health Integration Networks, ON	• Addressing regional healthcare needs. Commissioning and service delivery functions are combined in Manitoba. The regional needs and disparity identified in the Peachey report indicate that a commissioning-based system may be able to address the specialized needs of urban, rural, remote, and indigenous communities. Stakeholders suggested that certain challenges in their communities could be addressed by creating a system that could more effectively focused on the needs of patients and the health of Manitobans overall. • Integration of health and social care. Stakeholders commented on the connection between health status and the social determinants of health in Manitobans. Opportunities to integrate health and social care, such as building on successes with Early Intervention, were identified as critical to supporting population health. In leading jurisdictions, such as the LHINs, health and social care are effectively integrated through commissioning – these relationships are then defined in Integrated Health Services Plans.

Guiding Principles (Cont.)

Principles	Jurisdictional Reference	Implications for Manitoba Health System
3. Where benefits - both financial and clinical - can be realized both administratively (from standardization, scale and commercial perspectives) and clinically (in terms of services that require management provincially) then a provincially based organization can remove or consolidate observed silos and empower the RHAs to focus on their core role.	• Local Health Integration Networks, Ontario • Provincial Health Services Authority, B.C. • 3sHealth, SK • Alberta Health Services	• Provincial services standardization. In consultations, there was appetite for greater administrative standardization of provincial services such as human resources, Supply Chain, support functions, lean management, and analytics. There was some suggestion that outsourcing could be considered for shared services, while balancing the need for strategic, rather than transactional, relationships with the business. • Consolidation of programs and services. Stakeholders suggested that there could be consolidation of programs and services within facilities, aligned with findings from the *Clinical and Preventative Service Plan*. Integration of programs and services was a noted challenge across programs and sites in WRHA. Overall, there was agreement that the system's fragmentation is a barrier to patient navigation to the appropriate provider and facility, which may place unnecessary burden on other parts of the system (e.g. ambulatory-sensitive conditions in ED). • Use of private health services. There is appetite to leverage the use of private health services, where feasible. In reference jurisdictions, private lab, diagnostics, and laundry are in place. • Consolidation of IT. Stakeholders noted that technology differs across regions and sites, further challenging continuity of care and service integration.
4. Implementation of robust performance management frameworks	• Thedacare, USA • Local Health Integration Networks, ON • Alberta Health Services	• Accountability frameworks. Stakeholders agreed that a performance management framework is required to understand how funding is achieving outcomes for patients. In particular, it was suggested that there be a performance management system for which physicians and facilities would be accountable. • Quality Management. Stakeholders indicated that, in general, there is no quality improvement approach at the delivery level, although the WHRA has adopted some early visual management techniques using dashboards. There is appetite for more robust quality improvement, with a desire for a "made in Manitoba" approach.
5. Department-level funding reforms to drive population health	• Thedacare, USA • Local Health Integration Networks, ON • Alberta Health Services	• Incentives for primary/community care. The Peachey report indicated that "public and population health have been under-resourced and require a broad provincial approach that focuses on prevention and a long-term vision of a return on investment". To drive population health reforms, there is opportunity to implement funding levers to shift care "upstream" into the community. In reference jurisdictions, this has included integrated health services plans that consider the unique demographics and socioeconomic status of communities or programs of care that incentivize community-based care. Stakeholders indicated a desire for system wide incentives to operate cost-effectively across the continuum of care, suggesting that funding could "follow" the patient pathway. Fee-for-service was noted as a barrier for effective collaboration across the continuum. • Strategic priority alignment. Stakeholders are amenable to funding models that align sites and programs to strategic priorities, as well as incentive systems for budget accountability (e.g. % of savings reinvested into the site when budgets are met).

Detailed findings from each reference model are outlined in the following section.

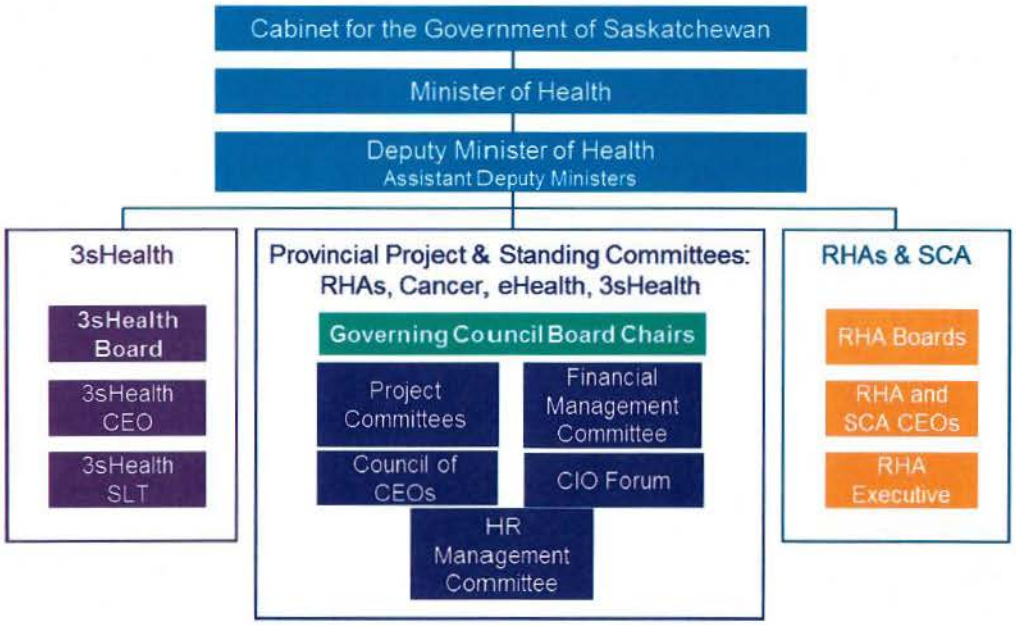
CONFIDENTIAL

KPMG

4.1. Health Administrative Shared Services Organizations

3sHealth Saskatchewan

3sHealth Saskatchewan



History & Background

- 3sHealth was created on April 2012 by the Saskatchewan Association of Hospital Organizations, with a mandate to provide province-wide shared services, including payroll, benefits, and procurement to support Saskatchewan's healthcare system and help ensure its long-term sustainability.

Role of Department

- Sets strategy and direction;
- Sets policy;
- Sets and monitors regulatory framework/standards;
- Secures funding; and
- Designs & implements system-wide reform programs including funding reform.

Role of Delivery Organizations

- Executes direction;
- Designs/Plans interventions (including programs).

Role of Shared Services Organization

- Purchasing (payroll, benefits, and procurement).

3sHealth: System Features

Levers of Change

People & Organization

- 3sHealth works collaboratively with Regional Healthcare Providers and RHAs.
- 3sHealth employs approximately 100 people internally, and is responsible for providing services to over 42,000 employees across the province. Operating under a hybrid shared service model, 3sHealth maintains some centralized services such as payroll, while other services are more decentralized such as Finance.
- 3sHealth has embedded a culture of continuous improvement. Lean thinking is built into 3sHealth processes to engage key stakeholders in innovative approaches to patient care and Supply Chain Management.
- >42,000 professionals are served by 3sHealth.

Process & Delivery

- 3sHealth is responsible for the provision of province-wide shared services, including payroll, benefits, and procurement to support Saskatchewan's healthcare system and help ensure its long-term sustainability.
- 3sHealth provides product conversion support and supports an issues resolution process for new products to health regions and the Saskatchewan Cancer Agency.
- >$112M in savings were realized between 2012 and 2016, chiefly through the provincial contracting of drugs, medical surgical supplies, linen services, and dividends/rebates from provincial contracts.

Information Technology

- Gateway Online is an electronic system that automates and implements standard HR processes across the province, including paperless pay statements, personal information storage, and talent profiles.

Regulation & Policy

- 3sHealth is a non-profit, non-governmental organization.

Governance

- 3sHealth is governed by a representative board referred to as the Governing Council of Board Chairs of the RHAs and the Saskatchewan Cancer Agency. The Governing Council is responsible for planning and organizing provincial services including: business and clinical support, determining the organization's mandate, services, funding parameters and governance for 3sHealth, and appointing the Board of Directors.
- The 3sHealth Governing Council appoints a skills-based Board of Directors to provide oversight to the organization. The Board is responsible for holding the 3sHealth management team accountable and making recommendations to the Governing Council.

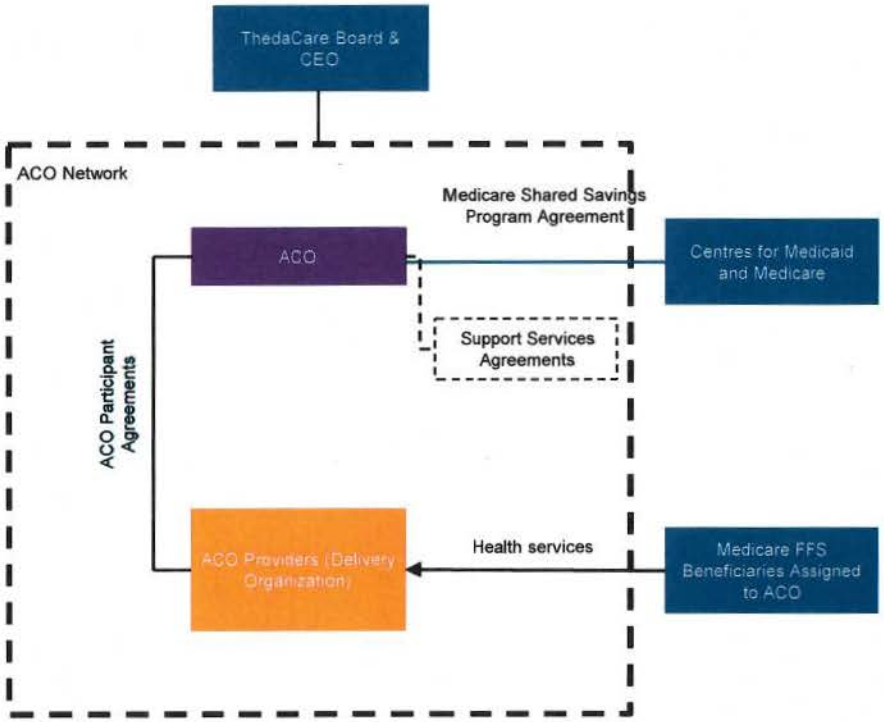
CONFIDENTIAL

KPMG

4.2. Integrated Health Services Organizations

ThedaCare

ThedaCare



History & Background

- ThedaCare is a cradle-to-grave, not for profit healthcare provider with a turnover of circa $800m and 6,000 staff and a world leading Lean healthcare system in the US. It works in an ACO model to deliver end-to-end care to over 235,000 patients annually.

Role of Department

- Sets ACO policy;
- Sets and monitors regulatory framework/standards;
- Secures funding; and
- Designs & implements system-wide reform programs including funding reform.

Role of Delivery Organizations

- Designs/Plans interventions (including programs).

Role of Shared Services Organization (ACO)

- Integrate and support delivery organizations as service provider;
- Consolidate and integrate whole jurisdiction services and care programs/sites; and
- Managed with shared governance and SLA/KPIs.

Thedacare: System Features

Levers of Change

People & Organization

- 7 acute hospitals and 35 clinics.
- Thedacare is an integrated healthcare delivery system, working with community and non-profit providers within the ACO to deliver end-to-end care. Thedacare is structured as an Accountable Care Organization, promoting coordination of care for defined patient groups across the continuum of care. The key feature of ACOs is shared savings ("gain-sharing") – based on agreements where payers and providers share cost savings, allowing the provider to shift the risk of high cost services to the provider. Shared savings are calculated against benchmarks, using historical spending patterns and adjusted future projects. Savings and losses occur when spending is above or below the benchmark. The model has the potential to shift the emphasis from volume/intensity of services to incentives for efficiency and quality.

Process & Delivery

- Systems thinking in ThedaCare is achieved within the ACO model, which promotes coordination of care for defined patient groups across the continuum of care.
- Lean is embedded in the organization.
- The ThedaCare Business Performance System is an organization-wide quality improvement program to drive excellence in clinical care. This system has enabled ThedaCare to improve patient outcomes and reduce costs through a structured approach to daily improvement, training content for all staff and managers, and a direct link between all improvement activities and the overall strategic direction of the organization.

Information Technology

- Thedacare's EMR is accessible by providers at all facilities and to external providers via the "Care Everywhere" network; the organization has been recognized as a "Most Wired" hospital and health system.

Regulation & Policy

- Guidelines for ACOs are set out in the Department of Health and Human Services Medicare Shared Savings Program.

Governance

- To facilitate clinical leadership and involvement, ThedaCare's Board appointed a special committee of 12 physicians to identify and manage organizational "pain points" identified by medical staff.

CONFIDENTIAL

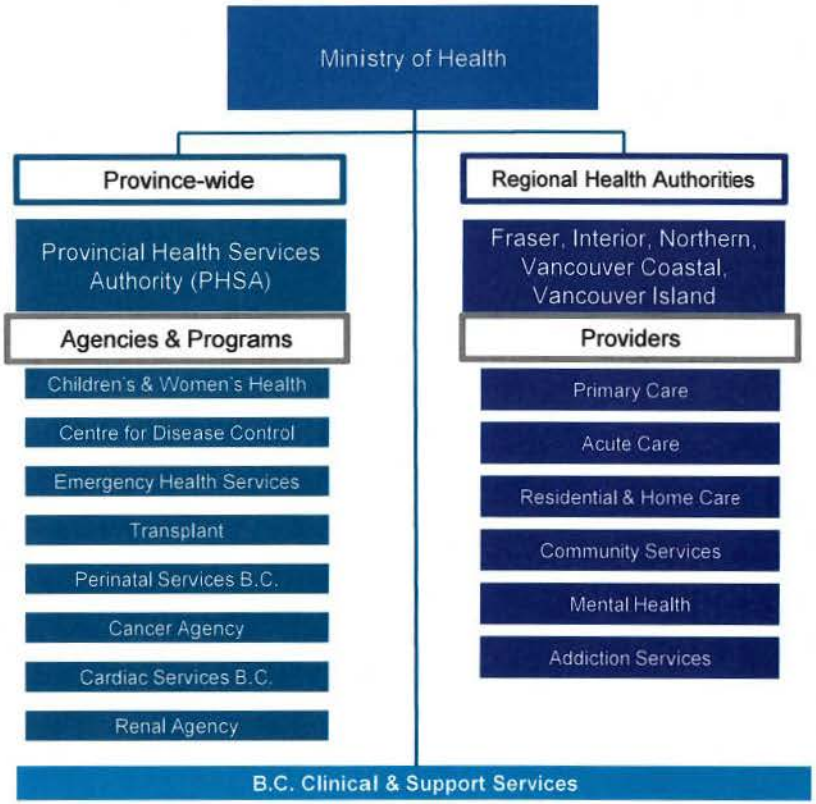
KPMG

4.3. Provincial Health Shared Services Organizations

Provincial Health Service Authority, Northern Territory Australia, NHS England LHINs Ontario, Alberta Health Services

Provincial Health Services Authority

*Shares Some Characteristics With Provincial Health Shared Services Model



History & Background

- PHSA is Canada's only health authority that is mandated to provide province-wide specialized services, either through PHSA directly or in collaboration with RHAs.

Role of Department

- Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes; and
- Coordination of program execution and outcomes.

Role of Delivery Organizations

- Execute service delivery mandate with independent governance and leadership.

Role of Shared Services Organization

- Commissioning specialist, province-wide healthcare services (10 programs); and
- Design/Plans interventions (including programs).

Provincial Health Services Authority: System Features

Levers of Change

People & Organization

- >19,000 employees.
- PHSA has a distinct organizational structure and mandate from the RHAs and B.C. Clinical and Support Services.

Process & Delivery

- PHSA plans, coordinates and evaluates specialized health services with the B.C. health authorities to provide equitable and cost effective healthcare for people throughout the province.
- PHSA works with the five regional health authorities and the Ministry of Health to plan, coordinate and in some cases, fund the delivery of highly specialized provincial services.

Information Technology

- B.C.'s eHealth system is administered by the Ministry of Health and available to PHSA and RHAs.

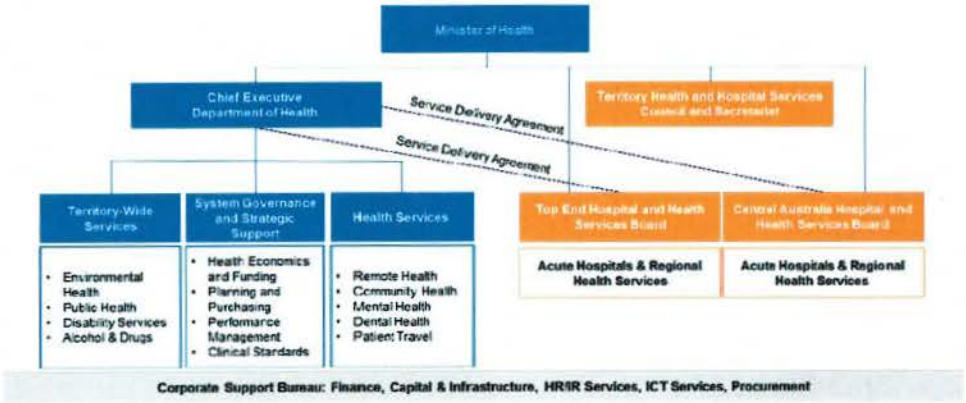
Regulation & Policy

- A mandate letter guides PHSA's activities and responsibilities.

Governance

- The Board Chair is appointed by the Minister of Health.
- Board Directors are appointed by the Government.
- The Board is a fully functioning governing body. Its role is fiduciary is responsible for strategic planning, quality, risk management, organizational and management capacity, internal control, ethics and values, and communications with stakeholders.

Northern Territory, Australia



History & Background

- The Northern Territory Government endorsed the Council of Australian Governments' National Health Reforms in 2012, and published in mid-2013 the Territory's New Services Framework – a document setting out the way in which the Northern Territory's health services would be reformed to focus on frontline service delivery and seek consumer and community input into the direction of the health system.

Role of Department

- Centralize critical policy, planning, workforce development, funding, compliance and outcomes management processes;
- Coordination of program execution and outcomes; and
- Manage and monitor system performance through funding agreements.

Role of Delivery Organizations

- Execute service delivery mandate with independent governance and leadership; and
- Retain local administrative services and transformation management capability.

Role of Shared Services Organization

- Territory-wide program delivery; and
- Clinical support & broader corporate services.

Northern Territory: System Features

Levers of Change

People & Organization

- >74,168 admissions & >144,517 ER visits.
- >6,600 professions.
- 5 public hospitals; 1 private hospital.
- Top End and Central Australia Health and Hospital Services are responsible for the alignment and linkage of hospital and community-based services to improve the patient and client pathway. This arrangement contributes to lower hospital costs by more effective use of community-based supports to ease the burden on acute centres. The Northern Territory's health system has demonstrated significantly improved outcomes in terms of quality (continued improvement in Indigenous health outcomes through Closing the Gap and reductions year-on-year in adverse clinical events), performance (improved National Emergency Access Target and National Elective Surgery Target outcomes) and access (continued growth in demand has been able to be met, to date, within budget parameters).

Process & Delivery

- Providers are given greater autonomy and accountability to deliver services aligned with population needs.
- The Department sets and monitors consistent, system wide standards and a range of indicators.

Information Technology

- IT Services are delivered by the Department of Health's Corporate Services Bureau.

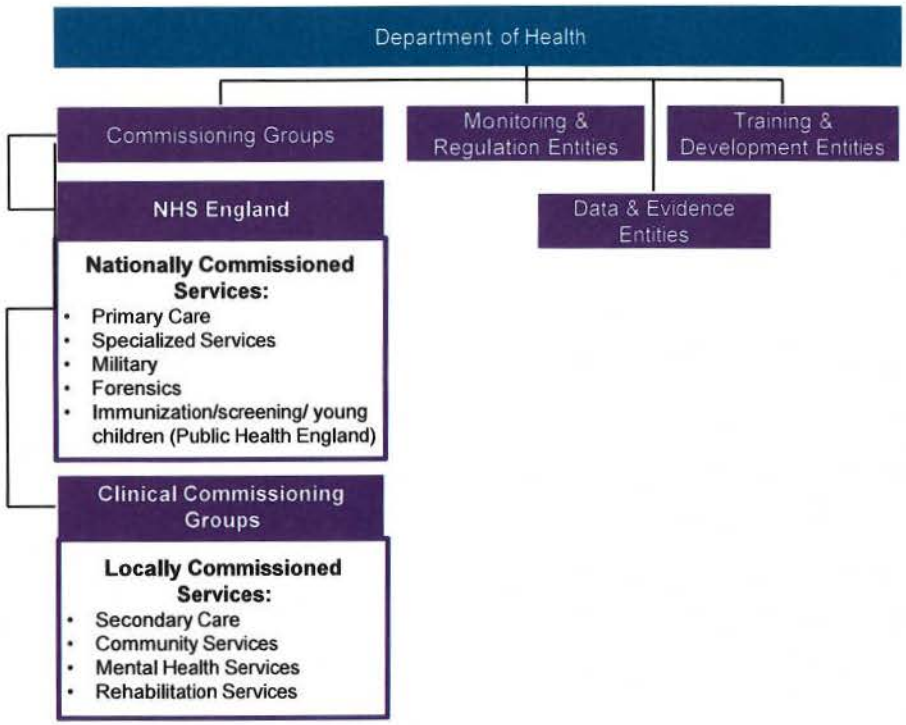
Regulation & Policy

- The Northern Territory Government endorsed the Council of Australian Governments' National Health Reforms in 2012, and published in mid-2013 the Territory's New Services Framework – a document setting out the way in which the Northern Territory's health services would be reformed to focus on frontline service delivery and seek consumer and community input into the direction of the health system.
- As part of that process, in mid-2014 the Northern Territory Government passed legislation to establish new structural arrangements for the health system, forming two separate Health Services (Top End and Central Australia) operated by Statutory Management Boards to oversee service delivery. The Department of Health assumed responsibility for system management, Territory-wide services, policy advice, system planning/monitoring, clinical governance frameworks, and intergovernmental relations. A Health Corporate Services Bureau delivers corporate services to the Department and Health Services.

Governance

- There is clear delineation between bureaucratic, system leadership, system management, and provision functions. Service Delivery Agreements, set with the Boards, clearly outline expectations for Health and Hospital Services, intended to empower Top End and Central Australia Health and Hospital Services to align services with local/regional needs.
- In the New Service Framework, the role of Boards was expanded. Boards of Health and Hospital Services are accountable to the Minister in matters of financial sustainability and balancing the efficiency agenda with desired outcomes and service quality.

NHS England



History & Background

NHS England has been reorganized several times in past years. In 2012, a new Act was established to include clinically-led commissioning, increased patient involvement, a focus on public health, streamlining of quality and performance management entities, and allowing market competition.

Role of Department

- Sets strategy and direction; 'Plans' system;
- Prioritizes focus;
- Sets policy and regulatory frameworks/standards;
- Quality & safety standards and controls;
- Secures funding; and
- Designs and implements system-wide reform programs including funding reform.

Role of Delivery Organizations

- Use of contracts and KPIs to measure outcomes, quality, operational improvement and efficiency; and
- Executes direction.

Role of Shared Services Organization

- Commissioning; Designs/plans interventions; Performance management.

NHS: System Features

Levers of Change

People & Organization

- Commissioner and provider roles are separated:
  - NHS England is responsible for commissioning primary care, specialized services, military health services, and health services in forensic settings.
  - Clinical commissioning groups are responsible for commissioning services in communities, including emergency and acute care, community health services, maternity/newborn services, and mental healthcare.

Process & Delivery

- Back office functions, support services, and Supply Chain procurement are centralized.
- NHS Trusts or Foundation Trusts are groups of providers delivering commissioned services in primary, community, or secondary care, including ambulances and mental health services.

Information Technology

- Information technology is centralized within NHS England.
- Open data is available for public use.

Regulation & Policy

- Several external councils and boards are in place to regulate trusts, quality of care, professional standards, and clinical guidelines.

Governance

- Funding flows through the Department of Health, to NHS England to Clinical Commissioning Groups; there is a transition away from block funding to "payment by results".
- Clinical commissioning groups have separate governing bodies.

Local Health Integration Networks (LHINs): Ontario

History & Background

- 14 Local Health Integration Networks (LHIN) were established in 2006 by the Ministry of Health and Long Term Care (MOHLTC) to address community health needs at a local level. In the LHIN system, the commissioning function is separated from service provision to enhance accountability, performance, and engagement.

Role of Department

- Sets strategy, direction, and policy;
- 'Plans' system;
- Sets and Monitors regulatory framework/standards;
- Secures funding; and
- Designs & implements system-wide reform programs including funding reform.

Role of Delivery Organizations

- Execute service delivery mandate with independent governance and leadership.

Role of Shared Services Organization

- Executes strategic direction; designs/Plans interventions (including programs).
- Commissions; purchases; performance Manages.

LHINs: System Features

Levers of Change

People & Organization

- LHINs are 14 community-based non-profit Crown agencies responsible for planning, funding, and coordinating healthcare services across the continuum of care.
- LHINs set out three-year plans known as Integrated Health Service Plans (IHSPs) in collaboration with communities and service providers.

Process & Delivery

- Accountability agreements include performance goals and objectives, performance standards, targets and measures, and a financial plan. LHINs provide the Minister with annual reports, including audited financial statements. The Auditor General has authority to audit any aspect of the operations of a LHIN.
- The LHIN is responsible for addressing needs and priorities in individual communities, and determining how to best integrate services based on the needs of the local geography/population.
- Providers (e.g. hospitals, long-term care centres, community care access centres) are responsible for delivering care per the Integrated Health Services Plan.

Information Technology

- LHINs are served by eHealth Ontario, which maintains the Electronic Health Record for all Ontarians.

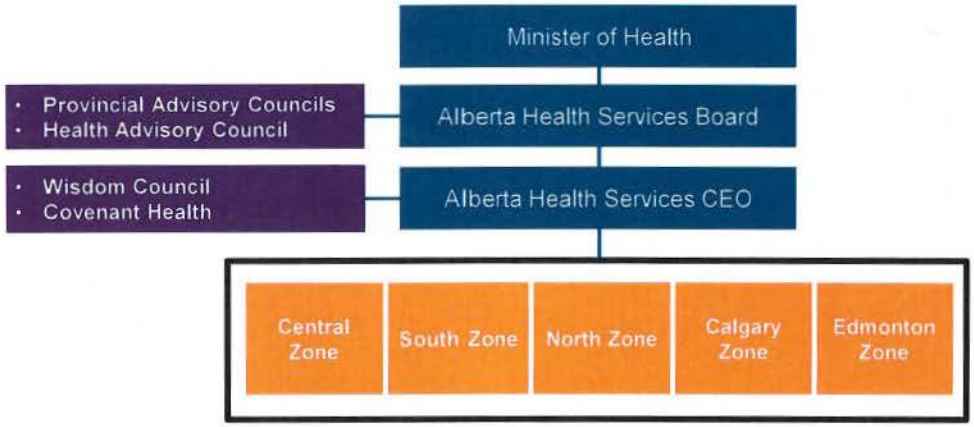
Regulation & Policy

- The Local Health System Integration Act (2006) grants LHINs the legislative power and authority to effectively plan, coordinate, and fund local health systems.

Governance

- LHINs are responsible for governance in each of the 14 health systems. Within each LHIN, individual Boards are responsible for the governance of each health service organization.
- LHINs work with the community to establish Integrated Health Services Plans.

Alberta Health Services (AHS)



History & Background

- AHS was established in 2008 when 9 RHAs and 3 agencies were consolidated into one entity. It is Canada's first province-wide, fully integrated healthcare system.

Role of Department

- Sets policy;
- Sets and Monitors regulatory framework/standards;
- Secures funding; and
- Designs & implements system-wide reform programs including funding reform.

Role of Shared Services Organization

- Sets strategy and direction; 'Plans' system;
- Prioritizes focus;
- Executes direction;
- Designs/Plans interventions (including programs); and
- Purchasing.

AHS: System Features

Levers of Change

People & Organization

- >108,000 employees
- 8,461 acute beds.
- AHS has one CEO; each Zone is controlled by one VP with a clinical leader (e.g. physician) in a dyad relationship.

Process & Delivery

- AHS delivers all care across the continuum.
- Service agreements are made with Covenant Health, the provincial Catholic healthcare provider, to deliver some urban and rural services.
- AHS has three wholly-owned subsidiaries: CareWest and CapitalCare (long-term care); and Calgary Lab Services. Other services are contracted out (e.g. lab services in Edmonton Zone; laundry).
- Strategic Clinical Networks are in place to improve operational effectiveness as a means to enhance quality of care and patient experience. There are 10 strategic clinical networks in place for specialized areas such as cancer, bone and joint, and population, public, and indigenous health.

Information Technology

- IT services are centralized, with one HER.
- Some legacy regional health records and IT/IM systems exist.

Regulation & Policy

- Regulated by Alberta Health.

Governance

- The Board is appointed by the Ministry of Health. Between 2013 and 2015, the Board was replaced with a single Official Administrator accountable to the Minister.
- Covenant Health (Catholic Service Provider) has a separate board and executive team.

CONFIDENTIAL

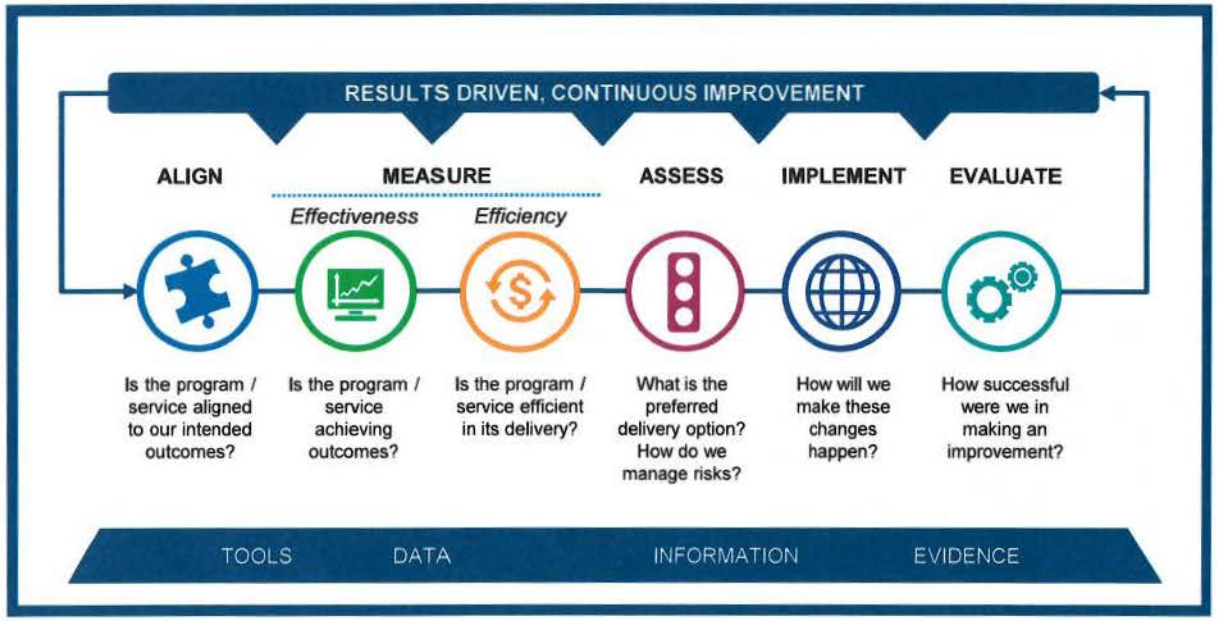
KPMG

5. Health Fiscal Performance Review Framework

Health Fiscal Performance Review Framework

The Manitoba healthcare budget for 2016/17 is approximately $6 billion, with an average annual increase of $223 million. The rate of actual spending growth is not sustainable. Manitoba faces specific challenges with the necessity to bend the cost curve and ensure that its health system is fiscally sustainable while improving the quality of care and achieving better health outcomes. The Health Fiscal Performance Review Framework is complementary to the Fiscal Performance Review Framework developed for core government, and provides principles and guidelines to place attention and fiscal discipline on all spending, and on the provision of efficient and effective healthcare programs and services to improve health outcomes for Manitobans and ensuring a sustainable health system.

The Fiscal Performance Review Framework is applied across a series of steps that consist of a set of questions that decision-makers are expected to ask, and provides a guide for how analysis should be approached and evidence-built. The use of reliable evidence, supported by standards and tools, will determine the successful application of this Framework.



To measure financial performance by effectiveness and efficiency, the following two lens are applied for healthcare spending:

1. **Allocative Efficiency**: the extent to which limited funds are directed towards commissioning the right mix of health services in line with the preferences of those commission the services (e.g. doing the right things). This includes assessment of those services not only invested in but services disinvested from. It ensures the healthcare system can effectively evaluate healthcare programs and services and institute the optimal investments/disinvestments on the basis of assessment.

2. **Technical Efficiency:** the extent to which a healthcare provider is securing the minimum cost for the maximum quality in delivering its agreed healthcare outputs. This incudes operational performance assessment and the extended to which resources are being wasted (e.g. doing things the right ways). This includes assessment of the health system's capability to optimize those healthcare services already provided through various means of quality improvement.

Health Fiscal Performance Review Framework

Align

Overview	Questions to be Answered
The purpose of this step is to identify whether the healthcare program/service is aligned to the Government and MHSAL outcomes. Alignment is a key factor in the Assess phase whether a program/service should start, stop, reconfigure, reduce or expand as well as taking account of evidence of achieving improved health outcomes, leading practice both in jurisdictions in Canada and globally. Key performance measures should also be identified and mapped out at this stage to support future steps.	This step defines whether the program/service is aligned with what MHSAL wants to achieve. Specifically the following questions should be asked: • How will the health program/ clinical service achieve improved health outcomes? • To what degree is the objective aligned with MHSAL's outcomes? • What is the evidence and/or leading practice to support our conclusion? • Do other programs/services in other Departments contribute to the same outcomes? • Is the program/service still relevant to MHSAL Should it be stopped or reconfigured?
Standards	**Tools**
This standard has been met when outcome statements for the program/service are clearly defined and aligned with the MHSAL's and Government's outcomes.	• Health Assessment Framework; • Performance Metrics.

Health Fiscal Performance Review Framework: Measurement Approach

The Framework decomposes total health expenditures to input price, services, outcomes, and demographic components in terms of health risk. This Framework allows an analysis of specific drivers and the effects of single and combined improvements.

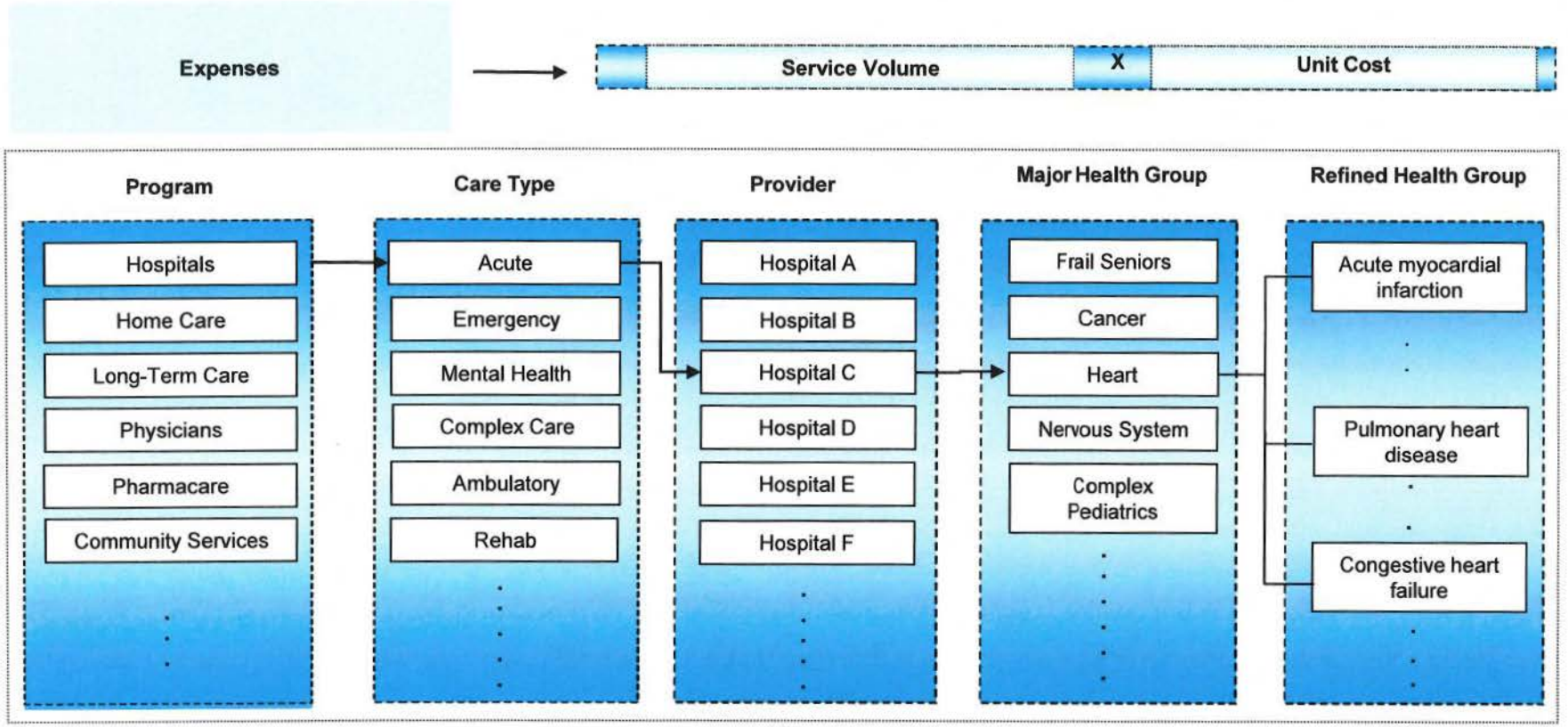
$$Cost\ per\ Capita = \underset{(A)}{input\ price} \times \underset{(B)}{\frac{inputs}{services}} \times \underset{(C)}{\frac{services}{outcomes}} \times \underset{(D)}{\frac{outcomes}{health\ risk}} \times \underset{(E)}{\frac{health\ risk}{population}}$$

Example: Why might health expenditures per capita be higher than historic, interprovincial, or other jurisdictional benchmarks?

(A)	(B)	(C)	(D)	(E)
Higher prices for inputs such as wages, drugs and supplies.	Providers use more inputs or costly inputs to produce a given level of services. For example, higher personal support worker to nursing ratios; more lab and imaging per weighted case.	More services for given outcome; more use of nursing homes instead of home care, assisted living and day programs.	Costs may be high because the province spends for better health risk adjusted outcomes than others.	Population may be older or have higher morbidity than comparators which increases costs.

Health Fiscal Performance Review Framework: Measurement Approach Example

Below is a pragmatic example of use of the Framework's measures (inputs, services and outcomes) in relation to acute care focusing on an identified patient population (refined health group) that has higher morbidity than comparators which increases costs.



Health Fiscal Performance Review Framework

Measure: Effectiveness

Overview

The purpose of this step is to identify how well the health care program/services are achieving their outcome potential in terms of achieving improved health outcomes for Manitobans – 'doing the right things' in relation to alignment with leading practice care models and service configuration.

This should be done by leveraging the performance measures that were identified in the previous step. Historical trending should be undertaken to understand the healthcare program/service's performance and what, if any, deviations from positive performance exist.

Time and effort should be spent examining why performance issues exist and whether this is a nature of the health program's design or care model or its delivery.

Questions to be Answered

This step defines whether the program/service is achieving its stated outcomes. Specifically the following questions should be asked:

- How effective has the healthcare program/service been in meeting its objectives in terms of efficiency and achieving improved outcomes? How do we know? Where we do not have data, how can we know how well it is performing?
- How does the performance of our healthcare program/service compare to other jurisdictions? Where are we better or worse?
- Where there are performance issues what is the cause of these? Wrong model of care for example?

Standards

This standard has been met when a program/service has been assessed as achieving the defined MHSAL and Government outcomes.

Tools

- Health Assessment Framework;
- High Performing Health Systems Assessment Framework;
- Value Optimization Toolkit;
- Jurisdictional Review.

Health Fiscal Performance Review Framework

Measure: Efficiency

Overview

The purpose of this step is to identify whether the healthcare program/service is delivered in an efficient perspective, e.g. that service output is maximized given the cost of the program/service itself – 'doing things the right way'.

This should be done by understanding the full cost of the program/service and the costs associated with service delivery and the services provided - such as days and treatments.

Time and effort should be spent understanding and comparing the per unit cost of programs and services to identify where variability exists.

Productivity, process improvement, technology enablement and other measures should be considered.

Questions to be Answered

This step defines whether the program/service is efficient in achieving its stated outcomes. Specifically the following questions should be asked:

- How efficient is the program / service being delivered (e.g. cost per patient treated)? How do we know?
- What improvements can be made to the existing healthcare program/service? (e.g., productivity, process improvements, technology)
- Can the healthcare delivery be improved to reduce costs? Are there alternative healthcare delivery models that would be more cost effective? More efficient?
- How does the cost and overall efficiency of our healthcare program/service compare to other similar types of healthcare programs in other jurisdictions?

Standards

This standard has been met when a program/service has been assessed against efficiency while delivering upon the Department and Government outcomes.

Tools

- Cost Accounting;
- Benchmarking;
- Health Assessment Framework;
- Process Improvement (e.g., Lean); and
- Value Optimization Toolkit.

Health Fiscal Performance Review Framework

Assess

Overview	Questions to be Answered
In this step based on the findings from the first three steps, options are identified and a robust analysis is completed for each, including the status quo and stopping or reconfiguring the healthcare program/service. Analysis includes understanding which options will generate the maximum value to the Province through a number of contextual Value Lenses. The following Value Lenses should be considered (and are described later): Economy, Efficiency and Effectiveness, key risks and risk mitigation strategies are identified for each option. At the conclusion of the step the preferred delivery option is identified and supported, showing the robust analysis that was undertaken to arrive at it.	This step defines what options should be taken to wind-down, change, or expand a program/service. Specifically the following questions should be asked: • Should the healthcare program/service be stopped, changed, or expanded? • What are the possible options? • What would happen if MHSAL did not do anything? • What is the relative benefit and value to be created by each option? • What is the preferred delivery option? Why is it preferred? What are the risks that need to be managed? What are the risk mitigation strategies?
Standards	**Tools**
This standard has been met when a healthcare program / service has identified a robust list of options, assessed the options against the value lenses, and a preferred delivery option is identified.	• Cost/Benefit and Prioritization Analysis; • Value Analysis (e.g., Economic Impact / Health Outcomes / Social Impact); • Clinical Analysis; • Risk Assessment; and • Financial Analysis.

Levers of Change: Learning from High-Performing Health Systems

Key Features:

There are various levers with which MHSAL can effect a change in programs/services and the design of its provincial health system to better align with and/or achieve desired outcomes.

Similar challenges, priorities, interventions and preoccupations tend to characterize high-performing health systems around the world.

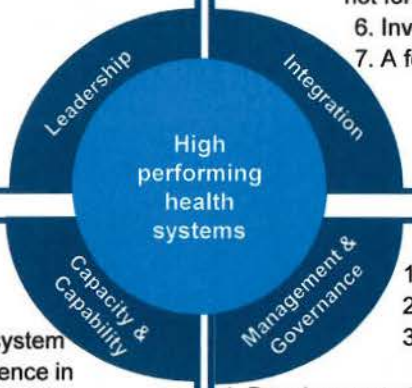
A scan of a selection of these systems, including Canada, Australia, New Zealand Sweden and the United Kingdom indicates that there are several critical features or interventions that are being employed to help these systems meet their strategic objectives.

It is not the case that each of these interventions are employed in every single system, nor is the list exhaustive. However, there is a high degree of commonality between high-performing jurisdictions in relation to these or similar interventions. The next page shows the core interventions for high performing health systems across the domains of Leadership, Integration, Capacity and Capability, and Management and Governance.

Levers of Change: Learning from High-Performing Health Systems

1. 'Systemacity' of thinking
2. Clear delineation between bureaucratic, system leadership, system management and provision functions
3. Clinical leadership and involvement across all system functions
4. Advanced population and health needs-based focus, increasingly around cohort and localities
5. Focus on priority clinical pathways and outcomes definition
6. Setting and monitoring of consistent system-wide standards and performance metrics across all service providers and a range of indicators – quality/safety, financial and wider operational performance

1. Integration of research, education and service delivery agendas
2. Collaboration and integration of public sector provider effort around key pathways and areas of focus
3. Demand management strategies across healthcare settings to address 'pinch points'
4. Emphasis on public health/prevention interventions
5. Collaboration and integration with other public sector agencies and not for profit providers to deliver end-to-end care pathways
6. Involvement and integration with wellness and wellbeing agenda
7. A focus 'up stream' on the social determinants of health



1. Development of innovative workforce strategies and plans to address to add physician/clinical shortages on a tactical and more strategic level
2. Holistic workforce competency frameworks at all levels of the system
3. Focus on education and innovation to achieve and drive excellence in clinical care
4. Advanced leadership and broader capability L & D programs
5. Advanced data and information management process/systems driving evidenced-based decision-making
6. Focus on technology enablement to care delivery and the Digital/eHealth agenda
7. Greater partnership with the private sector
8. Adopting more effective business models and increasingly commercial approaches

1. Clear separation of commissioner-provider functions
2. Evolution/maturity of the commissioning function
3. Clear ability for service providers to earn autonomy and development of more advanced graded levels of autonomy
4. Development of more consistent funding mechanisms across the care continuum
5. An increased shift towards outcomes-based funding across pathways and providers
6. Alignment of system incentives to deliver care in the most effective and efficient setting e.g. out-of-hospital
7. Increased focus on long-term financial sustainability across the system and balancing the efficiency agenda with desired outcomes and service quality

Creating Value

In its broadest sense, value is the relationship between **satisfying needs** and **expectations** and the **resources required to achieve them**. In the context of MHSAL's funding and delivery of programs and services, it is the worth of a healthcare program/service funded by the HIF as determined by the preference of the public, clients and users and the ***trade-offs*** given scarce resources such as time or revenues.

In order to generate the most value, stakeholders need to be engaged to determine which trade-offs maximize the desired outcomes for clients, users, the public, and MHSAL as an organization. Value can further be broken down across the following dimensions:

- **Financial and Economic Value:** this is the quantitative and tangible financial and economic value that is created as a direct result of healthcare programs/services based on revenues brought in, expenditures managed, or a return on an investment.
- **Health Outcomes Value**: this is the value that is created in terms of measurable improvement in health outcomes (e.g., increased average life expectancy, reductions in prevalence of chronic diseases etc.) for the Manitoban population, including targeted sub-populations.
- **Social Value:** this is the long-term value created by displacing costs for healthcare that would normally be borne if social issues are not addressed, e.g., the social costs of poverty, etc.
- **Perceived Value:** this is the worth of healthcare programs/services in the minds of Manitobans, which is as important as the other dimensions of value and often associated with ease of access such as in relation to wait times for ED, Surgery and access to primary care services. Since the recipients of healthcare programs/services are not generally aware of the cost, value to them may have more to do with how they perceive the results of the programs/services relative to others.

Value Lens: Economy, Efficiency & Effectiveness

HIF programs and services will be evaluated against the following three key value lens:

- **Economy:** ensuring activities are implemented at a reasonable cost (including the consideration of quality, per capita costs, and unit costs for service delivery)
- **Efficiency**: ensuring results or outputs are produced in appropriate relation to the inputs (materials, human resources, funding) provided, and;
- **Effectiveness:** ensuring actual outcomes correspond to intended outcomes to the extent those outcomes may be attributed to outputs produced.

The following value lens will be applied in the context of MHSAL's financial performance:

- **Allocative Efficiency**: the extent to which limited funds are directed towards commissioning the right mix of health services in line with the preferences of those commission the services (e.g. doing the right things). This includes assessment of those services not only invested in but services disinvested from. It ensures the healthcare system can effectively evaluate healthcare programs and services and institute the optimal investments/disinvestments on the basis of assessment.
- **Technical Efficiency:** the extent to which a healthcare provider is securing the minimum cost for the maximum quality in delivering its agreed healthcare outputs. This includes operational performance assessment and the extended to which resources are being wasted (e.g. doing things the right ways). This includes assessment of the health system's capability to optimize those healthcare services already provided through various means of quality improvement.

The next two pages illustrate the application of both the allocative efficiency and technical efficiency lenses against hypotheses for efficiency improvement identified in other jurisdictions.

Technical & Allocative Efficiencies

We followed a comprehensive approach based on the measurement criteria set out in the Health Fiscal Performance Review Framework to identify immediate (2017/18), tactical/operational and strategic improvement and transformation required to ensure sustainability. Each of the potential opportunities will be qualified as technical or allocative efficiency.

Lens	Hypothesis	Criteria	Improvement Category	Timelines
Technical Efficiency *'doing things the right way'*	**Potential areas of opportunity for 2017/18** • Tactical cost reduction programs in larger hospitals via opportunities identified through benchmarking. • Consolidation of procurement functions and transformation of Supply Chain. • Improved drugs procurement.	Economy & Efficiency	**Immediately Implementable** *High impact cost management opportunities realized in-year.*	2017/18
			In-Depth Analysis: *Tactical Cross-cutting programs across health system.*	2018/19+
Allocative Efficiency *'doing the right things'*	**Areas of potential opportunities in 2017/18 to realize significant savings in a 3-4 year fiscal year timeframe** • Reallocation of funding. • Clinical support services in relation to consolidation/ outsourcing.	Effectiveness	**In-Depth Analysis: Strategic Re-design** *Re-design models of care/service reconfiguration.*	1+ Years
			In-Depth Analysis: Strategic Partnerships *Working with others to deliver existing and new services differently.*	1+ Years

Health Fiscal Performance Review Framework

Implement

Overview	Questions to be Answered
In this step, an implementation plan is developed. This includes the key steps, roles and responsibilities, milestones, and timelines. The plan should outline the full cost of the preferred option and include actions related to managing risk, reporting on progress, and include a project implementation plan outlining the benefits to be realized, expected costs, roles and responsibilities, and actions to implement the project. The necessary changes to implement the preferred option are then initiated.	This step defines how the changes to programs/services will be made. Specifically the following questions should be asked: • How will you manage and implement the change? • What are the key tasks and milestones? • What is the total approved budget for the change? • How will you report on the progress of implementation? • What benefits both should be expected and when will these be realized? How will you report on these?
Standards	**Tools**
This standard has been met when the changes to be made have been broken down into a set of key milestones to be achieved. Consideration for the benefits has also been documented and reporting has been agreed upon.	• Cost Accounting; • Project Implementation Plan; • Benefits Tracker; • Risk Assessment.

Health Fiscal Performance Review Framework

Evaluate

Overview	Questions to be Answered
To ensure ongoing continuous improvement, and an outcomes driven approach, this step is critical to the overall fiscal performance review framework. Utilizing the implementation plan and associated performance metrics, evaluate the extent to which the change is having the desired effect on performance. This information is then utilized on a go-forward basis to manage the program/service and continually inform the design and operation of others.	This step measures how the changes to program/service have made a positive impact. Specifically the following questions should be asked: • What were the improvement made? Were there any unintended consequences? • How have the changes improved the program's ability to achieve outcomes? • Have the benefits, that were previously defined, been realized? If not, why? • Are there any emerging risks to performance?
Standards	**Tools**
This standard has been met when evaluation becomes a routine part of the program's operations. There is ongoing data collection and comparisons performed against a baseline or defined performance target.	• Cost/Benefit Analysis; • Risk Assessment; • Clinical Analysis; • Financial Analysis; • Benefits Tracker.

Health Evaluation Criteria

The key Health Evaluation Criteria to consider in reviewing areas of opportunity or initiatives to improve performance and costs are consistent with the Assess phase. These are same evaluation criteria developed for the Fiscal Performance Review Framework.

Whole of Government Approach

Achieving the intended outcomes of the Health Fiscal Performance Review Framework requires a transformational shift in culture and process. The framework applies an approach for information and analysis supporting MHSAL and Government decisions.

It is important to stress that the Health Fiscal Performance Review Framework has been developed to align with and be supplemental to the Fiscal Performance Review Framework developed for the whole of Government. This is consistent with the intention for roles and responsibilities for fiscal performance not to be in silos and requires a whole of Government approach and shift in culture across MHSAL.

CONFIDENTIAL

kpmg.ca