Deloitte.

AHW RHA Efficiency Review
Northern Lights Health Region

Governance and Accountability Overview

Final Report

July 14, 2006

Audit. Tax. Consulting. Financial Advisory.

Governance and Accountability Overview

Key Components of Governance and Accountability

- The province of Alberta uses a four part accountability framework that includes: 1) a three year Health Plan; 2) Annual Business Plans; 3)Quarterly Performance Reports; and 4) Annual Reports. This framework is to promote:
  - Governance and management of the health region
  - Accountability to the Minister
  - Keeping the public informed
- For this assessment, Deloitte has focused on the three year health plan and the most recent Annual Business Plan to assess the degree to which there is demonstrable evidence that the direction is cascading to the operational level.
- In addition, Deloitte has applied a high level assessment of the Board's role related to:
  - Responsibilities and mandate
  - Structure and organization
  - Processes and information
  - Performance assessment and accountability
  - Organizational culture

NLHR Three-Year and Annual Plan

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goals 1	Legislated Responsibility 1
• Albertans Choose Healthier Lifestyles	• Promote and protect the health of the population in the health region and work towards the prevention of disease and injury

Deloitte Observation at the Operational Level	• Eight corresponding strategies identified: • **1.1 – Promote optimal health and development of young children** • **1.2 – Promote prevention of sport related injury** • **1.3 – Expand breast and cervical cancer screening in partnership with ACB** • **1.4 – Regionalize health promotion services** • **1.5 – Healthy Eating** • **1.6 – Customize and implement school health newsletter across Region** • **1.7 – Tobacco reduction** • **1.8 – Choose Well and Healthy U to staff and residents of Region** • The region has several population health programs in place in line with these strategies, and have developed regional coordinators to support programming on both sides of the region. • The need for a broader community health needs assessment is critical to ensure the strategic and operational alignment of these initiatives to population health needs.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 2	Legislated Responsibility 2
• Albertans Health is Protected	• Assess on an ongoing basis the health needs of the region.

Deloitte Observation at the Operational Level	• Four corresponding strategies identified: • **2.1 – Reduce influenza outbreak severity** • **2.2 – Minimize environmental health risks through education, monitoring, compliance and enforcement** • **2.3 – Ensure safe and secure drinking water** • **2.4 – Through collaboration and partnership, reduce suicide and serious injury risk through education and targeted interventions** • Consultation findings suggest that the region's Environmental Health service is unable meet AHW blue book standards for routine inspections, which is a significant potential risk to the region, and limits the operational ability to support these strategies. • This challenge is further compounded by a large 'shadow' population in the region, where the service reports heavy workload associated with the private industry camps. • The need for a broader community health needs assessment is critical to ensure the strategic and operational alignment of these initiatives to needs, with corresponding resource allocation for implementation.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 3	Legislated Responsibility 3
• Improve Access to Health Services	• Reasonable access to quality health services is provided in and through the health region.

Deloitte Observation at the Operational Level	• Ten corresponding strategies identified: • **3.1 – Ensure appropriate access to services across Region** • **3.2 – Promote aging in place through supportive living programs** • **3.3 – Implement Local Primary Care Initiatives** • **3.4 – Partner to implement priority components of Regional Mental Health Plan** • **3.5 – Relocate service to community, as appropriate** • **3.6 – Increase clinical application of telehealth** • **3.7 – Expand service within Region, as appropriate and to meet need** • **3.8 – Focus on acceptable wait times** • **3.9 – Comply with Alberta Waitlist Registry requirements** • **3.10 – Promote Health Link use** • The region is currently in development of primary care initiatives, but is still in preliminary stages of supporting living program development. Consultation findings suggest the need for increased focus on supportive living options, to expand community choice across continuing care, supportive housing and home care based service delivery options.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 3	Legislated Responsibility 3
• Improve Access to Health Services	• Reasonable access to quality health services is provided in and through the health region.

Deloitte Observation at the Operational Level	(continued) • The region's mental health plan is in progress, and consultation findings suggest support for planned initiatives. • The region has established good telehealth infrastructure to support strategic direction, but consultation findings suggest the need for increased clinical leadership to drive the use of this technology in clinical service delivery. Operationalization of this strategy will also require consistent resource support to enable broader community health applications, as a shift from the historical grant-based funding for telehealth programs. • The need for a broader community health needs assessment is also critical to ensure the strategic and operational alignment of these initiatives to needs, with corresponding resource allocation for implementation.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Light' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 4	Legislated Responsibility 4
• Improve Health Services Outcomes	• Activities and strategies to improve program and facility quality.

Deloitte Observation at the Operational Level	• Nine corresponding strategies identified: • **4.1 –Maintain regional accreditation status** • **4.2 – Collaborate to address aboriginal health issues** • **4.3 – Continue health needs assessment** • **4.4 – Implement Regional Mental Health Plan** • **4.5 – Focus on Health Quality Council of Alberta results to improve access** • **4.6 – Focus performance improvement on findings from Health Quality Council and patient satisfaction** • **4.7 – Establish an ethics process in Region** • **4.8 – Improve physician access** • **4.9 – Focus on patient safety and quality standards** • The region has identified the need for increased partnership with FNHIB, which is supported by consultation findings. This is especially relevant to the northwest area of the region. • Physician access was identified as a challenge in communities, and consultation findings suggest the need for increased primary care access to support this strategy. • The region's creation of a Patient Safety/Risk Management role will support improvements to patient safety and quality standards. The existence of two separate MACs within the region and limited physician role in service delivery leadership, however, are expected to impact the region's ability to drive forward with this initiative.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 5	Legislated Responsibility 5
• Health System Sustainability	• Determine priorities in the provision of health services in the health region and allocate resources accordingly.

Deloitte Observation at the Operational Level	• Ten corresponding strategies identified: • **5.1 – Provide appropriate services for a regional facility** • **5.2 – Establish shared resource and service agreements for clinical and administrative support** • **5.3 – Implement an integrated information system, including EHR** • **5.4 – Implement best practices for health information management** • **5.5 – Explore private sector partnerships for capital development and service delivery** • **5.6 – Ensure evidence based decision-making is in place** • **5.7 – Apply quality framework for reporting and business case development** • **5.8 – Implement new beds to align to bed to patient ratios** • **5.9 – Apply indicator based approach for staff management** • **5.10 – Establish resources to support staff development** • The region is currently moving forward with Meditech and other IT implementations to support the creation of a regional EHR, improve health information management and enhance decision-making. Preliminary success has been achieved, as evidenced by the telehealth and PACS infrastructure in the region. Further, IT initiatives have demonstrated business case process to ensure appropriate investments. • Although clinical development roles are in place to support staff development, the region is challenged by staff vacancies to effectively enable this role. • Consultation findings suggest that increased focus on industry partnerships is needed to achieve strategic goals, and that senior level leadership will be a key enabler for success.

Three Year Plan

NLHR Strategy Mapping AH&W Goals & Legislated Responsibility

- Deloitte's review of Northern Lights' strategies (2005–2008) mapped to health system goals and legislated responsibilities provides the following observations.

Health System Goal 6	Legislated Responsibility 6
• Create Organizational Excellence	• Promote the provision of health services in a manner that is responsive to the needs of individuals and communities and supports the integration of services and facilities in the health region.

Deloitte Observation at the Operational Level	• Thirteen corresponding strategies identified: • **6.1 – Support educational opportunities for staff.** • **6.2 – Promote and increase awareness of educational opportunities.** • **6.3 – Support teamwork and shared responsibility in workforce.** • **6.4 – Maximize effectiveness of stakeholder relationships and networks.** • **6.5 – Collaborate with key stakeholders related to staff recruitment and retention.** • **6.6 – Appropriate staff mixes will be established.** • **6.7 – Increase focus on staff safety and wellness.** • **6.8 – Partner with AH&W on health care reform.** • **6.9 – Increase modified work availability.** • **6.10 – Develop detailed action plans for leadership, respectful workplace and balance.** • **6.11 – Collaborate with Health Regions and other stakeholders in above.** • **6.12 – Promote learning and continuous improvement.** • **6.13 – Continue to implement and document innovative people management practices.** • The region is investing in increased education development for staff, but will require focused efforts and resource allocation to achieve strategies, as part of a broader focus on talent management. • Focus on improved physician relations and engagement will be an important enabler to support development of improved teamwork, stakeholder relations. • Critical to the achievement of these strategic priorities will be a significant re-focus on HR strategies, and the need for a senior leader responsible for driving HR change efforts.

Three Year Plan

NLHR Challenges and Opportunities Section

- Deloitte's review of Northern Lights' Three Year Plan (2005-2008) provides the following observations.
- We concur with the identified challenges and opportunities. The extent to which opportunities have been identified for the challenges is varied. Specifically, we appreciate and support the identified relationships between many of Northern Light's pressure points:
  - Access, Geography, Orthopaedic Program
  - Revenue, Recruitment and Retention, Service Levels and Sustainability
  - Population Growth, Space Constraints, Industry Expansion and Development and Housing
  - Service Levels, Access, and Space Constraints
  - Continuing Care and Access
  - Mental Health Plan and Access
  - Regional Shared Health Information Program and Technological Advances
  - Primary Care Networks and Access
  - Healthy Choices, First Nations Partnerships, Primary Care, and Public Health Risks
- Our consultation findings indicates that:
  - The region is making progress across several goals, including: Resource Allocation Based on Priorities, Achieve Organizational Excellence
  - Although work is underway, many of the opportunities are dependent upon the completion of a regional community health needs assessment to determine appropriate direction and alignment. These include: Promote Healthier Lifestyles, Protect the Health of the Region's Population, Improve Access to Health Services, and Improve Health Service Outcomes.

Annual Plan

Observations

- Deloitte's review of Northern Light's Annual Business Plan (2005–2006) provides the following observations related to the extent to which annual direction and activities align to broader strategy.
  - Annual Business Plan (2005-06) demonstrates alignment and support to the Three Year Plan through the development of more supportive activities to support the respective strategies.
  - Significant actions are identified to support goals and strategies, but planning inconsistently identifies the mechanism through which actions will occur.
  - Although performance metrics are identified to support annual plan goals, further alignment of metrics to the significant actions identified will support improved management and reporting of activities.
  - Identification of leadership responsibility and accountability for plan items is also suggested, to support improved action and achievement of goals.

NLHR Governance Assessment

NLHR Governance Assessment
Assessment Areas and Indicators

- The high level assessment of the five areas of governance responsibility included:
  - Responsibilities and mandate
  - Structure and organization
  - Processes and information
  - Performance assessment and accountability
  - Organizational culture

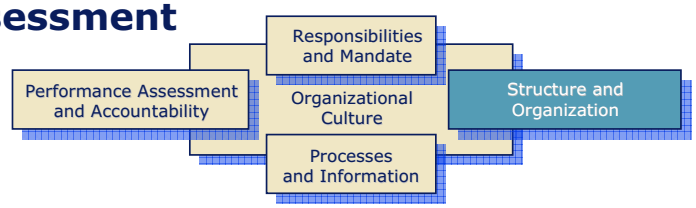
NLHR Governance Assessment

Responsibilities and Mandate

Areas of Assessment	• Understanding of scope, authority and responsibilities (the difference between stewardship and management and setting policy vs. implementing policy) • Involvement in multi-year strategic planning • Involvement in annual planning and budgeting • Involvement in establishing risk management process and aware of procedures to mitigate risk • Ensuring management effectiveness and succession • Communication with key stakeholders
Deloitte Observations	• Board self reports and is reported to have good level of involvement in key areas of responsibility, with a focus on governance and policy. Management is given a clear mandate to respond to operational issues. • The Board Chair reports an increased level of activity and commitment from Board members. • Board members are familiar with their responsibilities and personal liabilities associated with their regional governance role. • The Board reports minimal risk management reporting at a Board level, with no established risk management framework. • Board may want to ensure stronger efforts are applied to management succession planning given the ever-present and increasing need to secure good talented managers.

NLHR Governance Assessment

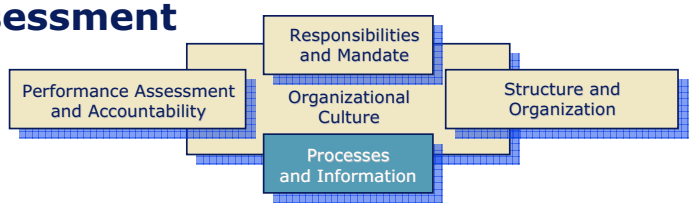
Structure and Organization



Areas of Assessment	• Appropriate number of members and meetings • Appropriate representation of communities • Committee structure • Self assessment
Deloitte Observations	• Board self reports effective working structure for board, with monthly meetings to address regular Board work, and additional meetings to enable the Board to examine internal Board structure and organization changes. • The Board currently has nine members, and reports a good mix of skills and financial knowledge among the current members. • The Board is looking to expand membership to further increase Board skills and capacity. Three additional members will be added, which has been approved by AHW. The specific skill sets required of these members were determined through focused Board sessions and self-evaluation. • The Board has several committees in its structure, including an Executive, Foundation, and Ethics Committee. The Executive Committee serves as the Board's Finance Committee, and the full Board serves the role of Audit Committee. • The Board is also in the process of establishing two new committees, including the Stakeholder Relations Committee (including the CHCs), and Resources Committee (including Finance, Audit, Capital Planning and Risk Management) • As of February 2006, the Board has initiated full Senior Management attendance at all at Board meetings.

NLHR Governance Assessment

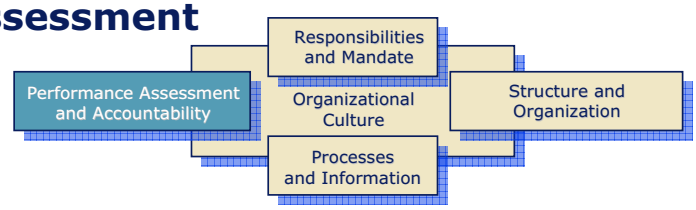
Processes and Information



Areas of Assessment	• Board identification of information needs and receives required reporting • Board meetings considered to be appropriate structured (length, frequency, advance circulation of materials, attendance, management ability to respond to enquiry) • Documentation of meetings • Identification of required skill sets / competencies for board members • Formal orientation; ongoing education / development • Board related policies (roles/responsibility; code of conduct; conflict of interest; …)
Deloitte Observations	• Board self reports good information flow between management and Board, however notes that current management resource constraints limit the availability of evidence and analysis to support decision-making. • Board reporting does not currently meet the Board's information needs to effectively govern the region. To resolve this issue, the Board has established a Resource Committee to identify the most appropriate type and level of reporting (e.g. monthly and quarterly reporting, regular updates to community health needs assessment, performance indicators and quality reporting). • Formal orientation process for new Board Members • Ongoing development opportunities for Board Members • Board specific policies are in place to direct board management, and the Board has been holding separate monthly Board sessions to work on NLHR's Board policies and terms of reference. • The Board also works closely with the Health Boards of Alberta to align by-laws and policies across regional Boards.

NLHR Governance Assessment

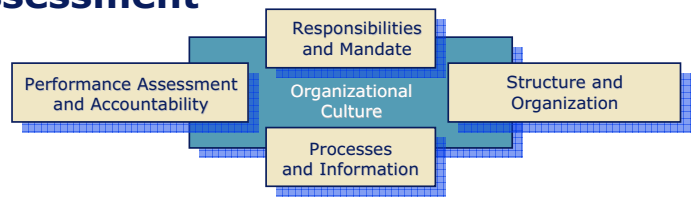
Performance Assessment and Accountability



Areas of Assessment	• Process to assess and monitor organization performance related to financial management, operations, people management, risk and safety • Process to monitor achievement of strategic directions • Self assessment of board performance • Board understanding of liability issues • Process to routinely assess performance of CEO/President
Deloitte Observations	• Board compliant with required reporting. • Strong financial reporting and control mechanisms are reported, but the Board notes a need for increased performance indicator reporting across all areas. • Scorecard reporting for organization priorities and operations is not currently in place, but the Board is considering a scorecard approach to Board, Chair and CEO evaluations. • The Board has a structure process in place for annual evaluation of the Board, Chair and CEO. • As of February 2006, the Board is having monthly reports from the Chair, CEO and other Senior Management. Given this potential for increased information, the Board may want to consider adopting established metrics for tracking and reporting related to other key areas of reporting (e.g. strategy, people, operations).

NLHR Governance Assessment

Organization Culture



Areas of Assessment	• Board involvement in setting organization's values and philosophies • Diverse representation from communities within Region • Board serving role as policy advocates with government and key stakeholders • Fosters effective board / management relations
Deloitte Observations	• Board self reports significant involvement in value setting and strong relationship with management • Board has secured diverse representation through its 6 Community Health Councils – including a focus on both Metis Settlements and First Nations – but recognizes the need for increased community engagement through these Councils. Further, the new CEO has had meeting with each CHC to further promote engagement of these community groups. • To further strengthen the regional perspective of the Board, and access to the Board by stakeholders from across the region, the Board has initiated a process by which Board meetings will alternate across the west and east sides of the region on a monthly basis. • The decision-making processes and accountability structure within management roles is not optimal. Given the elapsed time since re-regionalization, the Board may want to direct the incoming CEO and management team to review current role structure, decision-making and accountabilities.

Concluding Comments

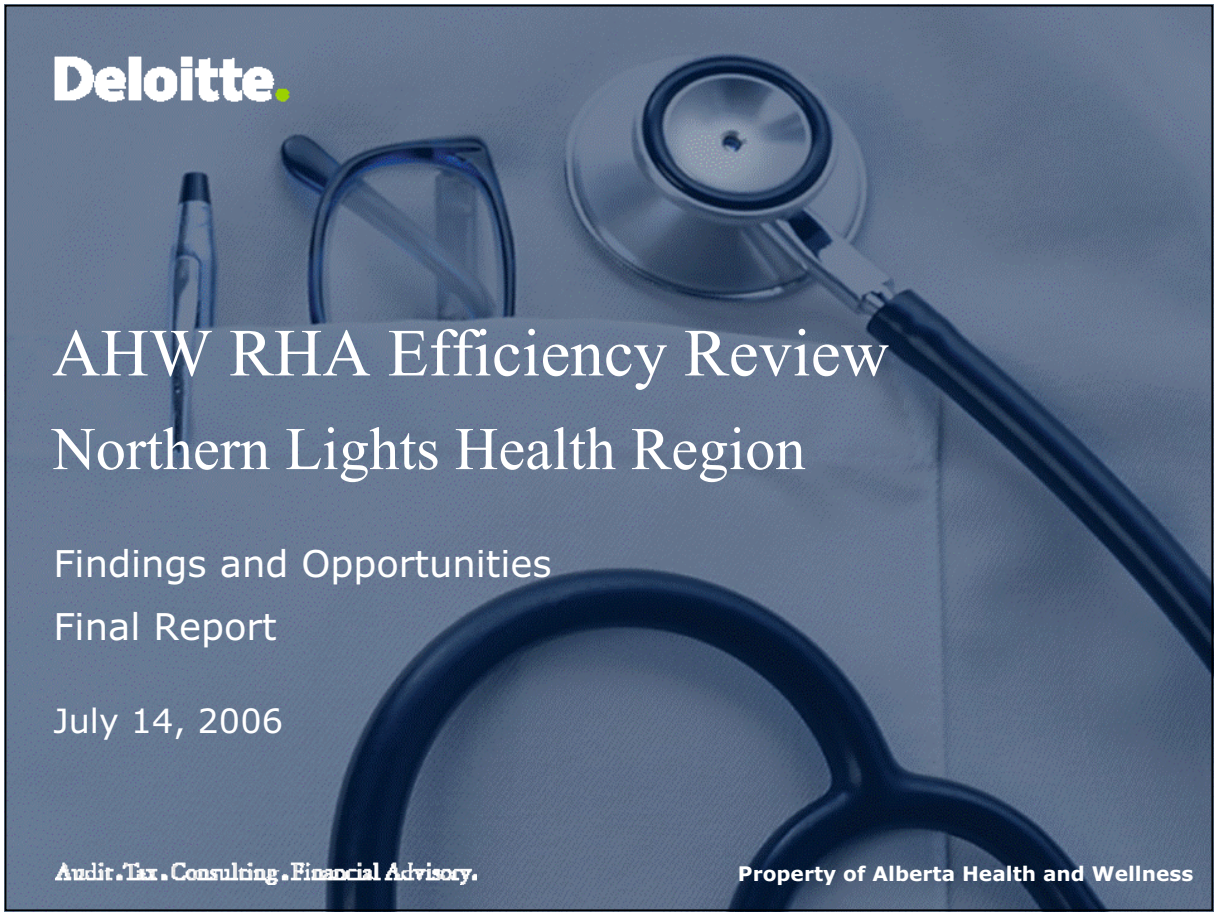
NLHR

Strengths to build on include...

- **Alignment of three-year plan to provincial directions, and supporting alignment of the annual business plan**
- **Development of Patient Safety/Risk Management role.**
- **Continued revitalization of the organization's information systems**
- **Identification of need for new focus on Health Human Resources as a strategic priority**
- **Increased focus on building regional culture through Board and CEO efforts**
- **Increased recognition of the need to grow and build external partnerships**

Areas for further development and assessment...

- **Number of goals NLHR can undertake in support of its strategic priorities**
- **Delineation of strategic vs. operational goals to further focus leadership efforts**
- **Overall timing for implementation of three-year plan**
- **Strategic approach to resource allocation to meet overall implementation timeline, and for ongoing operations post implementation**
- **Senior level Human Resources leadership to support strategic directions**
- **Completion of a regional community health needs assessment to ensure alignment of priorities**



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AHW RHA Efficiency Review

Northern Lights Health Region

Findings and Opportunities

Final Report

July 14, 2006

Audit. Tax. Consulting. Financial Advisory.

Property of Alberta Health and Wellness

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Deloitte.

Project Overview

Project Overview

Scope, Objectives and Business Drivers

Scope:

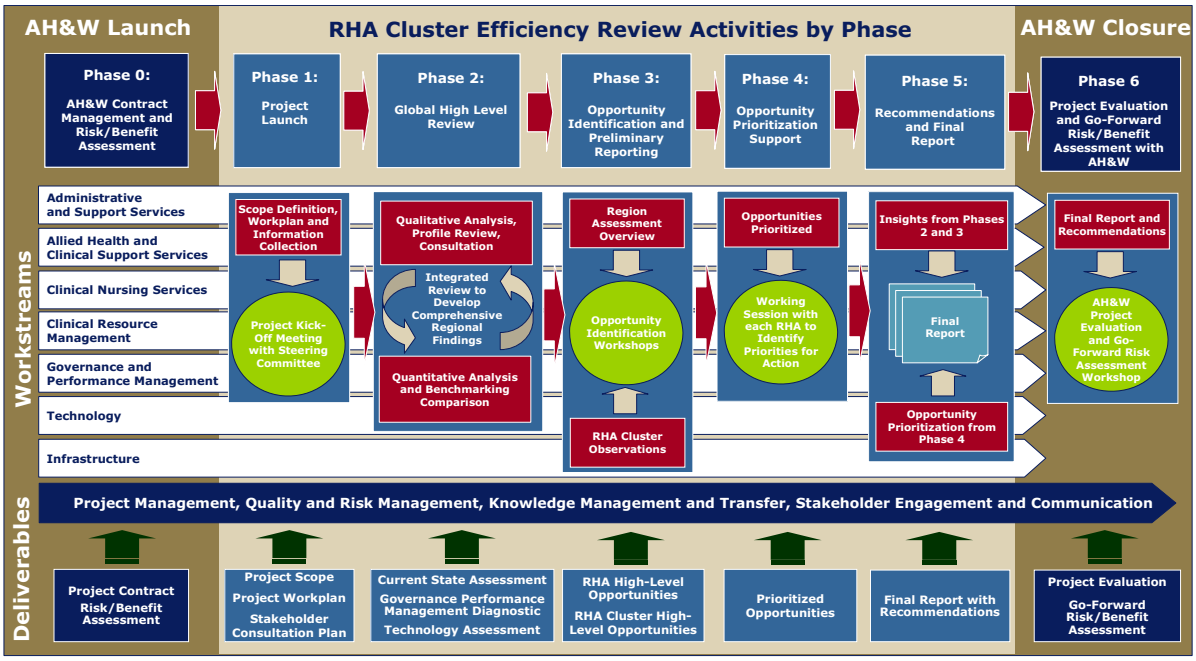
- Alberta Health and Wellness is undertaking an RHA Efficiency Review to identify potential efficiencies and opportunities for improvement within each of the RHAs in the province.
- To achieve this purpose, this Review is focusing its scope on improvements to deployment across five key dimensions:
  - Increases to productivity
  - Improvements to patient flow
  - Improvements to patient outcomes
  - Improvements to financial stewardship
  - Exploration of province-wide opportunities
- The review does include voluntary organizations, but will not be reporting to the voluntary boards.

Project Objectives

- There are three primary objectives that direct the activities of this Review:
  - Identify performance improvement issues and opportunities.
  - Identify productivity and performance improvement strategies and solutions.
  - Provide recommendations to optimize: available resources, operational efficiency, service delivery, safety and quality.

Project Overview
Approach and Timelines

- The diagram below outlines the project approach, and key activities of the review.
- The review started in December 2005, and was completed in June 2006.



Project Overview
Reporting

- This report presents the findings and opportunities identified through the region's review.
- Findings and opportunities are organized into 10 categories of reporting:
  1. Clinical Resource Management
  2. Acute Care
  3. Continuing Care
  4. Community Health Services
  5. Physician Findings and Opportunities
  6. Clinical Support and Allied Health
  7. Corporate and Support Services
  8. Operational Trending and Key Metrics
  9. Human Resources
  10. Infrastructure
- Following the identification and validation of findings and opportunities for each region, two additional activities were completed for this review, which are summarized in the final two sections of the report:
  - Identification of opportunities at a cluster / provincial level.
  - An opportunity prioritization and mapping exercise to support regional planning and go-forward monitoring.

Clinical Resource Management
Overview

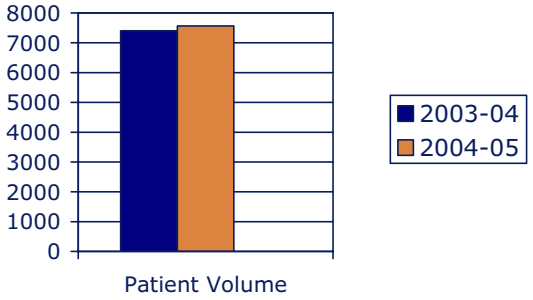
- Clinical resource management analysis includes CIHI analysis (internal trending of complexity and utilization data and external comparison of utilization data for each program) and the results of the MCAP ® review.
- In conducting an internal review of the complexity and utilization data, a drill-down approach is used to understand changes in utilization efficiency (volume, complexity and utilization efficiency).
  - Analysis is based on 2003-04 and 2004-05 data.
- In conducting an external comparison of utilization data, the goal is to identify potential opportunities to improve utilization in relation to CIHI ELOS and peer performance.
  - A drill-down approach is utilized, which begins with a "gross" assessment of utilization and potentially "conservable days" opportunities by comparing NLHR's acute ALOS by CMG to the CIHI acute ELOS. The analysis is based on the 2004-05 data.
  - This analysis is then fine tuned to determine the more realistic opportunities related to improved utilization management. A filter is applied that specifies the number of cases required and the minimum variance in ALOS required before an opportunity can be considered realistic. For example, if there were fewer than 10 cases or the conservable days for the CMG are less than .5, it is not considered to be a realistic opportunity.

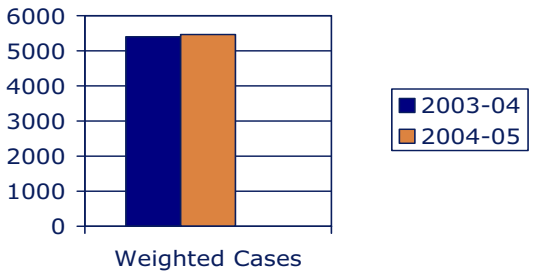
Top 10 Patient Services (2003-04 to 2004-05) CIHI Abstract Data (Region)

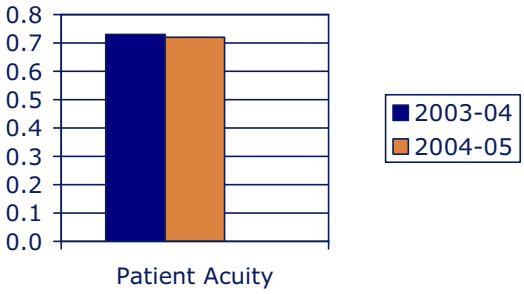
- The Top 10 Patient Services accounts for the 98% of the region's total caseload.
- Comparison over the past three fiscal years suggests a fairly consistent distribution of key patient services:
  - General Medicine represents 30%, Obstetrics/Newborns represents 37%, Paediatrics represents 12%, and General Surgery represents 9% of current volume

Patient Service	2003-04	2004-05	Variance
General Medicine	2,173	2,210	1.7%
Newborn	1,269	1,266	-0.2%
Obs Delivered	1,263	1,259	-0.3%
Paediatric Medicine	931	874	-6.1%
General Surgery	767	686	-10.6%
Gynaecology	292	302	3.4%
Obstetrics Antepartum	263	287	9.1%
Psychiatry	217	214	-1.4%
Orthopedics		197	
Alternate Level of Care	90	97	7.8%
Top 10 Patient Services Total	**7,256**	**7,392**	**1.9%**
Other Patient Services Total	**147**	**172**	**17.0%**
Region Patient Services Total	**7,403**	**7,564**	**2.2%**

Patient Volume, Weighted Cases and Patient Acuity (Region)

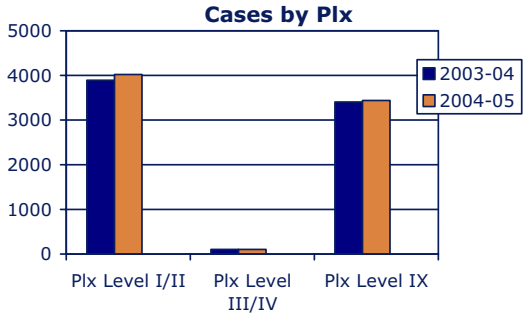


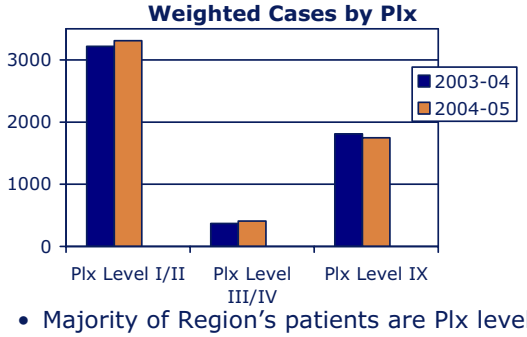


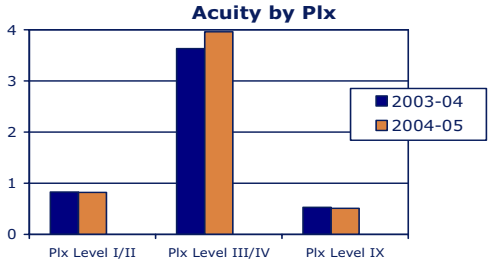


- Regional inpatient volume increased by 2.2%.
- Overall patient acuity has remained relatively consistent (a small decline is noted), however, which results in a marginally higher Weighted Case volume.

Patient Volume, Weighted Cases and Patient Acuity by Plx (Region)







Note: Plx further refines case mix groups to reflect additional diagnoses that influence a patient's overall medical condition. Cases are assigned to one of four Plx Levels. Level 1 denotes the absence of co-morbid conditions, while Level 4 denotes the presence of co-morbid conditions that may be potentially life threatening.

- Majority of Region's patients are Plx level I/II and Plx IX. Volume increase is most noted at the Plx I/II levels.
- Plx III/IV is the only group of patients with a significant acuity change (9%), which drives a corresponding 10% increase in weighted cases for this group.
  - Given the relatively low volume in Plx III/IV, however, this increase has marginal impact on total weighted cases (an increase of only 64 cases).
- Acuity is decreasing slightly for Plx I/II and Plx IX groups (0.4% and 4.5% respectively).

Import/Export Inpatient Volumes for NLHR

By Complexity for 2004-05

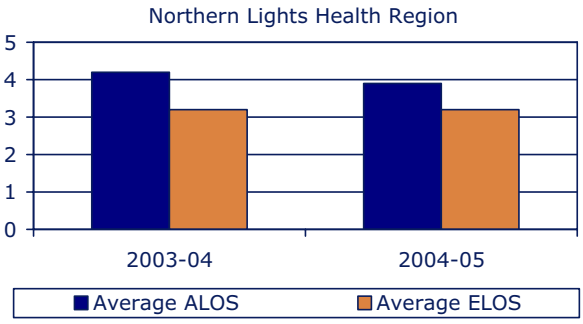
As a % of Total Cases for each Plx	2004-05			
	Plx I/II	Plx III/IV	Plx IX	Total
% Imports	5%	4%	1%	3%
% Exports	23%	57%	10%	19%

- In examining the impact of import/export on inpatient volumes for 2004-05, an overall average of 3% of patients were imported into NLHR in 2004-05:
  - Further examination suggests that imported patients are from a number of other regions, with Capital Health providing the largest % of imports (38%), followed by Aspen Regional Health Authority (23%).
- Overall, 19% of inpatient volumes were exported from NLHR in 2004-05
  - Plx III/IV patients demonstrated the highest level of export, at 57%
  - Further examination suggests that 81% of exported patients are sent to Capital Health Region
- Although not demonstrated here, analysis suggests that imports/exports as a % of total cases has not changed significantly for NLHR over 2003-04 and 2004-05.
  - Further the proportion of import/export by Plx level has also been comparable over the two-year period.

Source: Alberta Health & Wellness CIHI DAD, 2003-04 and 2004-05

Average Length of Stay vs. Expected Length of Stay

as a Region

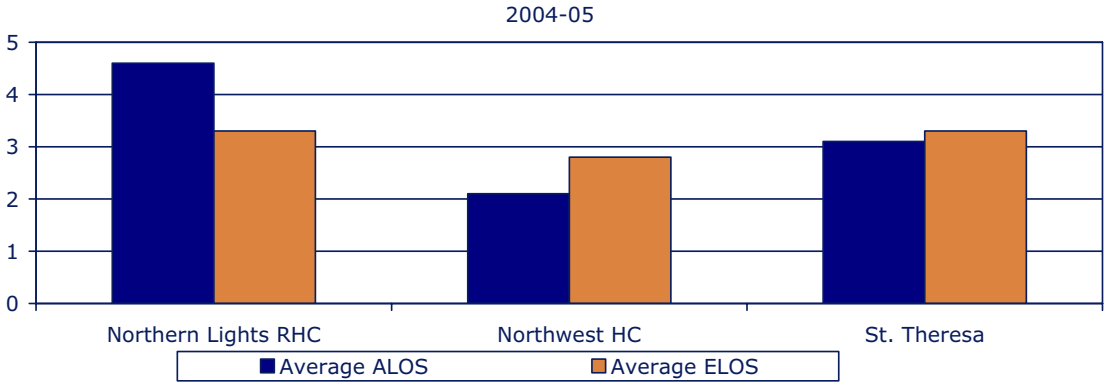


- Length of Stay analysis reveals that NLHR's average length of stay (ALOS) is consistently higher than the CIHI expected length of stay (ELOS).
- NLHR is working to close the gap. We see a small decrease in the gap over the two years reviewed (from 1.0 to 0.7 days).
- The chart below shows that the patients in Plx I/II and III/IV are driving the ALOS – ELOS gap.
  - ALOS to ELOS gap in Plx Level I/II has remained relatively constant
  - ALOS to ELOS gap in Plx III/IV has demonstrated good progress in reducing gap
  - The region has shifted Plx IX patients to be slightly below ELOS.

Fiscal Year	PLx Level I/II		Plx Level III/IV		Plx Level IX	
	ALOS	ELOS	ALOS	ELOS	ALOS	ELOS
2003-04	**4.8**	3.2	**20.9**	10.7	**3.0**	3.0
2004-05	**4.6**	3.3	**17.7**	13.5	**2.7**	2.8

Average Length of Stay vs. Expected Length of Stay

By Site



- Both Northwest Health Centre and St. Theresa General Hospital demonstrated an overall ALOS that is below ELOS, although opportunities across individual CMGs may still exist.
- This suggests that the regional gap in ALOS to ELOS is driven by the Northern Lights Regional Health Centre in Fort McMurray.

Top 10 CMGs by Potential Days Savable in 2004-05

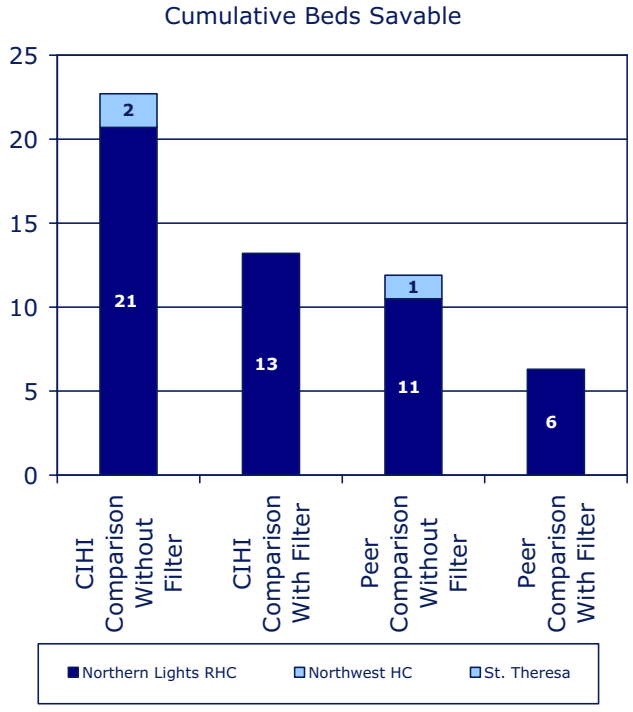
as a Region

CMG	CMG Description	Total Cases	Total Acute Days	Average Length of Stay	CIHI Expected Length of Stay	ALOS - ELOS Gap	Potential Days Savable
851	Other Factors Causing Hospitalization	185	1,969	10.6	2.9	7.79	1,442
847	Other Specified Aftercare	63	1,034	16.4	8.0	8.45	532
483	Diabetes	108	791	7.3	4.4	2.96	320
521	Renal Failure without Dialysis	26	378	14.5	5.9	8.65	225
143	Simple Pneumonia and Pleurisy	224	1,087	4.9	4.1	0.77	173
783	Psychoactive Substance Dependence	14	216	15.4	4.4	11.03	154
140	Chronic Obstructive Pulmonary Disease (COPD)	49	456	9.3	6.7	2.59	127
781	Alcohol Induced Organic Mental Disorders without Axis III Diagnosis	28	228	8.1	3.8	4.30	120
147	Other Respiratory Diagnoses	79	337	4.3	2.9	1.33	105
842	Signs and Symptoms	19	186	9.8	4.5	5.31	101
Top 10 Region CMGs Total		795	6,682				3,300
Other 268 Region CMGs Total		6,769	22,977				1,522
Total Region CMGs		7,564	29,659				4,822

- Leading CMGs for savable days are "Other Factors" and "Other Specified Aftercare". Coding improvements are required to identify appropriate strategy. Remaining days savable are scattered across range of CMG's.
- The savable days calculation includes only those cases where the gap between actual length of stay was greater than 0.5 of a day, and the number of cases per CMG was greater than 10.

Beds Savable in 2004-05

as a Region



- Comparison of NLHR ALOS to CIHI expected length of stay suggests that the Region could save as many as 13 beds.
- When compared to peers, using the filter process, the region's potential bed saving reduces to 6 beds, all of which are located at NLHRC.

- Note: The filter excludes cases where the gap between actual length of stay was less than 0.5 of a day, and the number of cases per CMG was less than 10. Estimated bed savings are based on 100% occupancy.

Top 10 CMGs by Peer Potential Days Savable in 2004-05
at NLRHC

CMG	CMG Description	Total Cases	Total Acute Days	Average Length of Stay	CIHI Expected Length of Stay	ALOS - ELOS Gap	Potential Days Savable
851	Other Factors Causing Hospitalization	82	1,928	23.5	15.2	8.3	683
847	Other Specified Aftercare	45	992	22.0	14.3	7.8	349
781	Alcohol Induced Organic Mental Disorders without Axis III Diagnosis	11	178	16.2	4.8	11.4	125
483	Diabetes	83	692	8.3	7.1	1.3	105
777	Schizophrenia and Other Psychotic Disorders w/o ECT or Axis III Diagnosis	18	390	21.7	16.2	5.5	98
770	Bipolar Mood Disorders, Manic without ECT without Axis III Diagnosis	11	245	22.3	13.5	8.7	96
766	Depressive Mood Disorders without ECT without Axis III Diagnosis	48	667	13.9	12.1	1.8	87
140	Chronic Obstructive Pulmonary Disease (COPD)	30	334	11.1	8.9	2.2	67
784	Psychoactive Substance Abuse	23	121	5.3	2.5	2.8	64
751	Septicemia	12	149	12.4	7.2	5.2	63
Top 10 NLRHC CMGs Total		363	5,696				1,737
Other 251 NLRHC CMGs Total		4,610	17,386				556
Total NLRHC CMGs		4,973	23,082				2,294

- At NLHRC, the leading CMGs for savable days are "Other Factors" and "Other Specified Aftercare", equivalent to approximately 3 beds. Coding improvements are required to identify appropriate strategy. Remaining days savable are scattered across range of CMG's, although Mental Health shows another cluster of opportunity.
- The savable days calculation includes only those cases where the gap between actual length of stay was greater than 0.5 of a day, and the number of cases per CMG was greater than 10.

MCAP Review

MCAP Overview

Process

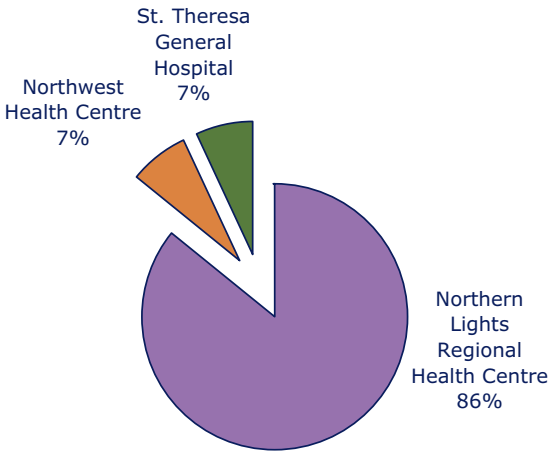
- An MCAP® review was conducted to:
  - Gain a better understanding of patients' required levels of care and their specific care needs and the impact these needs have on inpatient bed utilization
  - Identify system issues why patients are not at appropriate level of care.
- MCAP® is a utilization management tool that uses rigorous scientifically researched and validated criteria to review the intensity of services required for any given patient and determine the appropriate level of care required.
- The tool uses a "service-driven methodology" and focuses on the treatment plan/services ordered for that day.
- By avoiding the placement of patients at too high or low of a care level, health care managers can be assured that patients will receive the highest possible care quality and will move through the health care system in the shortest possible time.
- The review was conducted by Registered Nurses certified in MCAP. They reviewed the charts of all admitted inpatients in the Acute Care settings between January 30 – February 2, 2006.
- Using the MCAP criteria, the following three key questions were answered for each admitted patient:
  - Does the patient require the level of care (i.e. Long Term Care, Acute Care, Intensive Care, etc.) they are receiving?
  - If not, what level of care does the patient require?
  - Why is the patient not at the level of care they require?

Patient Profile

NLHR Acute Care

- 99 patients were reviewed at the acute care sites within the Northern Lights Health Region. This represents 72% of the total number of acute care bed capacity (148) within these sites.
  - Northern Lights RHC had 83% occupancy, while NWHC and St. Theresa General Hospital had 35% and 27% occupancy, respectively.
- The average age of patients was 52 years. Northern Lights Regional Health Centre, with an average age of 51, clearly drives this average, as the other two sites represent an average age of 55 – 59 years.
- 57% of patients were female and 43% were male.

Site	Total Number of Beds	Number of Beds Reviewed
Northern Lights Regional Health Centre	102	85
Northwest Health Centre	20	7
St. Theresa General Hospital	26	7
Grand Total	**148**	**99**



Patient Profile by Site and Service

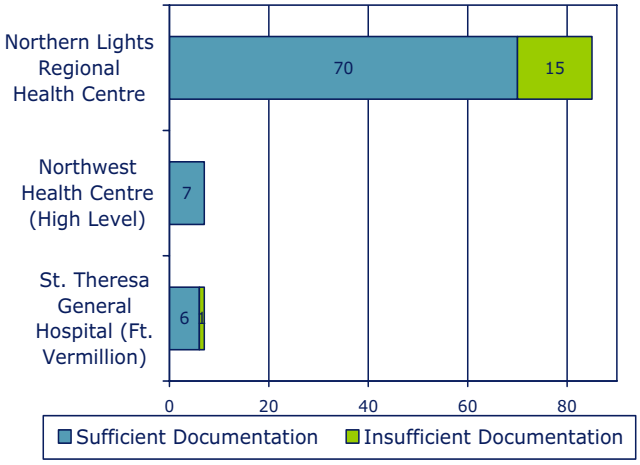
NLHR Acute Care

Site	Patient Service	Number of Beds Reviewed
Northwest Health Centre	Combined Medical/ Surgical	6
	Obstetrics	1
Northwest Health Centre Total		**7**
St. Theresa General Hospital	Combined Medical/ Surgical	7
St. Theresa General Hospital Total		**7**

Site	Patient Service	Number of Beds Reviewed
Northern Lights Regional Health Centre	ER Observation	1
	Intensive Care	6
	Medicine	40
	Obstetrics	7
	Paediatrics	2
	Psychiatry	7
	Surgical	22
Northern Lights Regional Health Centre Total		**85**
Grand Total		**99**

Patients With Insufficient MD Documentation

NLHR Acute Care

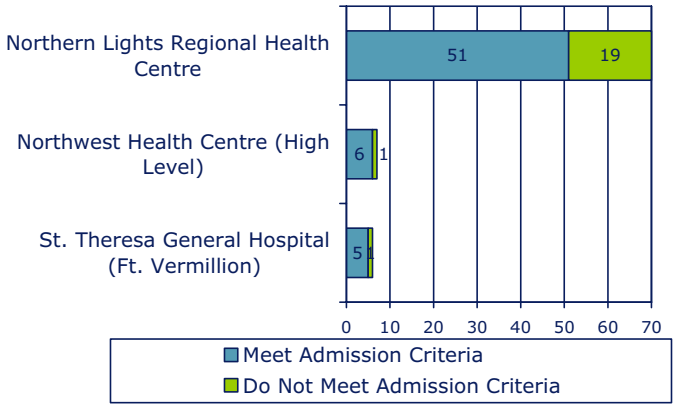


Site	% with Insufficient Documentation
Northern Lights RHC	18%
Northwest HC	0%
St. Theresa	14%
Total for Region	16%

- Overall, 16 of 99 reviewed patients (or 16%) had insufficient MD documentation.
- Where insufficient MD documentation exists, our clinical team is unable to appropriately determine if the patient meets clinical criteria for admission.
- This percentage of patients with insufficient MD documentation suggests opportunity for improvement in physician charting.

Patients Who Meet Clinical Criteria for Admission

NLHR Acute Care

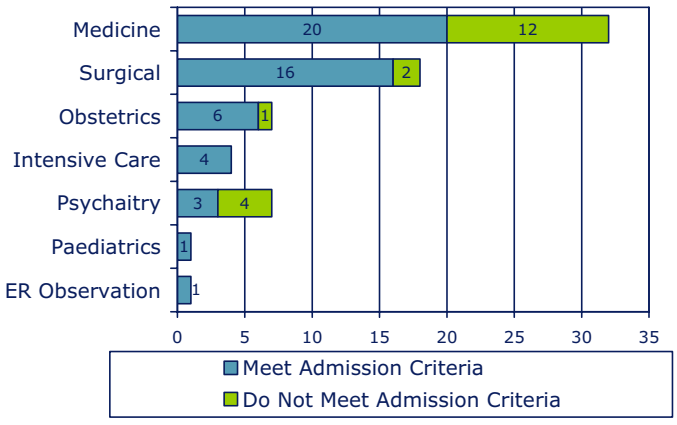


Site	Percent at Appropriate Level
Northern Lights RHC	73%
Northwest HC	86%
St. Theresa	83%
Total for Region	75%

- For those patients with sufficient documentation for our clinical team to determine if they met clinical criteria for admission to the service they were on, 62 out of the 83 patients (or 75%) reviewed met criteria.
- In comparison to our experience with other regions and hospitals in Canada, these results suggest that NLHR is in line with peers, although still has opportunity for additional improvement. The observed average for other Canadian sites is approximately 65-75% of patients in the most appropriate care setting.

Patients Who Meet Clinical Criteria for Admission

Northern Lights Regional Health Centre Acute Care

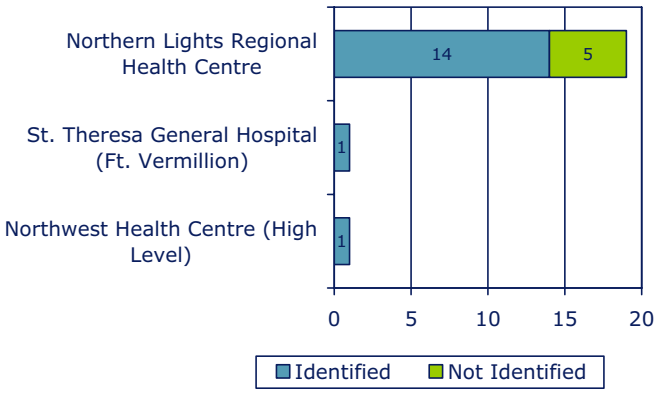


Service	Percent Meeting Clinical Criteria for Admission
ER Observation	100%
Intensive Care	100%
Paediatrics	100%
Surgical	89%
Obstetrics	86%
Medicine	63%
Psychiatry	43%
Total	**73%**

- Further examination of the Northern Lights RHC revealed that overall, 51 out of the 70 patients (73%) reviewed patients meet the clinical criteria for admission – demonstrating an opportunity for improvement.
- Psychiatry and Medicine have the lowest percentage of patients meeting the clinical criteria for admission.

Patients Identified as Requiring a Different Level of Care

NLHR Acute Care



Site	Percent Identified as Requiring a Different Level of Care
Northern Lights RHC	74%
Northwest HC	100%
St. Theresa	100%
Total for Region	**76%**

- Of the 21 patients who did ***not*** meet clinical criteria, 16 (76%) of this group were already identified by the facilities as requiring a different level of care.
- The 5 patients requiring a different level of care ***but not identified as*** such were located at Northern Lights Regional Health Centre. This suggests an opportunity for Northern Lights RHC to improve in the early identification of when patients require a different level of care.

Required Level of Care for Patients not Requiring Acute Care

NLHR

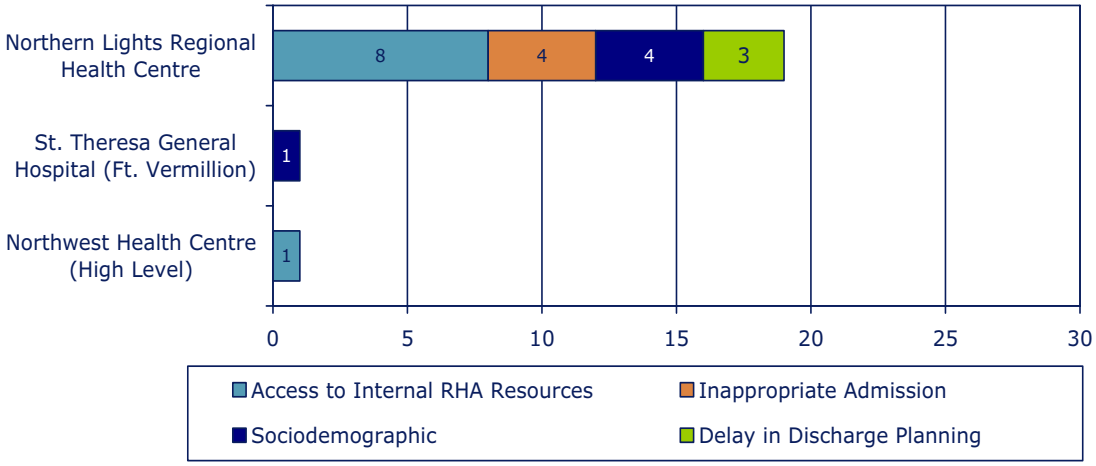
Required Level of Care	Northern Lights Regional Health Centre	Northwest Health Centre	St. Theresa General Hospital	Total
Continuing Care	9	1	1	11
Home	3			3
Home care	2			2
Outpatient Psychiatry	4			4
Palliative Care	1			1
Grand Total	19	1	1	21

- Of those patients who did ***not*** meet clinical criteria for acute care admission, the most frequently observed levels of care required were Continuing care and Outpatient Psychiatry.

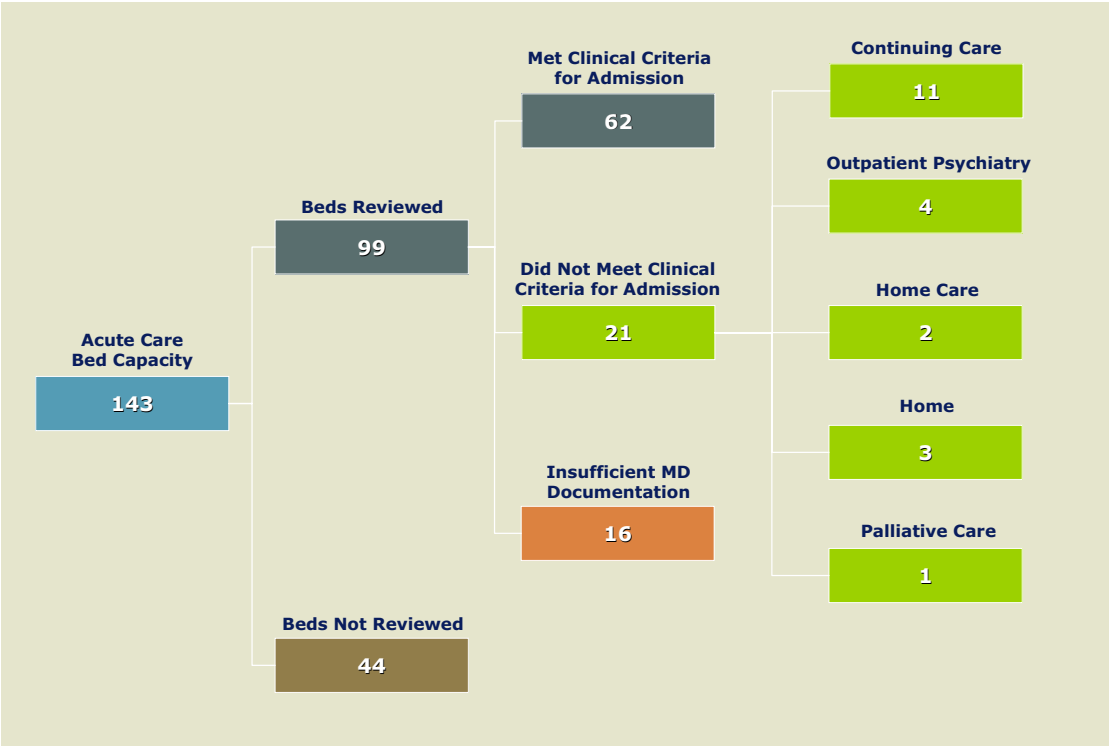
Reasons Patients Did Not Meet Clinical Criteria

NLHR Acute Care

- Of the 21 patients who did ***not*** meet clinical criteria, 43% were due to challenges in accessing different levels of care or resources within the region.
- The second most common reason (23%) was due to sociodemographic factors.



Acute Care Profile Summary: February 6 – 17, 2006



Clinical Resource Management Opportunities

Opportunities	Findings
1. Realize length of stay savings at Northern Lights Regional Health Centre	• Based on the CMG analysis relative to peers, NLRHC has an opportunity to reduce length of stay across several CMGs, particularly in mental health. • MCAP review indicated several inpatients who required continuing care or outpatient treatment, which suggests the need for additional non-acute resources. • Increasing transient/shadow population can make timely discharge problematic.
2. Examine NLRHC admission/ discharge criteria	• Analysis identified that 73% of patients at NLRHC Acute Care met clinical criteria for admission. • Psychiatry and Medicine had the greatest opportunities for improvement. • Improved awareness of, and education on admission best practices to staff will support the realization of this opportunity.
3. Improvements to Regional Coding and Abstracting	• Analysis identified CMG 851 (Other Factors Causing Hospitalization) and CMG 847 (Other Specified Aftercare) as having the highest potential days savable to both ELOS and peers. • The high presence of these CMGs suggest additional coding and abstracting focus is required to help the region more discreetly identify and manage this patient volume.

Clinical Resource Management Opportunities

Opportunities	Findings
4. Improve MD Documentation in Inpatient Charts	• The MCAP review found 16% of inpatient charts could not be not assessed for eligibility for admission due to insufficient physician documentation. • Where this occurs, there is a heavy requirement and reliance on verbal communication between physician and team to support care management. • The heavy reliance on verbal communication has potential risk issues for patient outcomes, and potential for increased length of stay without clear discharge direction.
5. Explore options to increase continuing care capacity in Fort McMurray	• The MCAP review found a large number of patients in NLRHC that required continuing care services. • This was supported by Hospital Management who reported that a separate module has been created on the medical unit to care for overflow continuing care patients, using a more cost effective and appropriate model of care.

Clinical Program Review

Clinical Program Review

Introduction

- Our review of the clinical programs and facility-based care across NLHR has focused on identifying key findings and opportunities related to service delivery and staffing.
- Clinical programs and services will be reported on in the following order:

Clinical Programs and Facilities
NLRHC Medicine and Critical Care Services
NLRHC Surgery and Perioperative Services
NLRHC Obstetrics, Neonatal and Paediatric Services
NLRHC Emergency Department and Ambulatory Care Services
Regional Mental Health Services
Northwest Health Centre
St. Theresa General Hospital
Rainbow Lake Health Centre
Regional Continuing Care Services
Regional Home Care Services
Regional Population Health Services
Regional Environmental Health Services

Clinical Program Review

Nursing Staffing Process Overview

- The relative efficiency of patient/resident care services was assessed based on a comparative analysis of staffing levels and skill mix for each inpatient care unit using three key inputs:
  - GRASP Systems International Database (using the Canadian section of the database)
  - Deloitte Peer Database
  - Unit Staffing Schedule/Pattern
- As an indicator of variance from the benchmark, the difference in hours per patient day (HPPD) is reflected using an FTE estimate for illustrative purposes.
- To gain an understanding of the clinical requirements and environment on each unit, profiles were completed and consultation was conducted with clinical leadership.
- For each patient care unit, the following analysis was then conducted:
  - Total nursing unit producing personnel (UPP) worked hours per patient day/visit (HPPD).
  - Nursing UPP Worked Hours include direct patient care hours provided by RNs, RPNs, and certain percentage of Health Care Aides. UPP hours include regular worked, relief, and overtime, and exclude benefit hours (i.e., vacation and absenteeism).
  - HPPD were calculated using actual worked hours (not budgeted) for 2004-05 and 2005-06 YTD (Sept 30th), and then compared to comparable peer units based on the profiles completed by each program/unit.
  - All units are shown at the 50th percentile. In some units, adjustments have been made to better reflect patient mix/care requirements.
- Staffing opportunities are identified based on comparative analysis and the clinical team's understanding of minimum staffing requirements. Staffing opportunities are not stand alone, however, and need to be considered in the context of other opportunities identified for each clinical area.

NLRHC
Medicine and Critical Care

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Medicine and Critical Care

Opportunities	Findings
1. Conduct a review of Medicine unit admission practices and policies to improve alignment of care practices to care needs. 2. Consider potential staffing investment on Medicine to align to peer levels.	• Utilization analysis and MCAP findings suggested opportunities in Medicine to reduce length of stay, improve coding, and shift patients into alternative levels of care. • Consultation findings further suggested challenges in bed utilization, driven by a mix of admission and discharge practice challenges and off-service patients. • Staffing comparison suggests that Medicine has a potential staffing investment of 3.9 FTEs to align to peers, based on 2005-06 YTD staffing levels.
3. No staffing opportunity identified in ICU.	• Staffing comparison indicates that the ICU is in line with peer staffing.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Medicine	28.9	32.8	4.1	3.8	4.3	3.9
ICU/CCU	14.4	13.4	15.6	15.6	15.6	-

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

NLRHC
Surgical and Perioperative Services

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Surgical Nursing Unit

Opportunities	Findings
1. Monitor 2006-07 staffing levels and patient days to determine alignment to peer levels.	• Staffing comparison suggests that the Surgical Unit had an staffing investment opportunity relative to peers, based on 2004-05 staffing levels. • Projected 2005-06 YTD HPPD suggests an increased level of staffing, however, which would position the surgical unit above peer levels. Anecdotal reporting suggests that patient days may not be accurate, however, with respect to where surgical overflow activity is captured.
2. Review plans for changing the model of care delivery.	• It is important to differentiate between team nursing and stronger mentoring approach. Planned implementation of stronger team approach (within nursing) may create issues related to accountability and continuity of care.
3.Consider converting 2 beds to step-down beds with enhanced staffing levels.	• Epidural pain management is nursing intensive and a potential risk area.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Surgical Nursing Unit	19.0	22.1	4.8	5.4	5.2	(0.6) See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Perioperative Services

Opportunities	Findings
1.Improve OR utilization, equipment flow and reduce overtime through implementation and adherence to booking policies.	• Consultation findings for the OR indicate challenges in OR booking, scheduling, equipment availability, cases starting late and running late, use of evening hours for non-emergency cases, are key issues. High overtime hours for OR staff supports the running over issue. • An OR review was performed several years ago, of which only some of the recommendations were implemented. • Based on projected 2005-06 staffing levels, comparison suggests that the OR/PACU/SDC has a small staffing savings opportunity relative to peers at the 50th percentile, however given the findings identified above, it is suggested that the region focus on opportunity to increase throughput instead of staffing reductions.
2. Ensure a culture of interdisciplinary respect and collaboration	• Nurses report that professional relationships are at time difficult, which is impacting patient care delivery.
3. Implement patient safety policies, including surgical pause.	• No deliberate policies and procedures related to ensuring patient safety.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
OR, PACU & SDC	13.5	18.4	7.5	8.3	8.2	(0.3) See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

NLRHC
Obstetrics and Pediatrics Services

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Obstetrics/LDRP

Opportunities	Findings
1. Develop a targeted recruitment and retention strategy for Obstetrics to ensure continued sustainability of NLRHC obstetrics services, as part of a broader regional HR strategy. 2. Monitor 2006-07 staffing levels to ensure that Obstetrics is adequately staffed to be in line with peers.	• NLHRC has a small and unpredictable volume of births with unpredictable census, which is a challenge to manage efficiently. Despite this, 2005-06 YTD staffing levels were below peer levels. • Consultation findings indicate that a critical issue facing Obstetrics is the planned departure of 8 nurses (50% of the unit's staff) to resign this summer. This will result in a significant shortage of Obstetrics staff, and is a risk to the organization's ability to continue service delivery in this area. • Staffing comparison suggests that the unit was in line with peers for 2004-05 staffing. In 2005-06 YTD staffing indicates the region may be below peer levels, however consultation findings indicate that surgical overflow days may be included in these numbers. Staffing should be targeted at an average 9.5 HPPD, and so the organization should continue to monitor 2005-06 staffing levels to ensure alignment to peers.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Obstetrics/LDRP	12.5	11.9	9.8	7.1	9.5	4.0 See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Pediatrics

Opportunities	Findings
1. Improve tracking of staffing and workload across Pediatrics. 2. Given the need for new physical space for the Pediatrics service in NLRHC, consider locating Pediatrics adjacent to Obstetrics and cross training staff.	• Risk issues due to the crowded and outdated physical space (crash cart and team would not fit in room, parents have to put their cots under the cribs when staying with child). • NLRHC Pediatrics nurses are cross-trained and frequently assist on the adjacent Surgical unit when the pediatric census is low. • Ambulatory procedures are performed on the unit during the day shift. • Staffing comparison suggests Pediatrics has a potential small savings opportunity, based on 2004-05 and 2005-06 staffing. Three key issues are impacting clarity of this comparison, however: 1) cross-coverage of Pediatrics nurses of the surgical unit may be impacting staffing levels; 2) workload related to ambulatory volumes which could not be captured; and 3) facilities challenges which could impact ability for additional throughput.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Pediatrics	6.7	5.8	8.4	8.4	7.3	(0.7) See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

NLRHC Emergency Department and Ambulatory Care Services

Emergency Department Volumes by Triage Level

NLRHC

Triage Level		2004-05 NLRHC Emergency Visits	% of Total NLRHC Emergency Visits Volume	CTAS National Averages: Weekday	CTAS National Averages: Weekend
I	Resuscitation	32	0.1%	0.4%	0.2%
II	Emergency	476	0.8%	9.9%	8.5%
III	Urgent	5,496	9.2%	37.9%	38.9%
IV	Semi-Urgent	18,598	31.2%	41.9%	45.3%
V	Non-Urgent	26,118	43.8%	9.5%	6.7%
IX	Unavailable	8,916	15.0%	0.0%	0.0%
Left without Being Seen		0	0%	0.4%	0.4%

Source: Alberta Health & Wellness ACCS Database

- A review of 2004-05 triage levels suggests that 75% of NLRHC's emergency department visits are distributed across the lower acuity levels of Semi-Urgent and Non-Urgent, which is out of line with national averages.
- The proportion of triage level III volumes is also out of line with what is nationally observed, which is approximately 38-39% of volume.
- Further, the level of patients in the triage level IX is significantly above national standards, and suggests need for improved rigour around use of CTAS in emergency patient management and/or the fact that some ambulatory care patients are registered inappropriately as emergency visits.
- This analysis could not be completed for NWHC and STGH, due to a lack of CTAS use.

NLRH Emergency Department and Ambulatory Care

Findings and Opportunities

Opportunities	Findings
1. Review Emergency Department physician care delivery model and staffing.	• Physician staffing levels are significantly lower than what is typical for either an emergency department or an ambulatory walk-in clinic. This poses a significant risk to the organization and needs to be addressed.
2. Explore opportunities to increase primary care and home care access to patients in FMM, in alignment to a broader regional community health needs assessment.	• Consultation findings and analysis suggest that the increased volume of low acuity triage V patients suggests that there may be opportunity to shift volumes out of the ED into a primary care setting. • Similarly there is an opportunity to shift some volume to home care as patients are seen and treated in emergency, due to a lack of after hours home care.
3. Examine options to shift outpatient registration and waiting areas outside of the ED and reassess physical design for ER operations. • Refer to the Infrastructure for further information on this opportunity.	• Outpatient registration and ED registration was recently consolidated in the ED, which has created significant congestion of patients in the ED. • Waiting space for both outpatients and emergency patients is combined, with some space not visible by the triage nurse. This lack of line-of-site visibility of the waiting area by ED clinical staff is a significant risk to the organization.
4. Ensure that there is capability in the ED to accommodate patients with respiratory conditions requiring negative pressure, in line with national standards and recommendations.	• The only room with the capacity to operate as a negative pressure room is not set up to provide acute care and is instead used as a safe room for mental health clients.

NLRH Emergency Department and Ambulatory Care

Findings and Opportunities

Opportunities	Findings
5. Develop program to improve CTAS use and scoring in the ED, with consideration of required resources, education support, and policies and procedures required to standardize use across the region.	• Examination of CTAS scoring suggests an increasing number of emergency patients are not being coded with a CTAS score, as seen by increased number of Triage IX visits. • Anecdotal reporting suggests varied compliance to CTAS recording, a lack of use of CTAS as a quality/risk management tool in the ED, and the need for increased education.
6. Improve the separation of statistical reporting across the ED and Ambulatory Care Clinics at NLRHC.	• There are challenges in separating current reporting of visits statistics across these two areas.
7. Review NLRHC policies regarding acceptance of non critical out-of-province patients.	• Staff report that Physicians regularly accept non-critical patients from LaLoche Saskatchewan on a regular basis, causing difficulty and expense in transfer when patient is discharged. • Although this has not been fully investigated by the consultants, it suggests the need for further review.
8. Establish and adhere to guidelines related to booking and scheduling in ambulatory care.	• Stakeholders report that approximately 6 procedures per day are un-booked and direct referrals from physicians, causing additional unplanned workload and overtime. • Although this has not been fully investigated by the consultants, it suggests the need for further review.

Peer Staffing Comparative Analysis

Northern Lights Regional Health Centre – Emergency and Ambulatory Care

Opportunities	Findings
9. Explore options to decant ambulatory volumes from the ED, and then consider staffing investment opportunity relative to align to true ED volumes and recommended HPPD.	• Staffing comparison of the NLRHC Emergency Department shows a potential staffing investment opportunity of 12 FTEs to bring the department to a peer standard. • This low level of staffing is a potential risk to the region given the high level of emergency volumes, and the increased presence of industry camps that are expected to drive higher trauma volumes. • However, anecdotal reporting suggests that a high level of ambulatory volume is currently seen in the ED, which may be impacting these numbers. The ED should focus on staffing investment that supports the recommended HPPD for true ED volumes.
10. Monitor ambulatory care staffing levels in alignment with ED review and primary care capacity building in FMM.	• Staffing comparison is in line for 2004-05, but is low in projected 2005-06 YTD, suggesting the need for an investment of 2.1 FTEs. • The region should consider this opportunity from the perspective of building ambulatory care capacity, but in alignment with broader need for a review of overall ambulatory activity across the ED and clinics and the development of increased primary care capacity in the community.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Emergency	20.6	26.6	0.6	0.6	0.9	12.0
Ambulatory Care	11.4	10.3	1.2	1.0	1.2	2.1

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

Mental Health

Mental Health Outpatient Activity

NLHR Overview

- As presented below, NLHR Enrolments increased by 15% between 2002-03 and 2004-05, while Events increased by 41% for the same period
- Enrolments have increased most significantly at High Level between 2002-2003 and 2004-05, while Fort McMurray and High Level demonstrate the most significant increases for Event volumes over the same period
- Where variances between Event and Enrollment increases across the site exist (e.g. Fort McMurray and La Crete), this may be due, in part, to information capture capacity, but may also speak to changes in programming.

Clinics	Enrolments			Events		
	2002-03	2004-05	3-Year Variance	2002-03	2004-05	3-Year Variance
Ft. McMurray Mental Health Clinic	752	800	6%	7,975	13,667	71%
High Level Mental Health Clinic	291	398	37%	2,278	2,604	14%
La Crete Mental Health Clinic	44	60	36%	1,785	1,182	-34%
Fort Vermilion Mental Health Clinic	107	97	-9%	707	463	-35%
Rainbow Lake Mental Health Clinic	2	22	-	1	59	-
Grand Total	1,196	1,377	15%	12,746	17,975	41%

Mental Health Outpatient Activity

Events by Type

Type of Event	Type of Activity	2002-03	2003-04	2004-05	3-Year Variance
Face-to-Face	Assessment	914	658	664	-27%
	Consultation	335	283	212	-37%
	Group Work	626	568	519	-17%
	Therapeutic Intervention	8,256	9,046	10,412	26%
Face-to-Face Total		10,131	10,555	11,807	17%
Telephone		552	466	464	-16%
Videoconference		-	1	1	-
Not Specified		2,063	5,948	5,703	176%
Grand Total		12,746	16,970	17,975	41%

Source: ARMHIS Database 2002-3 to 2004-05

- As demonstrated above, outpatient mental health activity in NLHR has been increasing over the past three years by 41% - driven primarily by face-to-face therapeutic interventions, and events where the activity type is "Not Specified".
- Group work as a type of activity has seen a significant decline in volume, although this may, in part be due to some group activity being coded as therapeutic interventions.
- From an information capture perspective, this supports opportunity for improved mental health event coding in the region.

Mental Health Outpatient Activity

Top 10 Diagnoses Driving Enrolments Year over Year

Diagnoses	2002-03	2003-04	2004-05	3-Year Variance
Major Depressive Disorder, Recurrent, Moderate	59	65	68	15%
Unspecified Mental Disorder (non-psychotic)	2	39	64	3100%
Generalized Anxiety Disorder	39	51	62	59%
Parent-Child Relational Problem	48	33	59	23%
Posttraumatic Stress Disorder (PTSD)	23	29	47	104%
Partner Relational Problem	40	53	45	13%
Dysthymic Disorder	43	37	42	-2%
Major Depressive Disorder, Recurrent, Severe Without Psychotic Features	27	63	40	48%
Adjustment Disorder With Depressed Mood	29	28	25	-14%
Adjustment Disorder With Mixed Anxiety and Depressed Mood	25	34	25	0%
Top 10 Diagnoses Total	335	369	477	42%
NLHR Total	1,196	1,177	1,377	15%

- The top 10 diagnoses driving enrolments have increased by approximately 42% over the past three years, and represent approximately 35% of total enrolments in 2004-05.
- Notable increases are observed for PTSD (104%), Generalized Anxiety Disorder (59%), and Major Depressive Disorder (48%),
- An increase in "Unspecified Mental disorder" may highlight a coding issue for submitting clinics.

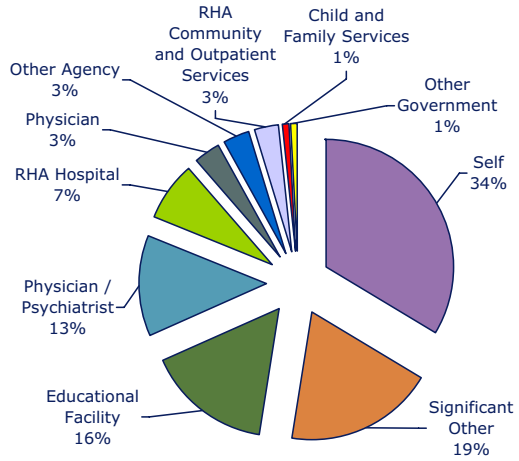
Source: ARMHIS Database 2002-3 to 2004-05

Mental Health Outpatient Activity

Top 10 Referral Sources

- The top 10 referral sources for mental health enrolments in NLHR represent almost 99% of total enrolments. From these top 10 sources, the main referral source for Mental Health enrolments in NLHR was Self-Referral, at 34% in 2004-05
- Overall regional average time between referral and intake call for NLHR in 2004-05 was 5.1 days, which is a significant increase from 2003-04. This increased intake time is observed across all clinics in the region between 2003-04 and 2004-05. The time between intake call and initiation of services is not available.
- Referral source data for this analysis was only available for 2003-04 and 2004-05.

NLHR Top 10 Enrolment Referral Sources



Source: ARMHIS Database 2003-04 and 2004-05

Mental Health Clinics	Average Days Between Referral & Intake Call	
	2003-04	2004-05
Ft. McMurray Mental Health Clinic	4.2	6.3
Fort Vermilion Mental Health Clinic	4.1	4.4
High Level Mental Health Clinic	1.2	3.5
La Crete Mental Health Clinic	2.9	3.3
Rainbow Lake Mental Health Clinic	0.0	1.1
NLHR Average	3.3	5.1

NLHR Mental Health Program

Findings and Opportunities

Opportunities	Findings
1. Continue current 2005-08 Mental Health Plan to expand mental health service availability in the region, in alignment with broader regional community health needs assessment. 2. Continue to build external partnerships with other mental health service providers (e.g. AADAC) and community social agencies.	• Mental health services in NLHR are considered a regional program, and the region has recently developed a 2005-08 mental health plan that is designed to address a number of key challenges in the region, including: – Improved linkage between inpatient services in NLRHC and the northwest area of the region. – Further alignment of community mental health services to community health needs. • Consultation findings suggest that mental health services needs are increasing in the region due to an increasing need in the 'shadow' population. This population is specifically driving an increased need for addiction supports services, suggesting the need for increased regional partnerships with other service providers (e.g. AADAC). • Utilization analysis identified a number of mental health CMGs with potential days savings, which was further supported by the MCAP review that identified a number of inpatients required outpatient treatment, supporting the need for further alignment of community mental health services to needs. • Examination of mental health outpatient activity suggests that although overall activity is increasing, clients are facing longer intake times, which is a challenge to care delivery.

NLHR Mental Health Program

NLHR Psychiatry – Peer Staffing Comparative Analysis

Opportunities	Findings
3. Monitor 2006-07 staffing levels to ensure alignment to recommended HPPD, and ability to maintain crisis nurse services.	• Staffing comparison suggests that the inpatient psychiatry unit at NLRHC has a staffing investment opportunity of 0.7 FTEs, based on 2005-06 YTD staffing levels. In addition, however, hours of the crisis nurse are assigned to a different cost centre, and since these individuals frequently cover short staffing on the inpatient unit, the actual HPPD is likely higher than 4.5. • Access to the 24-7 Crisis Nurse service is at times challenged when these individuals are required to cover short staffing on the inpatient psychiatry unit. Recruitment and retention efforts should be focused on ensuring an adequate supply of staff to maintain an HPPD of 4.9, using unit staff.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Psychiatry	8.6	9.1	4.4	4.5	4.9	0.7

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

Northwest Health Centre

Peer Staffing Comparative Analysis

Northwest Health Centre (High Level)

Opportunities	Findings
1. Support implementation of a formal patient triage and CTAS function at NWHC.	• The NWHC Emergency Department does not currently have a triage function or physical facility for the function. • Consultation findings suggest that triage and the use of CTAS as a risk and patient care management tool has not historically been part of organizational culture in NWHC, although the new Director is in process of introducing this function and related training to staff.
2. Continue to institute clinical education and standards	• NWHC has recently initiated the MORE OB program, and is in the process of offering CTAS and TNCC education to nursing staff.
3. Explore options to reduce staffing impact and premium salary costs associated with high sick and overtime usage at NWHC.	• Consultation findings suggest that NWHC nursing management are often supporting care delivery, due to absenteeism, and a lack of staff available for short term replacement. • Analysis suggests a high level of sick and overtime at NWHC, which impacts staff workload and results in higher premium salary costs for the organization.

Peer Staffing Comparative Analysis

Northwest Health Centre (High Level)

Opportunities	Findings
4. There is space for an additional 10 beds at the Northwest Health Centre. Increases in volume would result in greater economies of scale in both quality and cost.	• On average, the HPPD is appropriate given the volume of emergency department visits, OR procedures, obstetrical, medical, surgical and psychiatric patients. However the unpredictable nature of surgical and obstetrical volumes, and the difficulty of finding replacement staffing makes it a challenge to ensure adequate staffing during peak periods. • The hospital has approximately 360 deliveries per year, providing an essential and cost effective service to residents of this part of the region. • Cross training of staff is appropriate and supports efficient and quality care delivery. • Greatest opportunity for efficiency would come through increased volumes in NWHC, as the region would achieve improved economies of scale relative to minimum staffing requirements.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Combined Inpatient Acute, ED, Obs and OR	20.1	22.1	10.2	9.2	10.0	2.0 See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

St. Theresa General Hospital

Peer Staffing Comparative Analysis

St. Theresa General Hospital

Opportunities	Findings
1. Conduct a role review of St. Theresa General Hospital in the context of a broader regional community health needs assessment, to inform current capital planning.	• St. Theresa General Hospital is an aged physical plant, and the region is currently in capital planning for replacement. • Potential for retirements among current physician resources suggests that the region may face challenges in maintaining sustainable physician service in the near future. • Proximity of the facility to High Level suggests opportunity for the region to consider an alternative service delivery model, to potentially change the balance of the continuum of services provided in the northwest area.
2. Explore options to reduce staffing impact and premium salary costs associated with high sick and overtime usage at STGH.	• Analysis suggests a high level of sick and overtime at STGH, which creates impact on staff workload and higher premium salary costs for the organization.
3. Support implementation of a formal patient triage and CTAS function at STGH	• Similar to NWHC, the STGH Emergency Department does not currently have a triage function. • Under the leadership of the Director at High Level, this function and related staff training should be developed for STGH.

Peer Staffing Comparative Analysis

St. Theresa General Hospital

Opportunities	Findings
4. No staffing opportunity identified for STGH. Consider staffing with respect to broader role review opportunity.	• On average, the HPPD is appropriate given the volume of emergency department visits, obstetrical, medical, surgical and psychiatric patients. However the unpredictable nature of obstetrical volumes, and the difficulty of finding replacement staffing makes it a challenge to ensure adequate staffing during peak periods. • Cross training of staff is appropriate and supports efficient and quality care delivery. • Given need for minimum staffing levels to maintain service at STGH, greater opportunity for regional efficiency could be considered through a realignment of service delivery models across the northwest area of the region.

Unit/Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HPPD 2004-05	Actual HPPD 2005-06 YTD	Recom'd HPPD	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
Combined Inpatient Acute, ED & Obs.	21.7	20.4	11.1	7.7	8.4	1.9 See Above

Source: NLHR 2004-05, 2005-06 Sept YTD Payroll, Deloitte Database, Grasp Database

Rainbow Lake Health Centre

Rainbow Lake Health Centre
Findings and Opportunities

Opportunities	Findings
1. Engage stakeholders in a conducting a role review of Rainbow Lake with respect to clinical programs, service delivery hours and staffing, in alignment with broader regional community health needs assessment.	• Rainbow Lake is a nurse practitioner station staffed by 2 NPs, 1 casual RN and 1 Community Health/Home Care RN. • Volumes and care delivery model are not what would be expected with this level and type of nurse staffing. The clinic sees patients primarily between the hours of 9 – 11 a.m. and 1 – 4 p.m., Monday-Friday. After hours service is provided on an on call basis, and triaged through HealthLink. • Statistics are kept manually and not trended by reason or type of visit. In January 2006, a total of 345 visits were logged – not all of these required the services of an NP, although on-call service is available 24-7. • Limited health promotion and disease prevention services provided (e.g. smoking cessation, prenatal education) • Accountability framework does not support the expected goals for this facility.

Rainbow Lake Health Centre
Findings and Opportunities

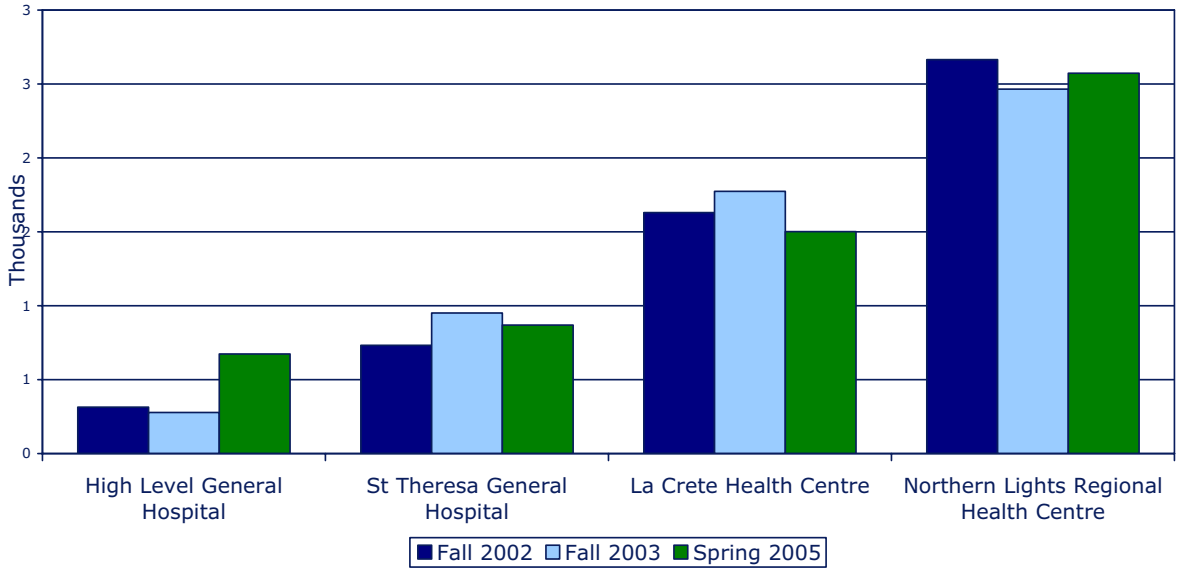
Opportunities	Findings
2. Opportunity to develop an collaborative practice model between nursing and medicine.	• Consultation findings suggest limited collaboration between the clinical staff and physicians for Rainbow Lake, and the site lacks clear physician leadership, both of which are likely impacting patient care quality, effectiveness and efficiency.
3. Examine staffing patterns to identify options for reductions in overtime premium costs.	• Rainbow Lake shows a high level of overtime, which suggests opportunity for overtime premium costs savings.
4. Investigate cost of 'shadow' population and determine billing options to ensure cost recovery for services provided by Rainbow Lake.	• Rainbow Lake currently serves a large 'shadow' population from industry camps. Consultation findings suggest that the region is not currently able to recover costs for services provided to this population, so should be examined further.

Regional Continuing Care Services

Continuing Care Activity Analysis

NLHR Weighted Cases by Facility

- As depicted below, NLHR had 5,618 continuing care weighted cases in Spring 2005, which represents an overall increase in weighted cases by 5% from Fall 2002.
  - Regional continuing care beds remained relatively constant for the same period.



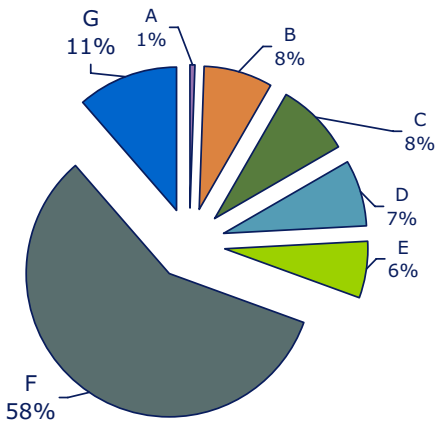
Source: Alberta Health & Wellness LTC Database

Continuing Care Activity Analysis

NLHR Weighted Cases by Classification

Classification	Spring 2005 Continuing Care Weighted Cases	Spring 2005 Proportion of Total Cases	Proportion Variance Fall 2002 to Spring 2005
A	31	1%	-5%
B	432	8%	6%
C	477	8%	90%
D	419	7%	-37%
E	358	6%	-62%
F	3,259	58%	9%
G	641	11%	90%
NLHR Total	5,618	100%	

Proportion of Weighted Cases by Classification



Source: Alberta Health & Wellness LTC Database

- 75% of NLHR's continuing care weighted cases are distributed across classifications E, F and G as of Spring 2005.
  - Overall proportion of F and G weighted cases has increased from 59%in Fall 2002 to 69% in Spring 2005, while E weighted cases have declined significantly. A similar decline is also observed in classification D weighted cases.
  - Although the region has reduced its facility-based residents in classification A, an increase in residents classified as B and C is observed.
  - Increases in residents classified in F and G have been the primary drivers of an overall increase in the region, supporting the trend of overall increases in weighted cases and resident acuity.

NLHR Continuing Care

Findings and Opportunities

Opportunities	Findings
1. Conduct a regional review of supportive housing requirements to determine optimum alignment of care resources. 2. Identify and explore partnership opportunities to fast track supportive housing developments. 3. Continue with and accelerate efforts to establish a continuing care facility in Fort McMurray.	• An overall increase in continuing care weighted cases is observed in the region, although lower acuity resident volumes are still increasing within facilities, suggesting need for additional supportive housing/lodge facilities. • In La Crete, a lodge exists but is reported as being full, which may suggest need for additional supportive housing opportunities. – Given interest of the local community in La Crete in health service delivery, opportunity exists to explore partnership opportunities with the community for the collaborative development of additional supportive housing capacity. • Consultation findings and MCAP analysis suggest the need for additional continuing care capacity, including a stand-alone facility in Fort McMurray. It is not ideal, from both a cost and a quality/programming perspective to have continuing care beds within a hospital, suggesting that planning for this initiative should be accelerated.

NLHR Continuing Care

Findings and Opportunities

Opportunities	Findings
4. Monitor 2006-07 total care team staffing levels across NLHR continuing care units to ensure alignment to recent AHW target of 3.4 HPRD, with consideration of appropriate staffing allocations across acute and continuing care units.	• NLHR facilities demonstrate significant variation in staffing levels across sites. Although not shown below, variation in 2004-05 and 2005-06 staffing levels are also observed. • Recent AHW announcements suggest that regions should target an average level of 3.4 total paid hours per resident day (HPRD) of combined nursing and personal care staffing, for facilities with an average CMI of 100. • Staffing comparison to this recommended HPRD suggests that all NLHR continuing care units have potential staff savings opportunities for 2005-06 YTD. Year-over-year staffing variation may be a result of changes to staffing allocations across the acute and continuing care units of some of these facilities, however, which needs to be explored further by the region to understand this potential opportunity. • Given the trend for increasing involvement of rehabilitation and recreation therapy disciplines in continuing care service delivery, however, the region should examine total care team staffing levels in determining appropriate alignment to the AHW 3.4 HPRD.

Site	Actual FTEs 2005-06 YTD	Actual Total Paid HPRD 2005-06 YTD	AHW Recom'd 3.4 HPRD @ 100 CMI	Recom'd FTE (Effic.)/ Re-Invest. 2005-06
NLRHC Continuing Care	26.8	5.2	2.9	(12.9) See Above
Northwest Health Centre Continuing	9.8	5.4	2.9	(4.5) See Above
St. Theresa Continuing Care	7.8	4.4	3.0	(2.7) See Above
La Crete	19.9	8.8	3.2	(12.8) See Above

Source: NLHR 2004-05, 2005-06 Oct YTD Payroll, Deloitte Database

Regional Home Care Services

Home Care Staffing and Activity

Opportunities	Findings
1. Conduct a regional review of home care services to align service model, resources, hours of service delivery, and access times to community health needs.	• Home care is a regional service that is coordinated across a Manager in Fort McMurray and a Manager in the northwest. • Home care is currently provided only 5 days/week for most services, with limited evening/night/weekend service available on-call only. This is out of line with peer practice, and impacts the Region's ability to meet client care needs. • In Fort McMurray, clients are typically seen on a next-day basis, which may be impacting increased same-day workload in the ED. • The practice of seeing patients in ED for after hours IV medications and dressings is inappropriate and inconsistent with peer practice.
2. Implement the RAI-HC, to ensure a standardized approach to assessment and ensure the collection of standardized volume and visit statistics across the region.	• No standard approach or guidelines for service provision. Frequently and length of service is based on individual assessment of professionals. This impacts management's ability to understand operational trends and client needs.

Statistics	2003-04	2004-05	2005-06 Projected	Variance 2003-04 to 2005-06p
FTEs	37.9	38.2	38.7	2%
Visits	25,638	32,927	27,910	9%
Attendance Days	-	32,333	32,710	-
New Referrals	722	1,053	1,006	39%

Source: NLHR GL 2003-04, 2004-05, 2005-06 Sept YTD

Population Health

Population Health Staffing and Activity

Health Promotion & Education And Disease & Injury Prevention

Opportunities	Findings
1. Conduct a regional review of population health services to align service programming, resources, and use of telehealth in service delivery to community health needs.	• The region has many population health programs in place, and has demonstrated fairly stable staffing and activity over the past three years. • Improvements are observed in statistics reporting, as group sessions and assessment activity is being tracked as of 2005-06. This will support improved workload management. • Opportunity exists to further leverage the region's investment in telehealth infrastructure to support chronic disease management and other population health programming. • Given the requirement for a regional community health needs assessment, however, determination of overall alignment of population health services to need is difficult to determine.

Statistics	2003-04	2004-05	2005-06 Projected	Variance 2003-04 to 2005-06p
FTEs	58.7	60.5	61.5	3%
Visits	27,217	27,538	26,972	(1%)
Telephone Visits	-	7,801	8,100	-
Group Sessions	-	-	1,450	-
General Health Assess. (Initial/Subsequent)	-	-	154	-
General Health Workshop Attendees	-	-	1,468	-

Source: NLHR GL 2003-04, 2004-05, 2005-06 Sept YTD

Population Health Staffing and Activity

Health Promotion & Education And Disease & Injury Prevention

Opportunities	Findings
2. Implement nurse led clinics with nurses functioning under medical directives in the areas of sexual health, well women, and STI in High Level.	• Alberta STI rates are consistently higher than national rates for gonorrhea and chlamydia, and are rising. • Fort McMurray has one of only three clinics in Alberta providing STI services, on a drop in and appointment basis, staffed by nurses operating under medical directives. • In the northwest, sexual health and STI services are limited and physician led, which does not meet the needs of the young population and are not consistent with peer practice.
3. Consider realignment of community programs in the northwest under one umbrella.	• In the northwest, while staff in community programs (mental health, health promotion, home care, public health and rehab services) support and provide coverage for one another, they report to different individuals.

Source: NLHR GL 2003-04, 2004-05, 2005-06 Sept YTD

Environmental Health

Environmental Health Staffing and Activity

Opportunities	Findings
1. Conduct a regional review of Environmental Health services to align service programming and resources to increasing community health inspections needs and to meet minimum provincial standards.	• Environmental health is a regional service with largely separate programs that serve Fort McMurray and the northwest areas of the region. • Projected staffing for 2005-06 indicates a potential increase by 20% from 2004-05. For this same period, activity is projected to decrease by 5%. This change in activity may be due to improve statistics reporting and breakdown by activity type, however, so should be monitored. • Given the region's current staffing, Environmental Health is unable meet AHW blue book standards for routine inspections, which is a significant potential risk to the region. • This challenge is further compounded by a large 'shadow' population in the region, where the service reports heavy workload associated with the private industry camps. • Given the population growth in this region, increasing presence of private industry camps and the need for a community health needs assessment for NLHR, further review of Environmental Health is needed to determine appropriate resource alignment.

Statistic	2004-05	2005-06 Projected	Variance 2003-04 to 2005-06p
FTEs	6.7	7.9	20%
Visits	7,706	1,532	-5%
Complaints		286	
Communicable Diseases		72	
Animal Bites		108	
Water Reports		4,992	
Special Events		328	

Source: NLHR GL 2003-04, 2004-05, 2005-06 Sept YTD

Deloitte.

Physician Findings and Opportunities

Physician Findings and Opportunities
Introduction

- The review process incorporated several direct consultations with physicians, which have yielded a number of findings and opportunities.
- Physician-related findings and opportunities have been clustered into the following four key areas, which also have linkage to opportunities identified across other areas of the region:

Physician Governance and Leadership

Physician Human Resources Planning and Management

Quality, Risk and Performance Management

Program Review and Organization

Physician Findings and Opportunities

Physician Findings and Opportunities
Governance and Leadership

Findings

- The region currently has two separate MACs, representing the Fort McMurray and northwest part of the region.
- As a result, consolidated medical leadership does not exist for the region, with the exception of the Medical Director role – although challenges have prevented the Medical Director from having active presence in the northwest part of the region.
- The combined role of the Medical Director to also serve as the Medical Officer of Health is a large portfolio, but the role is currently only part-time. Limited support resources for the portfolio compounds related challenges to having sufficient overall physician leadership and support for the region.
- Consultation findings suggest that gaps in physician accountability related to adherence with by-laws and medical policies/procedures currently exist across both MACs, which are causing challenges in overall physician governance and leadership in the region.
- Further, variation in leadership roles and definitions suggests a need for greater alignment between current physician leadership structures/supports and requirements of the region.

Opportunities

1. Conduct an external review of MAC governance structure/mechanisms for the region, with specific attention to by-law adherence/alignment.
2. Conduct an alignment review of physician leadership requirements across all services and roles.
3. Examine the Medical Director portfolio to consider role re-alignment, overall organization structure, and support resources required to support strategic HR focus on physician recruitment, retention and management.

Physician Findings and Opportunities
Physician Human Resources

Findings

- The region is facing several significant physician recruitment/retention issues and staffing shortages (i.e. Internal Medicine, Emergency, Surgery, Psychiatry, Family Medicine, Radiology).
- Requirements for physician human resources are expected to continue to grow, given the rapid population expansion in the region associated with growth in the Oil & Gas industry.
- A broader physician HR strategy is lacking that ensures alignment of physician skill mix with care and service delivery priorities for the region, and considers alternative remuneration strategies to attract and retain physicians.
- Physician recruitment is reported as being often done without consideration of physician impact on other clinical services (i.e. nursing, clinical support and allied health), space availability and bed capacity, equipment requirements, IT/IS requirements, etc.
- The region has a dedicated physician recruiter, but this role does not currently report to the Medical Director.

Opportunities

1. Engage physicians and regional leadership in the development of a regional Physician Human Resource Strategy that is linked to the broader regional HR strategy, to address Physician resource gaps, skills management and education, alignment/realignment of current resources to core service delivery needs, remuneration and recruitment/retention.
2. Explore alternative payment models for physicians in the region, with an objective to improve resourcing, and linkage to care/service delivery model.
   - As part of this opportunity, explore alternate staffing models in the consideration of physician AFP options – e.g. APN/NP model in ER and community health clinics.
3. Develop a consistent regional Physician Impact Assessment process that is used for physician recruitment needs planning, and in assessment when new physicians are being considered.

Physician Findings and Opportunities
Quality, Risk, and Performance Management

Findings

- The region is currently lacking an assessment framework for MD quality, performance, or competencies; which is further compounded by a lack of required funding or resources available to maintain education and certification.
- There is a need for greater physician accountability related to developing and maintaining consistent standards of practice throughout the region.
- Further, there is need for a physician risk management framework to assess and proactively manage physician-related issues and risks at the service, site, community and regional levels.
- Stakeholders report a relationship gap between Regional Administration and physicians across the region, which is a potential risk to physician retention and ongoing clinical service delivery. Specific challenges exist in the northwest with respect to physician connection to the region and clinic facilities issues.

Opportunities

1. Create an accountability framework with evaluation and quality/risk/performance management tools for Physicians, which is integrated into a broader regional framework.
2. Develop a regional approach and support for CME for both Canadian-trained and foreign-trained medical graduates, based on a sustainable business model, and integrated with the physician recruitment and retention strategy and broader regional education function.
3. Develop a clinical adoption strategy for standardized, peer reviewed protocols and care maps for key conditions (e.g. pneumonia, cellulitis, congestive heart failure, and MI management).
4. Engage physicians to identify methods to improve the perceived challenges in region-physician relations (e.g. physicians clinic facilities issues, physician involvement in broader regional planning and community health needs assessment, senior team representation on Board, etc.).

Physician Findings and Opportunities
Clinical Program Frameworks and Review

Findings

- Consultation findings suggest that the region's facilities and many of their respective services operate in silos, and that several programs are not regional.
- Further, communication and coordination of services across the region continues to be a challenge for select areas – suggesting a need for greater integration region-wide.
- Observed challenges across the region suggest a need for a greater regional focus across various services to:
  - Define scope of service for current and future community/regional needs.
  - Ensure congruence of site/regional services with functional planning exercises.
  - Assess and determine current/future capacity requirements/constraints.
- Specific clinical program challenges in Emergency, Internal Medicine and Surgery services suggest the need for a more in-depth review that examines the role, function and resourcing required of these areas as regional programs.

Opportunities

1. Conduct external reviews of Emergency, Internal Medicine and Surgery services as regional programs, with focus on developing a coordinated and sustainable strategy for each of these programs to address needs of the respective communities served.
2. Enhance communication between respective facilities by leveraging Telehealth technology in a structured approach for coordination of service, information sharing of leading practices, CME and professional support.
3. Re-examine role of facilities and programs across the region in the context of human resource requirements and community health services needs.

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Clinical Support and Allied Health Services

Clinical Support and Allied Health Services

Peer Staffing Comparison Process Overview

- To understand the relative efficiency of the Clinical Support and Allied Health services, we conducted a comparative analysis with a number of comparable health regions from Alberta, British Columbia, Manitoba, and Saskatchewan
- Fiscal 2004-05 data for NLHR was used for peer comparison, as this represents a full year of staffing, but reference to observed 2005-06 YTD staffing levels are also provided
- The efficiency analysis assessed peer staffing based on a comparison of actual total paid hours per adjusted patient day (HAPD) for each "discipline" within the organization (based on MIS functional centre alignment).
  - Although many of the allied health disciplines in the region are aligned to clinical program, an MIS-based alignment for comparison was used to ensure an 'apples-to-apples' comparison to peers.
- The adjustment factor increases the base of inpatient clinical activity to better reflect the span of inpatient, outpatient, continuing care and community clinical activity.
- The results across the comparator group were considered with the following "rules" applied at the departmental level:
  - Values among the comparator group that were well outside the range (e.g. outliers) were eliminated from the analysis.
  - For Clinical Support and Allied Health Services, the FTE efficiency opportunity was identified compared to the 50th percentile to reflect a more realistic level of clinical resourcing to support patient care needs.
- Staffing opportunities are identified based on comparative analysis and the team's understanding of minimum staffing requirements. Staffing opportunities are not stand alone, however, and need to be considered in the context of other opportunities identified for each area.
- The benchmarking information should be used as input to management decision-making, rather than as a decision in and of itself.

Peer Staffing Comparative Analysis

Clinical Support and Allied Services Areas Reviewed

MIS Primary Account	Departments and Disciplines
71410	Clinical Laboratory
71415	Diagnostic Imaging
71435	Respiratory Therapy
71440	Pharmacy
71445	Clinical Nutrition
71450	Physiotherapy
71455	Occupational Therapy
71460	Audiology And Speech/Language Pathology
71470	Social Work
71485	Recreation

Peer Staffing Comparative Analysis

Clinical Laboratory

- As Laboratory services are outsourced, a peer staffing comparison analysis was not conducted; however, key findings and associated opportunities are discussed here.

Opportunities	Findings
1. Establish a region-wide Lab Advisory Council, comprised of regional stakeholders with a DKML representative, which sets standards and monitors ongoing utilization. 2. Through the Lab Advisory Council, engage stakeholders in the design and implementation of consistent region-wide lab utilization and standards, with a mechanism for ongoing monitoring by the region. 3. Modify the current Meditech implementation to improve controls over the creation of ad-hoc lab order sets.	• Lab services are outsourced to DKML, which provides service in both Fort McMurray and northwest area of the region. • The region currently does not have a consistent process in place to monitor lab utilization, although a region-wide Lab Advisory Council is in development to set common standards and utilization practices. • Implementation of the new Meditech system has resulted in physicians' ability to create customized order sets for lab testing. Although this is convenient for physicians, it has created an increase in lab orders, and is a risk to increased lab costs for the organization in the absence of a utilization monitoring process.

Peer Staffing Comparative Analysis

Diagnostic Imaging

Opportunities	Findings
1. Monitor 2006-07 staffing levels to confirm achievement of film library staff reductions to address staffing opportunity. 2. Continue to explore recruitment strategies for DI to reduce reliance on premium overtime costs, as part of broader regional HR strategy. 3. Continue development of region-wide coordination of DI services, with regular regional monitoring and evaluation to ensure alignment of in-house and DKML provided services.	• Diagnostic Imaging is currently provided through two separate service delivery models in NLHR. Fort McMurray services are provided in-house, while services in the northwest have recently changed to be provided by DKML, due to shared CXLT staffing with the outsourced lab services. • In conjunction with the shift to DKML service provision, the region is working on the harmonization of policies, procedures, roles and protocols for region-wide DI services. Implementation of a common PACS for the region is facilitating this process. • Analysis suggests that overtime costs for DI are high, and represent a potential savings opportunity. Consultation indicates the need for increased coverage of X-Ray and CT to reduce overtime and callback costs, however the region is faced with staff shortages in these areas. • Staffing comparison suggests that DI has a small potential staff savings opportunity, however the department has identified a reduction in film library staff in late 05-06 with the implementation PACS, which should address this opportunity.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Diagnostic Imaging	24.9	27.9	0.27	0.09	0.63	0.26	(0.5)

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Respiratory Therapy

Opportunities	Findings
1. Monitor 2006-07 staffing levels to ensure continued alignment to peers. 2. Continue to explore recruitment strategies for RT to reduce reliance on premium overtime costs, as part of broader regional HR strategy. 3. Explore options to expand RT scope of practice in NLRHC, with consideration of corresponding staffing implications on RT and nursing, as part of broader regional HR strategy.	• Staffing comparison suggests that Respiratory Therapy in NLHR has a staffing investment opportunity relative to peers at the 50th percentile, based on 2004-05 staffing levels. Projected 2005-06 YTD staffing suggests that the region is now in line with peers, however, so this should continue to be monitored. • Consultation findings suggest, however, that several challenges are being faced by the discipline: – The amount of direct hours available for patient care is challenged due to a high proportion of administrative workload on the clinical staff. – Analysis indicates that RT has a high level of overtime costs, suggesting opportunity to reduce this premium costs. • Further, Respiratory Therapy scope of practice in NLRHC could be expanded to include cardiac stress testing, a function currently performed by nursing. While this shift in function could relieve some pressures on nursing resources, it is only achievable with an increase in Respiratory Therapy staffing.
4. Explore and define potential role of Respiratory Therapy services in the northwest area of the region, in alignment with a broader community health needs assessment.	• There is no Respiratory Therapy support in the northwest area of the region, in part due to historical service patterns. • As with many other services, the adoption of common practice standards, particularly in community settings, is constrained by lack of resources in this area of the Region.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Respiratory Therapy	4.7	5.6	0.05	0.01	0.12	0.06	1.0

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Pharmacy

Opportunities	Findings
1. Establish a common structure and process for monitoring regional drug utilization, medication errors and standardizing related policies and procedures. 2. Work with RSHIP to assess cost/benefit of implementing required improvements to pharmacy module in Meditech.	• Pharmacy has been developed as a regional function for one year, and so standardization of regional policies, procedures and protocols in still underway. • The region currently has two separate Pharmacy and Therapeutics Committees – one in Fort McMurray and one for the northwest – with a need for improved coordination. • Implementation of the new Meditech system has resulted in a 'step backwards', as the new system has created challenges in inventory management, dose range checking and other decision support functionality, which is a potential risk to the organization.
3. Develop a business case to explore the costs and benefits of implementing automated unit dose and other Pharmacy technologies to support efficient operations across the region.	• Pharmacy currently uses manual unit dose in Fort McMurray, but this is not in place in the northwest. • Limited technology supports Pharmacy operations in the Region (e.g. automated unit dose, PIXIS in the ER/OR), and a business case has not been developed to explore these technologies.
4. Monitor 2006-07 staffing levels to confirm continued alignment to peers.	• Staffing comparison suggests that NLHR is in line with peers at the 50th percentile for 2004-05. Projected FTEs for 2005-06 YTD suggest an increase in staffing, however.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Pharmacy	11.1	13.6	0.12	0.07	0.20	0.12	-

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Clinical Nutrition

Opportunities	Findings
1. Review staffing mix of Registered Dietitians and Clinical Dietary Technologists for the region.	• Staffing comparison suggests that Clinical Nutrition staffing is in line with peers at the 50th percentile. • Consultation findings suggest that there is an opportunity for an alternative staff mix, however, which includes increase use of technologists for some patient care activities, in the northwest area of the region.
2. Consider realignment of clinical nutrition services to strengthen linkages with the evolving Primary Care and Chronic Disease initiatives, in alignment with a broader regional community health needs assessment.	• Functions of Clinical Nutrition are appropriately focused in the clinical realm, yet activities related to intervention are mostly approached with an individual or group focus. • Although the importance of shifting the focus to more community-based services is recognized by the region, there is a perception that staffing is inadequate to support a shift in the model of care.
3. Assess the cost/benefits of improving current systems support for Clinical Nutrition and Food Services, as part of broader regional IT infrastructure and planning.	• Clinical Nutrition has been impacted by the transition to Meditech and a corresponding lack of functionality to support operations. • This is reported to create significant downstream manual work for Clinical Nutrition, and presents a potential risk of increased error rates in food delivery.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Clinical Nutrition	4.3	4.7	0.05	0.01	0.06	0.05	-

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Physiotherapy

Opportunities	Findings
1. Monitor 2006-07 staffing levels to determine remaining staffing investment required to align to peer levels. 2. Explore options to expand regional Physiotherapist staffing, with focus on community-based services in the northwest area of the Region, in alignment with broader regional community health needs assessment.	• Staffing comparison suggests that Physiotherapy has a staff investment opportunity of 6.9 FTEs at the peer 50th percentile, based on 2004-05 staffing levels. Projected 2005-06 staffing suggests that region has achieved some of this opportunity. • Consultation findings support the analysis, suggesting a limited amount of physiotherapy services are available in the northwest area of the region. • This gap in service is a significant constraint on the adoption of common practice standards across the region and a consistent approach to providing care in the community, particularly in supporting Home Care programs. • The expansion of physiotherapist services in the region, should also consider the development of additional leadership infrastructure to support the expanded service.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Physiotherapy	8.3	9.6	0.09	0.09	0.30	0.16	6.9

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Occupational Therapy

Opportunities	Findings
1. Conduct broader Occupational Therapy service planning, to ensure alignment to a broader regional community health needs assessment.	• Staffing comparison suggests that Occupational Therapy staffing is in line with peers at the 50th percentile. • Recruitment difficulties in the northwest area of the Region, as well as the practice of using facility-based staff to respond to community referrals, however, are reported to be a challenge to meeting service delivery needs outside of acute care (e.g. therapy support for home care programs, swallowing issues in the long term care population). • Occupational Therapy has developed a wait-list and priority setting process according to need/expected outcome to help manage this identified service gap, however a broader community health needs assessment has not been completed to ensure alignment of services and identify unmet demand.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Occupational Therapy	9.1	8.8	0.10	0.07	0.17	0.10	-

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Audiology & Speech Language Pathology

Opportunities	Findings
1. Conduct broader Audiology and SLP service planning to inform appropriate alignment of identified staffing investment opportunity to community health needs, as part of a broader regional community health needs assessment.	• Staffing comparison suggests that Audiology & Speech Language Pathology have a staffing investment opportunity of 2.3 FTEs relative to peers at the 50th percentile. • Consultation findings suggest that recruitment challenges are the primary driver of this staffing shortage, although 2005-06 projected numbers suggest that the region has had some gains in staffing. • Dysphagia services are not currently offered in the northwest area of the Region due to limited access to staff and training.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Audiology & Speech Language Pathology	7.2	8.2	0.08	0.04	0.21	0.10	2.3

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Social Work

Opportunities	Findings
1. Explore and define the potential role of Social Work services in the region to inform appropriate alignment of identified staffing investment opportunity to community health needs, as part of a broader regional community health needs assessment.	• Social Work in NLHR is currently a limited function, with less than 1 FTE supporting the region. • Staffing comparison suggests that Social Work has a staffing investment opportunity of 2.4 FTEs to align to peers at the 50th percentile.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Social Work	0.3	0.5	0.003	0.003	0.04	0.03	2.4

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis
Recreation

Opportunities	Findings
1. Explore options to increase access to Recreation Therapy services, in alignment with a broader regional community health needs assessment.	• Recreation Therapy is currently provided in the Medicine and Continuing Care units at NLRHC, and is reported as being also provided in NWHC, STGH and LCCC in the northwest area of the region. • Staffing comparison suggests that Recreation Therapy has a staffing investment opportunity of 4.1 FTEs to align to peers at the 50th percentile.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Recreation	4.9	5.2	0.05	0.03	0.11	0.10	4.1

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

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Corporate and Support Services

Corporate and Support Services

Peer Staffing Comparison Process Overview

- To understand the relative efficiency of the Corporate and Support Services, we conducted a comparative analysis with a number of comparable health regions from Alberta, British Columbia, Manitoba, and Saskatchewan
- Fiscal 2004-05 data for NLHR was used for peer comparison, as this represents a full year of staffing, but reference to observed 2005-06 YTD staffing levels are also provided
- The efficiency analysis assessed peer staffing based on a comparison of actual total paid hours per adjusted patient day (HAPD) for each "department" within the organization (based on MIS functional centre alignment).
- The adjustment factor increases the base of inpatient clinical activity to better reflect the span of inpatient, outpatient, continuing care and community clinical activity.
- The results across the comparator group were considered with the following "rules" applied at the departmental level:
  - Values among the comparator group that were well outside the range (e.g. outliers) were eliminated from the analysis.
  - Given the northern geographic challenges faced by the region, the FTE efficiency opportunity for all Corporate, Support, Clinical Support and Allied Health Services was identified compared to the peer 50th percentile level of staffing performance.
- Staffing opportunities are identified based on comparative analysis and the team's understanding of minimum staffing requirements. Staffing opportunities are not stand alone, however, and need to be considered in the context of other opportunities identified for each area.
- The benchmarking information should be used as input to management decision-making, rather than as a decision in and of itself.

Peer Staffing Comparative Analysis

Corporate and Support Services Areas Reviewed

MIS Primary Account	Departments
71105, 71110, 71205, 71305, 71405, 71505	General Administration and Nursing Administration Combined (Combined to ensure comparability to peer reported data)
71115	Finance
71120	Human Resources/Personnel and Occupational Health & Safety
71840	Education
71125	Systems Support – Regional IT
71135	Materiel Management (includes all CSR for the region)
71145	Housekeeping
71150	Laundry And Linen
71153, 71155, 71165, 71175	Plant Operations, Maintenance and Biomedical Engineering Combined (Combined to ensure comparability to peer reported data)
71190, 71180, 71130	Health Records, Registration and Telecommunications Combined (Combined to ensure comparability to peer reported data)
71195, 71910	Patient/Resident and Non-Patient Food Services Combined (Combined to ensure comparability to peer reported data)

Peer Staffing Comparative Analysis

General and Nursing Administration Combined

Opportunities	Findings
1. Monitor 2006-07 staffing levels to determine savings opportunity for the General and Nursing Admin areas to align to peer staffing levels.	• Staffing comparisons suggests that General and Nursing Admin has a savings opportunity relative to peers at the 50th percentile, based on 2004-05 staffing. • Projected FTEs for 2005-06 suggest an increase by 8.6 FTEs from 2004-05, which would potentially increase this savings opportunity. • In comparison to peers, NLHR also demonstrates the highest % of expenses in its Corporate Services, which includes General and Nursing Administration.
• Refer to the Human Resources section for opportunity.	• There is a centralized staffing office in Fort McMurray, with responsibility for replacing vacation, sick calls, etc. • There is float team of RNs, LPNs and Unit Clerks, staffed with full time and casual staff, but due to vacancies and the high number of replacement requests, is not sufficient to meet all the needs. – For example, of 8 approved FT ER/CCU float positions, 7 of the 8 are vacant at the current time.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
General & Nursing Admin. Combined	42.2	50.8	0.44	0.09	0.44	0.39	(3.0)

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Finance

Opportunities	Findings
1. Monitor 2006-07 staffing levels, mix and experience to determine remaining staff savings opportunity for Finance, with consideration of further evolving Decision Support functionality in the region. 2. Identify anticipated operational efficiencies as a result of Meditech system implementation, and develop an action plan to achieve them.	• Finance has had significant turnover but has recently re-staffed to full complement, and is currently in role re-alignment. The department has a high proportion of junior staff, and so several staff are still in a learning mode. • Finance reports limited role in broader Decision Support function and business case development for the region, but does provide financial analysis. This is primarily due to junior experience of staff, and the region expects that this function will evolve within current staffing complement as staff move through learning curve. • Components of Decision Support as a function are also currently provided through Health Records, and so improved coordination across these areas may facilitate planning and management decision-making. • Staffing comparison suggests that Finance has a 4.2 FTE savings opportunity at the 50th percentile. The region will need to consider staff mix and experience with respect to its ability to achieve this opportunity. • In comparison to peers, NLHR also demonstrates the highest % of expenses in its Corporate Services, which includes Finance.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Finance	17.5	17.5	0.19	0.05	0.19	0.14	(4.2)

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Human Resources/Personnel

Opportunities	Findings
• Please refer to HR section for additional opportunities.	• Human Resources is a regional service managed by a regional Director of HR, with staff in both FMM and High Level. The region previously had a VP of HR, but this position was eliminated, such that HR now reports to the VP Corporate Services. • HR and OH&S have recently implemented a number of regional programs to support the organization (e.g. attendance management, work accommodation), but they are still in process of gaining traction in the region. • Staffing comparison suggests that HR (including OH&S) has as a staff savings opportunity relative to peers at the 50th percentile. Given the need for maintaining site presence in the northwest area of the region, however, no staffing change is recommended. • Recommended focus for HR is on the broader regional need for re-focus of HR as a strategic priority, and the development of an education function that supports regional learning and development needs.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Human Resources / Personnel	9.9	12.0	0.11	0.03	0.13	0.07	(3.4) See Above

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Education

Opportunities	Findings
1. Continue with plans to expand clinical development within the Fort McMurray site, with a priority given to developing an enhanced orientation and preceptorship program. • Please refer to HR section for additional opportunities.	• NLHR currently has 1 Clinical Instructor in High Level and 1.5 FTE Clinical Instructor in Fort McMurray. • These individuals provide education such as orientation (limited to 2 days per person), CPR and back care. • Two additional new educator positions have recently been approved (1 for acute and 1 for critical care). • Although staffing comparison indicates that NLHR is in line with peers for education, given the overall organization need to refocus on HR and education, support should be given to staffing expansion to support overall change and mentorship activities.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Education	3.5	3.5	0.04	0.01	0.06	0.04	-

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Systems Support

Opportunities	Findings
1. Consider IT staffing levels with respect to broader regional IT and RSHIP implementation management. • Please refer to Technology section for additional opportunities	• Staffing comparison suggests that IT has a staff savings opportunity at the peer 50th percentile. Given the current RSHIP initiative and associated resources, however, it is suggested that the region consider broader IT staffing requirements relative to implementation and ongoing operations maintenance and support of the Meditech system before exploring this potential staffing opportunity further.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Systems Support	6.4	6.8	0.07	0.04	0.17	0.06	(0.8) See Above

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Materials Management, Housekeeping, Laundry & Linen, and Food Services

Opportunities	Findings
1. Continue efforts to drive product standardization across the region. 2. Develop regional standards for policies, procedures, risk and safety protocols, and equipment trays for CSR services.	• Materials Management is a regional function centrally managed from NLRHC. • Product standardization is underway across the region, but existing contracts and information systems changes are reported as slowing this process. • NLHR participates with other rural RHAs in a GPO, which has contributed to the region having low medical/surgical, drug and food supply costs. • CSR is managed and delivered by Materials Management in NLRHC, but by nursing in the northwest area of the region. This has resulted in a lack of standardized policies, procedures, and trays.
3.Conduct a role review of functions and accountability for property management services in the Region, to determine most appropriate operations alignment.	• Property management in the region is currently managed by both Housekeeping and Materials Management. • Preliminary discussions have started to explore consolidating this function under the Facilities department, which will ensure alignment of services and management.
4.Develop a contingency plan for laundry services, including preparation for pandemic planning. 5.Conduct a cost-benefit assessment of laundry equipment as part of the development of a long range service plan.	• Consultation findings indicate that the region's aging laundry equipment has frequent breakdowns, which is a high potential risk to the delivery of clinical services. • Further, reports of limited Maintenance support on the weekends, coupled with the additional stress of higher throughput following the recent shift to 7-day service will reduce the life span of the current equipment.
6. Assess the cost/benefits of improving current systems support for Clinical Nutrition and Food Services, as part of broader regional IT infrastructure and planning.	• Food Services has been impacted by the transition to Meditech and a corresponding lack of functionality to support operations. • This is reported to create significant downstream manual work for Food Services, and presents a potential risk of increased error rates in food delivery.

Peer Staffing Comparative Analysis

Materials Management, Housekeeping, Laundry & Linen, and Food Services

Opportunities	Findings
7. Monitor 2006-07 staffing levels for Housekeeping, Laundry & Linen and Materials Management to alignment to peer levels, with consideration of minimum on-site staffing requirements in the northwest. 8. Conduct a support service role review across these functions to determine potential realignment of roles, and to explore the feasibility of a support services float pool in NLRHC.	• Staffing comparison suggests that Materials Management and Housekeeping have staffing savings opportunities relative to peers at the 50th percentile, while Laundry & Linen and Food Services have a potential investment, based on 2004-05 staffing levels. • Given that the region's Housekeeping and Laundry functions are managed by a common leadership structure, and that laundry and food distribution is completed in part by Materials Management (MDC), staffing opportunities for these areas need to be considered together. For 2004-05, there is a net investment opportunity of 9.5 FTEs across these four areas. • Projected 2005-06 staffing suggests an overall increase across these three functions, such that total staffing would be in line with peer levels. • Housekeeping and Materials Management also demonstrate a high level of sick time, and all areas report challenges in aide staff recruitment and retention given market wage competition, which are contributing to staffing challenges.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Materiel Management	29.5	32.5	0.32	0.06	0.43	0.19	(12.2) See Above
Housekeeping	57.4	60.6	0.62	0.24	0.62	0.59	(2.9) See Above
Laundry & Linen	12.9	13.2	0.14	0.07	0.21	0.19	4.4 See Above
Pt. & Non-Pt. Food Services Combined	39.8	42.0	0.43	0.14	0.79	0.65	20.2 See Above

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Health Records, Telecom and Patient Registration Combined

Opportunities	Findings
1. Monitor 2006-07 staffing levels to determine level of staff savings opportunity for Health Records, Registration and Telecom relative to peers, with consideration of minimum staffing requirements in the northwest sites. 2. Consider opportunity to shift some Health Records resources into a regional Decision Support function to support broader analysis and planning.	• Health Records, Registration and Telecommunications are regionally managed services, with Registration and Telecommunications staff in combined roles in the northwest of the region, but separate in NLRHC. • Health Records has limited involvement in Decision Support functionality, although do provide some support for business planning. • The department has had staffing challenges due to turnover and vacancies, which have impacted efficiencies. Projected 2005-06 staffing suggests that an overall increase of 5 FTEs has occurred since 2004-05, however. • Health Records is currently examining optical scanning technology to support business operations, through which some efficiencies may be gained. • Staffing comparison suggests that Health Records has a staff savings opportunity of 3.5 FTEs relative to peers at the 50th percentile. This opportunity needs to be considered relative to the observed increase in projected 2005-06 staffing levels, and maintaining minimum staffing requirements in the northwest sites of the region.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Health Rec., Telecom Pt Reg. Combined	44.4	48.5	0.48	0.14	0.49	0.44	(3.5)

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Peer Staffing Comparative Analysis

Plant Operations, Maintenance and Biomedical Engineering Combined

Opportunities	Findings
1. Monitor 2006-07 staffing levels to ensure continued alignment to peer staffing levels. • Please refer to Infrastructure section for additional opportunities.	• Facilities Operations is a regional service but managed locally at each of the sites. • The region is starting an energy audit to identify further utilities cost savings. • Staffing comparison suggests that Facilities (including Biomedical Engineering) is in line with peers 50th percentile for 2004-05 staffing levels, but an increase is observed in projected 2005-06 staffing.

Area Description	Actual FTEs 2004-05	Actual FTEs 2005-06 YTD	Actual HAPD 2004-05	Alberta Peer HAPD MIN	Alberta Peer HAPD MAX	National Peer 50th Percentile HAPD	Potential FTE (Effic.)/ Re-Invest.
Plant Ops, Maint., and Biomed.	24.4	25.9	0.26	0.21	0.42	0.26	-

Source: Alberta H&W MIS 2004-05, Deloitte Benchmarking Database 2003-04 & 2004-05, NLHR Payroll Data 2004-05

Deloitte.

Operational Trending and Analysis

Introduction

- Through the peer staffing comparison, this review has already explored opportunities for efficiency and effectiveness across approximately 70% of the organizations operational spending.
- Other key cost drivers for consideration include:
  - Sick and Overtime Premium Costs
  - Non-Salary Discretionary Supplies and Sundries
  - Medical/Surgical Supply Costs
  - Drugs and Medical Gas Supply Costs
  - Food Supply Costs
- Further examination of each of these costs will be presented over the following slides.
- In addition, an overall review of where the region is investing its operating dollars across the continuum of care will be presented relative to peers.

Sick Time and Overtime Summary

Service Area	Total FTEs 2004-05	Sick Time % of Total Paid 2004-05	Sick Time % of Total Paid 2005-06	Potential FTE Savings 2004-05
Administration & Support Services	281	2.6%	3.0%	1.2
Nursing	344	3.2%	3.3%	2.4
Allied Health	101	1.4%	1.4%	0.2
Community & Social Services	129	2.8%	2.9%	0.4

Service Area	Total FTEs 2004-05	Overtime % of Total Paid 2004-05	Overtime % of Total Paid 2005-06	Potential $ Savings 2004-05
Administration & Support Services	281	2.3%	2.5%	$25,246
Nursing	344	4.7%	5.3%	$376,651
Allied Health	101	2.9%	2.1%	$142,351
Community & Social Services	129	0.9%	1.0%	$45,680

Source: NLHR Payroll 2004-05, 2005-06 Sept YTD.

- Sick time and over time rates increased across most areas from 2004-05 to 2005-06.
- By examining the region's internal sick and overtime averages by service area, opportunities for improvement can be realized by shifting departments to perform at the area-specific sick and overtime averages.
- Analysis suggests a potential for up to 4.2 FTEs in sick time improvement, and almost $590,000 in overtime premium cost savings, which would need to be explored within a broader HR framework for change.

Non-Salary Discretionary Supplies and Sundries

- An analysis of non-salary discretionary accounts was conducted to identify spending variations as well as to understand the large increase in sundry expenses.
- Discretionary accounts are identified as those non-salary costs that are not directly related to patient care, and over which management is able to exert a degree of control.
- Overall, 2005-06 Projected data suggests that non-salary discretionary costs may increase by as much as $2.2 million, or 52%, between 2003-04 and 2005-06 Projected.
  - The main drivers of the increase include Travel Expenses, Insurance, and Public Relations & Advertising. Although these cost drivers are driven by the geographic size and widely-dispersed population base of the region, they should continue to be monitored as part of a potentially growing cost of business for the region.
- Continued management monitoring of these costs to compare year-end 2005-06 actuals to projected numbers is suggested. Where year-end actual costs demonstrate similar spend levels, the organization will need to evaluate the balance of non-salary discretionary spending relative to core service delivery.

Account	2003-04	2004-05	2005-06 Projected	Variance 2003-04 to 2005-06 Projected
Travel Expenses	$1,051,209	$1,742,698	$2,321,452	121%
Office & General Supplies	$716,260	$796,198	$845,009	18%
Insurance	$273,148	$316,535	$599,052	119%
Professional Fees	$477,380	$580,337	$578,268	21%
Public Relations & Advertising	$80,250	$191,977	$291,585	263%
Data Processing	$30,406	$267,354	$203,915	571%

Source: NLHR General Ledger 2003-04, 2004-05, 2005-06 Oct YTD.

Med/Surg, Drugs and Food Supply Costs

- Medical/Surgical, Drugs and Food Supply expenses were examined relative to adjusted patient days for NLHR and other rural RHAs in Alberta.
- In comparison to Alberta peers, NLHR was found to have the second and third lowest Medical/Surgical Supplies and Drugs and Medical Gases Expenses per APD, respectively, in 2004-05.
- For Food and Dietary Supplies, NLHR was found to have the lowest costs/APD among the rural Alberta RHAs.

Supply Costs as a % of Total Expenses	2004-05 Actual Expenses	2004-05 Expense/APD	Alberta Peers Expense/APD MIN	Alberta Peers Expense/APD MAX
Medical/Surgical Supplies	$1,807,901	$12.47	$10.11	$29.32
Drugs and Medical Gases	$1,248,705	$8.62	$5.13	$19.92
Food and Dietary Supplies	$757,732	$5.23	$5.23	$14.35

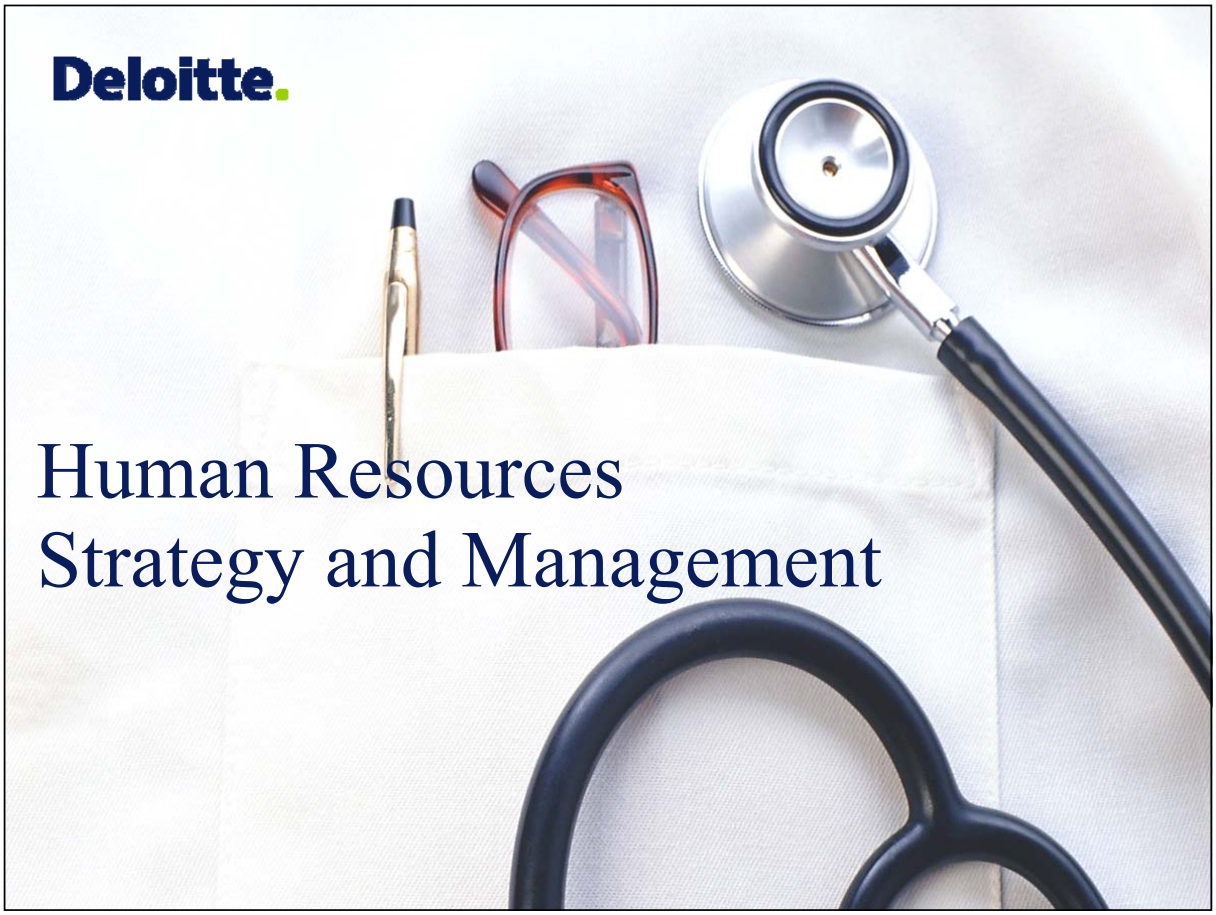
Source: AHW MIS Database 2004-05

Financial Profile Across the Care Continuum

- A financial profile of NLHR relative to other regions in Alberta is presented below, which examines the % of total expenses currently being allocated across different dimensions of the organization.
- As observed through this analysis, NLHR has the highest % of total operating expenses in its Corporate Services, which supports potential staffing efficiency results noted in the comparative staffing analyses.
- NLHR also has the highest % of total operating expenses in Telehealth, Allied Health, Marketed Services, and Undistributed expenses. For Telehealth, this supports the region's investment in this technology and support infrastructure as a business enabler.
- Conversely, NLHR is currently spending the lowest % of total operating expenses on Residential Nursing, and is the third lowest among peers with respect to Acute Nursing spending as a % of total expenses.

Components of Regional Operational Expenses	2004-05 % of Total Expenses	Alberta Peers % of Total Operating Expenses MIN	Alberta Peers % of Total Operating Expenses MAX
Corporate Services	12.4%	6.3%	12.4%
Support Services	17.8%	15.6%	22.2%
Acute Nursing	21.3%	14.9%	26.2%
Residential Nursing	4.6%	4.6%	18.2%
Emergency, Day and Ambulatory Services	6.6%	4.4%	8.2%
Telehealth	0.3%	0.0%	0.3%
Allied Health	17.8%	13.8%	17.8%
Community Health Services	12.5%	10.9%	15.9%
Marketed Services	1.2%	0.0%	1.2%
Undistributed	5.6%	2.1%	5.6%

Source: NLHR General Ledger 2003-04, 2004-05, 2005-06 Oct YTD.

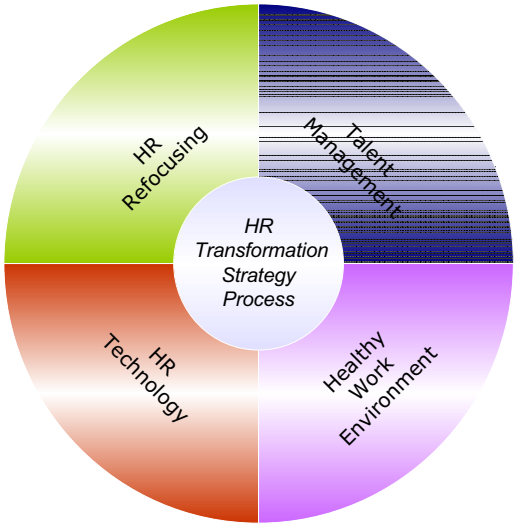


Human Resources Overview

- Talented people – or shortage of talented people – can make or break any organization's strategy. In the past, health care in general has taken the people and talent issues for granted. Our people plans – including plans to hire and / or workforce deployment were tactical issues to be addressed once the business strategy was finalized.
- This approach can no longer stand up to the growing and increasingly complex demands of the health care workforce. What was once tactical has now become strategic.
- Coming into this review, Deloitte expected that the Health Regions would share the following common healthcare workforce challenges:
  - Critical shortage of numerous professional and non-professional roles
  - Retention issues as staff leave health care industry for other better paying opportunities
  - Retention issues as staff go to other healthcare organizations for better pay or perceived better role
  - Aging workforce
  - Increased casualization of the workforce
  - Reliance on foreign graduates and the corresponding need for higher level of organizational support for these individuals
  - Need for incentives to recruit and retain
  - Restrictive labour contracts and requirements
- Our goal was to assess the extent to which the Region understands these issues and has developed strategy to respond. Specifically, we are looking to see the degree to which the Human Resource Strategy and roles are well positioned to support the growing complex world of people management.

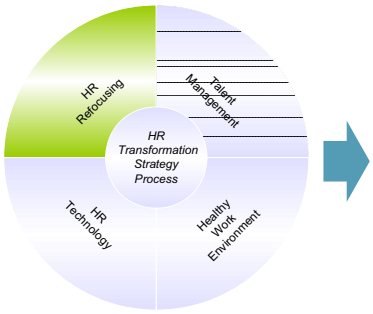
Human Resources Overview

- Our findings are based on a review of relevant documentation and consultation. From these, we will identify opportunities for Regions to consider. Our model for review, findings reporting and opportunity identification follows a four part framework:
- ***Talent Management*** – the integration of processes, programs, technologies and staff to Develop, Deploy and Connect workforce.
  - Develop – builds individuals' capabilities as required by organization – either currently or for the future.
  - Deploy – ensures candidates are attracted, and recruited to roles and that recruitment is well aligned to strategic and operational needs.
  - Connect – cultivates high quality work relationships and culture that fosters engagement, productivity and innovation.
- ***Human Resources Re-focus*** – efforts to enhance HR capacity and capability to support service and management priorities of the Region.
- ***Human Resources Technology –*** focuses on the extent to which technology supports the HR capacity and consistency in practice across Region.
- ***Healthy Work Environment*** – encompasses the physical work environment and psychosocial work environment. Healthy work environment practices exist where culture and practices converge to create improvements for staff that cascade to the patient and community level.



Human Resources Findings and Opportunities

HR Refocusing



Findings

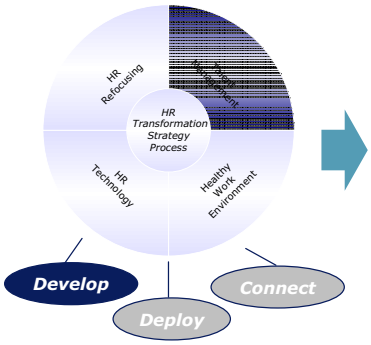
- NLHR is facing a significant shortage of management, staffing and physician resources, driving the need for Human Resources strategy and management to be a top corporate priority.
- Region has several unique northern health human resources pressures that will also drive a realignment of HR operations focus to support the region.
- Performance management processes have been developed, however are not well understood and in use throughout the organization.
- Cascading of performance management processes is not yet part of personal evaluation at Executive/Director/ Manager levels for most areas of the organization.
- Directors/Managers challenged to complete performance management processes given high workload.

Opportunities

1. Re-focus regional priorities to recognize and drive Human Resources strategy and initiatives as a top corporate priority.
2. Examine need for HR department roles and focus realignment once a new HR Strategy and Plan are developed for the region.
3. Further develop the performance management focus and function in the region to drive increased accountability, monitoring and evaluation, with a clear accountability framework that cascades down to manager and frontline staff levels.

Human Resources Findings and Opportunities

Talent Management - Develop



Findings

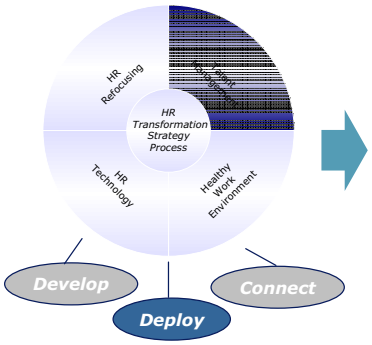
- As noted in previous findings, the region needs a region-wide education function – both to mitigate potential risks through lack of knowledge transfer, and to attract, retain and build employee knowledge throughout the organization.
- Specific education roles for the function could include coordinated orientation and preceptorship, management capacity building, infection control policies and procedures, quality and risk management, and maintenance of certification across staff disciplines.
- Although the region has a central education fund available to management and staff, this is not well communicated or used by the organization.
- Need for education was also observed in the physician review, and suggests that a coordinated function that supports both organization and physician education would best serve the region.

Opportunities

1. Develop a coordinated education strategy and function that supports the full human resource base of the organization – executive, management, staff, and physicians – and which incorporates organization-wide learning and training, support for quality and risk management, support for maintenance of certification across staff and physician disciplines, with associated resources to enable the education strategy and function.

Human Resources Findings and Opportunities

Talent Management - Deploy



Findings

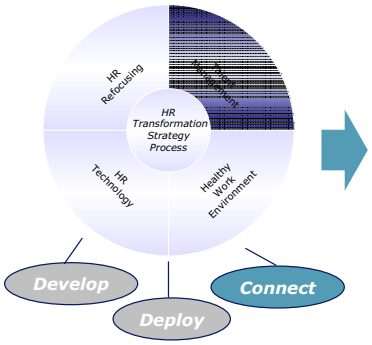
- Region has difficulty in retaining professional staff, in particular with nursing. A significant contributor is the lack of affordable housing.
- Market wage rates for unregulated and support service staff are creating significant competition for these positions.
- Current union contracts limit region's ability to compete on direct wages, although the region has already implemented additional monthly stipends as one strategy – but additional alternate strategies are required.
- The region faces similar challenges with respect to physician recruitment and retention, where creative strategies are needed to address physician challenges around geography, facilities, balance of Canadian-trained vs. foreign-trained MDs, alternative funding models.

Opportunities

1. The region needs to develop a comprehensive HR Strategy and Plan that is aligned to the business needs and operating realities of the north, and considers a number of key dimensions: significant population growth in the north, high level of market competition for resources and compensation, resourcing strategies and staffing models, partnerships with industry, broader community health focus across care providers. Physician planning needs to be an integrated component of this plan, so that the region has a consolidated plan that focuses its efforts on talent management to support current and future core service delivery.
2. The region needs to explore alternative strategies to HR planning to position the region for success in recruiting and retaining staff in the north – a staff housing strategy is one such example.
3. To support broad talent management, the region needs a structure approach to succession planning that is integrated across key human resources - including executives, management, professional and support staff, and physicians.

Human Resources Findings and Opportunities

Talent Management - Connect



Findings

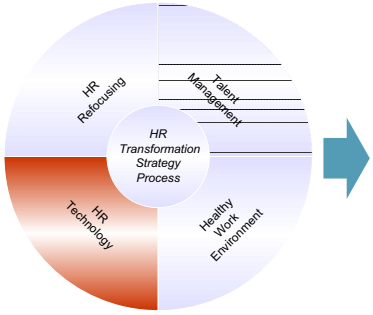
- Consultation findings suggest that the regional re-organization over the past three years has resulted in some degree of change fatigue, and fear of further change.
- To support the development of high quality work relationships, productivity and innovation throughout change, the region needs to create a dedicated change management focus that supports staff and physicians through change.
- Communication was also noted as a challenge by some stakeholders, further impacting ability for the region to effect change and leverage the benefits of regionalization.

Opportunities

1. Develop clear change management function and support within HR that is linked to the broader HR strategy and education function, and which provides broad organization support to engage stakeholders in change initiatives. This will be a critical function to enable broader organization opportunities for change and to support ongoing work in regionalization.
2. Develop a communications plan and strategy that promotes the benefits of regionalization, engages stakeholders in change initiatives, increases executive engagement, and reports back on resulting improvements from change initiatives.

Human Resources Findings and Opportunities

HR Technology



Findings

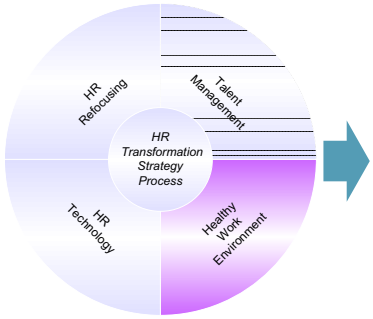
- The organization currently uses QHR and EPS to support HRIS functionality.
- Consultation findings suggest opportunity to further leverage EPS functionality to support advanced staff scheduling support, but further investigation of relative costs/benefits of this functionality would need to be assessed within a broader assessment of regional HRIS needs.
- From an education perspective, the region has opportunity to further leverage e-learning as a cost effective resource.
- Given the telehealth infrastructure in the region, this resource should be further leveraged to provide both regional HR and OH&S support and education opportunities to reduce staff travel requirements.

Opportunities

1. Develop strategy to address HRIS needs, which aligns HR technology enablers to support the organizations HR re-focus, and is part of the broader regional IT Strategic Plan development.
2. Examine HR service delivery options to increase use of existing telehealth infrastructure for HR and OH&S support across the region.
3. Explore options for increased e-learning and tele-learning to improve existing education for staff through a cost-efficient mechanism.
4. Develop online performance management processes for management and staff to enable improved performance measurement and management capabilities in the organization.

Human Resources Findings and Opportunities

Healthy Work Environment



Findings

- Consultation findings indicated several work environment challenges currently being faced by the organization, including:
  - Management and staff burnout due to staffing shortages.
  - Change fatigue from re-regionalization.
  - Need for consistent senior leadership, given turnover at Board and CEO level.
  - Relationship challenges across cultural differences of foreign-trained physicians.
  - Disengagement of physician stakeholders from regional operations.

Opportunities

1. Develop a targeted healthy work environment strategy as part of the region's HR re-focus, with corresponding infrastructure, support, and organization alignment (where necessary).
2. Create forums for management, staff and physicians to identify workplace challenges, and contribute to the development of strategies to address challenges.
3. Develop a communication and stakeholder engagement strategy and plan to re-engage management, staff and physicians in regional planning and programs to promote an engaged, healthy work environment.

Infrastructure

Regional Infrastructure Alignment
Introduction

- Our review of regional infrastructure is intended as a high level assessment of how well infrastructure is aligned to support operations.
- Where there are opportunities for improvement to infrastructure, these opportunities will be identified for the region's consideration.
- The review has focused on the key high level opportunities across two dimensions of regional infrastructure, with findings and opportunities based on consultation, document review and related analysis:

Facilities and Equipment

Facilities and Equipment
Overall Observations

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. No opportunity identified.	• Consultation findings indicated that NLHR has had good infrastructure investment with respect to equipment. • Partnerships with private industry and other fundraising initiatives have enabled the region to maintain updated equipment infrastructure across a number of areas, including: – Beds and Lifts – Monitors – Diagnostic Imaging – Telehealth

Facilities and Equipment

NLRHC – Overall Facility

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Conduct a facilities review of NLRHC to identify current and future care and service delivery requirements, in alignment with a regional community health needs assessment.	• Consultation findings indicated that NLHRC has several facilities challenges that are impacting patient flows and care delivery, staff and physician workflows, and efficiency. • Although not examined by the consultants, the region has identified significant population growth over the past few years, and an expectation for continued population expansion. This population growth is currently beyond the volume for which NLRHC was originally designed, which causes challenges to operations and patient care. • NLHRC is also reported to be further challenged due to a lack of regional access to available land in FMM for facility expansion. Where a facilities review confirms the need for additional physical capacity for NLRHC, partnerships with AHW and other provincial ministries will be important to enable regional access to available land in the community.

Facilities and Equipment

NLRHC Emergency Room

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Relocate NLRHC outpatient registration out of the Emergency Department to reduce impacts on patient flow.	• The current NLRHC Emergency Department was originally designed for significantly lower volumes than current levels. • From a facilities perspective, the ED faces two specific issues that are further compounding the issues of departmental volumes: – Outpatient registration and ED registration are currently both completed in the ED. This has created significant challenges in patient flow, and a high volume of ambulatory clinic patients waiting in the ED. – Waiting space for both outpatients and emergency patients is combined, with some space not visible by the triage nurse. This lack of line-of-site visibility of the waiting area by ED clinical staff is a significant potential risk to the organization. • Consultation findings suggest that outpatient registration was previously located in the main hospital lobby of NLRHC, and that this space still exists such that outpatient registration could be relocated to this area, as one option for consideration.

Facilities and Equipment

NLRHC Paediatrics Unit

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Given the need for new physical space for the Pediatrics service in NLRHC, consider re-locating Pediatrics adjacent to Obstetrics and cross training staff.	• The current NLRHC Paediatrics Unit physical facilities are insufficient to support care delivery, suggesting the need for redesign or re-location of the unit. • Observations of peer practice suggests opportunity for the region to consider cross-training Paediatrics nursing staff with Obstetrics, which if explored would suggest the need to relocate Paediatrics in close proximity to Obstetrics.

Facilities and Equipment

NLRHC Laundry Equipment

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1.Conduct a cost-benefit assessment of laundry equipment to determine the most appropriate timeline for replacement. This assessment should be conducted as part of the development of a long range service plan for laundry services in FMM that is tied to the clinical service needs identified through the broader regional health needs assessment.	• Consultation findings indicate that the region's aging laundry equipment in FMM has frequent breakdowns, which is a high potential risk to the delivery of clinical services. • A recent shift to 7-day laundry service in FMM, in support of clinical service delivery requirements, is further anticipated to reduce the life span of the current equipment.

Facilities and Equipment

NLRHC Parking and Helicopter Pad

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Conduct a cost-benefit assessment of the current parking and helicopter pad facilities challenges at NLRHC, and collaborate with AHW, Alberta Infrastructure and private industry to identify options for resolution.	• Consultation findings indicate that NLRHC currently lacks sufficient parking for patients and staff, which is reported to impact patient access to services. • Consultation also identified challenges with the helicopter pad at NLRHC, which is reported to not meet current code requirements. • Where patients or service providers have barriers to access due to physical facilities, this creates potential risks to the region. • The potential cost for enhancing these facilities issues is significant, suggesting need for partnership with AHW, Alberta Infrastructure and others to explore options for addressing facilities needs.

Facilities and Equipment

Northwest Health Centre Triage

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Examine infrastructure requirements and costs related to the recommendation for increased use of CTAS triaging in the NWHC emergency department.	• Consultation findings indicate the need for increased CTAS triage use as a care and risk management tool in the NWHC emergency department. • Development of this suggested triage function has a potentially significant facilities infrastructure implication, which needs to be examined by the region.

Facilities and Equipment

St. Theresa General Hospital

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Conduct a role review of St. Theresa General Hospital in the context of a broader regional community health needs assessment, before proceeding further with current capital planning.	• St. Theresa General Hospital is an aged physical plant, and the region is currently in capital planning for replacement. • Analysis and consultation findings indicate that the facility typically runs a low acute occupancy – for an annual average of 10 of 26 beds filled. • Proximity of the STGH to High Level suggests opportunity for the region to consider an alternative service delivery model, to potentially change the balance of the continuum of services provided in the northwest area. • Given that the region plans to conduct a regional health needs assessment in 2006-07, it is suggested that a role review of STGH be a part of that assessment, before further capital planning proceeds.

Facilities and Equipment

High Level Physicians' Clinics

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Engage key stakeholders to develop an action plan to address High Level physicians' clinic issues, with consideration of broader clinical sustainability of health service delivery in the northwest.	• Consultation findings with regional management and physicians indicate significant challenges with the need to relocate the High Level physicians' clinic onto regional hospital grounds. Although the region and physicians report support for this initiative, broader stakeholder buy-in is a challenge. • The continuation of these challenges is expected to result in significant potential risk to physician retention and future recruitment in the area. • From a regional perspective, the broader implications of this risk include: – Risk to the sustainability of health services in High Level, if physician retention becomes an issue. – Potential risk for increased operational costs if the current physicians leave the region, and are replaced by physicians with a lower obstetrical skill set (e.g. cost of Medi-vacs for high risk obstetrics cases).

Facilities and Equipment

Regional Telehealth

- High-level consultation findings, on-site observations, and analysis of availability Alberta Infrastructure data for regional facilities and equipment identified the following key findings and opportunities:

Opportunities	Findings
1. Engage clinical stakeholders to develop a regional strategy and resource plan to further leverage use of telehealth in clinical service delivery. 2. Expand current clinical partnerships with other regions to support increased telehealth clinical service delivery. 3. Develop a structured tele-learning program as part of a broader regional HR and education strategy.	• The region has developed extensive telehealth infrastructure and supporting resources to support the use of this technology as an enabler. • Currently, telehealth technology is primarily used to facilitate meetings, although the region does have several clinical programs currently in place. • Stakeholders have identified additional opportunities for increased use of telehealth in clinical service delivery, but the region is currently lacking physician champions to drive increased use of telehealth in clinical service delivery. – Further, challenges in partnering with other regional clinicians for telehealth service delivery are also identified by stakeholders. • The region also has opportunity to explore telehealth as a tool in additional education provision.

Technology

Leveraging the Value of Information Technology through IT Governance

- Information and the Technology that supports it often represent the most valuable but least understood asset in an organization.
- The essential elements of IT governance are to ensure that value is received from spending on technology and then to control and safeguard information.
- The purpose of an IT governance framework is to institutionalize good practices that ensure an organizations IT investment supports business objectives. These objectives are identified through the Northern Lights Health Region's mission statement of

  Improving health and promoting wellness

  And may be directly linked to three of your values:

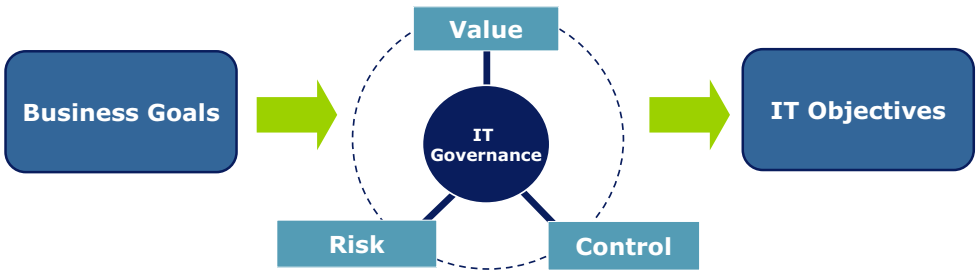
  Shared Responsibility – ensuring senior management and frontline providers are involved in determining the direction and goals of the IT department

  Accountability and Sustainability – evaluation of service delivery from two perspectives, the total cost of technology operations and monitoring of project outcomes

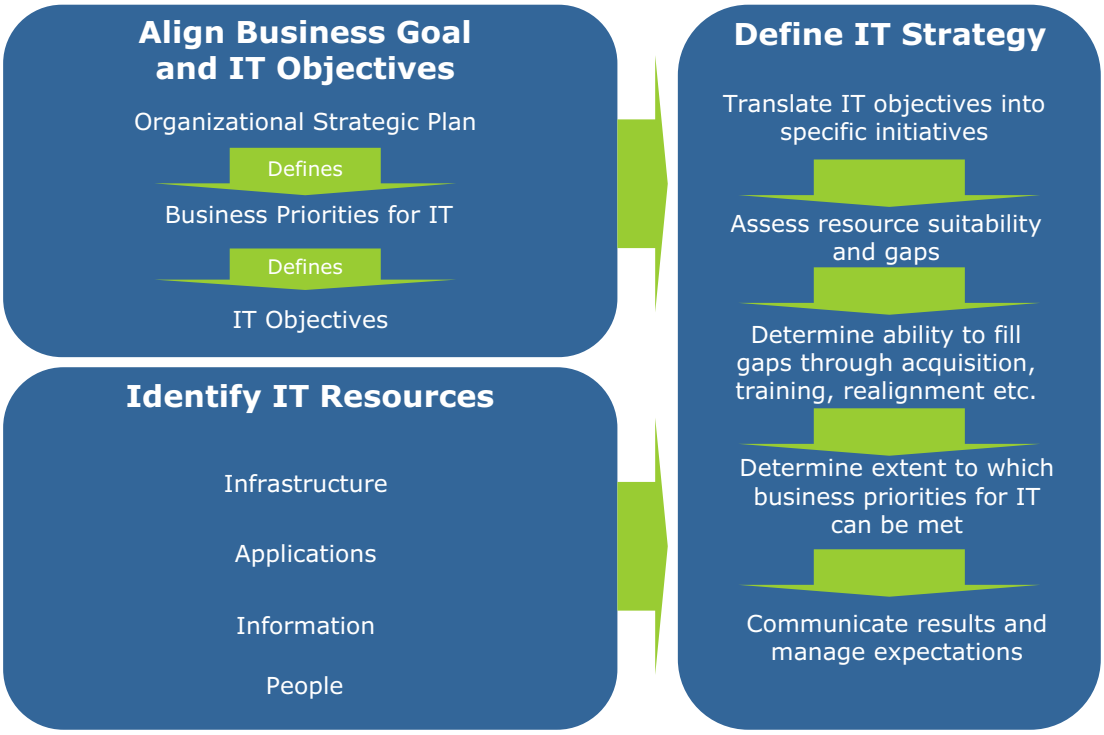
  Continuous Improvement – ongoing support and maintenance intended to safeguard the value of existing assets and knowledge in the regional facilities.
- Available IT resources, including infrastructure, applications, information and people, should be optimized according to these values.
- Organizations such as yours need to satisfy the quality, fiduciary and security requirements of your IT information and infrastructure as you do for all other assets.
- To discharge these responsibilities, as well as to achieve your objectives, you must know the status of your evolving enterprise architecture.

What is IT Governance?

- IT governance consists of leadership, organizational structures and processes that are designed to support an organization's strategies and objectives to increase stakeholder value.
- Clear responsibility for the direction of IT requirements is necessary to successfully deliver services that support the enterprise's strategy.
- Monitoring success in delivering against business requirements, requires that management put a framework in place to measure achievements against goals.
- IT governance transforms business goals into IT objectives through consideration of value, risk and control.



Determination of IT Activities



Technology

- Findings and observations for the technology workstream are intended to identify the degree to which IT investments and resulting initiatives support the goals of the region, and the degree to which they are executed efficiently and effectively.
- The following key documents were reviewed in support of the Technology review for NLHR:
  - Facility Profiles – Northern Lights Facilities
  - Facility Profiles – Northern Lights IT
  - Interview notes
  - 2006-2007 budget for IT
  - Organization Chart
- Information has been summarized in five key focus areas:

Technology Categories	Key Questions
Business Alignment	• Is the IT strategy aligned to support the business? • Is there a clear understanding of how IT is supporting the RHA's business objectives?
Resource Alignment	• Is the RHA achieving optimum use of its IT resources? • Is the RHA investing in the appropriate IT resources?
Value Delivery	• Does the RHA perceive value from their IT investments? • Is IT delivering the promised benefits?
Risk Management	• Are IT risks understood and being managed?
Quality Management	• Is the quality of IT systems appropriate for business needs? • Is there a framework within which to measure the achievement of IT goals?

1. Business Alignment

Leading Practice Attributes	• The organization focuses on ensuring the linkage of business and IT plans; on defining, maintaining and validating the IT value proposition; and on aligning IT operations with enterprise operations.
Deloitte Findings and Observations	• NLHR does not currently have a full IT plan. A full IT strategic plan is currently in development for the region, however, and will be completed in May/June 06. • Through the RSHIP Meditech implementation, and provincial PACS implementation, NLHR is maintaining good alignment with regional counterparts and other provincial initiatives. • Ongoing communication is reported as a continuing success factor to keeping business users aware of the RSHIP and other implementations. • Business users across the organization report a high level of awareness of IT initiatives, with specific focus on the RSHIP Meditech implementation. Awareness of Information Management as a concept is still developing. • IT department coordinates with other areas with significant IT systems to ensure ongoing alignment. • Functionality of Meditech has been reported as a challenge to business process in some areas. For example, ability of the new system to enable end-users to create lab order sets outside of standard lab controls is a challenge to lab utilization and cost containment. • Further, several stakeholders identified the need for improved document management as an additional functionality that needs support from IT.
Potential Opportunities	1. Once developed, conduct an annual realignment of the IT plan to the organization's business objectives and strategies. 2. Incorporate further use-case testing as part of implementation to ensure that IT systems align to end-user requirements of business process owners.

2. Resource Alignment

Leading Practice Attributes	• The organization is focused on the optimal investment in, and the proper management of, critical IT resources: applications, information, infrastructure and people including the optimization of knowledge and infrastructure.
Deloitte Findings and Observations	• The majority of the IT department is centrally located at NLRHC, with some resource support at the NWHC. • Given the current Meditech implementation, the NLHR Project Management Office, responsible for the implementation, has a low level of resources. • CIS team members have cross-trained staff due to team size, to enable cross coverage of key IT operations areas. As a result, the team is highly trained across operational processes. • The region is involved in provincial initiatives related to both RSHIP and PACS, and is leveraging opportunities to share provincial or cross-regional resources – e.g. Security Systems Analyst, Meditech helpdesk support. • For the RSHIP Meditech implementation, business resources have been seconded from operations to support the implementation through a number of activities, including providing input into system requirements, working with cross-regional counterparts in setting standards, and will be involved in supporting internal training efforts. • Although business users from most areas report good involvement in the Meditech implementation, they also note the challenge of the corresponding strain on their resources available for daily operations.
Potential Opportunities	1. Where business resources continue to support business functions during assignment to IT initiatives, a formal arrangement should be documented to ensure project team resource availability and identify clear roles and accountabilities.

2. Resource Alignment (continued)

Leading Practice Attributes	• The organization is focused on the optimal investment in, and the proper management of, critical IT resources: applications, information, infrastructure and people including the optimization of knowledge and infrastructure.
Deloitte Findings and Observations	• The region is currently the highest among the non-metro Alberta RHAs with respect to IT department spending as a % of total expenses. Given that NLHR was the first to initiate the Meditech implementation as part of RSHIP, this is in line with expectations. • A 24 hour helpdesk (phone or email access) is available to ensure that service is available when required. This ensures less downtime for resources across the region. • The RSHIP regions provide collaborative support for Meditech modules. Teams include Technical/ network; Conversion; Clinical Standards; Financial Standards; Interface; DI/PACS etc. These teams address both system development and support issues. • NLHR has leveraged its IT resources with some outsourcing support, including IT strategic planning and some implementation support with IBM. • The region is investigating opportunities with PCHR to integrate components of IT services, in order to achieve efficiencies and build on skill sets available to both regions.
Potential Opportunities	2. Ensure that cross-training occurs between RSHIP resources and local IT support resources to allow a continuum of service following the completion of the implementation phase for Meditech. 3. Continue exploration of IT integration with PCHR, with specific assessment of potential costs, benefits, risks and implementation considerations associated with integration.

2. Resource Alignment (continued)

Leading Practice Attributes	• The organization is focused on the optimal investment in, and the proper management of, critical IT resources: applications, information, infrastructure and people including the optimization of knowledge and infrastructure.
Deloitte Findings and Observations	• MAGIC and Project/ Task Lists are used to optimize staffing requirements and skill mix. Additional resources are able to be brought in during peak periods (testing, training and go-live activities). • Impact to non-RSHIP IT support has been reported due to current RSHIP focus. The effect should be mitigated as the RSHIP initiative advances and more support resources become available.
Potential Opportunities	4. NLHR should ensure an enterprise-wide view of resource allocation to minimize impact of large initiatives on the business unit(s), and to ensure ongoing IT support outside of those initiatives.

3. Value Delivery

Leading Practice Attributes	• The organization executes the value proposition throughout the delivery cycle, ensuring that IT delivers the promised benefits against the strategy, concentrating on optimising costs and proving the intrinsic value of IT.
Deloitte Findings and Observations	• The majority of NLHR business users anticipate improved IT value creation through the implementation of the new Meditech system. • Further, NLHR has reported that "As a result of the RSHIP program we have seen a significant increase in the collaboration and sharing of resources/ knowledge among the RSHIP regions." • As NLHR has already implemented some components of Meditech, business users report a sufficient level of training and ongoing support from IT for system operations. • Limitations of Meditech's capacities to meet needs of certain departments have been reported. In some cases, significant additional manual workload has been necessary to fulfill business needs after Meditech went live. This is a risk to end-user uptake of new systems, and is reported to impact operational efficiency and effectiveness. • A challenge to the overall RSHIP implementation in NLHR is that an overall benefits framework is lacking, which prevents clear identification, communication and realization of business process benefits as a result of the implementation.
Potential Opportunities	1. Establish a benefits realization framework for the Meditech implementation that identifies, promotes, monitors and assesses benefits realization for each key department as Meditech implementation continues. 2. Consider options for business process transformation as part of benefits realization framework for the Meditech implementation, and other regional IT initiatives. 3. Ensure communication to business areas about the benefits of new system initiatives is realistic as to expected benefits and impact to users and business processes.

3. Value Delivery (continued)

Leading Practice Attributes	• The organization executes the value proposition throughout the delivery cycle, ensuring that IT delivers the promised benefits against the strategy, concentrating on optimising costs and proving the intrinsic value of IT.
Deloitte Findings and Observations	• A challenge to the overall RSHIP implementation in NLHR is that an overall benefits framework is lacking, which prevents clear identification, communication and realization of business process benefits as a result of the implementation. • NLHR has developed a business case approach for internal IT initiatives to ensure the identification and follow-up realization of benefits: – For example, through reduced film use, NLHR has started to be realized in PACS, even before its full implementation by March 2006. • Regional initiatives have focused on cost reduction and automation as a means of optimizing resources, where possible. – The telecomm infrastructure has been moved to IP Telephony. NLHR reports an annual estimated savings of $200,000 that has been realized in benefits from the initiative. – The IP Telephony infrastructure has been leveraged to improve IT department efficiency by maximizing use of videoconferencing and other communication tools instead of travel between the region's sites. • More than half of the program areas expressed the need to have scheduling as a necessary functionality of ESP.
Potential Opportunities	4. Continue use of business case approach for internal IT initiatives to ensure ongoing business alignment and benefits realization. 5. Review the current ESP function and distribution through the organization, to determine feasibility and associated resources for expansion.

4. Risk Management

Leading Practice Attributes	• The organization requires risk awareness by senior corporate officers, a clear understanding of the enterprise's appetite for risk, understanding of compliance requirements, transparency about the significant risks to the enterprise, and embedding of risk management responsibilities into the organization.
Deloitte Findings and Observations	• Risks around the RSHIP implementation with respect to resource requirements are understood and being managed such that the region is still able to move forward with other IT initiatives (e.g. telecom). • Risks on new initiatives are considered within the planning and business case approach, where risks and benefits are assessed as part of the decision process to move forward with an IT initiative. • Inadequate resources in the NLHR Project Office to implement all of the desired functionality resulting in a limiting of benefits from implemented systems, and inadequate acceptance tests – for example: – "Current timelines are set to proceed with development and implementation at a rate which out measures our resources." – "Meditech operating room module delayed due to lack of resources." • IT department is working to increase support automation instead of staffing where possible, leveraging resources provided through RSHIP, and exploring opportunities to integrate components of IT services with PCHR.
Potential Opportunities	1. Review current utilization of the staff to determine staffing level requirements in alignment with the new IT Strategic Plan, with consideration of maintaining the current Meditech implementation and other key NLHR IT initiatives. 2. Ensure that the risk management and project plans for the Meditech implementation address required alignment between resources and deliverables, and establish a process to identify, manage and communicate potential project plan delays.

4. Risk Management (continued)

Leading Practice Attributes	• The organization requires risk awareness by senior corporate officers, a clear understanding of the enterprise's appetite for risk, understanding of compliance requirements, transparency about the significant risks to the enterprise, and embedding of risk management responsibilities into the organization.
Deloitte Findings and Observations	• IT department incorporates cross-training to ensure adequate support, and to maintain knowledge in the organization through staff turnover. • Meditech user training is clearly planned, and end-users report good support through existing implementation work. • NLHR has a change management process in place with regard to Meditech, and reports good traction. • Parts of the region do not have adequate computers for users, which is a risk to end-user uptake, timelines and costs for training.
Potential Opportunities	3. Assess the capacity across the region in both hardware and user skill sets to respond to new initiatives. Build these gaps into the project risk assessment, training and procurement plans. 4. As a mechanism to improve end-user buy-in and uptake to new systems, ensure that staff charged with cross training of staff members have an appropriate appreciation of the business processes in which the trainee is involved.

5. Quality Management

Leading Practice Attributes	• The organization utilizes a system of performance measurement to track and monitor strategy implementation, project completion, resource usage, process performance and service delivery, using, for example, balanced scorecards that translate strategy into action to achieve goals measurable beyond conventional accounting.
Deloitte Findings and Observations	• NLHR's IT department uses a structure business case approach for all initiatives, with clearly identified benefits, outcomes and an anticipated ROI. –Total cost of ownership is considered, with respect to full SDLC costs, including training and change management. –Assessments are completed post-implementation to confirm achievement of business case objectives. • The IT department is engaged in high level peer learnings and best practice research. • NLHR works closely with RSHIP to identify and maintain system standards during Meditech implementation. • NLHR works with RSHIP, for all new IT initiatives, to confirm if a suitable Meditech application exists, and if not, to determine if other potential systems can be integrated into Meditech, with associated costs and resource implications. • The department uses a pilot-approach to many initiatives to confirm success before rolling out more broadly across the region.
Potential Opportunities	1. As part of ongoing quality management and IT support to the organization, NLHR should maintain an enterprise wide view of IT to ensure that non-RSHIP related processes remain supported.

Cluster 1 Opportunities
Introduction

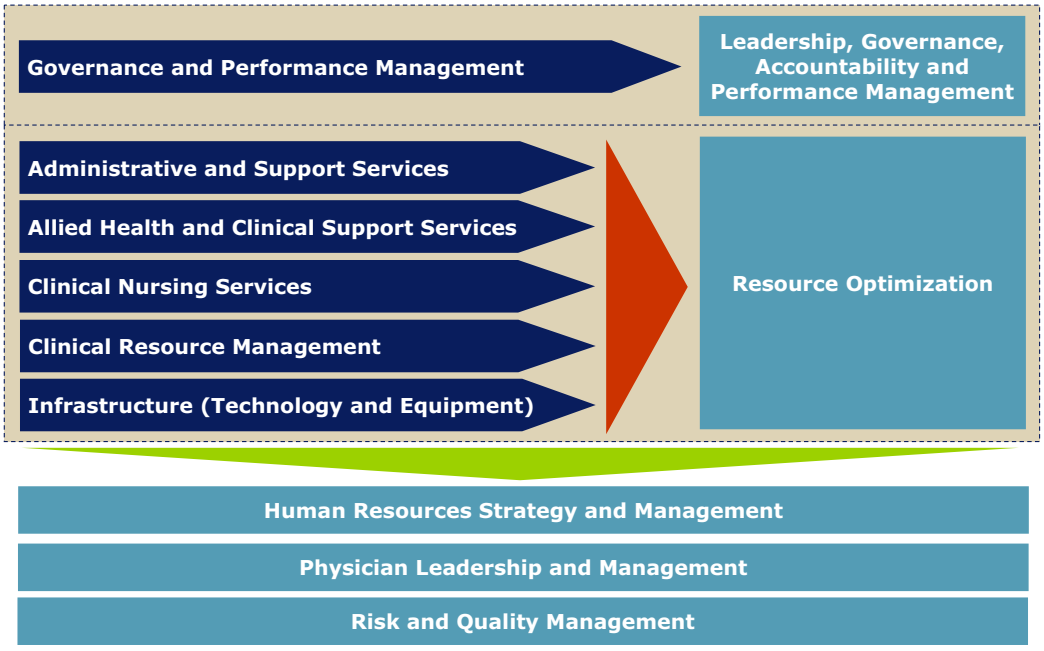
- Having reviewed three regional health authorities concurrently, we have identified opportunities that are common across the three regions.
- We have identified these as 'Cluster Opportunities', and they are based on of the following three criteria:

  - Where the opportunity requires a *solution larger than 1 Region's capacity* (as it may require cross-region collaboration, provincial collaboration or investment).
  `
  - Where a *cross region collaboration* and solution development will *deliver greater value (either qualitative or quantitative)* than if pursued by 1 Region independently.
  - Where individual regions are *without the current resources or talent* and/or will have challenge attracting and recruiting individuals or securing resources independently.

- Further, Cluster Opportunities may become 'Provincial Opportunities', where the opportunities will have application to more than the three northern regions.
- These Cluster Opportunities have been accepted by AHW, although a timeline for moving forward has yet to be determined by the province.

Cluster 1 Opportunities
Reporting Framework

- Cluster 1 Opportunities are identified in five key areas of reporting, which have been aligned to the project workstreams, as shown below:



Cluster 1 Opportunities
Resource Optimization

I. Develop strategy to promote expanded clinical application and adoption of Telehealth to respond to growing clinical needs (strategy to include sourcing clinical expertise external to regions to support Telehealth delivery).

II. Adopt a stronger standardized approach to Chronic Disease Management, supported by clinical expertise and links to Telehealth, which can be customized within Regions.

III. Explore shared service model for core corporate services as a strategy to enhance effectiveness, avoid cost, and achieve efficiency:
- Finance and Decision Support
- Human Resources (includes physician issues)
- Information Systems and Support
- Supply Chain Services
- Management and Leadership Training

IV. Develop and implement workload measurement and caseload tracking and reporting for home care to enable management decision-making and cross-regional comparisons.

V. Develop and implement workload measurement and reporting for Population Health and Environmental Health to enable management decision-making and cross-regional comparisons.

Cluster 1 Opportunities
Leadership, Governance, Accountability and Performance Management

I. Strengthen capability and resource allocation to position Health Human Resource (HHR) Strategy and Management as top priority for organization. (See next section.)

II. Collaborate in the development or procurement of leadership and management development and training based on identified need or gaps.

III. Increase attention and effort to creating board awareness and education on responsibilities and liabilities.

IV. Enhance broad regional reporting requirements to include ongoing monitoring of IT strategic initiatives, to ensure ongoing alignment of IT to business priorities and objectives.

V. Develop a Northern Response Strategy for the three Regions that includes:
- Increasing effort on building and growing external partnerships, primarily focused on industry and academia, focused on attraction, recruitment, retention, housing and reimbursement.
- Reviewing the accountability framework and interface requirements between regional governance model and appropriate operational structure given the size and geography of Northern Regions.
- Developing alternative funding mechanisms that attracts and retains critical workforce segments (physicians, registered nurses, pharmacists, …) and high talent management pool.
- Determining the appropriate funding / resource support for the growing service delivery pressures in the North as well as the impact of rapid industry growth (high population growth, transient and shadow population).
- Support for the more frequent requirement to conduct a community health needs assessment to be able to respond to the dynamic and growing challenges in the North.

Cluster 1 Opportunities
Human Resources Strategy and Management

I. Explore northern collaboration for comprehensive Health Human Resources (HHR) strategy development that includes HR refocus, talent management, HR technology and a focus on healthy work environments.

II. Ensure that HHR strategy, management and implementation includes the physician component and is focused on:
- Workforce/resource gaps, skills management and education;
- Alignment/realignment of current resources to core service delivery needs;
- Attraction/recruitment/retention of a talent workforce; and
- Enhanced business case approach to cost impact analysis related to physician recruitment and service repatriation.

III. Define talent strategy to ensure effective leadership in place (from governance to front line delivery) to support change in complex environment.

IV. Review current agreement language and requirements in the AHW-AMA-RHA Agreement and staffing union labour agreements, which limit the Regions' ability to provide service in an increasingly challenged environment.

V. Explore concept of establishing stronger rural academic centres across the three Northern regions as a mechanism to ensure steady human resource stream (includes physicians, nurses and other health care disciplines).

Cluster 1 Opportunities
Physician Leadership and Management

Our observations and identified opportunities reflect common and emerging physician practice across the country. Where these five opportunities are seen as desirable by AHW, the province will have to explore different remuneration models that support and lever physician behaviour and desired change.

I. Review MAC governance structure and mechanisms with specific attention to by-law adherence and alignment.

II. Develop a medical leadership accountability framework and leadership requirements (which includes examining current organizational and reporting structures, and current /potential roles and responsibilities for Chiefs in the management and decision-making process at the site and regional levels).

III. Create a Physician accountability framework with evaluation and quality/risk/performance management tools for Physicians which is integrated into the broader regional performance management framework.

IV. Explore alternative payment models for physicians with the objective to improve resourcing and linkage to care/service delivery model. (As part of this opportunity, explore alternate staffing models in consideration of physician AFT options – e.g., APN/NP model in ER and other primary care models.)

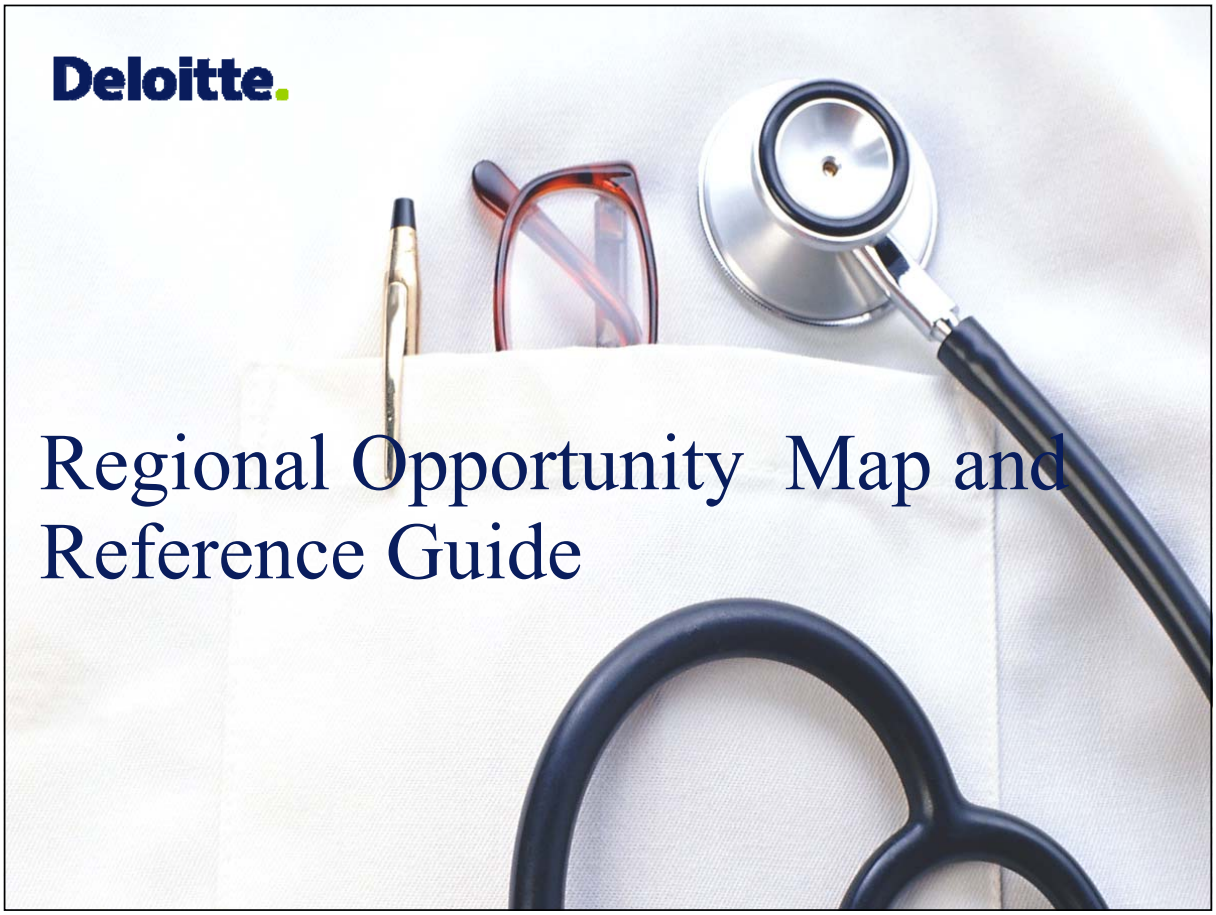
V. Develop a comprehensive Physician Impact Assessment process for physician recruitment related to needs planning and service expansion.

Cluster 1 Opportunities
Risk and Quality Management

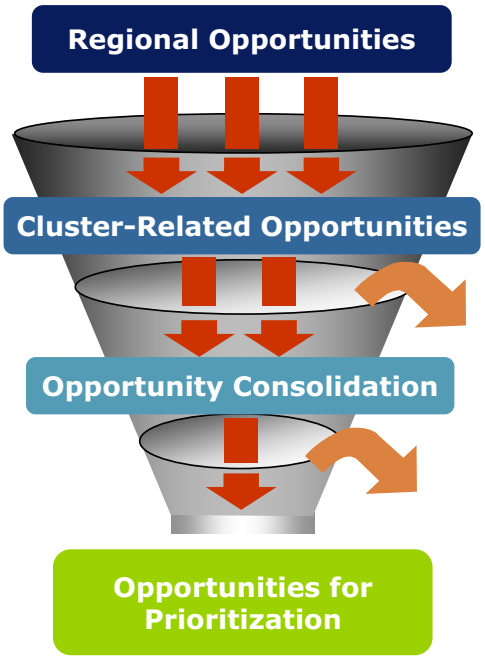
I. Increase awareness, commitment and focus on risk management as a key requirement for operations and decision-making across clinical and non-clinical service areas. Sample areas of focus include:
   - Evaluation/quality/risk/performance management tools for physicians
   - Regular community heath needs assessment
   - Stronger and consistent adoption of CTAS
   - Increased education for Board members

II. Develop a benefits realization approach for RSHIP to ensure investments are aligned to intended outcomes.

III. Increase collaboration and partnership with industry to address increasing environmental health workload and associated risks.



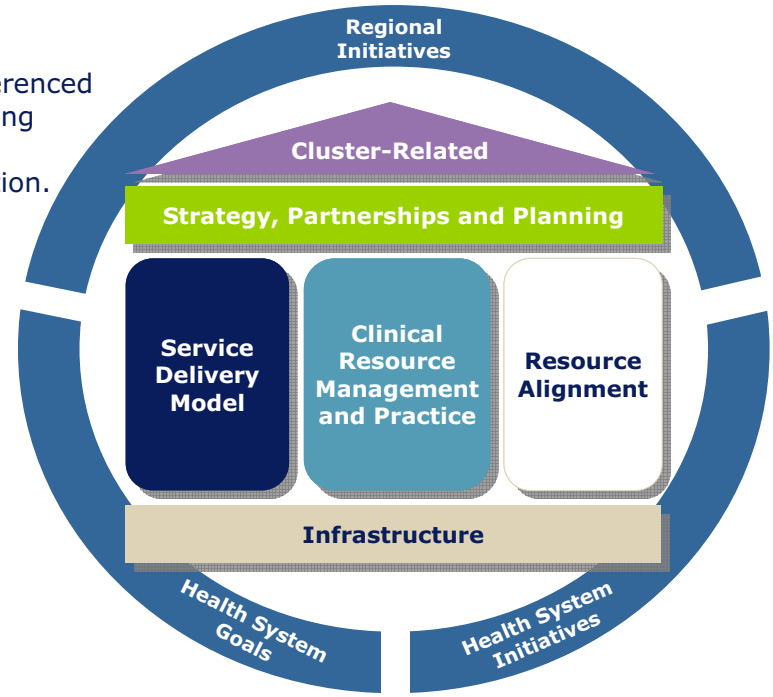
Regional Opportunity Map and Reference Guide
Introduction



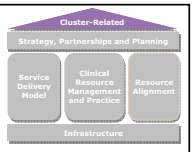
- A reference guide has been developed for the opportunities identified in the region's report.
- Opportunities have been filtered to facilitate discussion and planning.
- **Filter 1:** The overlap of cluster and regional opportunities is one filter.
  - Cluster Opportunities will be driven by a separate process through a collaboration of AHW and the Cluster 1 regions, and so have not been prioritized in the region's opportunity map.
  - Where Cluster and regional opportunities overlap, the cluster-related regional opportunities have been identified in this reference guide, but not included in the prioritization and sequencing process.
- **Filter 2:** Like / related opportunities have been consolidated to facilitate planning and action.
  - Opportunity consolidation is based on inter-dependencies and linkages, which are highlighted in the reference guide.

Regional Opportunity Map and Reference Guide
Opportunity Alignment

- To facilitate prioritization, opportunities are aligned across five areas, shown in framework below.
- This framework will be referenced to facilitate an understanding of the different types of opportunities for prioritization.
- Also important will be an understanding of how broader system goals and initiatives, and other regional initiatives impact opportunity prioritization.



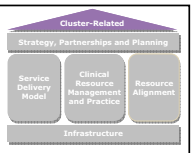
Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities



- The following regional opportunities are directly related to cluster opportunities.

Resource Optimization	
Opportunity Name	**Opportunity Description**
Finance Staffing	Monitor 2006-07 staffing levels to determine remaining staff savings opportunity for Finance, with consideration of further evolving Decision Support functionality in the region.
Health Records Staffing	Consider opportunity to shift some Health Records resources into a regional Decision Support function to support broader analysis and planning.
IT Staffing	Consider IT staffing levels with respect to broader regional IT and RSHIP implementation management.
IT Integration	Continue exploration of IT integration with PCHR, with specific assessment of potential costs, benefits, risks and implementation considerations associated with integration.
HR Staffing	Examine need for HR department roles and focus realignment once a new HR Strategy and Plan are developed for the region.
HR Telehealth	Examine HR service delivery options to increase use of existing telehealth infrastructure for HR and OH&S support across the region.
Clinical Telehealth	Engage clinical stakeholders to develop a regional strategy and resource plan to further leverage use of telehealth in clinical service delivery.

Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities

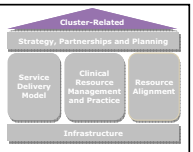


- The following regional opportunities are directly related to cluster opportunities.

Resource Optimization	
Opportunity Name	**Opportunity Description**
Telehealth Partnerships	Expand current clinical partnerships with other regions to support increased telehealth clinical service delivery.
Coordination via Telehealth	Enhance communication between respective facilities by leveraging Telehealth technology in a structured approach for coordination of service, information sharing of leading practices, CME and professional support.
Homecare Workload	Implement the RAI-HC, to ensure a standardized approach to assessment and ensure the collection of standardized volume and visit statistics across the region.

Regional Opportunity Map and Reference Guide

Cluster-Related Regional Opportunities

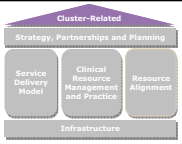


- The following regional opportunities are directly related to cluster opportunities.

Leadership, Governance, Accountability and Performance Management	
Opportunity Name	**Opportunity Description**
Regional Performance Management	Further develop the performance management focus and function in the region to drive increased accountability, monitoring and evaluation, with a clear accountability framework that cascades down to manager and frontline staff levels.
Succession Planning	To support broad talent management, the region needs a structure approach to succession planning that is integrated across key human resources - including executives, management, professional and support staff, and physicians.

Regional Opportunity Map and Reference Guide

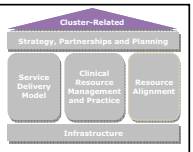
Cluster-Related Regional Opportunities



- The following regional opportunities are directly related to cluster opportunities.

Human Resources Strategy and Management	
Opportunity Name	**Opportunity Description**
HR Re-Focus	Re-focus regional priorities to recognize and drive Human Resources strategy and initiatives as a top corporate priority.
HR Strategy	The region needs to develop a comprehensive HR Strategy and Plan that is aligned to the business needs and operating realities of the north, and considers a number of key dimensions: significant population growth in the north, high level of market competition for resources and compensation, resourcing strategies and staffing models, partnerships with industry, broader community health focus across care providers. Physician planning needs to be an integrated component of this plan, so that the region has a consolidated plan that focuses its efforts on talent management to support current and future core service delivery.
HR Recruitment	The region needs to explore alternative strategies to HR planning to position the region for success in recruiting and retaining staff in the north – e.g. a staff housing strategy.
Education Strategy	Develop a coordinated education strategy and function that supports the full human resource base of the organization – executive, management, staff, and physicians – and which incorporates organization-wide learning and training, support for quality and risk management, support for maintenance of certification across staff and physician disciplines, with associated resources to enable the education strategy and function.
Performance Management	Develop online performance management processes for management and staff to enable improved performance measurement and management capabilities in the organization.
Tele-Learning	Develop a structured tele-learning program as part of a broader regional HR and education strategy.

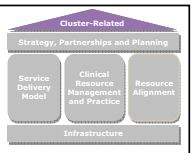
Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities



- The following regional opportunities are directly related to cluster opportunities.

Human Resources Strategy and Management	
Opportunity Name	**Opportunity Description**
Physician HR Strategy	Engage physicians and regional leadership in the development of a regional Physician Human Resource Strategy that is linked to the broader regional HR strategy, to address Physician resource gaps, skills management and education, alignment/realignment of current resources to core service delivery needs, remuneration and recruitment/retention.
Regional CME	Develop a regional approach and support for CME for both Canadian-trained and foreign-trained medical graduates, based on a sustainable business model, and integrated with the physician recruitment and retention strategy and broader regional education function.
Healthy Work Environment Strategy	Develop a targeted healthy work environment strategy as part of the region's HR re-focus, with corresponding infrastructure, support, and organization alignment (where necessary)
Healthy Workplace Forums	Create forums for management, staff and physicians to identify workplace challenges, and contribute to the development of strategies to address challenges.
Healthy Work Environment Communication Plan	Develop a communication and stakeholder engagement strategy and plan to re-engage management, staff and physicians in regional planning and programs to promote an engaged, healthy work environment.
HRIS Strategy	Develop strategy to address HRIS needs, which aligns HR technology enablers to support the organizations HR re-focus, and is part of the broader regional IT Strategic Plan development.

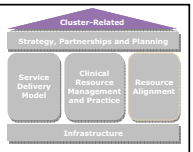
Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities



- The following regional opportunities are directly related to cluster opportunities.

Physician Leadership and Management	
Opportunity Name	**Opportunity Description**
MAC Review	Conduct an external review of MAC governance structure/mechanisms for the region, with specific attention to by-law adherence/alignment.
Physician Alternative Payment Models	Explore alternative payment models for physicians in the region, with an objective to improve resourcing, and linkage to care/service delivery model.– As part of this opportunity, explore alternate staffing models in the consideration of physician AFP options – e.g. APN/NP model in ER and community health clinics.
Physician Impact Assessment	Develop a regional Physician Impact Assessment process that is used for physician recruitment needs planning, and in assessment when new physicians are being considered.
Physician Accountability Framework	Create an accountability framework with evaluation and quality/risk/performance management tools for Physicians, which is integrated into a broader regional framework.

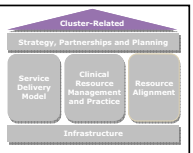
Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities



- The following regional opportunities are directly related to cluster opportunities.

Risk and Quality Management	
Opportunity Name	**Opportunity Description**
NWHC CTAS	Support implementation of a formal patient triage and CTAS function at NWHC.
STGH CTAS	Support implementation of a formal patient triage and CTAS function at STGH.
RSHIP Benefits Realization	Establish a benefits realization framework for the Meditech implementation that identifies, promotes, monitors and assesses benefits realization for each key department as Meditech implementation continues.
	Identify anticipated operational efficiencies as a result of Meditech system implementation, and develop an action plan to achieve them.
	Value Delivery: Consider options for business process transformation as part of benefits realization framework for the Meditech implementation, and other regional IT initiatives.
	Value Delivery: Ensure communication to business areas about the benefits of new system initiatives is realistic as to expected benefits and impact to users and business processes.
	Value Delivery: Continue use of business case approach for internal IT initiatives to ensure ongoing business alignment and benefits realization.
	Risk Management: As a mechanism to improve end-user buy-in and uptake to new systems, ensure that staff charged with cross training of staff members have an appropriate appreciation of the business processes in which the trainee is involved.

Regional Opportunity Map and Reference Guide
Cluster-Related Regional Opportunities

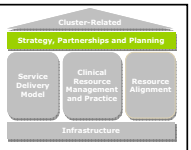


- The following regional opportunities are directly related to cluster opportunities.

Risk and Quality Management (continued)	
Opportunity Name	**Opportunity Description**
Clinical Lab IT	Modify the current Meditech implementation to improve controls over the creation of ad-hoc lab order sets.
Pharmacy IT	Work with RSHIP to assess cost/benefit of implementing required improvements to pharmacy module in Meditech.
Clinical Nutrition IT	Assess the cost/benefits of improving current systems support for Clinical Nutrition and Food Services, as part of broader regional IT infrastructure and planning.

Regional Opportunity Map and Reference Guide

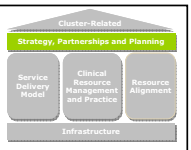
Strategy, Partnerships, and Planning



Opportunity Name	Opportunity Description
Change Mgmt Function	Develop clear change management function and support within HR that is linked to the broader HR strategy and education function, and which provides broad organization support to engage stakeholders in change initiatives. This will be a critical function to enable broader organization opportunities for change and to support ongoing work in regionalization.
Internal Communication Strategy	Develop a communications plan and strategy that promotes the benefits of regionalization, engages stakeholders in change initiatives, increases executive engagement, and reports back on resulting improvements from change initiatives.
NLHR Clinical Development	Continue with plans to expand clinical development within the Fort McMurray site, with a priority given to developing an enhanced orientation and preceptorship program. Please refer to HR section for additional opportunities.
Continue Building Mental Health Partnerships	Continue to build external partnerships with other mental health service providers (e.g. AADAC) and community social agencies.
Community Program Realignment	Consider realignment of community programs in the northwest under one umbrella.
Medical Director Portfolio	Examine the Medical Director portfolio to consider role re-alignment, overall organization structure, and support resources required to support strategic HR focus on physician recruitment, retention and management.
Continuing Care Capacity	Explore options to increase continuing care capacity in Fort McMurray.

Regional Opportunity Map and Reference Guide

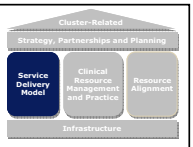
Strategy, Partnerships, & Planning (continued)



Opportunity Name	Opportunity Description
Rainbow Lake Shadow Population Billing	Rainbow Lake Health Centre: Investigate cost of 'shadow' population and determine billing options to ensure cost recovery for services provided by Rainbow Lake.
MD Leadership Alignment	Conduct an alignment review of physician leadership requirements across all services and roles.
Improved MD Relations	Engage physicians to identify methods to improve the perceived challenges in region-physician relations (e.g. physicians clinic facilities issues, physician involvement in broader regional planning and community health needs assessment, senior team representation on Board, etc.).

Regional Opportunity Map and Reference Guide

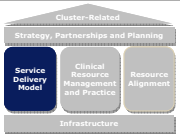
Service Delivery Model



Opportunity Name	Opportunity Description
Facility Role Review	Re-examine role of facilities and programs across the region in the context of human resource requirements and community health services needs.
	Conduct a facilities review of NLRHC to identify current and future care and service delivery requirements, in alignment with a regional community health needs assessment.
	NW Health Centre: There is space for an additional 10 beds at the Northwest Health Centre. Increases in volume would result in greater economies of scale in both quality and cost.
	St. Theresa General Hospital: Conduct a role review of St. Theresa General Hospital in the context of a broader regional community health needs assessment, to inform current capital planning.
	St. Theresa General Hospital: No staffing opportunity identified for STGH. Consider staffing with respect to broader role review opportunity.
	Rainbow Lake Health Centre: Opportunity to develop an collaborative practice model between nursing and medicine.
OR Utilization	Improve OR utilization and reduce overtime through implementation and adherence to booking policies.
Patient Safety & Surgical Pause	Implement patient safety policies, including surgical pause.

Regional Opportunity Map and Reference Guide

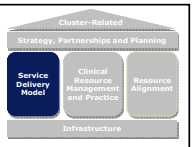
Service Delivery Model (continued)



Opportunity Name	Opportunity Description
CSR Improvements	Develop regional standards for policies, procedures, risk and safety protocols, and equipment trays for CSR services.
Paediatrics & OBS Co-location	Given the need for new physical space for the Pediatrics service in NLRHC, consider locating Pediatrics adjacent to Obstetrics and cross training staff.
Supportive Housing Review & Partnerships	Conduct a regional review of supportive housing requirements to determine optimum alignment of care resources.
	Identify & explore partnership opportunities for supportive housing developments.
Home Care Review	Conduct a regional review of home care services to align service model, resources, hours of service delivery, and access times to community health needs.
Population Health Review	Conduct a regional review of population health services to align service programming, resources, and use of telehealth in service delivery to community health needs.
Nurse-Led Clinics	Implement nurse led clinics with nurses functioning under medical directives in the areas of sexual health, well women, and STD in High Level.

Regional Opportunity Map and Reference Guide

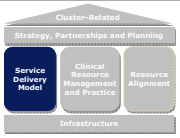
Service Delivery Model (continued)



Opportunity Name	Opportunity Description
Emergency Department External Review	Conduct external review of Emergency as a regional program, with focus on developing a coordinated and sustainable strategy to address needs of the respective communities served.
ED Model & Management	Review Emergency Department physician care delivery model and staffing.
	Explore opportunities to increase primary care and home care access to patients in FMM, in alignment to a broader regional community health needs assessment.
	Ensure that there is capability in the ED to accommodate patients with respiratory conditions requiring negative pressure, in line with national standards and recommendations.
	Examine options to shift outpatient registration and waiting areas outside of the ED.
	Review NLRHC policies regarding acceptance of non critical out-of-province patients.
	Improve the separation of statistical reporting across the ED and Ambulatory Care Clinics at NLRHC.
	Establish and adhere to guidelines related to booking and scheduling in ambulatory care.
	Explore options to decant ambulatory volumes from the ED, and then consider staffing investment opportunity relative to align to true ED volumes and recommended HPPD.

Regional Opportunity Map and Reference Guide

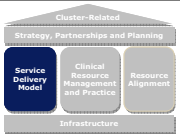
Service Delivery Model (continued)



Opportunity Name	Opportunity Description
Allied Health Services Review	Explore and define potential role of Respiratory Therapy services in the northwest area of the region, in alignment with a broader community health needs assessment.
	Explore options to expand RT scope of practice in NLRHC, with consideration of corresponding staffing implications on RT and nursing, as part of broader regional HR strategy.
	Explore options to increase access to Recreation Therapy services, with focus on the northwest area of the region, in alignment with a broader regional community health needs assessment.
	Consider realignment of clinical nutrition services t o strengthen linkages with the evolving Primary Care and Chronic Disease initiatives, in alignment with a broader community health needs assessment.
	Explore options to expand regional Physiotherapist staffing, with focus on community-based services in the northwest area of the Region, in alignment with broader regional community health needs assessment.
	Conduct broader Occupational Therapy service planning, to ensure alignment to a broader regional community health needs assessment.
	Conduct broader Audiology and SLP service planning to inform appropriate alignment of identified staffing investment opportunity to community health needs, as part of a broader regional community health needs assessment.
	Explore and define the potential role of Social Work services in the region to inform appropriate alignment of identified staffing investment opportunity to community health needs, as part of a broader regional community health needs assessment."

Regional Opportunity Map and Reference Guide

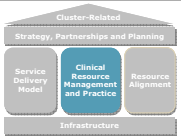
Service Delivery Model (continued)



Opportunity Name	Opportunity Description
Environmental Health Review	Conduct a regional review of Environmental Health services to align service programming and resources to increasing community health inspections needs and to meet minimum provincial standards.
Dietician and Technologist Staffing Mix	Review staffing mix of Registered Dietitians and Clinical Dietary Technologies for the Region.
Property Management Accountability	Conduct a role review of functions and accountability for property management services in the Region, to determine most appropriate operations alignment.
Medicine External Review	Conduct external review of Internal Medicine services as a regional program, with focus on developing a coordinated and sustainable strategy to address needs of the respective communities served.
Surgery External Review	Conduct external review of Surgery services as a regional program, with focus on developing a coordinated and sustainable strategy to address needs of the respective communities served.
	Review plans for changing the surgical team model of care delivery.
	Consider converting 2 surgical beds to step-down beds with enhanced staffing levels.

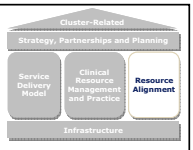
Regional Opportunity Map and Reference Guide

Clinical Resource Management and Practice



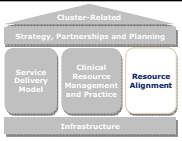
Opportunity Name	Opportunity Description
Admission/ Discharge Criteria and Practice	Examine NLRHC admission/ discharge criteria
	Conduct a review of Medicine unit admission practices and policies to improve alignment of care practices to care needs.
Improved Coding	Improvements to Regional Coding and Abstracting
Improved MD Documentation	Improve MD Documentation in Inpatient Charts
Clinical Protocol Adoption	Develop a clinical adoption strategy for standardized, peer reviewed protocols and care maps for key conditions (e.g. pneumonia, cellulitis, congestive heart failure, and MI management).
Regional Lab Advisory Council	Establish a region-wide Lab Advisory Council, comprised of regional stakeholders with a DKML representative, which sets standards and monitors ongoing utilization.
	Through the Lab Advisory Council, engage stakeholders in the design and implementation of consistent region-wide lab utilization and standards, with a mechanism for ongoing monitoring by the region.
Drug Utilization	Establish a common structure and process for monitoring regional drug utilization, medication errors and standardizing related policies and procedures.

Regional Opportunity Map and Reference Guide
Resource Alignment



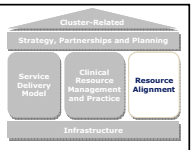
Opportunity Name	Opportunity Description
NLRHC Acute Nurse Staffing	Consider potential staffing investment on Medicine to align to peer levels.
	Develop a targeted recruitment and retention strategy for Obstetrics to ensure continued sustainability of NLRHC obstetrics services, as part of a broader regional HR strategy.
	Monitor 2006-07 staffing levels to ensure that Obstetrics is adequately staffed to be in line with peers.
	Monitor 2006-07 staffing levels to ensure that Surgical Care is adequately staffed to be in line with peers.
	Improve tracking of staffing and workload across Pediatrics.
	Monitor 2006-07 Psychiatry staffing levels to ensure alignment to recommended HPPD, and ability to maintain crisis nurse services.
	Monitor ambulatory care staffing levels in alignment with ED review and primary care capacity building in FMM.
Continuing Care Nurse Staffing	Monitor 2006-07 total care team staffing levels across NLHR continuing care units to ensure alignment to recent AHW target of 3.4 HPRD, with consideration of appropriate staffing allocations across acute and continuing units.

Regional Opportunity Map and Reference Guide
Resource Alignment (continued)



Opportunity Name	Opportunity Description
NWHC, STGH and RLHC Nurse Staffing	Explore options to reduce staffing impact and premium salary costs associated with high sick and overtime usage at NWHC.
	Explore options to reduce staffing impact and premium salary costs associated with high sick and overtime usage at STGH.
	Examine staffing patterns to identify options for reductions in overtime premium costs at Rainbow Lake Health Centre.
NLHR Allied Health Staffing	Monitor 2006-07 DI staffing levels to ensure continued alignment to peers.
	Continue to explore recruitment strategies for DI to reduce reliance on premium overtime costs, as part of broader regional HR strategy.
	Monitor 2006-07 RT staffing levels to ensure continued alignment to peers.
	Continue to explore recruitment strategies for RT to reduce reliance on premium overtime costs, as part of broader regional HR strategy.
	Monitor 2006-07 Pharmacy staffing levels to confirm continued alignment to peers.
	Monitor 2006-07 PT staffing levels to determine remaining staffing investment required to align to peer levels.

Regional Opportunity Map and Reference Guide
Resource Alignment (continued)



Opportunity Name	Opportunity Description
Corporate and Support Staffing	Monitor 2006-07 staffing levels to determine savings opportunity for the General and Nursing Admin areas to align to peer staffing levels.
	Monitor 2006-07 staffing levels for Housekeeping, Laundry & Linen and Materials Management to alignment to peer levels, with consideration of minimum on-site staffing requirements in the northwest.
	Conduct a support service role review across these functions to determine potential realignment of roles, and to explore the feasibility of a support services float pool in NLRHC.
	Monitor 2006-07 staffing levels to ensure continued alignment to peer staffing levels.
	Monitor 2006-07 staffing levels to determine level of staff savings opportunity for Health Records, Registration and Telecom relative to peers, with consideration of minimum staffing requirements in the northwest sites.

Regional Opportunity Map and Reference Guide
Infrastructure

Opportunity Name	Opportunity Description
Laundry Equipment Business Case	Develop a contingency plan for laundry services, including pandemic planning.
	Conduct a cost-benefit assessment of laundry equipment as part of the development of a long range service plan.
Pharmacy Technology Business Case	Develop a business case to explore the costs and benefits of implementing automated unit dose and other Pharmacy technologies to support efficient operations across the region.
NLRHC Parking & Helicopter Pad	Conduct a cost-benefit assessment of the current parking and helicopter pad facilities challenges at NLRHC, and collaborate with AHW, Alberta Infrastructure and private industry to identify options for resolution.
Northwest Physicians Clinic	Engage key stakeholders to develop an action plan to address High Level physicians' clinic issues, with consideration of broader clinical sustainability of health service delivery in the northwest.

Regional Opportunity Prioritization

Regional Opportunity Prioritization
Introduction

- Based on a facilitated working session with the Region's Senior Managemetn Team, the Project Team have developed an Opportunity Sequence Map.
- Opportunity prioritization has focused on sequencing, using four key factors:
  - Opportunity Inter-Dependencies
  - Resource Requirements (Leadership, People, Financial, External Support)
  - Identified Risks
  - Timeline Feasibility
  - Priority Level to the Region
- The opportunity mapping (timeline) has four phases of effort:
  - Phase 1: 0-6 months
  - Phase 2: 6-12 months
  - Phase 3: 12-18 months
  - Phase 4: 18-24 months

Regional Opportunity Prioritization
Introduction (continued)

- During the working session with the region's Senior Management Team, opportunities were reviewed by phase of effort to discuss the appropriateness and feasibility of the preliminary prioritization.
- Throughout the discussion, a "go forward determination" was also assigned to each opportunity to establish if phasing needs to be changed, deferred and / or not pursued:

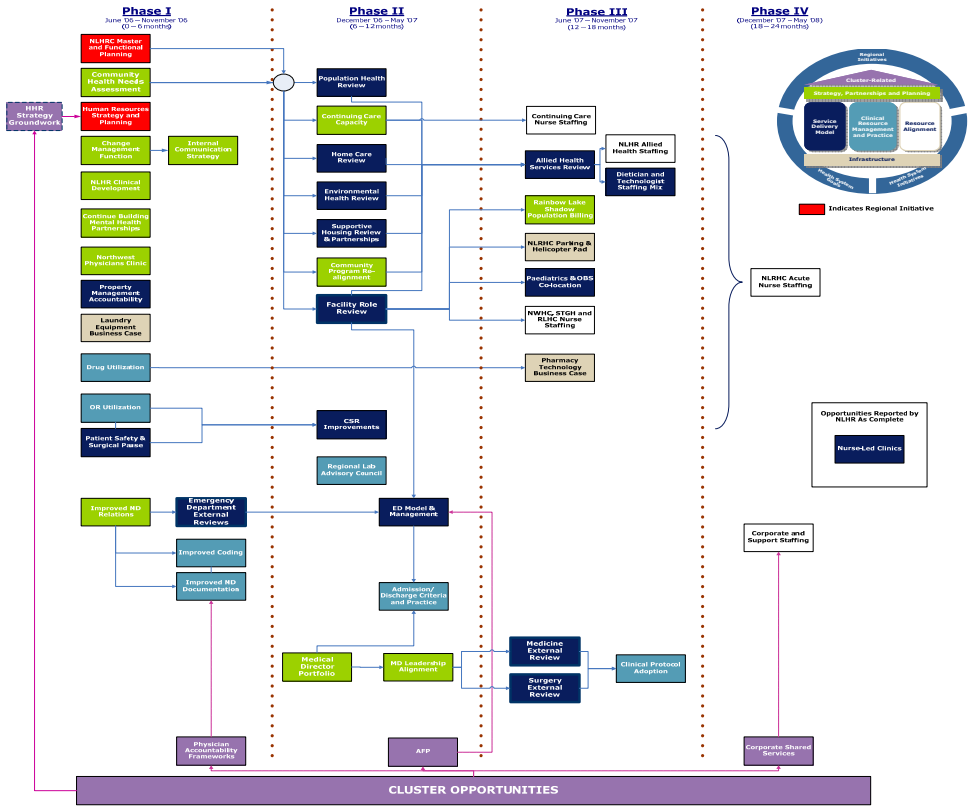
  – ***Priority*** – Opportunities that are considered priorities for achievement by the region over a two year period.

  – ***Deferred*** – Opportunities which must be deferred at this stage, but which will be re-considered for pursuit in the future.

  – ***Not Pursued*** – Opportunities which are not considered as regional priorities, and so will not be pursued.

- The following slide presents the opportunity prioritization map, based on those opportunities identified as priorities by the region.
- Supporting this opportunity map is an overview of the regional lead, required resources, and priority assignment for each regional opportunity.

Regional Opportunity Prioritization Map



Regional Opportunity Prioritization

Phase 1 Senior Leads and Resources

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
Change Management Function	Bernie Blais	✓	✓	✓	✓		
Internal Communication Strategy	Lorraine Lynch	✓	✓	✓	✓		
Community Health Needs Assessment	Pat Furey	✓	✓	✓	✓		
NLHR Clinical Development	Bernie Blais / Pat Furey / Valetta Lawrence / Nell Vrolyk	✓	✓	✓	✓		
Continue Building Mental Health Partnerships	Valetta Lawrence	✓			✓		
Human Resources Plan	Valetta Lawrence	✓	✓	✓	✓		

Regional Opportunity Prioritization

Phase 1 Senior Leads and Resources (continued)

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
OR Utilization	Pat Furey	✓			✓		
Patient Safety & Surgical Pause	Pat Furey	✓			✓		
CSR Improvements	Pat Furey / Linda Metz	✓		✓	✓		
Regional LAC	Valetta Lawrence	✓			✓		
Improved MD Relations	Bernie Blais / Dr. Nicholson		✓	✓	✓		
Drug Utilization	Valetta Lawrence	✓			✓		
Northwest Physician's Clinic	Bernie Blais / Nell Vrolyk	✓	✓	✓	✓		
Property Management	Linda Metz	✓			✓		
Laundry Equipment Business Case	Linda Metz	✓			✓		

Regional Opportunity Prioritization

Phase 1 Senior Leads and Resources (continued)

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
Improved Coding	Linda Metz	✓			✓		
Improved MD Documentation	Dr. Nicholson	✓			✓		
Emergency Department External Review	Bernie Blais / Dr. Nicholson		✓	✓	✓		
Rainbow Lake Shadow Population Billing	Linda Metz / Nell Vrolyk	✓			✓		

Regional Opportunity Prioritization

Phase 2 Senior Leads and Resources

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
Facility Role Review	Bernie Blais	✓	✓	✓	✓		
Community Program Realignment	Nell Vrolyk / Pat Furey / Valetta Lawrence	✓			✓		
Supportive Housing Review & Partnerships	Pat Furey / Nell Vrolyk	✓	✓	✓	✓		
Home Care Review	Pat Furey / Nell Vrolyk	✓	✓	✓	✓		
Environmental Health Review	Pat Furey	✓	✓	✓	✓		
Population Health Review	Pat Furey / Nell Vrolyk	✓	✓	✓	✓		
Continuing Care Capacity	Pat Furey	✓	✓		✓		

Regional Opportunity Prioritization

Phase 2 Senior Leads and Resources (continued)

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
ED Model & Management	Dr. Nicholson / Valetta Lawrence / Pat Furey		✓	✓	✓		
Medical Director Portfolio	Bernie Blais / Dr. Nicholson		✓	✓	✓		
MD Leadership Alignment	Bernie Blais / Dr. Nicholson	✓	✓	✓	✓		
Admission/ Discharge Criteria and Practice	Pat Furey / Valetta Lawrence / Nell Vrolyk / Dr. Nicholson	✓	✓		✓		

Regional Opportunity Prioritization

Phase 3 Senior Leads and Resources

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
Surgery External Review	Bernie Blais / Dr. Nicholson / Pat Furey	✓	✓	✓	✓		
Medicine External Review	Bernie Blais / Dr. Nicholson / Pat Furey		✓	✓	✓		
Clinical Protocol Adoption	Dr. Nicholson / Valetta Lawrence / Pat Furey	✓	✓		✓		
Allied Health Services Review	Pat Furey / Valetta Lawrence / Nell Vrolyk	✓	✓		✓		
NWHC, STGH and RLHC Nurse Staffing	Nell Vrolyk	✓			✓		

Regional Opportunity Prioritization

Phase 3 Senior Leads and Resources (continued)

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
Continuing Care Nurse Staffing	Pat Furey / Nell Vrolyk	✓			✓		
NLRHC Parking & Helicopter Pad	Linda Metz	✓	✓		✓		
Pharmacy Technology Business Case	Valetta Lawrence	✓		✓	✓		

Regional Opportunity Prioritization

Phase 4 Senior Leads and Resources

Opportunity Name	Responsible Senior Lead	Project Resources			Prioritization		
		Internal Resources	Additional Financial Support	External Resource Support	Priority	Deferred	Not Pursued
NLRHC Acute Nurse Staffing	Pat Furey / Valetta Lawrence	✓	✓		✓		
Corporate Services Staffing	Linda Metz	✓			✓		

Deloitte.

AHW RHA Efficiency Review
Northern Lights Health Region

Performance Management Overview

Final Report

July 14, 2006

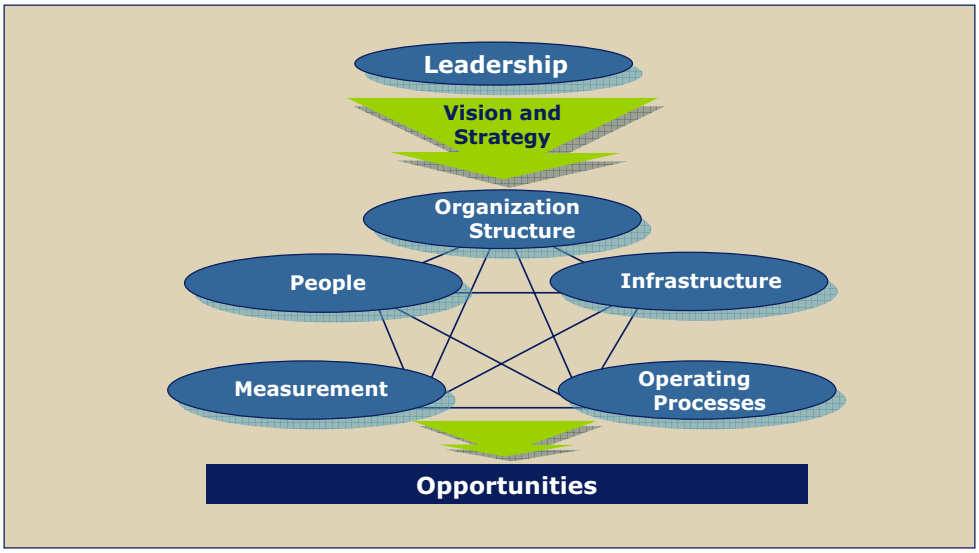
Audit. Tax. Consulting. Financial Advisory.

Property of Alberta Health and Wellness

Performance Management Overview

Key Components of Performance Management

- The framework below is used to assess performance management alignment. There are seven components used in this assessment.



1. Leadership

Leading Practice Attributes	• Visible leadership; vision and strategy focused; systems thinking and planning; • Transparent and timely management processes related to decision-making; • Demonstrated commitment to standardization; • Role mentorship and succession planning; • Multi-stakeholder relationships management

Findings	
Documentation Review	**Stakeholder Feedback**
• 3 Year Health Plan; Annual Business Plan; Annual Report • Organization Charts	• Board Chair and CEO Leadership in the region has had turnover over the past year, which has resulted in some initiatives being on hold. • Staffing shortages and large portfolios have impacted managers' ability to focus beyond daily 'fire-fighting' to broader strategic and operational planning. • The new Board Chair has driven efforts to establish a stronger role in both the west and east side of the region, which has been supported by new CEO, • Two MACs in the region cause a challenge to consistent physician leadership.

Deloitte Observations	• The geography of the region has created a challenge for leadership to maintain Senior Management across the regional geographic divide. This may suggest the need for re-focused attention on leadership structure to support the west and east sides of the region. • Strained physician relations in High Level suggest the need for greater leadership focus to create better regional connection and resolve existing risks. • Turnover of Board and CEOs appears to have halted strategic action, such that leadership focus has, in part, been on 'fighting fires' instead of effecting significant change during the CEO's absence. • Although the new Chair has identified a number of planned partnerships, there has historically been a lack of multi-stakeholder partnership and relationship management – especially given presence of private industry in regions – suggesting the need for focused leadership to support this area

2. Vision and Strategy

Leading Practice Attributes	• Clearly articulated Mission, Vision, and Value Statements (or Guiding Principles) • Current Strategic Plan with supportive structure and processes to cascade to operational level; prioritization process to focus organizational initiatives and decision-making • Performance management processes and structure aligned to support strategy; • Focused on direction; • Cross RHA collaboration; integration mindset.

Findings	
Documentation Review	**Stakeholder Feedback**
• 3 Year Health Plan; Annual Business Plan; Annual Report,	• The region's mission, vision and strategy were revisited and confirmed through a Fall 2005 planning exercise, with good Board, management and CHC involvement. • Strategies are in place, but broader health human resource strategy is needed. • Quarterly reports to Board and AHW update progress towards regional objectives and strategies.

Deloitte Observations	• The region has a clearly articulated mission, vision and principles, which are supported by the three-year plan and annual business plan. • Three-year plan and annual business plan show alignment to AHW requirements, and performance indicators are in place to track progress to plans. Regional service plans also show alignment to key strategic priorities. • The region has a large number of initiatives identified in planning, which may pose challenges to achieving them within the identified three-year timeline. Further delineation of strategic vs. operational initiatives may support this planning. • An overall implementation timeline for the three-year plan is needed, to ensure balanced approach to resource requirements to support each initiative.

3. Organization Structure

Leading Practice Attributes	• Organizational structure reflects unique requirements of organization, service delivery; supports changing service and people requirements; • Supports timely decision-making and efficient work flow; role accountability and communication • Minimizes role duplication and confusion • Strategic portfolios instead of service management ones

Findings	
Documentation Review	**Stakeholder Feedback**
• Organization Structure / Charts • Role descriptions (select management roles)	• Senior Management is identified as being extremely thin, with broad portfolios that limit capacity for planning and programming. • Medical Director and MOH positions have been combined, and although there are physician chief roles, they are reported as being not actively involved in operations. • Although regional managers are in place, the geographic distance is challenge to maintaining connection to staff in the rural communities. • The organization's choice to not replace the VP Human Resources has resulted in reduced Senior Management focus on this area.

Deloitte Observations	• The overall organization structure of NLHR is challenged by the geography of the region, which suggests the need for additional role alignment and accountabilities for the management structure in the West to support operations, with corresponding review of the most appropriate alignment of staff to regional vs. site-based management. • Given the challenges currently faced by the region, and the need for a creative approach to address northern issues, a VP level focus is suggested for Human Resources, and External Partnerships. • The geographic divide in the region suggests the need for designated senior Medical leadership for the East and West. • Although the current model of one MOH for the region is appropriate, this role needs to be separate from Medical Director

4. People

Leading Practice Attributes	• Current Human Resources Strategic Plan; HR planning and management from a regional perspective (move from local to central) • Standardized performance review process with regular application • Identified competencies for roles – particularly at leadership level • Sufficient HR staffing support across organization to support management and staff • Supportive staff development and education program / process in place / career paths / laddering opportunities

Findings	
Documentation Review	**Stakeholder Feedback**
• HR Recruitment and Retention Plan • Organization Structure	• The organization's choice to not replace the VP Human Resources has resulted in reduced Senior Management focus on this area. • Given the need for increased focus on recruitment, a full-time position was recently created. • Although staff shortages have caused delays to role updates, competency-based role descriptions are in place.

Deloitte Observations	• Although an HR plan exists, the region needs consider a more strategic and creative approach to address northern health HR issues, supported by senior level leadership for HR. The recent creation of a dedicated recruitment support in HR will support this initiative, although senior leadership to drive recruitment efforts is needed. • Given resource challenges, the region should consider further partnerships with other regions to leverage pre-existing program/material development. • Additional RN recruitment options exist, where improved connection with local colleges is needed to create more placement positions, and thereby maintain a higher level of local talent. • A performance management review process, exists, but is not consistently in place.

5. Infrastructure

Leading Practice Attributes	• Current and integrated information management, technology and facility plans • Sufficient and appropriate technology to support efficient and effective operations • Capital replacement plan (current and integrated); Facility development processes and plans to support care requirements and efficient operations • Metrics to assess value of investment (economic and social value, linking service to infrastructure) • Assessment of new business models to enable infrastructure investment

Findings	
Documentation Review	**Stakeholder Feedback**
• IT planning documents • Capital Redevelopment Submissions	• Good funding exists for capital equipment, driven in part through private industry relationships. • The region's IT initiatives are resource-intensive but are expected to provide a good information foundation for operations. Challenges in data reporting through the first phase of implementation have impacted information capture in 2005-06. • Availability of land in FMM is a barrier to development of new care delivery space, due to competition with private industry.

Deloitte Observations	• In FMM, leadership should explore inter-Ministry partnerships to obtain land for housing and facilities development. • Given the need for a regional community health needs assessment, the region should pause capital redevelopment planning until alternative service delivery models are considered in key areas (e.g. St. Theresa, La Crete). This should be further combined with the exploration of community and agency partnerships to support alternative service delivery models. • IT infrastructure re-development needs to consider physician IT in current strategic planning, so that the region is well-positioned to fully leverage the benefits that can be driven through the Meditech implementation.

6. Measurement

Leading Practice Attributes	• Existence of a comprehensive performance management system in place (people, financial, operations, satisfaction, and other key processes) • Development of performance metrics and targets to manage care and service; linkage of measurement to action and communication; • Consistent, standardized measures • Performance measurement linked to quality and risk management

Findings	
Documentation Review	**Stakeholder Feedback**
• 3 Year Health Plan; Annual Business Plan; Annual Report, • Annual Reports	• Performance is measured on a quarterly basis to track to organization plans and goals, with linkage to CQI initiatives. • Performance goals and indicators are established in planning, and department-level actions are in place to support. • Individual performance management processes are in place, but are inconsistently applied.

Deloitte Observations	• The region has performance management in place through the three-year and annual planning processes. • A more comprehensive performance management system/framework is suggested that uses a scorecard approach to focus the cascading of regional goals to all levels of the organization and physicians, and enables regular monitoring and evaluation. • Further, performance management, clinical service utilization, and clear roles, responsibilities and accountabilities for physicians is needed to support regional strategy, operations, care delivery and risk management.

7. Operational Processes

Leading Practice Attributes	
	• A formal, organization-wide risk identification and management process is in place; • Established processes in place to support standardization and development of practice • Established processes, initiatives to support standardization of care and service • Established resources to support initiative implementation and monitoring • Assessment of new or different business models to support service delivery and integration • Management processes that support accountability

Findings	
Documentation Review	**Stakeholder Feedback**
• Annual Business Plan • Accreditation Report • Care documentation (charts) • Policy/Procedure • Risk Management Framework	• The region has established 10 Quality Improvement teams consisting of front-line staff, management, and community members to address quality issues on a monthly basis. • A new Patient Safety/Risk Management role has been established to support broader risk management. • Process standardization is underway across the region. • EMS service response times are a potential risk, but are operated by the municipalities.

Deloitte Observations	
	• The region should continue efforts to standardize policies, procedures, roles, etc., with consideration of geographic and operating differences between sites. • The presence of two MACs in the region, with limited coordination between each, is a challenge to clinical practice standardization. • Further partnership development with the municipalities is needed to support emergency service delivery across the region. • The region needs to engage in a community health needs assessment with a focus on exploring alternative service delivery models to support care delivery, especially given geographic limitations that prevent patient flow between the East and West sides of the region.

Summary Remarks

Strengths to build on include:

- **Good alignment between the three-year plan and annual plan**
- **The establishment of a Patient Safety/Risk Management role to support the region.**
- **Progress in Meditech implementation and demonstrated leadership across non-metro RHAs**
- **Renewed focus on creating regional culture under leadership of new Board Chair and CEO**
- **Leadership recognition to establish and grow external partnerships with industry related**

Areas for further consideration:

- **Development of an overall implementation timeline and plan for strategic priorities that links resources and organization change capacity**
- **Continued examination of organization structure to ensure portfolio balance and alignment across East-West geographies**
- **Separate Senior Leadership focus on Human Resources and External Partnerships**
- **Integration of Physician IT as part of broad IT strategic planning**