

Case for Successful Quick-Win Execution:

***Hip and Knee Joint Replacement
Integrated Model of Care:
Executive Summary***

Prepared by:
Hips and Knees Priority Action Team
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1. Executive Summary

In October 2006, the South West Local Health Integration network (“South West LHIN”) identified several high-level action plans in their Integrated Health Services Plan. One of these action plans involved accessing the right services, in the right place, at the right time. The work of the Steering Committee was identified as a Quick Start opportunity. This resulted in the creation of the Hips and Knees Priority Action Team (“Hips and Knees PAT”) in early 2007 to promote and build on the work of the Steering Committee to ensure an integrated approach to hip and knee total joint replacements across the LHIN. The work of the Hips and Knees PAT will also serve to inform other South West LHIN access and integration activities. Membership included several members from the previously existing Steering Committee but also included members not involved in the previous work. This report summarizes the work of the Hips and Knees PAT.

APPROACH

The Hips and Knees PAT used the information in the Steering Committee’s Current State Report and the Future State Report as a starting point for discussion. The Hips and Knees PAT:

- Refreshed quantitative data;
- Reviewed inventories of services and practices. At the hospital and agency level, care pathways and education tools were obtained;
- Conducted further best practice research;
- Developed a proposed model of integrated service delivery for total joint replacement in the South West LHIN; and,
- Developed a community engagement strategy and conducted community engagement.

In order to fully design the recommendations, guidelines, outcomes and indicators of the various components of the model, the Hips and Knees PAT formed four Task Teams in late November, 2007.

- Standardized Referral, Central Registry and Assessment, and Secondary Prevention Task Team
 - The purpose of this time-limited task team was to fully design the recommendation, guidelines, outcomes and indicators for Standardized Referral, Central Registry and Assessment, and Secondary Prevention, and conduct detailed implementation planning for successful execution of a standardized referral process and central registry process in 2008/2009.
- In-Hospital Care
 - The purpose of this team was to conduct an inventory of in-hospital care practices, design the high-level recommendation, guidelines, outcomes and indicators for what in-hospital care should look like in the South West LHIN. Detailed design of the recommendation and implementation planning for successful execution will continue in 2008/09. The scope of this team’s work was limited to designing the recommendation.

- Post-Acute Care
 - The purpose of this team was to design the high-level recommendation, identify the various streams of post-acute rehabilitation, and create the guidelines, outcomes and indicators for post-acute rehabilitation in the South West LHIN. Detailed design and implementation planning for successful execution will continue in 2008/2009. The scope of this team's work was limited to designing the recommendation.
- Education Tools
 - The purpose of this time-limited task team was to fully design the recommendation, guidelines, tools, outcomes and indicators and, conduct detailed implementation planning for successful execution of the common education tools in 2008/2009.

The Hips and Knees PAT and the Task Teams used the Health System Integration Methodology (“HSIM”) to provide a consistent planning and implementation approach. This involved a step-by-step process whereby certain activities and tools were completed. Task Teams met independently with occasional combined sessions for facilitated workshops and for the purposes of keeping the work of the entire project aligned. Task Team Leads provided regular updates on the team's progress at biweekly Team Lead conference calls and monthly PAT meetings. Task Team Leads presented their final Team recommendations to the Hips and Knees PAT on March 5th, 2008. The HSIM's Building Block framework was used as a guide to aid teams in the future design of their recommendations and to help illustrate how the design can be applied in the system by components.

This process has been a learning experience for the PAT members and South West LHIN. The Hips and Knees PAT is the first PAT to proceed to this stage of implementation planning for an integrated service delivery model for the South West LHIN. It is important to note that wait time is a complex function of many different variables. The integrated model of care addresses many of those variables; however, it does not fully address system-wide capacity issues such as the availability of health human resources, acute care beds, and other facilities to move patients into at the end of their hospital stay. These capacity issues limit the number of surgeries that can be performed and are not within the scope of the Hips and Knees PAT.

CURRENT STATE

A current state assessment of total hip and knee replacement services in the South West LHIN identified several key findings.

- Extensive human resource shortages:
 - Nurses – limiting the number of beds that can be open and overworking the nurses currently working in the system causing burnout;
 - Anesthesiologists – more would increase surgical capacity; and
 - Therapists – the current numbers are stretched too thin and patient care in the recovery phase is starting to suffer.
- System-wide bed shortages:
 - Lack of beds in hospitals performing surgeries is limiting the number of surgeries that can be performed; and
 - Lack of beds in Long-Term Care and Alternate Level of Care facilities means that patients stay longer in hospitals.
- Desire for a standardized provincial care path that is well established and clearly describes the roles of each player along the path.
- Need for better segmentation of patients into those who need acute care and those who could be ambulatory; and treatment of patients according to their individual needs.

- Timing of patient discharge is causing strain on post-acute care facilities and organizations.
- Interest in centralized patient waitlist to ensure patients are referred to the most appropriate surgeon and providers have access to wait list to enable better planning.
- Need to increase knowledge and information sharing across various providers along the patient care path. This will require changes to processes and enhanced information technology capabilities. Privacy and security will be the major issues to overcome.
- Funding needs to better reflect the actual costs of delivering care and it needs to align better with long-term capacity planning.

RECOMMENDATION

Rationale for Change

Currently, wait times in the South West LHIN for hip replacement surgery and for knee replacement surgery are above the provincial benchmark of 182 days. With the demand for hip and knee total joint replacement expected to grow significantly in the coming years and continued constraints on hospital resources such as available beds, operating room time, and staff, this presents a challenge that demands change.

Integrated Model of Care

In response to the current and evolving needs of this specific patient population, the Hips and Knees PAT is recommending this integrated model of care to improve service delivery efficiency and effectiveness, resulting in decreased wait times, enhanced quality of care for the patient and increased access. A fundamental goal is to ensure consistency in the delivery of hip and knee care throughout the South West LHIN, by incorporating a combination of best practices and lessons learned from a review of comparable existing models and associated research.

It is expected that the new integrated model of care will decrease hip and knee total joint replacement surgery wait times in the South West LHIN to be equal to or lower than the provincial benchmark of 182 days. In addition, this new model could be used as a framework for future cross-LHIN surgical processes.

Mission: The hip and knee replacement delivery model strives to ensure that individuals have timely, appropriate and equitable access to hip and knee replacement services based on best practices and evidence-based care. Through the use of a common multidisciplinary pathway spanning primary and secondary prevention through post-acute care, services are standardized and delivered efficiently in a coordinated manner.

Vision: Within the next five years, measures will show achievement of the following elements in the evidence-based care and management of hip and knee replacement patients within the South West LHIN:

- Clearly defined continuum of care available to all patients across the South West LHIN resulting in positive clinical and functional outcomes;
- Individuals have equitable timely access to services across the South West LHIN;
- Reduction in surgical wait times;
- The patient, family and/or their support system is an active participant in their care and self management;
- Demonstrated improvement in consumer satisfaction measures; and

- The South West LHIN delivers high quality, best practice care.

The mission and vision are closely aligned with the South West LHIN Vision for Integration.

The integrated model of care incorporates the following:

- Standardized Referral, Central Registry and Assessment and Education Centres to improve the overall flow of patients and ensure common information is obtained at referral and assessment;
- Enhancements to the role of Secondary Prevention and Post-Acute Care, addressing gaps in provision and access;
- A combination of best practices and lessons learned from other jurisdictions, modified to the specific needs of the South West LHIN and its providers and patients;
- Common clinical guidelines, indicators, education tools and care pathways that span across each of the steps along the continuum of care;
- Processes and systems that enhance the flow of communication between healthcare providers at each step along the continuum allowing for more integrated care and a more responsive system of care; and
- A performance management component that collects and evaluates data and outcomes in order to be more responsive to the needs of our patients.

Service delivery components of the integrated model of care are listed below:

- Standardized Referral Process – a standardized referral form will incorporate patient choice and streamline the intake process to expedite patients to receive appropriate services;
- Central Registry – will be the single point of entry into the system and will allow for the use of a single wait list to help ensure wait times are distributed appropriately across the LHIN;
- Assessment and Education Centres - At the Centres, an initial assessment will be performed by multi-disciplinary assessment teams with musculoskeletal expertise to determine if patient is a surgical candidate, to direct patient to appropriate secondary prevention services, to aid in pre-arranging necessary post-acute care. In addition, the team will educate all patients as required and distribute patient education binder;
- Secondary Prevention – refers to a wide variety of support available through specific community programs, providers, select outpatient departments and other resources;
- Pre-Admit / In-Hospital – use of a common clinical care pathway will ensure patient treatment across the South West LHIN is equitable and in accordance with best practices. Adherence to pathway in combination with the Assessment and Education Centres and Secondary Prevention should result in a reduction in the length of stay;
- Post-Acute – post-acute planning will begin with the initial assessment conducted in the early stages of the integrated model of care and confirmed while the patient is in-hospital. Clinical staff will use common guidelines to determine the most appropriate post-acute stream of care for the patient. Post-Acute service providers will use guidelines to ensure that all patients receive the same evidence-based quality of care; and
- Health Information – is coordinated and communicated along the care continuum to ensure that key information flows between care providers in a timely fashion as the patient moves through the process.

Governance and Accountability

Significant components of the governance and accountability structures include the development and implementation of a new governance structure, the negotiation of memorandums of understanding and securing funding arrangements.

Governance and Accountability Structure

It is recommended that a **Hips and Knees Accountability Council** (“Accountability Council”) be established to serve as an oversight function for the implementation of the integrated model of care and to provide ongoing oversight of the model to ensure optimal performance and achievement of the expected outcomes. The Accountability Council would have the combined accountability of the South West LHIN and key health care service providers. Membership would have the influence and authority to effect change in their organizations. The membership would consist of the following:

- Representation from the South West LHIN, at the Senior Director level or above, and a representative from the Board of Directors;
- Champions from each of the seven surgical sites, preferably a surgeon and a Vice-President or CEO;
- Champions from key community health service organizations that have the authority to influence their organizations; and
- Representation from the Hips and Knees PAT for continuity.

A full-time dedicated Project Manager would be chosen by the Accountability Council to manage the full scope of the project on a day to day basis. The role of the Project Manager will be to provide focused effort in terms of coordinating and facilitating all project activities related to the implementation of the integrated model of care.

A **Hips and Knees Implementation Steering Committee** would be formed to support and direct the Implementation process. Membership would include: individuals with an operational role from each surgical site and from key community organizations covering the entire continuum of care, and some members from the Hips and Knees PAT.

Implementation Task Teams would be established as needed to focus on specific tasks for a limited time and in a facilitated environment. These teams would work towards the final conceptualization and design of specific components of the model of care.

Memorandum of Understanding

In order to increase accountability and support the development of a more integrated model of care for hip and knee replacement surgery, expectations associated with the delivery of the model would be part of the Memorandum of Understanding between the South West LHIN, hospitals and community health service providers.

The Memorandum of Understanding would serve to establish the accountabilities and responsibilities of the involved parties. Development and negotiation of this legal document would be one of the first tasks of the new governance structure.

Funding Arrangements

The Hips and Knees PAT did not have the authority or the mandate to negotiate funding arrangements. The presence of the Accountability Council and signed Memorandum of Understanding will help guide discussions concerning securing required funding and other resources. Discussions would focus on obtaining further clarification of the required resources and establishing possible sources of required resources. The finalization of commitments to provide resources will need to proceed on a timely basis in order to keep the momentum of the project moving forward. If significant delays are expected, the team may want to reprioritize their activities and move forward with the work of activities with minimal associated costs, as appropriate.

IMPLEMENTATION

In order for the integrated model of care to be implemented successfully, the following success factors are critical:

- Strong leadership support to drive the change – at a senior management and physician level from the key health organizations and the South West LHIN;
- Funding to support the model;
- Stakeholder buy-in and involvement in the detailed design of the model;
- Dedicated project management to coordinate activities and ensure completion of key milestones;
- Comprehensive change management and communication plan to engage and manage stakeholders effectively; and
- Establishment of a solid foundation for the project in the Pre-Implementation Period.

Several critical barriers to change are highlighted in the report. The Hips and Knees PAT has identified two barriers that are perceived to present the most risk and must be managed proactively to mitigate them.

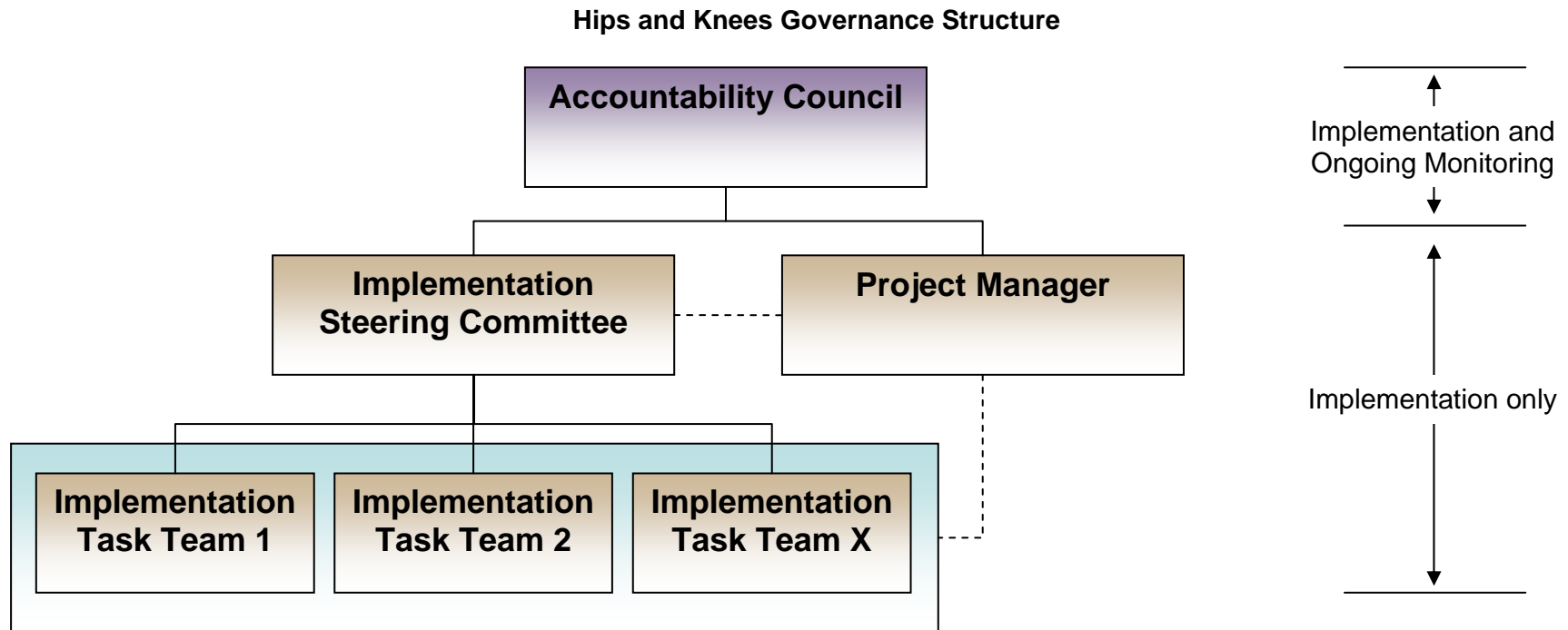
- Funding – In other jurisdictions such as Toronto Central and Hamilton Niagara Haldimand Brant, the requested funds from the MOHLTC have still not been made available to the LHINs. If the Pre-Implementation period takes undue time, momentum for the initiative may be lost and there is a risk of losing the interest of the membership of the Hips and Knees governance structure and other stakeholders if work to date does not continue to move forward. This may require a review of the recommendations for activities with minimal associated costs and a reprioritization of activities within the detailed project plan.
- Obtaining desired level of stakeholder engagement - Stakeholders have many demands on their time but are willing to share their thoughts and expertise. However, most do not have the time available to engage in detailed documentation and other time-intensive activities required to support final design and implementation. This may be mitigated by dedicated project management to aid in overall planning of participants' work, making participation as easy and time-effective as possible and, providing teams with directions and tools that are straight forward and easy to understand.

The major activities to implementing the integrated model of care fall into three time periods.

Pre-Implementation Period (estimated to be 3 months, depending on timing of endorsements and funding)

- Finalize endorsements from Strategic Advisory Group, South West LHIN Board of Directors and certain health service providers;
- Finalize governance and accountability structure;
- Implement governance structure;

- Finalize Memorandum of Understanding with South West LHIN and health service providers;
- Confirm anticipated costs and funding sources; and
- Establish project management.



Implementation Period (the following 24 months)

- Throughout the Implementation Period
 - Manage project through activities of Governance and Accountability, Performance Management, Financial Accountability, Change Management and Communication. This would include ongoing stakeholder engagement, communication and training at appropriate intervals.
 - Certain components of Phase One and Phase Two may occur in parallel, with consideration given to key points of interdependency.
 - Monitoring, evaluating and refining Standardized Referral, Central Registry and Education Tools.
- Phase One
 - Confirm tools and processes associated with Standardized Referral, Central Registry and Education Tools and move forward with LHIN-wide implementation within six months from start of implementation period.
 - Specific components of the model will have a staged introduction, with initial introduction at a specific location and refinements made before moving forward with LHIN-wide implementation.

- Phase Two
 - Confirm detailed design of tools and processes associated with Assessment and Education Centres, Secondary Prevention, In-Hospital Care and Post-Acute Care within 12 months from start of implementation period.
 - Modify tools and processes associated with Phase One implementation as necessary to incorporate feedback and align with new processes to be implemented as part of Phase Two.
 - Confirm tools and processes and launch all components of the integrated model of care within 24 months from the start of implementation period.
 - Specific components of the model will have a staged introduction, with initial introduction at a specific location and refinements made before moving forward with LHIN-wide implementation.

Post-Implementation Period (the following 12 months)

- Monitoring, evaluating and refining.
- Transition to future sustainability model of project.

Implementation Requirements

The identification of detailed costs and the configuration of services for the integrated model of care is an iterative process and preliminary estimates have been provided by the Hips and Knees PAT as summarized in the table below. The costs reflect best estimates based on information readily available to the Hips and Knees PAT and assumptions made on patient volumes and other variable factors. These costs do not represent firm amounts. It is not possible to identify and quantify all costs at this point in the planning given that the detailed design has not been completed and many of the costs identified are dependent on volumes and other variable factors and thus, cannot represent firm amounts at this point in time. In addition to the unknown costs that have been identified and discussed below, there may be additional resource requirements that have not been identified. The costs reflected below should by no means be taken to represent a budget.

Preliminary Estimated Costs

Component	One-time Costs		Ongoing Costs	
	Estimated	Unknown	Estimated	Unknown
Project management	\$120,000 annually for project manager	Support from LHIN and resources required to support work of the governance and accountability structures		
Clinical guidelines, education tools, care pathways	\$18,000 for document design and website design	Initial Printing and distribution		Ongoing Printing and distribution Website maintenance and hosting, if not covered by

Component	One-time Costs		Ongoing Costs	
	Estimated	Unknown	Estimated	Unknown
				the host site
Information technology		Central Registry database Information sharing between facilities Performance tracking		Central Registry database Information sharing between facilities Performance tracking
Change management, Communication plan, Performance management plan		To be determined once the plans are finalized		To be determined once the plans are finalized
Standardized referral process	No significant incremental cost		No significant incremental cost	
Central Registry	\$3,500 for office setup	Training Telecommunications	\$87,750 for clerical and management support \$0 for space	Telecommunications
Assessment and Education Centres		Training	\$411,588 annually for assessment team \$0 for space	Training
Initial assessment with surgeon	No significant incremental cost		No significant incremental cost	
Secondary Prevention		Expansion of existing programs - To be determined through RFP process		Expansion of existing programs - To be determined through RFP process
Pre-Admit Clinic and In-Hospital Care	None			Incremental costs could vary between facility based on variance between current practice and the common clinical pathway.
Post-Acute Care	None			Expansion of existing Post-Acute Care programs to ensure access is equitable (geographically disbursed and publicly funded) across the LHIN