Clinical Services Roadmap

Operational Plan

For Clinical Work Team:

Cardiovascular Disease (CVD)

Executive Summary (of the Submission June 15, 2011)

(excerpted from the full version submitted to South East LHIN as one component of the Clinical Services Roadmap)

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Cardiovascular Disease (CVD) Clinical Services Roadmap
High Level Operational Plan

1. Clinical Area of Opportunity- Précis.

The Regional Clinical Services Roadmap (CSR) Cardiovascular Disease (CVD) Leads & Work Team (WT) members have developed a regional CVD clinical services improvement plan that, when fully implemented, will result in a regional integrated system of accessible, leading practice cardiovascular disease prevention, management and specialized treatment services.

The improvements outlined are modeled on the evidence-based recommendations included in the Canadian Heart Health Strategy & Action Plan (CHHS-AP) [1]– adapted to the South East LHIN context - and guided by the CSR principles of improved access, quality of care, efficiency and sustainability.

The plan is also in keeping with the priorities outlined in "Toward an Integrated Vascular Health Strategy for Ontario" a joint statement of commitment prepared by the Ontario Ministry of Health and Long Term Care, The Board of Directors of the Cardiac Care Network, the Heart and Stroke Foundation and the Ontario Stroke Network.[2]

Implementation of the South East CVD Roadmap Plan will ensure that patients seeking care across the South East LHIN region will have access to best practice, standards-based cardiovascular treatment, secondary prevention and disease management services and opportunities across a coordinated and integrated patient journey. The plan enhances the role of primary care providers and provides improved access to key services for recovery and health improvement closer to home. When implemented, this plan will result in measureable reductions in emergency department (ED) visits; hospital admissions; duplicated diagnostic tests; and overall morbidity and mortality from cardiovascular disease.

The eight priority initiatives selected for implementation in this three year Plan are focused specifically on improving timely access to guidelines-based care in three clinical service areas:

- Prevention, detection and management of risk factors;
- Disease management and rehabilitation;
- Specialized cardiovascular treatment modalities.

The additional service areas included in the CHHS-AP framework of:

- Health Promotion, Healthy Behaviours and Healthy Environments
- Palliative & End of Life Care

are also recognized as important by the CV Roadmap WT, are incorporated formally in the vision, and will be addressed in subsequent quality improvement plans.

Further information on the eight priority initiatives is provided on page 7 and in the detailed operational plans in Table 2 beginning on page 10.

[1] The CHHS-AP (2009) is a CVD quality improvement framework developed jointly by the Heart & Stroke Foundation of Canada, the Canadian Cardiovascular Society (CCS) and the Canadian Institutes of Health Research (CIHI) – Institute of Circulatory and Respiratory Health at the request of the Government of Canada. The strategy development process involved a pan-Canadian engagement process with participation of over 1500 experts and citizens - funded through the Public Health Agency of Canada. The strategy outlines a framework of evidence/research indicating better, proven ways to organize & provide CVD care using integrated partnerships and disease management approaches.

[2] July 23, 2010.

Next Steps to Implementation

Implementation of an enhanced, regionally integrated, largely outpatient and community-based continuum of CVD services will require a paradigm shift for many currently involved in CVD care. Implementation will be feasible only through regional and local partnerships with organizations and clinical leaders from primary care, CV clinical specialties, and hospitals across the region.

Next steps will necessarily involve:

- Establishment of the infrastructure and processes for regional implementation, leadership and quality monitoring of the envisioned integrated regional continuum of cardiovascular prevention, disease management and specialized treatment services.
- Validation and adoption of the best practice standards frameworks that will guide implementation of regional networks of services and opportunities;
- Completion of gap analyses, resource & asset inventories to set baseline metrics, establish the foundation for efficient service enhancement, and to inform improvement targets;
- Identification of the key partners and local champions to lead the implementation of locally driven service delivery models in keeping with the regional standards frameworks.

Summary of Analysis Supporting this Plan

The Heart and Stroke Foundation of Canada's 2010 Annual Report describes a "perfect storm" of risk factors and demographic changes brewing in this province that will lead to an increase in cardiovascular disease among Canadians both young and old, creating an unprecedented burden on our healthcare system.

The Southeast Local Health Integration Network (SE LHIN) currently has the highest prevalence of cardiovascular disease (almost 7%) in Ontario (5%), and one of the highest rates in Canada. Cardiovascular disease continues to be the number one cause of death in the SE LHIN – with ischemic heart disease (almost 20%) and cerebrovascular and other circulatory diseases (12-15%) accounting for more than 30% of the approximately 4500 deaths that occur annually in this region

The SE LHIN hospital services data show circulatory diseases as the highest volume diagnostic category of acute inpatient hospital admissions in fiscal 2007[3]. Recent tracking of readmission rates (within 30 days) for cardiovascular disease shows high rates in most hospitals across the region.

The South East region is geographically large with almost 50% of the population living in rural communities (as defined by Statistics Canada). Travel time from many parts of the region to the urban centres to access healthcare services is often prohibitively long (e.g., can stretch to two hours from the northern communities) resulting in geographic inequities that must be considered when determining location and approach to providing CVD services.

The foundation of an integrated program of specialized tertiary CVD care is already in place in the South East.

- Inter-professional and inter-centre collaboration facilitates the *Same Day* Pacemaker and PCI programs and protocols for coordinated access to the Cardiac Catheterization and Cardiac Electrophysiology Laboratories at Kingston General Hospital (KGH). Combined with agreements for prompt post-treatment repatriation to the home hospital, these programs have been shown to reduce the time a patient waits in local hospitals to access specialized treatment at KGH, thereby contributing to more equitable access for all patients within the region[4].

[3] SE LHIN. Integrated Health Services Plan 2. October 2009.

[4] Leung WM, Simpson CS, Abdollah H, Ropchan GV, Brennan FJ. Effect of a Dedicated Implant Facility on Waiting Times and morbidity in patients requiring pacemakers. Pacing Clin Electrophysiol 2003; 26(2) (II); S145.

- Frequent interaction occurs between specialized clinicians (e.g., the Cardiac Rehabilitation Centre, Cardiac Rhythm Device Clinic and the Heart Failure Clinic) and CVD specialists (physicians as well as other health care professionals) in other hospitals, with primary care providers in several communities, as well as with the outreach clinics in other communities (e.g., general cardiology in Moose Factory, Arrhythmia Clinic in Peterborough, Coronary Artery Disease clinic in Napanee)
- Partnerships exist between the secondary/tertiary service providers and primary care providers built through joint participation in inter-professional cardiovascular conferences (notably, the Annual Queen's Cardiovascular Conference and the Annual KGH Cardiac Sciences Conference) and continuing medical education (CME) events targeted at the primary care community. This has led to reputational excellence and a general perception of willingness to engage in multi-stakeholder partnerships.
- Rapid Access STEMI Protocols are already in place with emergency services (EMS) and hospitals across the region that ensure that patients with STEMI are assessed and stabilized in the nearest ED followed by immediate transport to KGH for percutaneous coronary intervention (PCI) when appropriate.
- A limited area STEMI bypass protocol is currently in use by Frontenac County EMS and EMS, Regional Paramedic Program of Eastern Ontario and has been extremely successful. The region's hospitals and EMS services are now in the process of implementing an expansion of that protocol to a wider proportion of the population ensuring rapid access to primary PCI.

Despite this foundation for delivery of integrated CVD services, the remainder of a best practice continuum of CVD care is either not available in the region or is uncoordinated and fragmented - delivered by a variety of unconnected healthcare providers, in various settings of care across the region – in hospitals, primary care organizations, and specialist physician offices.

Regionally distributed networks of best practice models have been developed in other jurisdictions and are supported with evidence. Implementation of integrated cardiovascular disease programs/continuums in other jurisdictions focus on achievement of: guidelines for proactive secondary prevention in primary care with patients at risk; timely access to proven best practices in CV treatment and disease management; rapid access to diagnosis and specialist assessment; and improved communication and information at the transitions in care. These improvements have resulted in a reduction in hospital admissions and ED visits in those regions where they are available.

The SE LHIN's Clinical Services Roadmap (CSR) project has provided anopportunity to implement an integrated regional system of cardiovascular clinical services.

2. Major Themes

Several key recurring themes are threaded throughout the CV Roadmap plan priorities and the foundation upon which the priorities were established:

- Improved information sharing and communication with patients and among care providers in various settings of care – use information technology solutions where feasible and available
- Application of standards and guidelines-based, collaborative care pathways
- Care provided by interdisciplinary and interprofessional teams making effective use of full scopes of practice (virtual teams when required in shared care approaches)
- Implementation of regionally accessible CV rehabilitation / secondary prevention models
- Optimizing existing resources and assets to improve access
- Strengthen existing regional partnership of care with improved inter-centre patient flow and transportation
- Ongoing regional accountability infrastructure for implementation, planning & quality improvement – e.g., Regional CV Network or Program

- Policy change to support healthy behaviours and reduce risk for both acute events and chronic disease

3. Priority Initiatives

3.1 Planning Process

The CVD Clinical Roadmap regional plan engagement process began in February 2010 when approximately 70 stakeholders - from throughout the region, representing the health professional community - participated in a facilitated full-day session to establish the areas of opportunity for improvement and the strategic directions for achieving a SE LHIN regional Cardiovascular improvement plan.

The participants validated the pressing need to improve CVD care in this region and adopted the Canadian Heart Health Strategy & Action Plan (CHHS-AP) as the guiding framework for identifying areas for improvement. As a result, a list of twenty-one possible areas for improvement was generated and then rated (high, medium, low) each against seven indicators of health care quality:

- patient-centeredness
- number of patients impacted
- potential for improving health outcomes
- improvement in patient experience
- feasible
- connection along the continuum
- supportive of integration

The result was a set of strategic themes and twenty-one areas for improvement. These were ranked as high, medium, or low against the selection criteria and assigned a time horizon of short, medium or long term.

Building on this foundation, the two CVD CSR Leads and the 15 members of the Clinical Work Team (CWT) (see Appendix 1 for list of CWT members) held three additional meetings and consulted with a range of stakeholder groups and individuals in a range of environments across the region before agreeing to focus on eight inter-related priority initiatives for implementation to achieve the desired outcomes of access, quality, efficiency and sustainability.

3.2 Selected Priority Initiatives

Eight priority areas of opportunity have been selected for implementation in this 3 year plan. The eight priority initiatives are sub-divided into two broad overlapping categories/sectors: prevention and disease management in partnership with primary care; and specialized acute assessment/treatment in partnership with CV specialists and hospitals. (See the attached CV Roadmap Logic Map in Appendix 3).

A. Prevention and Disease Management Initiatives in Partnership with Primary Health Care Providers –
(CHCs, FHTs, NP-led clinics, FHOs, FHGs, and solo and group-based practitioners)

1. Partnership with Primary Care Providers to Achieve Guideline Based Targets for Identification, Prevention and Management of Cardiovascular Disease (CVD)

- To establish a formalized CVD Prevention & Management Partnership with primary care providers across the SE LHIN; to foster improved communication and shared problem-solving related to achievement of best practice clinical guidelines for CV care; and to implement region-wide a standardized and comprehensive approach to CVD risk screening, prevention and disease management within a chronic disease prevention and management approach**.**

2. Network of Healthy Heart – Secondary Prevention & CV Rehab Services
   - To provide access across the region to a Network of guidelines-based Healthy Heart – Secondary Prevention & CV Rehab Services and opportunities provided through a collaborative, service delivery partnership/shared-care approach with primary care providers, CV specialists, local hospitals and community groups - for patients who survived a heart attack, have had heart surgery or other acute CV treatment/intervention/event, and others with diagnosed cardiovascular disease who could benefit from a structured program of exercise and secondary prevention

3. Network of Specialized Heart Failure Disease Management Teams
   - To provide access across the region for patients with reduced heart function/heart failure (HF) and their primary care providers to a network of Specialized Heart Failure Disease Management (DM) Teams - through a collaborative, service delivery partnership/shared-care approach with primary care providers, CV specialists, local hospitals and community groups - to provide standardized, guidelines-based HF assessment, diagnosis, and an intensive disease management care program followed by transition to primary care for ongoing care and for a strategy of self-management.

B. Specialized Acute Assessment and Treatment Initiatives in Partnership with CV Specialists and Hospitals: BGH, HDH, KGH, LACGH, PSFDH, and QHC.

4. Coordinated / consolidated access to CVD diagnostic services in <u>outpatient</u> "one stop" model(s)
   - To provide coordinated / consolidated access to CVD diagnostic services and cardiovascular specialist assessments through "one stop" model(s) in outpatient settings across the region - for patients requiring a set of guidelines-based cardio diagnostic tests that may be required to inform assessment and treatment plan appointments with CVD specialists– beginning with implementation of a consolidated model at HDH in Kingston, followed by design and implementation of similar coordination models where appropriate to improve wait times and coordination of tests and assessments in other hospitals or outpatient care settings across the region.

5. Rapid Access to STEMI Treatment – Expansion of bypass protocol
   - To provide rapid access to ST Elevation Myocardial Infarction (STEMI) best care/treatment for a larger proportion of the population of SE LHIN – through expansion of the existing bypass protocol to that area within a sixty minute travel time from a qualifying ECG to arrival at KGH.

6. Standardized pathways & protocols for inpatient access to tertiary specialists and inter-centre transfer processes
   - To establish, strengthen and streamline regional inter-centre collaborative clinical care pathways & protocols / processes for CV diagnostic groups routinely scheduled for transfer and repatriation between hospitals to access specialized care/treatment, so that patients will have timely access to inpatient specialized treatment and procedures when required; and hospital and specialist resources are used as efficiently and affectively as possible

7. Comprehensive & Timely Discharge Information & Communication – for patients and primary care providers
   - To streamline and standardize the transitions / handoff points in the continuum of CVD hospital and primary care with implementation of comprehensive, standardized and timely discharge information and communication tools and processes for patients and primary care providers across the region.

8. Regional Information Access & Communication Infrastructure and Accountability
   - To achieve the required information access and management solutions to provide the integrated functionality required to support the improvements in cardiovascular care across the CV care continuum.

C. Regional Cardiovascular Care Program - Infrastructure and Accountability

9. An ongoing strategy to support implementation and coordination of the regional CVD continuum of services and partnerships has been identified by stakeholders as an important enabler for the success of this Plan. The need for an overarching management structure – a regional program of cardiovascular care – was identified in the SE LHIN's Integrated Health Services Plan 2 (IHSP 2) as well, even before work on the CV Roadmap project began.

- Establishment of a Regional Cardiovascular Care Program is recommended. The Program would begin its work with a mandate to work with and oversee the coordination of the CV continuum of service provider organizations and providers to implement the priority initiatives in the plan, to monitor quality improvement indicators and to provide recommendations for continuous quality improvement to partners and the SE LHIN.

Regional Cardiovascular Roadmap Improvement Plan – Logic Map[1] Draft 10 June 13, 2011

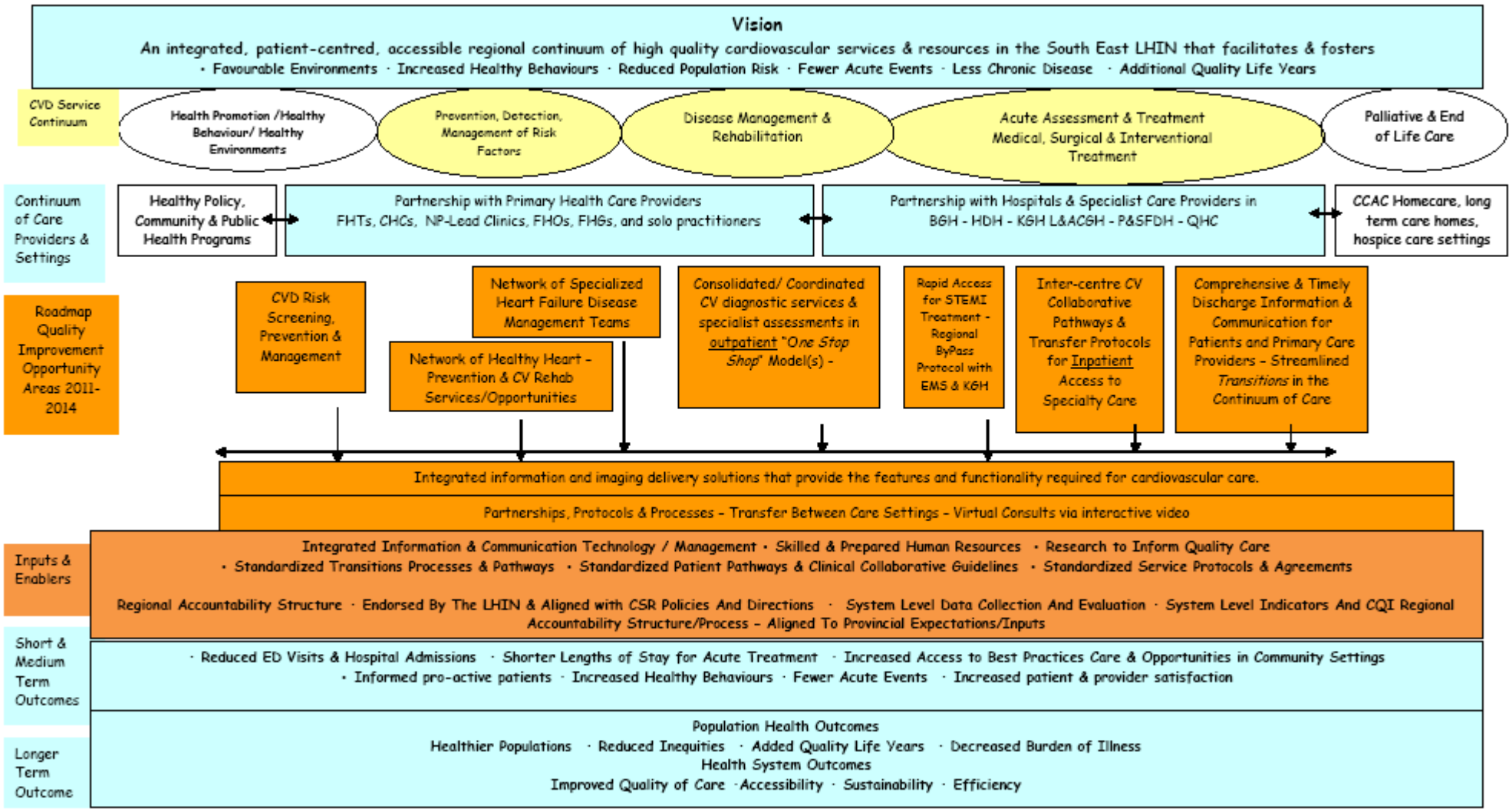

Table 1: Priority Initiatives by Implementation Horizon

	Priority Initiatives	Sub-Initiatives	Horizons for Implementation		
			< 1 year	1-2 years	<3 years
1.	Partnership with Primary Care Providers to Achieve Guidelines for Identification, Prevention and Management of Cardiovascular Disease (CVD)	• Regional CVD PM Partnership launch (discussion/decision) forum meeting • Complete data base/ inventory and gap analysis survey - current CVDPM guidelines achievement, challenges and opportunities in primary care. • Establish regional standards framework for CVDPM in primary care. • Establish regional common model - Set quality improvement indicators and targets to be monitored	X X X X		
		• Establish Regional CVD PM Partnership - Primary Care, CV Specialists & hospitals - structure/processes • Incremental implementation of CVDPMI model / comprehensive approach in primary care across the region.	X X	 X	
		• Implement service delivery partnership models re: CV Roadmap priority initiatives - to achieve guidelines for CVD PM in primary care	X	X	
		• Ongoing monitoring of progress on partnership implementation plan – satisfaction of participant partners – areas for improvement - shared progress reports		X	X
2	Network of Healthy Heart - Secondary Prevention & CV Rehab Services	• Completion of Regional Standards Framework	X		
		• Completion of gaps analysis – documentation of current resources, assets, practices, service volumes to establish baseline and improvement goals/indicators;	X		
		• Complete up to four (may be combined processes in some areas) local and one Network implementation plan/business plans (for approval)	X	X	
		• Phased in implementation of Regional Network of Healthy Heart – SP & CV Rehab programs/teams in local services delivery models		X	
		• Develop evaluation plan, metrics, reporting mechanisms	X	X	X
3	Network of Specialized Heart Failure Disease Management Teams	• Completion of Regional Standards Framework	X		

	Priority Initiatives	Sub-Initiatives	Horizons for Implementation		
			< 1 year	1-2 years	<3 years
		• Completion of gap analysis – documentation of current resources, assets, practices, service volumes to establish baseline and improvement goals/indicators; • Appropriate service locations/models determined	X		
		• Based on the regional standards framework, complete Network implementation plan and four business plans (may be combined processes in some areas) for approval	X	X	
		• Phased in implementation of Regional Network of Specialist HF teams in local services models		X	
		• Develop evaluation plan, metrics, reporting mechanisms	X	X	X
4.	Coordinated / consolidated access to CVD diagnostic services in <u>outpatient</u> "one stop" model(s)	• Completion of Regional Standards Framework	X		
		• Completion of gap analysis – documentation of current resources, assets, practices, service volumes to establish baseline and improvement goals/indicators; • Appropriate service locations/models determined	X X		
		• Based on the regional standards framework, complete detailed operational plan & complete implementation of "one stop model" at Hotel Dieu Hospital	X	X	
		• Based on the regional standards framework, complete detailed operational plan and complete implementation of "one stop models" (as appropriate and adapted to local circumstances) at Belleville, Brockville, Smiths Falls/Perth		X	X
5.	Rapid Access to STEMI Treatment – Expansion of bypass protocol	• Work with EMS/hospitals/RPPEO partners to complete data capture/reporting processes to support monitoring of Protocol expansion - phased-in approach to expanding the protocol	X X		
		• Facilitate achieve/maintain necessary agreements – hospitals with EMS providers - within expansion area(s) • Ensure hospitals maintain quality documentation – Protocol/algorithm /processes for STEMI decisions	X X		
		• Confirm quality indicators, measures, data capture/requirements in hospitals and at EMS for monitoring agreements, baseline measures, evaluation processes/timelines are in place	X		
		• Ongoing coordination, evaluation, quality assurance		X	X

	Priority Initiatives	Sub-Initiatives	Horizons for Implementation		
			< 1 year	1-2 years	<3 years
6.	Improved inpatient access to tertiary specialists and inter-centre transfer processes	• A current state map and inventory of inter-centre transfer circumstances and pathways	X		
		• Identify which CV diagnostic groups are most commonly in need of tertiary level treatment. • Review all guidelines-based collaborative care pathways in place currently in the regional hospitals and establish a set of common, documented, standardized, collaborative inter-centre pathways and processes for each.	X X		
		• Establish formal agreement – with MoUs and agreements – to implement the collaborative care pathways across all hospital sites as appropriate.	X	X	
		• Design and facilitate a regional education process to educate hospital frontline nursing, physician and clerical support staff on the new pathways		X	
		• Implement in a phased-in approach (in alignment with implementation of central dispatch/scheduling service model) collaborative care pathways for key common CV diagnostic groups		X	X
		Working with CSR Transportation Resource Group • Implement streamlined standards and processes to expedite timely inter-centre transfer when appropriate • Determine best practice approach to a standardized transfer instructions template and processes for use across the region for (non urgent) transfers. • Establish mechanism, common data elements, coordination of data collection and reporting related to inter-centre transfer of CV patients.	X X X	X X	
7.	Comprehensive & Timely Discharge Information & Communication – for patients and primary care providers	• Complete inventory, gap and SWOT analysis of current practices • Determine best practice approach to standardized discharge instructions and summary communication template and processes for primary care providers – Develop standardized template • Determine best practice approach for providing discharge instructions and educational materials to patients and their families at discharge from acute care - Develop standardized template and adaptable communication package	X X X		
		• Present prototype(s) to a forum of stakeholders (including primary care physicians/providers, cardiac care specialists, communication experts and patients and families from across the region) for discussion, feedback and decision. Adjust template & process based on input		X	
		• Implement prototype(s) in phased-in approach – evaluate the prototype product		X	

	Priority Initiatives	Sub-Initiatives	Horizons for Implementation		
			< 1 year	1-2 years	<3 years
		– revise/improve as indicated			
		• Distribute, implement and provide education to patients, specialist physicians and primary care providers across the LHIN		X	
		• Ongoing evaluation of product, process and baseline metrics • Re: reduced avoidable ED visits, reduced hospitalization and readmission, improved patient and primary care provider satisfaction. and adaptation as required		X	X
	Integrated CVD Information Access & Management Solutions	• Establish a CVD Information Access & Communication Group	X		
		• Develop a standards framework	X		
		• Complete a gap analysis report	X		
		• Identify future approaches to establishing 2-way shared information network for quality CVD care across the continuum		X	
		• Establish a standardized data sharing agreement among all hospitals	X		
		• Information Access & Communication needs & resources assessment and potential solutions inventory on a regular basis		X	X