

North Simcoe Muskoka **LHIN**

Regional Complex Continuing Care Review: Final Report and Recommendations

Submitted to:

North Simcoe Muskoka LHIN Leadership Council

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Submitted by

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Executive Summary

Project Scope and Objectives

Purpose:

To review current Regional Complex Continuing Care (CCC) Service design and recommend future design or modifications that would assist the North Simcoe Muskoka (NSM) Complex Continuing Care Steering Committee in moving to design a CCC Centre of Excellence model for healthcare improvements across the continuum of care.

Objectives:

1. Standardize the CCC patient definition for the regional service including a description of patient population to be served (e.g., palliative, slow stream rehabilitation (SSR), and medically complex);
2. Evaluate the current CCC program model highlighting key lessons learned and barriers to implementation;
3. Review current practices and variances, standardized care practices / policies (e.g., admission and discharge criteria, repatriation agreements, communication and referral processes, etc.) for the CCC Regional Service;
4. Recommend a leadership model to support a Regional CCC Centre of Excellence model within the LHIN environment including accountabilities and roles of the partners involved to ensure an accountable and sustainable service;
5. Recommend a cost-effective staffing model inclusive of frontline staff (nurse practitioners, physicians, etc.) and ensure medical coverage is provided across the continuum of CCC care;
6. Recommend a funding model to support this regional service that is within the scope of the regional service and the defined patient population; and
7. Based on cost efficiencies, current patterns of patient flow, patient needs, the health of the population and the future projected needs, review the appropriate sizing of CCC beds for North Simcoe Muskoka to recommend an appropriate number of CCC regional beds.

Summary of Recommendations

Area	Recommendation / Description
1. CCC Regional Vision Statement	<p>Adoption of CCC Vision statement <i>"All residents of North Simcoe-Muskoka will receive quality* complex continuing care appropriate to their needs."</i></p> <p>Vision statement for CCC program will provide a short, succinct "sound bite" that can be consistently used when speaking to Board members, physicians, community partners, staff, patients/family and also act as a "criterion/filter " for decision making (e.g. will proposed activities enable or hinder achievement of the vision).</p> <p>*Quality as defined by the Ontario Health Quality Council and the Institute for Health Improvement – Effective, Efficient, Equitable, Accessible, Safe, Patient-Centred, Focus on Population Health, Integrated, Appropriately Resourced.</p>
2. CCC Client Definitions	<p>Revise CCC client definitions to adopt a rehabilitation / goal orientation to client descriptions. Definitions to be goal focused and to include specific indicators and exclusion criteria for each of the CCC client subcategories.</p> <p>See Appendix A for CCC definitions and indicators</p>
3. CCC Sizing	<p>Total number of CCC beds reduced from 118 to 102 Regional beds:</p> <p>Georgian Bay General = 32 beds (including 6 Palliative Care beds) Muskoka Algonquin Healthcare / Huntsville = 10 beds Muskoka Algonquin Healthcare / Bracebridge = 16 beds Orillia Soldiers' Memorial Hospital = 44 beds (including addition of 11 Extensive Care beds)</p> <p>Key messages regarding number of CCC beds:</p> <ol style="list-style-type: none"> 1. Consistent with Integration Order 2. Reflective of current utilization trends 3. Facilitates care based on a "critical mass" of similar clients / care needs 4. Recognizes co-siting (or not) of CCC beds with acute care services 5. Enables a goal orientation to the care of CCC clients 6. Consistent with LHIN Strategic Priority to create an integrated health system in North Simcoe Muskoka
4. Role Review and Redesign	<p>To ensure optimal functioning and role clarity, conduct a role review to determine degree of involvement of staff in CCC admission, patient flow, team leadership, and discharge processes; identification of current practices within</p>

Area	Recommendation / Description
	<p>and across programs, areas of overlap, role ambiguity and opportunities for role redesign. Role review to include the following roles:</p> <ul style="list-style-type: none"> a. Service Manager b. Unit Clerk c. Nurse Practitioner d. Team Leader e. Social Work / Discharge Planner f. CCAC Client Care Coordinator g. Registered Nurse
<p>5. Staffing Model: Nursing</p>	<p>Implementation of a Nursing Dyad Model of care delivery: no more than two categories of care providers to enhance role clarity, accountability and continuity of care. (e.g., RN/PSW model or RN/RPN model)</p> <p>Nursing Leadership from CCC program partners to come together to determine most appropriate Nursing Dyad Model. Principles to guide Nursing Dyad Model development will be based on:</p> <ul style="list-style-type: none"> 1. Client population needs 2. Principles of care delivery, include a focus on Total Patient Care 3. Evidence re: staffing and impact on staff and patient outcomes 4. Optimized scope of practice 5. Financial sustainability 6. Physical layout: number of location of client rooms 7. Educational/regulation qualifications of dyad parties (specifically RNs and RPNs licenced through the College of Nurses of Ontario; PSWs graduates of Georgian College or equivalent program) 8. Human resource implications 9. Consistent approach across CCC program; with possible exception of Extensive Care Services and increased complexity of client needs.
<p>6. Staffing Model: Rehab Disciplines</p>	<p>Enhanced rehabilitation staffing for all CCC programs with designated time for CCC program.</p> <p>Incorporation of Rehab Dyads : Physiotherapist / Occupational Therapists and Rehab Assistant to optimize use of available rehab staffing resources and expertise.</p> <p>See Appendix C for Recommended Health Disciplines staffing based on current and projected CCC client needs and comparator consultations.</p>

Area	Recommendation / Description
7. Leadership and Governance Model	<p>Leadership Dyad Model:</p> <ul style="list-style-type: none"> a. Regional Program Director Role (1 Full Time) b. Physician Leadership Role (Stipend)
8. Quality Monitoring	<p>Development of Scorecard specific to CCC program using the CCC program scorecard to be in sync with LHIN Balanced Scorecard.</p> <p>Scorecard to include indicators that can be applied to both program and regional aspects of CCC care delivery.</p>
9. Process Improvements	<p>Recognition that all processes are dynamic in nature.</p> <p>Development of timeframes for review and refinement (e.g. short-term, interim and ongoing).</p> <p>Clarification of “eligible” versus “suitable” based on match between criteria, client needs and availability of required resources (e.g. physician availability, nurse practitioner (NP) workload, adequate staffing, necessary equipment and/or competencies required).</p> <p>Determine system for prioritization of clients (e.g., weighting based on established criteria)</p> <ul style="list-style-type: none"> • Within North Simcoe Muskoka LHIN – Inpatient referrals • Direct from community / Day Hospital • Outside of LHIN boundaries
10. Funding	<p>Reinvestment of funding from bed reductions into Staffing Models (e.g., Nursing and Health Disciplines) and newly identified roles (e.g., CCC Program Educator, Regional CCC Program Director, Regional Physician Leader).</p> <p>Determine OSMH’s ability to access Post Construction Operational Plan (PCOP) funding to support addition of 11 Extensive Care Service beds.</p>

Background

In the spring of 2007, at the request of the Ministry of Health and Long-Term Care (MOHLTC) and Royal Victoria Hospital, the North Simcoe Muskoka Local Health Integration Network (NSM LHIN) established a group to explore current utilization of Complex Continuing Care services, to project future need and to make recommendations regarding the most appropriate utilization, configuration and distribution of CCC resources within the LHIN.

In March 2008, the North Simcoe Muskoka LHIN Board of Directors issued an integration decision pursuant to subsection 25(2) (a) of the Local Health System Integration Act, 2006 (LHSIA), "that the NSM CCAC, RVH, MAHC-SMMH site, MAHC-HDMH site, NSHA-PGH, NSHA-HDH and OSMH are hereby required to implement by end of May 2008 a centralized access to CCC beds, coordinated through the NSM CCAC, and including:

- Standardized eligibility determination (eligibility criteria and assessment tools)
- Central management of the waiting list(s)
- Standardized discharge criteria."

In January 2009, letters were received from North Simcoe Hospital Alliance and Orillia Soldiers' Memorial Hospital indicating they were unable to meet the terms of the integration due to lack of physician resources and full implementation compliance by all partners.

In July 2009, the Steering Committee, supported by the North Simcoe Muskoka LHIN, identified the need to review the current status of the Regional CCC program and determine future directions.

Definition of Organizational Acronyms:

- Muskoka Algonquin Healthcare (MAHC)
 - South Muskoka Memorial Hospital (SMMH) – Bracebridge
 - Huntsville District Memorial Hospital (HDMH) – Huntsville
- North Simcoe Hospital Alliance (NSHA)
 - Penetanguishene General Hospital (PGH)
 - Huronia District Hospital (HDH)
 - **NOTE:** As of December 2009, name changed to Georgian Bay General Hospital (GBGH)
- North Simcoe Muskoka Community Care Access Centre (NSM CCAC)
- Orillia Soldiers' Memorial Hospital (OSMH)
- Royal Victoria Hospital (RVH)

Project Scope and Objectives

Purpose:

To review current Regional CCC Service design and recommend future design or modifications that would assist the North Simcoe Muskoka Complex Continuing Care Steering Committee in moving to design a CCC Centre of Excellence model for healthcare improvements across the continuum of care.

Objectives:

1. Standardize the CCC patient definition for the regional service including a description of patient population to be served (e.g., palliative, slow stream rehabilitation (SSR), and medically complex);
2. Evaluate the current CCC program model highlighting key lessons learned and barriers to implementation;
3. Review current practices and variances, standardized care practices / policies (e.g., admission and discharge criteria, repatriation agreements, communication and referral processes, etc.) for the CCC Regional Service;
4. Recommend a leadership model to support a Regional CCC Centre of Excellence model within the LHIN environment including accountabilities and roles of the partners involved to ensure an accountable and sustainable service;
5. Recommend a cost-effective staffing model inclusive of frontline staff (nurse practitioners, physicians, etc.) and ensure medical coverage is provided across the continuum of CCC care;
6. Recommend a funding model to support this regional service that is within the scope of the regional service and the defined patient population; and
7. Based on cost efficiencies, current patterns of patient flow, patient needs, the health of the population and the future projected needs, review the appropriate sizing of CCC beds for North Simcoe Muskoka to recommend an appropriate number of CCC regional beds.

Guiding Principles and Underlying Assumptions

The following were used to guide the review and development of recommendations:

1. The objective of the Regional CCC program is to meet the needs of the North Simcoe Muskoka Local Health Integration Network's population by effectively utilizing resources to achieve the appropriate level of Complex Continuing Care services in the right place at the right time.
2. Build upon experiences to date and lesson learned from both internal and external stakeholders and content experts.
3. Recommendations will be focused on a five year time frame: 2010 – 2015. This will enable implementation of recommendations, formal evaluation of impacts and consideration for future siting and sizing needs based on population needs.
4. Recommendations to be implemented within existing funding.
5. Consensus model to be used to enhance open and supportive communication and decision making.

Strategies to Conduct the Review

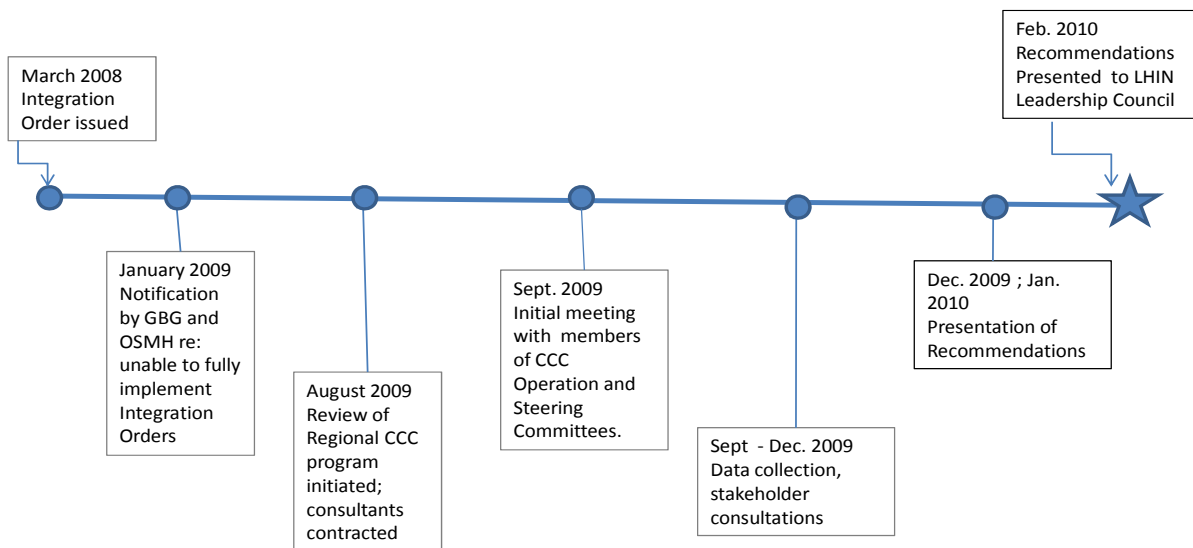
The following strategies were used to guide the review and development of recommendations:

1. Review of relevant background information and relevant literature regarding complex continuing care models, integrated care delivery, staffing models, and published reports.
2. Consultation with stakeholders directly involved with Regional Complex Continuing Care program, including hospitals with designated CCC beds and hospitals within North Simcoe Muskoka who refer to CCC clients to CCC program, and CCAC partners.
3. Consultation with comparator CCC programs within Ontario. Comparators were chosen based on similar program characteristics (e.g., CCC program within community hospitals), CCC programs with demonstrated quality outcomes (e.g. as per 2007 Hospital Report – Complex Continuing Care) and those also providing “Regional service”.
4. Presentation of recommendations to both the CCC Program Steering Committee and Operations Committee for input and consultation.

Project Timelines

The Regional CCC Program Review project began in August 2009 and was completed in February 2010. Data collection and consultations (internal and external) occurred from September to December 2009. Initial recommendations were presented to the joint CCC Steering / Operations Committee on December 9, 2009, with a follow-up meeting held on January 13, 2010 where consensus was reached on the recommendations contained in this report. The final report and recommendations will be presented to the North Simcoe Muskoka LHIN Leadership Council for review and direction.

NSM Regional CCC Program Review Project Timelines



CCC Client Profile

North Simcoe Muskoka LHIN population statistics for 2001, 2006 and 2007 were reviewed with specific attention to age categories relevant to CCC client population reveals the following:

1. Of the five geographic areas within the North Simcoe Muskoka LHIN, Barrie and Area has the greatest overall number of residents who are 75 years or age / older. (See Appendix B: Table 1)
2. Although Barrie and Area has the greatest overall number of residents who are 75 years and older, each of the four other geographic areas (Collingwood / Wasaga and Area, Orillia and Area, Midland / Penetanguishene and Area, and Muskoka) have a higher percentage of residents 75 years and older when compared to the overall population. (See Appendix B: Table 2)
3. When compared to the other geographic areas, Wasaga / Collingwood and Area has the highest percentage of residents who are 65 - 75 years. This age cohort has significance as they will become the future clients for the CCC program, and therefore may have an impact on the number and location of CCC beds in the future. (See Appendix B: Table 3).

CCAC Admission assessment data provided a snapshot of CCC client health status and care needs for all clients admitted to CCC program from April – September 2009.

A review of the most commonly identified Client Assessment Protocols (CAPs) reveals client care needs that would be associated with CCC population. The types of care needs documented were consistent across all CCC program sites. Examples of CCC care needs included:

- a) Assisted Daily Living (ADL) rehab potential
- b) Pain
- c) Urine (incontinence)
- d) Pressure Ulcers
- e) Cognition
- f) Falls
- g) Communication Disorders
- h) Psychotropic Drug

Additional assessment data such as Case Mix Index (CMI) values revealed a wide range in CMI scores (care requirements) within and across the CCC program sites. This may be due to presence of Alternate Level of Care (ALC) patients within designated CCC beds. The table below depicts the mean CMI scores for each of the CCC programs and the range.

	GBGH / PGH	MAHC / Huntsville	MAHC/ Bracebridge	OSMH
CMI Mean score	1.15	1.24	1.03	1.02
(Range)	(0.33 – 3.37)	(0.33 – 2.24)	(0.51 – 1.58)	(0.51 – 2.24)

Utilization Patterns

Data was collected from each of the CCC programs (sending and receiving hospitals) and CCAC for all clients referred to the CCC program for the six month time frame of April – September 2009. The following information has been derived from the data received. It is therefore important to note that the information presented here is based on a snapshot of a six month period of time and therefore may not be reflective of current status or overall trends throughout the year.

Admission Patterns

The admission patterns for each of the CCC programs were reviewed. The table below depicts the Top 3 sources of referrals / admissions for each of the CCC program sites.

	# 1	# 2	# 3
GBGH /PGH	GBGH	RVH	CGMH
MAHC/ Huntsville	MAHC		
MAHC/ Bracebridge	MAHC		
OSMH	OSMH	RVH	

Referrals, Eligibility and Placements

The table below depicts the number of referrals made to each of the CCC program sites (April – September 2009), degree of eligibility and overall percent of admission of CCC clients. The percent of clients referred, who were then deemed “eligible” ranges from 69% to 100%; thus indicating an opportunity to re-visit CCC admission eligibility criteria to ensure clarity and optimal utilization of resources.

	# of Referrals	% Eligible (#)	% Admission (#) Location
GBGH/PGH	39	90% (35)	69% (25) 24 admitted to GBGH 1 admitted to MAHC/H
MAHC/Huntsville	27	89% (24)	79% (19) All MAHC/H
MAHC/Bracebridge	17	100% (17)	59% (10) All MAHC/B
OSMH	64	69% (44)	56% (24) All to OSMH
RVH	54	78% (42)	90% (38) 22 admitted to OSMH 16 admitted to GBGH
CGMH	14	86% (12)	100% (12) All to GBGH

Discharge destinations

Each of the CCC programs was asked to rank order the most common discharge destinations for CCC clients. The results were fairly consistent across the CCC program sites. The most common discharge destination for CCC clients is long-term care (LTC), followed by "Other" (i.e. death), community and lastly, acute care.

CCC Bed Utilization

Data provided by the CCC program partners was used to determine overall CCC bed occupancy, and impacts of ALC pressures on the overall CCC bed utilization within the region. The results from the weekly ALC reports generated by the North Simcoe Muskoka LHIN were also used to review ALC impacts. The table below depicts overall CCC bed utilization. The percent of ALC clients in CCC beds ranges from 9-53%. Based on the CCC occupancy reported – a revised number of actual CCC beds used is generated. The calculation is based on the total number of CCC beds X highest CCC utilization / occupancy rate.

	# CCC Beds budget	# Beds Operational	Occupancy	% CCC clients	% ALC clients	# beds used for CCC clients*	% Referrals from other communities (e.g. regions)
GBGH /PGH	36	36	86-100%	81-93%	7-19%	34	50%
MAHC/H	10	10	90-100%	50-70%	30-50%	7	0%
MAHC/B	24	24	79-100%	5-19%	29-52%	5	0%
OSMH	37	37	87-96%	46-91%	9 -53%	34	50%
Total	107					80	

Please Note: In December 2009, MAHC/ Bracebridge site verbally reported a significant increase in CCC bed utilization due to increased support from ALC Flow Coordinator, increased team collaboration, physician engagement and enhanced understanding of CCC admission criteria. Increased utilization as high as 75% reported.

Based on the review of data provided, the status of Regional CCC Program bed utilization can be described as follows:

- a. Number of Beds "on paper" (as per Integration Order) = 118
 - 48 at OSMH; 36 at PGH and 34 at MAHC
- b. Actual number of beds in operation = 107
- c. Actual number of beds used for CCC clients (as per utilization rates) = 80
- d. Actual number of "Regional" beds in operation = 73 (GBGH and OSMH participating in Regional CCC Program)

Stakeholder Engagement

The following internal and external stakeholders were engaged in the review of the North Simcoe Muskoka Regional CCC program. Stakeholders represented CCC program leadership roles, direct care providers, CCAC, and North Simcoe Muskoka LHIN hospitals that refer clients to the Regional CCC program.

In addition to those directly involved in the CCC program, a list of CCC comparator programs across Ontario was generated for additional consultation regarding program delivery and staffing models.

Stakeholder Group	Organizations	Participants	Method
CCC Program Providers	Georgian Bay General Hospital Orillia Soldiers' Memorial Hospital Muskoka Algonquin Healthcare (Huntsville and Bracebridge sites)	CCC Program Leadership; Discharge planners, direct care providers (nursing and rehab professions); Decision Support; Physicians, Nurse Practitioners	Focus Groups
CCC Program Partners	Royal Victoria Hospital Collingwood General and Marine Hospital NSM CCAC	CCAC Client Care Coordinators; Patient Flow, Decision Support, Medical program; Discharge Coordinators, Utilization	Focus Groups
Total Number of Participants involved in consultations listed above = 56			
Stakeholder Group	Organizations	Participants	Method
Comparator CCC Programs	Headwaters Health Care Centre (Orangeville) West Park Healthcare Centre (Toronto) Bridgpoint Health * (Toronto) Almonte General Hospital (Almonte) St. Joseph's Care Group (Thunder Bay) St. Mary's / Providence CCC (Kingston)	CCC Program Managers / Directors *Professional Practice Leadership	Telephone consultation Site Visit*
Others	North Simcoe Muskoka Palliative Care Network	Executive Director	Telephone consultation

Results from Stakeholder Consultations

Participants were asked to provide their perspectives regarding the CCC program in terms of:

- a. What's working well?
- b. What is not working well?
- c. Suggestions for improvement?

The findings reported here represent the information obtained from the consultation processes. Unless otherwise indicated, the themes presented here present the views commonly expressed by the participant groups. The themes are listed according to the frequency in which they were mentioned. As with all consultations involving stakeholder engagement and feedback, findings should be reviewed with the awareness that for every opinion expressed during the consultations (and hence presented here) – there may be an alternate view held by others who were not involved in the consultation process.

Question # 1: What is working well	
Theme	Description
Team / Teamwork	Despite examples of "growing pains", overall team work between various partners viewed as being effective. Specific examples of teams mentioned include: interprofessional teams, MD/NP relationship, CCAC/CCC programs, and the effectiveness of the Q2 weekly conference calls to review CCC wait lists and projected bed availability.
Staffing / Resources	Two main areas identified: the benefits of access to rehab professionals and the importance of the RN team leader role – as a knowledgeable resource to the team.
Physician Involvement	Increased continuity of client care associated with increased physician involvement.
Client Identification	Improved identification and assessment of eligible clients for CCC program
Provision of Client Care	Improved goal orientation to client care planning, introduction of case conferences and interprofessional rounds / team meetings; as well as the benefits of client groupings (e.g., SSR and Active Rehab clients; CCC and Interim LTC clients).
Client Outcomes	Demonstrated benefits to the clients in terms of functional mobility and social impacts; having the "extra time" to recover and improve before moving to final placement / next destination; anecdotal "evidence" re: decreased readmissions.
Utilization	Need for program demonstrated by the number of referrals and bed utilization; increased acute care bed utilization; equal "regional access" (2/3 sites participating).

Question # 2: What is not working well?	
Theme	Description
Patient Care Processes	Lack of consistent goal setting and specific care delivery model; Mixing ALC with CCC client inhibits effective care delivery and goal setting for CCC clients.
Physician Involvement	Lack of physician involvement impacting the number of CCC clients that can be admitted to program; Physician reluctance to admit to CCC program due to lack of knowledge re: program goals; and funding inadequate as it's based on "chronic care" model vs. complexity of patients seen.
Lack of Rehab Philosophy	Lack of structure and processes to support/reinforce a "rehabilitation" approach to CCC client care; Nursing philosophy mainly based on "chronic care model" rather than rehabilitation focused; lack of educational roles/resources to support learning needs.
Space / Equipment	Limited space and equipment to provide rehabilitation services and interventions.
Staffing	Lack of adequate staffing for rehabilitation professionals; lack of dedicated time allocated to CCC program – therefore acute care needs take precedence; limited amount of physicians involved – impacting future sustainability of CCC program (Physician reimbursement / billing model cited as main barrier to physician engagement), lack of consistent team leader for all CCC units; recruitment challenges (e.g., NP role for MAHC) and implications for care delivery and program effectiveness.
Utilization	Perceptions of delays in referral process, increased admissions impacting workload for all professionals; not all beds are open / or available for "regional" referrals; ALC pressures impacting CCC utilization.
Patient Status	Differing perceptions regarding eligible patients and what defines "complex"; CCC patient status changes frequently therefore increased need for re-assessment.

Question # 3: Suggestions for improvement	
Theme	Description
Staffing	Increased dedicated time for rehabilitation professions to CCC program; Team leader for all CCC units; increased physician involvement; all roles functioning to full scope of practice / elimination of organizational policies limiting scope of practice; Educator role for CCC program to support clinical and professional development needs of staff.
Education	Investment in education to reinforce rehabilitation philosophy of care for all members of the interprofessional team; increased education for staff, physicians, and clients/families re: the objectives of CCC program (e.g., this is not substandard care or LTC).
Clear Expectations	Review policies and guidelines re: admission and discharge criteria; who makes decisions re: admission and who can "override" decisions.
Space / Equipment	Increased space and resources to support adequate rehabilitation interventions and programming.
Goal Orientation	Incorporation of clearly stated goals and outcomes for all CCC clients; reinforcement of approach to CCC – not as a final destination, but rather an interim destination to enhance functional mobility and health status.
Consistency in Practices	Consistent application of CCC policies (e.g., co-payment) – currently there is inconsistency among sites in terms of application of co-payment policy. This has negative impacts on client/family satisfaction as well as fiscal impacts.

Care Delivery and Staffing Models

A review of the literature reveals an extensive amount of information regarding the various factors that can impact patient, staff and organizational outcomes. A full review of the literature was beyond the scope of this review, yet the following provide some examples of the evidence regarding the relationship between staffing and patient outcomes.

Registered Nurse (RN) staffing and patient outcomes

- ▶ Increased RN staffing associated with decreased 30-day mortality, increased satisfaction, decreased falls, decreased nosocomial infections, and decreased length of stay (Kane et al, 2007; Aiken, 2008; Dall et al, 2009).

External factors impacting staffing

- ▶ Key factors to consider when determining staffing levels should include the following: availability of specialized equipment and technology, availability of support services, the model of care delivery in place, administrative practices, and proximity of patients, patient acuity and patient turnover (DeVandry & Cooper, 2009, Thomas & Herrin, 2009).

Team communication

- ▶ Less hierarchy within teams is associated with better patient outcomes (Institute of Medicine, 2004).
- ▶ Effectiveness of interpersonal communication between nurses and other team members has a positive impact on patient outcomes such as self-care activities (e.g., bathing), ambulation and transfers (Doran et al, 2001).

Characteristics of the work environment

- ▶ A study conducted by Tourangeau et al (2008) revealed high levels of staff burnout, low ratings of workplace empowerment, low job satisfaction and high turnover rates especially with health disciplines categories of CCC staff.

When considering the evidence, there is no one single care delivery model identified as providing the best outcomes (e.g., Primary Nursing, Total Patient Care, Team Nursing, Modular Nursing,). Rather, it is the combined effects of key elements of care delivery that should be considered when implementing a nursing and/or interprofessional care delivery model (See Appendix C). These essential elements include:

1. Continuity of care provider
2. Continuity of care
3. Effective communication
4. Care assignments based on patient care needs
5. Clear accountability

Based on the existing literature, these are the essential elements to be considered in the design, implementation and evaluation of care delivery model for CCC.

Nursing Staffing Model

Nurse staffing patterns for each of the four CCC program sites was obtained revealing a significant variability in the staff mix and staffing patterns within the CCC Regional program. Recent changes to the staff mix included the introduction of the Personal Support Worker role (PSW) at all sites to the existing RN and RPN skill mix. At present, only two of the six CCC units have an all nursing skill mix model (MAHC/ Huntsville site and OSMH/SSR). The nurse staffing patterns of the comparator CCC programs was also reviewed (See Appendix D: Nursing Staffing). Of particular interest was the Nursing Care Delivery Model currently being implemented at Bridgepoint Health. The principles of the model are drawn from the Ottawa Nursing Care Delivery Model which highlights the benefit of having no more than two categories of care providers, working as a dyad team, when determining nursing skill mix model. Verbal reports regarding the evaluation results from the Ottawa experience reveals increases in role clarity, accountability, continuity of care provider and team communication.

Health Disciplines Staffing Model

Health disciplines staffing patterns for each of the four CCC program sites was obtained revealing a significant variability in the staff mix and staffing patterns within the CCC Regional program (See Appendix E: Table 1 for current health disciplines staffing). Verbal feedback from staff obtained through the focus

groups revealed that staff time is often split between in-patient and CCC program; there is no specific dedicated time allocated to CCC program. This creates delays in assessment and development of treatment plans for CCC patients. The health discipline staffing patterns of the comparator CCC programs was also reviewed (See Appendix E: Table 2). As a result of the internal and external review, a Rehab Dyad Model is also proposed with increased allocation of rehabilitation professions within the CCC program. This will support the principle that CCC is not a final destination, but rather an interim placement to enhance health status and optimal functioning. (See Appendix E: Table 3).

Funding

Throughout the review and consultation process, the following funding gaps were identified as having an actual and or potential impact on the success of the Regional CCC program:

1. Physician reimbursement model
 - a. Current OMA funding reimbursement for CCC clients remains as Chronic Care; detriment to the recruitment and retention of physicians willing to assume care for CCC clients.
2. Need for enhanced Rehab services
 - a. Lack of dedicated rehab staffing for CCC program impacting ability to provide rehab care and programming.
3. Funding support for Roles
 - a. Lack of ongoing funding for NP and Most Responsible Physician (MRP) roles (has been provided as one-time dollars from the LHIN)
 - b. Regional Program Director Role – new role
 - c. Regional Physician Leader – new role (stipend)
 - d. CCC Program Educator / Professional Practice role – new role
4. CCC Program Needs
 - a. Equipment (e.g., Rehab equipment, bariatric equipment)
 - b. Pharmacy costs related to multi-system co-morbidities associated with CCC client population
5. Potential Human Resource implications associated with changes to staffing models
 - a. Recruitment
 - b. Severance – dependent on changes to staffing models and skill mix.
6. OSMH ability to access PCOP funding to support expansion of 11 beds/ Extensive Care Service.
 - i. $\$285.00/\text{bed}/\text{day} \times 11 \text{ beds} = \$1,144,275/\text{year}$

See Appendix F for a listing of Funding “knowns, assumptions and unknowns” that have a direct impact of the Regional CCC program and ability to meet the needs of the NSM CCC client population.

Recommendations

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
CCC Vision Statement	<p>Adoption of CCC Vision statement <i>“All residents of North Simcoe-Muskoka will receive quality complex continuing care appropriate to their needs.”</i></p> <p>Vision statement for CCC program will provide a short, succinct “sound bite” that can be consistently used when speaking to Board members, physicians, community partners, staff, patients/family and also act as a “criterion/filter” for decision making (e.g. will proposed activities enable or hinder achievement of the vision).</p> <p>*Quality as defined by the Ontario Health Quality Council and the Institute for Health Improvement – Effective, Efficient, Equitable, Accessible, Safe, Patient-Centred, Focus on Population Health, Integrated, Appropriately Resourced.</p>	None	March 2010
CCC Definitions	<p>Revise CCC client definitions to adopt a rehabilitation / goal orientation to client descriptions. Definitions to be goal focused and include specific indicators and exclusion criteria for each of the CCC client subcategories.</p> <p>See Appendix A for CCC definitions and indicators</p>	None	March 2010
CCC Bed Sizing	<p>Total number of CCC beds reduced from 118 to 102 Regional beds:</p> <p>Georgian Bay General Hospital = 32 beds (including 6 Palliative Care beds)</p> <p>Muskoka Algonquin Healthcare / Huntsville = 10 beds</p> <p>Muskoka Algonquin Healthcare / Bracebridge = 16 beds</p> <p>Orillia Soldiers Memorial Hospital = 44 beds (including addition of 11 Extensive Care beds)</p>		Initiate April 2010 – phased approach over 2 years.

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
	<p>Foci for CCC program sites:</p> <ol style="list-style-type: none"> 1. All of the CCC program sites will provide care for CCC clients within the following categories: clinically complex and slow stream rehabilitation clients. 2. GBGH/PGH will be identified as the designated site for CCC clients requiring Palliative Care. Please note: Although GBGH/PGH has 6 regional palliative care beds; this does not preclude other sites from providing palliative care or end of life services to clients. 3. OSMH will be identified as the designated site for CCC clients requiring Extensive Care services as this will enable timely access to acute care services such as diagnostic and laboratory services. <p>Key messages regarding sizing of CCC beds:</p> <ol style="list-style-type: none"> 1. Consistent with Integration Order 2. Reflective of current utilization trends 3. Facilitates care based on a "critical mass" of similar clients / care needs 4. Recognizes co-siting (or not) of CCC beds with acute care services 5. Enables a goal orientation to the care of CCC clients 6. Consistent with LHIN Strategic Priority to create an Integrated Health System in North Simcoe Muskoka 		
Role Review and Redesign	<p>To ensure optimal functioning and role clarity, conduct role review to determine degree of staff involvement in CCC admission, patient flow, team leadership, and discharge processes; identification of current practices within and across programs; areas of overlap, role ambiguity and opportunities for role redesign. Role review to include the following roles:</p>	None	Initiate June 2010

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
	<ul style="list-style-type: none"> a) Service Manager b) Unit Clerk c) Nurse Practitioner d) Team Leader e) Social Work / Discharge Planner f) CCAC Client Care Coordinator g) Registered Nurse 		
Nursing Staffing Model	<p>Implementation of a Nursing Dyad Model* of care delivery: no more than two categories of care providers (e.g. RN/PSW model or RN/RPN model) to enhance role clarity, accountability, communication and continuity of care (*Honours Ottawa Nursing Care Delivery Model recommendation of no more than two categories of caregivers to enhance accountability and role clarity).</p> <p><u>Proposed Nurse Staffing Model (Proposed for a 24 bed unit)</u></p> <p>Team Leader / RN Care Coordinator (M-F; days)</p> <p>Unit Clerk (M-F; days)</p> <p>RN – PSW <u>Dyads</u>* assigned to groups of patients</p> <ul style="list-style-type: none"> • 3 dyads; 8 patients per dyad (days); • 2 dyads; 12 patients per dyad (evenings; nights) • 1 dyad; 24 patients (nights) <p>Role Focus</p> <p>RN: Most Responsible Nurse - assessment, teaching, care planning, discharge preparation, direct client care</p>	<p>Human Resource implications: recruitment and retention of required care provider roles.</p> <p>Collective agreement implications related to changes in skill mix s and/or FTE allocation</p> <p>Financially sustainable</p>	Initiate March 2010

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
	<p>PSW: ADL, aspects of care as assigned by RN</p> <p>Both: rehabilitation and promotion of self-care and / or optimal functioning</p> <p>Action: Nursing Leadership from CCC program partners to come together to determine most appropriate Nursing Dyad Model. Principles to guide Nursing Dyad Model development will be based on:</p> <ol style="list-style-type: none"> 1. Client population needs 2. Principles of care delivery including a focus on Total Patient Care 3. Evidence re: staffing and impact on staff and patient outcomes 4. Optimized scope of practice 5. Financial sustainability 6. Physical layout: number of location of client rooms 7. Educational / regulation qualifications of dyad parties (specifically RNs and RPNs licenced through the College of Nurses of Ontario; PSWs graduates of Georgian College or equivalent program) 8. Human resource implications 9. Consistent approach across CCC program; with possible exception of Extensive Care Services and increased complexity of client needs. 		
Health Disciplines Staffing Model	<p>Enhanced rehabilitation staffing for all CCC programs with designated time for CCC program.</p> <p>Incorporation of Rehab Dyads: Physiotherapist / Occupational Therapists and Rehab Assistant to optimize use of available rehab staffing resources and expertise.</p>	<p>Human Resource implications: recruitment and retention of required care provider roles.</p> <p>Collective agreement implications related to changes in skill mix s</p>	Initiate March 2010

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
	<p><u>See Appendix C for the following</u></p> <p>Comparison of current Rehab staffing within CCC; projected staffing requirements (based on CCC utilization and client need)</p> <p>Health discipline staffing from comparator CCC programs</p> <p>Recommended Health Disciplines staffing based on current and projected CCC client needs and comparator consultations.</p>	<p>and/or FTE allocation.</p> <p>Financially sustainable</p>	
<p>CCC Program Leadership and Governance</p>	<p>A Leadership Dyad Model to be implemented in order to support the Regional CCC Program through the next phase of development. Leadership Dyad to consist of the following roles:</p> <ul style="list-style-type: none"> a) Regional Program Director Role (1 Full Time) b) Physician Leadership Role (Stipend 1-2 days/month) <p>The primary focus of the roles is to provide strategic leadership to the Regional CCC program, systems integration, development of quality monitoring indicators and processes, clarifying expectations and to act as liaison for Regional CCC program with internal and external partners. This will enable a focused approach to the implementation and monitoring of the Regional CCC program.</p> <p>Regional CCC Program Steering Committee to remain in place until Regional Program role is established and the Regional Governance structure has been developed.</p>	<p>Financially sustainable</p> <p>Recruitment of appropriate candidates</p>	<p>Initiate April 2010</p>
<p>Quality Monitoring</p>	<p>Development of CCC Program Balanced Scorecard. Scorecard to include indicators that can be used to monitor and review program specific and regional aspects of CCC care delivery, while keeping in sync with the foci of the LHIN Balanced Scorecard.</p>	<p>None</p>	<p>Initiate March 2010</p>

Recommendation	Description	Potential Risks	Proposed Timeline for Implementation
Process Improvements	<p>Recognition that all processes are dynamic in nature;</p> <p>Development of timeframes for review and refinement (e.g. short-term, interim and ongoing)</p> <p>Clarification of “eligible” versus “suitable” based on match between criteria*, client needs and availability of required resources (e.g. MD availability, NP workload, adequate staffing, necessary equipment and/or competencies...)</p> <p>Determine system for prioritization of clients (e.g. weighting based on established criteria)</p> <ul style="list-style-type: none"> • Within LHIN – Inpatient referrals • Direct from community / Day Hospital • Outside of LHIN boundaries 	None	Initiate April 2010
Funding	<p>Reinvestment of funding from bed reductions into Staffing Models (e.g. Nursing and Health Disciplines) and newly identified roles (e.g. CCC Program Educator, Regional CCC Program Director, Regional Physician Leader)</p> <p>Determine OSMH ability to access PCOP funding to support addition of 11 Extensive Care Service beds.</p>	Continuing fiscal pressures impacting ability to meet CCC program care delivery needs.	Initiate March 2010

Conclusions

1. Based on current utilization trends and population demographics, there is a demonstrated need for a Regional Complex Continuing Care program for the North Simcoe Muskoka LHIN.
2. Effective partnerships have been established between health care partners within the LHIN, with an opportunity for continued growth and development of relationships.
3. Demonstrated commitment to the Regional Complex Continuing Care program by all partners and service providers.
4. The act of integrating this program regionally is forefront and aligns with the North Simcoe Muskoka LHIN's strategic priority to create an integrated health system.

Next Steps

1. Presentation of report and recommendations to the North Simcoe Muskoka LHIN Leadership Council (February 10, 2010)
2. Direction required regarding the following areas:
 - a. Agreement with recommendations and proposed next steps
 - b. Funding: Reinvestment of funding from bed deductions into staffing model for both Nursing and Health Disciplines; and other key / new roles
 - c. Availability of PCOP funding to support opening of Extensive Care service beds within OSMH
 - d. Strategies to address any remaining funding gaps
 - e. Expectations regarding timelines for implementation: Revision to bring Integration Order up to date.
3. Upon agreement and support of recommendations, the North Simcoe Muskoka LHIN Board of Directors will be informed of the recommendations and next steps associated with this facilitated integration.

Appendix A: CCC Client Definitions and Indicators

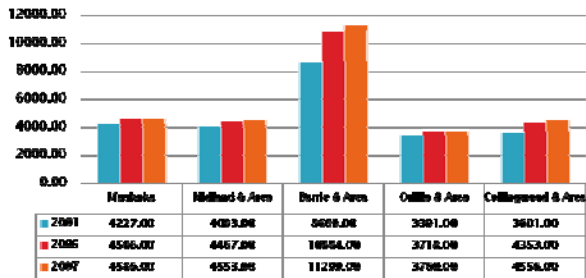
CCC Category	Criteria	Admission criteria	Exclusion Criteria	Indicators
Clinically Complex	<p>Clients are medically complex with stabilized disease processes and predictable outcomes. Clients are able to participate in a minimum of 45 minutes/week of therapy provided by members of the interdisciplinary team.</p> <p><i>The goal is to improve overall health status and level of functioning to the point where care needs can be met at home / community or long term care.</i></p>	<p>Clients are medically complex with stabilized disease processes and predictable outcomes. Clients are able to participate in a minimum of 45 minutes/week of therapy provided by members of the interdisciplinary team.</p>	<p>Clients with unstable conditions requiring acute care services including frequent diagnostic services</p>	<p>CMI (target) ADL (target) CHESS score (target)</p>
Slow Stream Rehab / Reactivation	<p>Clients present with varying diagnoses, medically stable, no longer needing an acute care setting. Clients are cognitively able to participate and follow instructions, and have the desire and motivation to participate in rehabilitation.</p> <p><i>The goal is to provide time-limited interdisciplinary rehabilitative care.</i></p>	<p>Clients present with varying diagnoses, medically stable, no longer needing an acute care setting. Clients are cognitively able to participate and follow instructions, and have the desire and motivation to participate in rehabilitation.</p>	<p>Client independent with ADL</p> <p>Cognitive deficits sufficient to prevent rehabilitation interventions</p>	<p>CMI (target) ADL (target) CHESS score (target)</p>

CCC Category	Criteria	Admission criteria	Exclusion Criteria	Indicators
Palliative	<p>Clients present with complex palliative supportive care needs.</p> <p><i>The goal is</i> to regain control of pain/symptom management or to facilitate end of life care.</p>	Clients present with complex palliative supportive care needs.	Clients with unstable conditions requiring acute care services including frequent diagnostic services	CMI (target) ADL (target) CHESS score (target)
Extensive Care	<p>Clients present with an exacerbation of a chronic disease process and/or multiple co-morbidities and complex extensive service needs. Client outcomes are less predictable and require extensive nursing intervention.</p> <p><i>The goal is</i> to improve overall health status and/or maintain current level of functioning.</p>	Clients present with an exacerbation of a chronic disease process and/or multiple co-morbidities and complex extensive service needs. Client outcomes are less predictable and require extensive nursing intervention.	Clients with unstable conditions requiring acute care.	CMI (target) LOS (unit average)

Adapted from: St. Joseph's Care Group (Thunder Bay)

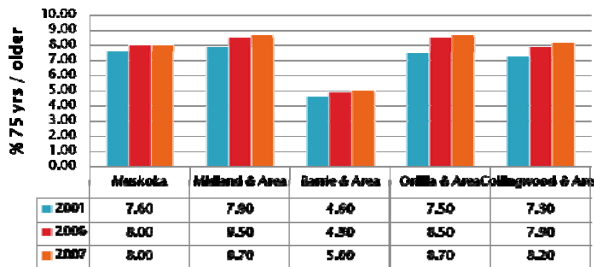
Appendix B: NSM LHIN CCC Population Demographics

Table 1 NSM LHIN: Total # population 75 years/older



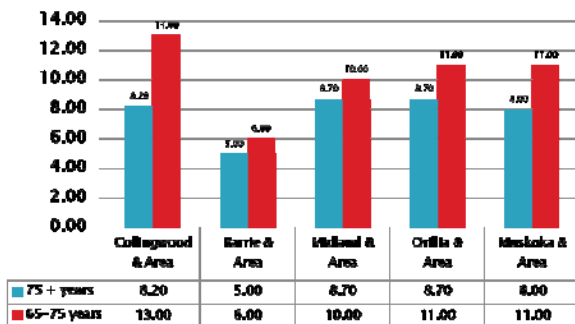
Data Source: Pop Est Summary PHU County Municip LHIN Tables, Ontario Ministry of Health and Long-Term Care: IntelliHealth ONTARIO, Oct. 9, 2009. Last refreshed [May/2009].

Table 2 Population Estimates : Percentage 75 years/older



Data Source: Pop Est Summary PHU County Municip LHIN Tables, Ontario Ministry of Health and Long-Term Care: IntelliHealth ONTARIO, Oct. 9, 2009. Last refreshed [May/2009].

Table 3 NSM LHIN: Comparison % population 75 years/older ; 65-75 age cohort (2007)



Appendix C: Care Delivery Model Essential Elements



Appendix D: Nursing Staffing Models

Current CCC program staffing and Comparators

	RN	RPN	PSW
GBGH/PGH Level1 (CCC)	X	X	X
GBGH/PGH Level 2 (SSR / Palliative)	X	X	X
OSMH / C4 (CCC)	X	X	X
OSMH / C5 (SSR)	X	X	
MAHC / H (CCC / Interim LTC beds)	X	X	
MAHC / B (CCC)	X	X	X
Bridgepoint Health Care	X	X	Phasing out; April 2010
St. Joseph`s Care Group	X	X	
St. Mary`s Providence	X	X	Not currently in place, in future
West Park Healthcentre	X		X
Almonte General Hospital	X	X	Not currently in place, in future
Headwaters Health	X	X	Introducing

Appendix E: Health Disciplines Staffing

Table 1: Current CCC Program Staffing (FTEs)

	GBGH / PGH Actual > Projected*	OSMH** Actual > Projected*	MAHC / H Actual > Projected*	MAHC / B Actual > Projected*
Current # of beds	36	37	10	24
Physiotherapy	0.8 > 1.2	1.2 > 1.5	0.5 > 0.8	0.5 > 1.0
Occupational Therapy	0.6 > 1.0	1.2 > 1.5	0.0 > 0.4	0.0 > 0.5
Rehab Assistant	.053 > 1.0	1.5 > 1.5		
Pharmacist			0.05 > 0.1	0.05 > 0.2
Dietitian	0.2 > 0.4	0.4 > 0.6	0.05 > 0.1	0.05 > 0.1
Speech Language Pathologist	0.0 > 0.2	0.4 > 0.4	0.0 > 0.2	0.025 > 0.2
Social Work	0.6 > 1.0	1.5 > 1.5	0.0 > 0.2	0.0 > 0.4
Recreation Therapist	1.0 > 1.0	1.0 > 1.0	0.6 > 0.6	1.0 > 1.0

* Projected need based on the assumption of decrease in % of ALC patients in CCC beds, resulting in an increased need for rehab services to meet needs of growing CCC population.

** Not inclusive of Extensive care services beds proposed for OSMH.

Appendix E: Health Disciplines Staffing

Table 2: Comparator CCC programs: Health Disciplines Staffing (FTEs)

	Bridgepoint 6W	Bridgepoint 7E	West Park	Almonte General Hospital	Headwaters Healthcare	St. Joseph's Care Group	St. Joseph's Care Group
Current # of beds	52 SSR	50 Clin Complex	26	26	22	20 Reactivation	40 Clin. Complex
PT	2.0	1.0	0.50	2 am/week	1.0	1.0	1.0
OT	2.0	1.0	0.30	2 am/week	0.5	1.5	1.0
Rehab Assistant	2.0	1.5	1.2	0.50	1.0	2.0	1.0
Pharmacist			Consult	Unable to obtain information	Consult	0	
Dietitian	0.3	0.3	Consult		0.1	0.20	0.30
SLP	0.0	0.3	0.20		0.1	0.5	0.25
Social Work	1.0	1.0	Consult		0	1.0	0.60
Recreation Therapist	0.5	1.0	Consult		0	0.0	0.40

Appendix E: Health Disciplines Staffing

Table 3: Proposed Health Disciplines Staffing for NSM Regional CCC Program

Health Discipline	FTE Based on 24 bed unit
Physiotherapy	1.0
Occupational Therapy	0.8 – 1.0
Rehab Assistant	1.0
Pharmacist	0.2
Dietitian	0.2
Speech Language Pathologist	0.2
Social Work / Discharge Planning*	1.0
Recreation Therapist / Activation	1.0

Appendix F: Funding.... the knowns, assumptions, and unknowns

Knowns	Assumptions	Unknowns
Demonstrated need for CCC program within NSM LHIN	No additional operating funds available	Ability to recruit and retain NP and MDs for CCC program?
Demonstrated commitment to CCC regional program by partners	Urgent Priority Funding extended to 2010-11	Current funding model sustainable for MDs
Continued support from LHIN to continue the program	Utilization of existing resources - "dedicated time" allocated to CCC program	Status of Urgent Priority Funding; ongoing funding after 2011?
Current OMA/ MD funding model not adequate	Existing funds can be moved from one category of staff to another within a hospital	Ability of OSMH to access Post Capital Operating Plan funding to support 11 beds / Extensive care services?
One time funding for NPs and Hospitalists ends March 2010	Existing funds can be moved from one department / program /service to another within an organization	Optimal Funding model: Centralized or decentralized?
Without the NPs and Hospitalists there is no regional program	Existing funds can be moved from one organization to another within the LHIN	
Although regional in principle, CCC program not "truly" regional		
CCAC Funding to support Regional CCC program one time only (2007/08)		

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