Waterloo Wellington **LHIN**

BRIEFING *Note*

Meeting Date:	August 15, 2013
Action:	Decision
Topic	Item 10. 3 Integration of Stroke Services in Waterloo Wellington Proposed Final Decision

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Purpose:

To provide the Waterloo Wellington LHIN (WWLHIN) Board of Directors with 1) an overview of the feedback received during the 30-day community consultation period on the proposed integration decision for stroke services; 2) a summary of the WWLHIN response to that feedback, and; 3) a recommendation related to the required integration decision for stroke services.

Recommendation:

Recognizing the importance of ensuring that all stroke patients have access to leading practice care, it is recommended **THAT** the WWLHIN Board of Directors approves the "Required Integration" relating to the integration of stroke services as revised and presented today (Appendix A).

Background Information:

The need for improved stroke care in Waterloo Wellington has been a long-standing issue and residents who have a stroke are not receiving the quality of care they deserve. While individual organizations have made changes which have led to some recent improvements in the Ontario Stroke Report Card indicator results, hospitals, stroke-experts and the Waterloo Wellington Rehabilitation Care Council (Rehab Care Council) have told the WWLHIN that sub-optimal performance will persist unless an integrated clinical stroke program is created that ensures one standard of care for every resident in Waterloo Wellington.

The creation of an integrated system of stroke care is fundamentally aimed at improving care for residents and will do this in two ways. First, it will create a new delivery model and will move our local system from a fragmented distributed system to one that is focused on a few hospital sites with the critical mass and expertise to deliver expert stroke care. This will change where care is delivered. Second, it will raise the standard of care by standardizing care to evidence-based leading practice. This will change what care looks like.

At the same time that Waterloo Wellington is developing a new system for stroke care, the province is rolling out a new mechanism for funding health services, including stroke care. Health System Funding Reform (HSFR), through a mechanism called Quality Based Procedures (QBPs) will link funding with quality. Every QBP will have a clinical guidebook that

lays out the expectations for standardized leading practice care, and as early as next year, funding will be dependent on meeting the best practice standards for stroke care.

On June 13, 2013, the WWLHIN Board of Directors passed a motion issuing a proposed integration decision of stroke services in Waterloo Wellington. The integration would result in leading practice acute stroke care being provided at two sites (Guelph General Hospital (GGH) and Grand River Hospital (GRH)) and best practice rehabilitation stroke care provided at three sites (Cambridge Memorial Hospital (CHM), St. Joseph's Health Centre Guelph (SJHCG) and GRH– Freeport Site). Stroke patients requiring palliative care would be transitioned to the most appropriate care setting as close to home as possible.

Following the WWLHIN Board of Directors meeting on June 13th, and in accordance with the consultation requirements of the Local Health System Integration Act (LHSIA), the briefing note and proposed decision were made available to the public at the WWLHIN office and posted on the WWLHIN website. Information was given on how to contact the WWLHIN to provide feedback.

In addition, affected parties were notified in writing on June 20, 2013 that the WWLHIN intends to issue a decision requiring Health Service Providers (HSPs) to undertake the integration activity outlined in the proposed decision and were provided with details of how they could provide feedback to the WWLHIN. Details of the consultation process were also included in the WWLHIN Board Highlights, which were circulated to all HSPs, media, local government officials and WWLHIN advisory committees.

Community Consultation Feedback

In total, feedback was received from nine sources, eight of which were HSPs affected by the proposed decision and one stroke survivor. All of the feedback was very supportive of the direction of the stroke integration and was offered in the spirit of refining and sharpening the clarity of the decision. The feedback received fell into two general categories: 1) feedback related directly to the proposed integration decision, and 2) feedback related to existing issues that are not a direct result of the proposed integration decision. For a more comprehensive description of the feedback received see section 7 of Appendix A: Analysis of the attached required integration.

1) Feedback related to the proposed integration decision:

Implementation Date:

HSPs indicated that the implementation deadline was not clear and that there were several issues which would make it difficult to meet the implementation deadline of February 28, 2014, including recruitment, union notifications and transfer of acute stroke volumes between hospitals. Hospitals proposed an implementation date of April 1, 2014.

WWLHIN Response: The WWLHIN believes that residents of Waterloo Wellington deserve access to best-practice stroke care as soon as possible. The six month timeframe provides for the minimum time required for union notifications and for providers to transfer stroke patients to the dedicated units. Moving to an April 1, 2014 implementation date will provide a bit more time to allow for a smoother implementation and will have the added benefit of simplifying the accounting and funding transfers by aligning with the start of the new fiscal year. The decision has been revised to reflect an April 1, 2014 implementation date.

No Refusal Policy:

It has been requested that hospitals providing acute stroke care institute a “no refusal policy” so that it is clear to all clinicians that care is to be provided to all residents of Waterloo Wellington regardless of the emergency department where they present.

WWLHIN Response: The decision has been revised to include a requirement that hospitals providing acute stroke care implement a no refusal policy.

Financial Impact:

The current QBP funding does not reflect the cost of delivering best-practice stroke care and hospitals are anticipating costs related to the provision of additional therapy to meet leading practice, as well as higher medical hospitalist costs related to the need to provide more intense medical care in rehabilitation units. The hospitals that will be providing stroke care following the integration have requested that implementation be delayed until the new QBP rate is implemented.

Four hospitals will be required to transfer all of their acute stroke volumes by April 1, 2014; St. Mary’s General Hospital (SMGH), Groves Memorial Hospital (GMH), North Wellington Health Care (NWHC) and CMH.

SMGH has historically treated a low volume of patients and is supportive of transferring those volumes to GRH in order to support evidence-based leading practice for patients.

GMH and NWHC have informed the WWLHIN in writing that there has been an explicit agreement established with GGH to accept the stroke volumes from GMH and NWHC as part of their business case to establish a designated stroke unit with no transfer of financial resources from either GMH or NWHC. This will be complemented by the rural hospitals’ efforts to repatriate patients and provide care closer to home for non-stroke patients and will have the effect of providing an off-setting volume of patients to the stroke patients who will be cared for in Guelph.

CMH has been an active participant in the delivery of stroke care for residents and development of the future model for stroke care delivery. They are supportive of the new directions for stroke care and have told the WWLHIN in writing that, “the acute care and rehabilitative care siting decisions reflect the currently available evidence and will do much to enhance the outcomes for those individuals who have experienced a stroke.” However, they have also informed the WWLHIN that they will be unable to identify savings equivalent to the proposed funding transfer once the program is divested due to “fixed” and “step” costs that comprise the service delivery model. CMH has stated their commitment to mitigating service and system impacts to the community wherever possible and as such are immediately prepared to engage in the work to identify a plan for a comparable clinical program transfer to CMH that would occur in a timely manner coordinated with acute stroke service transfers. The transfer would require a comparable population of weighted cases to be transferred to CMH in order to receive similar funding that would then allow them to maintain a comparable cost structure within the organization. CMH has requested the deadline of February 28, 2014 be adjusted to allow more time to work with other hospitals to find a system-level solution.

WWLHIN Response: The implementation deadline has been extended to April 1, 2014. Completing the implementation of best-practice stroke care by April 1, 2014 is in both patients’ and the hospitals’ best interest as it is expected that funding will be linked to the delivery of best-practice stroke care starting April 1, 2014. The WWLHIN has indicated a strong willingness to work with the MOHLTC to help inform and shape the best-practice QBP price for stroke care. The WWLHIN has arranged meetings and site visits for early September that will bring together

senior MOHLTC HSFR experts and local providers to discuss the integrated clinical program for stroke.

CMH has requested more time to work with other hospitals to identify a program that might be relocated in order to fill a resource gap left by the divestment of stroke. More than a year ago, hospitals identified the need to develop a vision for each acute care site as part of their work to develop integrated clinical programs that would help to guide the clustering of clinical programs and ensure that we have sustainable hospitals in all communities. This work is underway and now supported by external consultant assistance funded by the WWLHIN, and is expected to come to conclusion in the near to medium term. The WWLHIN endorses the need for a vision for a single system of acute care and encourages the hospitals to proceed with haste to complete this work.

Through a joint letter from all hospitals, "transitional funding" has been requested to support CMH. The new funding formulas require that hospitals are delivering care efficiently and any additional funding that would support ongoing inefficiencies will not be sustainable. There is evidence that CMH's underlying cost structure is not in alignment with their peer hospitals across the province. This is an issue that is not caused by the divestment of acute stroke care, but rather the divestment exacerbates a pre-existing condition. To assist CMH to transition to a lower overall cost structure they are being provided with transition assistance by the MOHLTC through the mitigation funding associated with HSFR. For 2013-14 CMH is projected to receive approximately $400,000 of additional one-time funding. It is difficult to provide any further funding to CMH that is not tied to direct service provision. Any funding not directly tied to service provision will be at risk of being returned to the MOHLTC and/or negatively impacting future years funding.

2) Feedback on Other Existing Issues

Continuum of Care: Feedback received from hospitals points to the important role that community-based service options play in the full recovery of stroke patients. The feedback identified that leading-practice stroke care is currently not being provided by the Waterloo Wellington Community Care Access Centre (WWCCAC), and there is also a need for community-based aphasia programs (speech language therapy) to support stroke patients in a full recovery. HSPs noted that leading practice length of stay targets for in-hospital stays are dependent on leading practice care also being provided in the community.

Health Human Resources: Feedback highlighted challenges that have existed and still persist with regard to the recruitment of physiatrists.

Conversion of Complex Continuing Care Beds: HSPs noted that traditionally some stroke patients have received care in Complex Continuing Care (CCC) beds. Going forward, it may be necessary to reclassify some of these beds to better reflect the care that is being provided and to formalize the rehabilitation care capacity in the system. Hospitals have recently made requests to reclassify more beds than originally identified in the stroke business case. As such, the WWLHIN has requested that hospitals and the Rehab Care Council work together to create a single, comprehensive plan for the rehabilitation and CCC capacity and to make a single recommendation for any bed conversions that may be necessary.

WWLHIN Response: The WWLHIN acknowledges the important role that community services play in the continuum of care; however, this existing issue should not delay establishing dedicated acute and rehab stroke units, both of which are required to deliver leading practice stroke care. The proposed integration decision focuses on in-patient (hospital) care for both acute and rehabilitation care. The logical next steps are to continue to address issues along the rest of the continuum of care for stroke patients. Further planning, much of which is currently

underway, is being led by the Sponsor Organization and will be reviewed by the Rehab Care Council.

Hospitals have made an informal request to the WWLHIN to convert some CCC beds to Rehabilitative Care beds in order to better reflect the care that is being provided in those beds and improve the data quality that is informing the HSFR calculations. A working group is developing a plan that will be reviewed by the Rehab Care Council who will then make a recommendation to the WWLHIN.

Next Steps:

1. Immediately following this decision, the Stroke Stream Lead Organization and all Parties named in the decision will begin implementing the necessary changes to move to the new model of care.

2. The WWLHIN will request that the WWCCAC work with the Rehab Care Council to develop a plan outlining how they will deliver best practice stroke care in the community within the WWCCAC's existing funding allocation and to submit that plan to the WWLHIN by November 1, 2013.

3. The Rehab Care Council, through the Sponsor Organization (SJHC) will provide the WWLHIN with the dates for transfer of patients and the WWLHIN will ensure that funding is transferred accordingly. Hospital Service Accountability Agreements (H-SAAs) will be amended to reflect the updated patient volumes.

4. The Rehab Care Council, through the Sponsor Organization, will submit a plan to the WWLHIN by November 1 2013, outlining a system-wide plan for rehabilitation and CCC bed designations.

5. WWLHIN and the Sponsor Organization have organized a meeting in early September for members of the MOHLTC - HSFR team to come and learn about the integrated stroke model of care in Waterloo Wellington; which will help to inform the leading practice stroke QBP funding.

Appendix A

REQUIRED INTEGRATION UNDER SECTION 26

Decision of the Waterloo Wellington Local Health Integration Network Issued pursuant to s. 25(2)(b) and s.26 of the *Local Health System Integration Act, 2006*

1. **Date:** August 15, 2013

2. **Parties to Decision**
   Cambridge Memorial Hospital (CMH)
   Grand River Hospital (GRH)
   Groves Memorial Community Hospital (GMCH)
   Guelph General Hospital (GGH)
   North Wellington Health Care (NWHC)
   St. Joseph's Health Centre Guelph (SJHCG)
   St. Mary's General Hospital (SMGH)

3. **Final Decision**

   Pursuant to section 26 of the *Local Health System Integration Act, 2006*, the Waterloo Wellington Local Health Integration Network finds that it is in the public interest to require the Parties to take the following actions by the dates specified:

   (a) GMCH is ordered to take the following actions by April 1, 2014:
      i. Work with GGH to ensure the transfer of all acute QBP stroke patient volumes to GGH.
      ii. Cease providing rehabilitative care to stroke patients in either acute or complex continuing care beds.
      iii. Provide palliative care to Band 5 stroke patients who may be repatriated.
      iv. Develop a human resources adjustment plan.

   (b) NWHC is ordered to take the following actions by April 1, 2014:
      i. Work with GGH to ensure the transfer of all acute QBP stroke patient volumes to GGH.
      ii. Cease providing rehabilitative care to stroke patients in either acute or complex continuing care beds.
      iii. Provide palliative care to Band 5 stroke patients who may be repatriated.
      iv. Develop a human resources adjustment plan.

   (c) GGH is ordered to take the following actions by April 1, 2014:
      i. Work with GMCH and NWHC to transfer all acute QBP stroke patient volumes from GMCH and NWHC to GGH.
      ii. Provide acute stroke care in 8 dedicated acute stroke beds.

iii. Provide acute stroke care in accordance with best-practice standards set out in the stroke QBP handbook.
iv. Implement a no refusal policy for acute stroke care.
v. Provide palliative care to Band 5 stroke patients who may be repatriated.
vi. Provide tPA on-site, only if determined to be an appropriate site by the Rehab Care Council and Telestroke Ontario.
vii. Work with GRH, the Stroke Stream Steering Committee and the Rehab Care Council to participate in the full evaluation of the stroke program, by September 30, 2015.
viii. Participate in the pilot project with the Ministry of Health and Long-Term Care to inform the stroke QBP pricing.
ix. Develop a human resources adjustment plan.

(d) CMH is ordered to take the following actions by April 1, 2014:
i. Work with GRH to ensure the transfer of all acute QBP stroke patient volumes from CMH to GRH.
ii. Provide stroke rehab care in 6 dedicated stroke rehab beds.
iii. Provide stroke rehab care in accordance with best-practice standards set out in the stroke QBP handbook.
iv. Provide palliative care to Band 5 stroke patients who may be repatriated.
v. Work with GRH, the Stroke Stream Steering Committee and the Rehab Care Council to participate in the full evaluation of the stroke program, by September 30, 2015.
vi. Participate in the pilot project with the Ministry of Health and Long-Term Care to inform the stroke QBP pricing.
vii. Develop a human resources adjustment plan.

(e) St. Mary's General Hospital is ordered to take the following actions by April 1, 2014:
i. Work with GRH to ensure the transfer of all acute QBP stroke patient volumes from SMGH to GRH.
ii. Continue to partner with GRH to care for cardiac patients who have had a stroke in hospital.
iii. Provide palliative care to Band 5 stroke patients who may be repatriated.
iv. Work with GRH, the Stroke Stream Steering Committee and the Rehab Care Council to participate in the full evaluation of the stroke program, by September 30, 2015.
v. Develop a human resources adjustment plan.

(f) Grand River Hospital is ordered to take the following actions by April 1, 2014:
i. Work with SMGH and CMH to ensure the transfer of all acute QBP stroke patient volumes from SMGH and CMH to GRH.
ii. Provide acute stroke care in 18 dedicated acute stroke beds at the GRH Kitchener-Waterloo (KW) site.
iii. Provide acute stroke care in accordance with best-practice standards set out in the stroke QBP handbook.
iv. Implement a no refusal policy for acute stroke care.
v. Provide rehab stroke care in 18 dedicated rehab stroke beds at the GRH Freeport site.

vi. Provide rehab stroke care in accordance with best-practice standards set out in the stroke QBP handbook.
vii. Provide palliative care to Band 5 stroke patients who may be repatriated.
viii. Continue to lead the work of the Stroke Stream Steering Committee, ensuring that a single best-practice standard of care is adhered to at all stroke sites and the ongoing monitoring and evaluation of the program.
ix. All stroke care providers, the Stroke Stream Steering Committee and the Rehab Care Council to participate in the full evaluation of the stroke program, by September 30, 2015.
x. Participate in the pilot project with the Ministry of Health and Long-Term Care to inform the stroke QBP pricing.
xi. Develop a human resources adjustment plan.

(g) St. Joseph's Health Centre Guelph is ordered to take the following actions by April 1, 2014 :
i. Provide rehab stroke care in 12 dedicated rehab stroke beds.
ii. Provide rehab stroke care in accordance with best-practice standards set out in the stroke QBP handbook.
iii. Provide palliative care to Band 5 stroke patients who may be repatriated.
iv. Continue its role as the Sponsor Organization for the Rehabilitative System of Care, ensuring that best-practice standards are being consistently implemented at all sites.
v. Work with GRH, Stroke Stream Steering Committee and the Rehab Care Council to participate in the full evaluation of the stroke program, by September 30, 2015.
vi. Participate in the pilot project with the Ministry of Health and Long-Term Care to inform the stroke QBP pricing.
vii. Develop a human resources adjustment plan.

4. Factual Background to the Decision

4.1 Description of the stroke patient population in WWLHIN

In WWLHIN, stroke is ranked as the third most common cause of death and the ninth most common chronic disease. Data suggests that in the WWLHIN, about 16% of those who suffer a stroke do not survive. Of those who do survive, 29.4% are discharged to an in-patient rehabilitation program and 18% to a long-term care or chronic care facility. Preliminary unpublished data from the OSN 11/12 report card shows that Waterloo Wellington has made gains due to the hard work of individual organizations. WWLHIN mortality rates (10.3%) have greatly improved and as a region we are now below the provincial benchmark (12.2%). However, there remains significant variability in mortality rates across Waterloo Wellington and local stroke experts have estimated that 7 out of the 20 indicators on the Stroke Report Card are site-specific and can be influenced by organizational changes to care. Changes to the remaining 13 indicators require system-wide improvements, such as consolidation to provide stroke care on dedicated units.

4.2 Description of the Parties to the Decision

Cambridge Memorial Hospital (CMH) is a community and referral acute-care facility, which offers a range of services to the residents of Cambridge and North Dumfries County. Services include 24-hour emergency coverage, advanced technology and diagnostic support, and specialty programs, including surgery, orthopaedics, and cataracts. CMH serves a population of approximately 135,000 people throughout Cambridge and North

Dumfries. In 2011/12 CMH provided acute service to 138 stroke patients and rehab service to 37 stroke patients.

Grand River Hospital (GRH) is a community and referral acute-care facility, which offers a range of services to the residents of Waterloo Wellington and, through its regional programs, Ontarians from outside the area. Services include 24-hour emergency coverage, advanced technology and diagnostic support, and specialty programs, including cancer care, diagnostic imaging, and paediatric and child services. GRH serves a population of approximately 470,000 throughout Waterloo Region. GRH is currently the District Stroke Centre for Waterloo Wellington and has the highest volumes of stroke patients in the region – 437 acute, 150 Rehab/Complex Continuing Care (CCC) in 2011/12. They are the only hospital site that has a dedicated acute stroke unit (13 beds) and also the only site that delivers the life-saving, clot-busting drug tPA. Emergency Medical Services take all potential tPA candidates to GRH where they are assessed (CT scan, consult with Telestroke, etc.), given the drug (if appropriate) and stabilized before being repatriated to their home hospital.

Groves Memorial Community Hospital (GMCH) is a small community acute-care facility offering services to the residents of Centre Wellington and Wellington County. Services include 24-hour emergency services, diagnostic support, complex continuing care, and outpatient services. GMCH serves a population of approximately 26,000 residents in Wellington County. GMCH provided acute care to 46 stroke patients in 2011/12. Some of these would have been tPA recipients that were repatriated from GRH.

Guelph General Hospital (GGH) is a community and referral acute-care facility, which offers a range of services to the residents of Guelph and Wellington County. Services include 24-hour emergency coverage, advanced technology and diagnostic support, and specialty programs, including surgery, orthopaedics, cardiac care, obstetrics, gynaecology and paediatrics. GGH serves a population of approximately 180,000 people throughout Guelph and Wellington County. GGH provided acute care to 171 stroke patients in 2011/12. While they do not have a dedicated unit, which is best-practice, they did cluster stroke patients on the medicine unit. This change resulted in improved care and efficiencies in length of stay.

North Wellington Health Care (NWHC) is a regional provider of primary and select secondary health services to the people of North Wellington County and to parts of its adjacent counties, Grey and Perth. With two fully-accredited hospital sites in Mount Forest and Palmerston, both hospitals operate 24-hour emergency departments, deliver obstetrical services and provide a comprehensive range of inpatient and ambulatory services. NWHC serves a population base of approximately 30,000 people. NWHC (both sites combined) provided acute care to 36 stroke patients and, like GMCH, some of these patients would have been tPA recipients repatriated from GRH.

St. Joseph's Health Centre Guelph (SJHCG) provides residential long-term care, complex continuing care, rehabilitation and outpatient services to the residents of Guelph and Wellington County. SJHCG also delivers specialty seniors services, including respite care, palliative care and dementia programming to a population of approximately 180,000 people. SJHCG provided rehab and CCC care to 76 stroke patients in 2011/12.

St. Mary's General Hospital (SMGH) is a community, adult acute-care and referral facility and tertiary cardiac care centre, which offers a range of services to the residents of Waterloo Region and, through its regional programs, Ontarians from outside Waterloo Wellington. Services include 24-hour emergency coverage, advanced technology and diagnostic support, and specialty programs, including cardiology, respiratory illness, minimal invasive

surgery, eye, nose and throat surgery, and thoracic surgery. SMGH serves a population of approximately 470,000 throughout Waterloo Region. SMGH does not provide care to stroke patients, however, some of their cardiac patients experience a stroke in hospital as a result of complications related to their cardiac care, in which case they would remain at SMGH. Once these patients are stabilized they transition to rehabilitative care.

4.3 Evidence Supporting Leading Practice Stroke Care:

Research completed during the past decade has demonstrated that a large opportunity exists to save lives and greatly improve recovery for Canadians who experience a stroke. The Canadian Stroke Strategy released updated Canadian Best Practice Recommendations for Stroke Care in 2010. These recommendations provide a framework to drive system improvement and facilitate the adoption of evidence-based best practices in stroke care across the continuum of care.

Some of the best practice guidelines from the Canadian Stroke Network and the Ontario Stroke Network include:

- All stroke patients should receive care on geographically designated stroke units.
- An inter-professional team should assess patient's impairment and functional status.
- Stroke assessments should be completed using standardized, valid assessment tools.
- Timely transfer of appropriate patients from acute facilities to rehabilitation (Patients with ischemic strokes to transfer to rehabilitation by day 5, patients with haemorrhagic strokes to transfer to rehabilitation by day 7).
- Provision of greater intensity therapy in inpatient rehabilitation (3 hours of therapy per day, 7-day a week therapy).
- Timely access to outpatient/community-based rehabilitation for appropriate patients
- Supported discharge with 2-3 outpatient or CCAC visits/ week for 8-12 weeks.
- Ensuring that all rehabilitation candidates have equitable and funded access to the rehabilitation they need at home, or in an ambulatory setting.

Research has shown that care delivered according to these guidelines can help to:

- reduce the risk of death and severe disability
- improve the functional capacity of stroke survivors
- increase the number of stroke survivors who can return to their homes
- reduce the numbers who need long-term care
- reduce the risk of another stroke
- improve the quality of life of stroke survivors and their families

Research also suggests that high volumes of patients translates into better outcomes for stroke patients as clinicians are able to develop expertise in providing stroke care. The Ontario Stroke Network has identified a threshold of 200 patients per year that, based on evidence, has shown to significantly improve outcomes for patients and efficiency of providing care.

Currently, in WWLHIN, stroke care is being delivered across eight hospital sites with some hospitals seeing very low volumes of patients and therefore not meeting the volume threshold required to develop and maintain stroke expertise. As a result, less than 45% of patients who have a stroke in WWLHIN are treated on a dedicated stroke unit (as per best practice). While individual organizations have made changes to better align themselves with the stroke guidelines which have led to improvements within their own facilities, system level

measures of success are not being impacted as this care is not available to all residents across Waterloo Wellington.

The results of the 2012 Ontario Stroke Network Report Card demonstrates that there is limited access to quality stroke care in WWLHIN and that the outcomes for stroke patients in WWLHIN are below provincial benchmarks. As shown in the table below there is a significant opportunity to better meet the needs of our residents and improve outcomes and efficiency.

Best Practice	WWLHIN	Provincial Benchmark
Stroke/TIA patients are treated on a stroke unit at any given time during their stay	43.9%	87.5%
The proportion of ALC days to total length of stay in acute care	36.9%	14%
Acute stroke (excl. TIA) patients discharged from acute care and admitted to inpatient rehabilitation	29.4%	42.3%
Patients with severe stroke are admitted to inpatient rehabilitation	27.4%	46.9%
Proportion of stroke/TIA patients discharged from acute care to LTC/CCC	13%	4.7%

4.4 Funding Best-Practice Stroke Care: Quality-Based Procedures

The province's new funding methodology will ensure that health care organizations are compensated based on how many patients they look after, the services they deliver, the evidence-based quality of those services, and the specific needs of the broader population they serve.

Quality Based Procedures (QBP) are one element of this new approach to funding. QBPs will reimburse care providers for the types and quantities of patients treated, using evidence-based rates for specific patient populations. Stroke care is transitioning to QBP funding in the current fiscal year. At this time however, the stroke QBP is based on the average cost of acute stroke care in Ontario and does not yet reflect the cost of providing best practice acute stroke care.

The proposed integration ideally positions Waterloo Wellington for the emerging QBP funding model. There is a need to consolidate stroke services in order to build the clinical infrastructure, expertise and critical mass that will facilitate meeting the quality standards outlined in the QBP guidelines. The province recognizes that integration of stroke services may be required "to achieve the critical mass of expertise and stroke unit admissions", and suggests that "each LHIN will need to consider consolidation of stroke care in a fewer number of hospitals in their region". (QBP Clinical Handbook Recommendations for the Implementation of Best Practice p.54)

4.5 Developing an Integrated Stroke Program

In 2009 WWLHIN staff, in partnership with local and regional stroke leaders initiated a review of stroke care in Waterloo Wellington. This review was undertaken in response to

local data from the Ontario Stroke Audit and Ontario Stroke Report Card, which indicated that care in Waterloo Wellington was not meeting the needs of residents. The goal of the review was to understand the current landscape, compare this against the best practice guidelines from the Canadian Stroke Network and make some recommendations for how Waterloo Wellington could ensure that the local stroke system could deliver best-practice care for residents.

A Stroke Review Steering Committee led this work from late 2009 until early 2010. The committee consisted of leading experts from the Ontario Stroke Network, the Regional Stroke Centre (Hamilton Health Sciences) and also local experts both clinical and administrative. The committee's work culminated in a draft report that was shared with multiple stakeholder groups and feedback was incorporated into the final draft document, which was completed in January 2011.

GGH was provided with project funding to lead the second phase of this work, which included further analysis into the feasibility of implementing the recommendations included in the phase 1 report and also the development of a model of stroke care that would ensure all Waterloo Wellington residents had access to best-practice care. This work was completed between June 2011 and January 2012 and resulted in an addendum report recommending a stroke model of care and also sizing and siting of stroke services to achieve best-practice care for every resident. The recommendations contained in the draft report were shared with the WWLHIN Board of Directors at its meeting on March 29, 2012, for information and included:

- GRH KW site provide best practice stroke recovery services for all acute patients in the WWLHIN
- GRH Freeport Site and SJHCG will provide services for all rehabilitation patients.
- Patients requiring palliative care will be triaged to a close to home palliative care bed when possible
- A no refusal policy will be in place to ensure that patients access the system across the continuum of care without delay.
- A regional Stroke Governance Structure will be created.
- Four stroke community implementation teams will be created to develop an inventory of services and strategies that will support patients transitioning from hospital to home.

Around the same time, SJHCG was provided project funding to carry out a review of rehabilitation services in Waterloo Wellington and deliver a report that included: an analysis of the current state of service delivery, development of a re-designed rehab service delivery model to address identified challenges and barriers and development of recommendations to support the operationalization of the new model. This work began in August 2011, with a draft report completed in December 2011. The draft report outlined a future system of rehabilitation care that included standardized care pathways organized around four condition-specific "streams of care": Musculoskeletal, Cardio-Pulmonary, Frail Elderly and Medically Complex and Stroke/Neurology. Due to the natural alignment of stroke in the desired future state for rehab care, the two projects were formally merged in March 2012.

In June 2012 SJHCG was identified as the Sponsor Organization responsible for implementing recommendations from the rehabilitative care review. The Sponsor was provided project funding to create a measurably improved system of rehabilitative care for the residents of Waterloo Wellington and a regional program framework and structure that will serve as a template for the development of future regional programs. For the stroke

stream, SJHCG worked with the Stroke Stream Lead Organization, GRH, to implement a best-practice model of stroke care across the Waterloo Wellington system.

Also, in the summer of 2012 the Rehabilitative Care Council was formed and is chaired by the Sponsor Organization (SJHCG) and a local physiatrist. While the Sponsor Organization is accountable to the WWLHIN for delivering the outcomes associated with the project, they work with leaders on the Rehab Care Council to enact change in the system. Since August 2012, the Rehab Care Council has been supporting the implementation of the rehab system of care and has been supported by four Stream Steering Committees, which are developing care pathways and models of care for each of the streams of care.

SJHCG, working in partnership with the Stroke Stream Steering Committee, led by GRH has developed a business case for a best-practice model of stroke care over the fall of 2012, which included financial and HR implications of implementing the recommended sizing and siting from the addendum report. In November and December 2012 the CEO of the Sponsor Organization presented the proposed model to each of the hospital boards.

Leaders from across the system have analyzed the data based on different siting options and have presented a business case for a model of care that ensures best-practice care for all WW residents and mitigates against potential financial and HR risks across the system. The model was presented to the Rehab Care Council in April and this group made a recommendation on a model that was taken to each HSP board during the last 2 weeks in April (changes to the first set of recommendations are in ***bold italics***):

1. Grand River Hospital (KW Site) ***and Guelph General Hospital*** will provide best practice acute stroke recovery services for all Band 1 and Band 2 patients in WWLHIN. Band 5 patients with minimal/no recovery potential identified will be transitioned to the most appropriate care setting.
2. Grand River Hospital Freeport Site, St. Joseph's Health Centre Guelph ***and Cambridge Memorial Hospital*** will provide rehab services for all Band 3 and Band 4 patients -
3. A no refusal policy will be in place to ensure that patients access the system across the continuum of care without delay.
4. An Integrated Model of Stroke Recovery Implementation Structure will be created and include:
    a. Appointment of a lead organization(s) that will work with an implementation committee to be accountable for the implementation and ongoing monitoring of the Stroke Recovery System of Care.
    b. Recruitment of a "newly created" Regional Stroke Program Director accountable to the lead organization(s).
    c. Development of an Implementation Committee structure that will address specific restructuring requirements necessary to implement this model.
5. Development of four Community Integration Teams (CIT's) responsible for developing an inventory of services and strategies that will support responsive community integration anticipating discharge needs based on patient's recovery trajectory (expected FIM change per band). Influences including age, pre-morbid family and social supports, mobility and home and community access may alter category of needs.

The decision to move from one acute site to two acute sites was supported by local data, which showed that Waterloo Wellington has high enough volume of patients to support two

dedicated stroke units with the necessary critical mass to ensure that clinical staff develop and maintain expertise in stroke care.

Regarding the decision to move from a two site rehabilitation model to a three site rehabilitation model, the Rehab Care Council considered a proposal from CMH to continue providing rehab care to stroke patients. Due to a lack of level A (randomized control trials) evidence on the threshold number of cases required to maintain expertise in rehab care, and the fact that CMH is currently the only provider delivering the best-practice standard of three hours of therapy per day, the council decided on the three site model. All providers committed to ensuring the highest quality of care and quality outcomes will be monitored by the Stroke Steering Committee and Rehabilitative Care Council with a plan to reevaluate the siting decision within 18-24 months or sooner if quality concerns are identified. Hospitals have provided the WWLHIN with their analysis of the costs of providing rehabilitative care at three sites versus two, and there does not appear to be any material difference between the two options. There is also no evidence that a 6 bed rehabilitation unit will cause any harm to patients, however the proximity of the CMH and GRH, Freeport site, intuitively raises questions about potential loss of efficiencies and dilution of expertise by spreading that expertise over multiple sites.

4.6 Overview of the Proposed Bed Distribution:

Acute

Currently, the equivalent of 24.4 beds are utilized to provide acute stroke care in Waterloo Wellington hospitals, of these 13 are on a dedicated stroke unit, the balance of patients are treated in general medicine units.

In the proposed model, GRH would increase the number of beds on the dedicated stroke unit from 13 to 18 and GGH would establish an eight bed dedicated stroke unit, for a total system capacity of 26 acute stroke unit beds.

Rehab

Currently, the equivalent of 26 rehab or CCC beds are utilized to treat stroke patients. In the proposed model rehabilitative care the number of beds designated for the treatment of stroke patients will be increased by 10 beds and care will be provided by dedicated teams on 3 designated rehab units with a total system capacity of 36 beds (GRH Freeport site – 18 beds; SJHCG – 12 beds; CMH - 6 beds).

4.7 Community Engagement on the Regional Integrated Stroke Program

Almost 150 engagement sessions have occurred over the past four years related to the stroke integration. These sessions have involved patients, stroke survivors, physician leaders, front-line staff, administrators and governors from across the Waterloo Wellington health system.

Advertisements in local newspapers have promoted resident participation in many of the sessions, and local stroke recovery chapters have been active partners in organizing focus groups and meetings to gather feedback. All of this feedback has been tracked and has informed the development of the model and helped identify potential risks to implementation. Feedback from these sessions indicates support for the integrated program and frustration that it has not yet been implemented.

5. A Proposed Decision

On June 13, 2013, the WWLHIN Board of Directors passed a unanimous motion that the WWLHIN notify the parties to this decision that the WWLHIN proposed to issue a decision

pursuant to s. 25(2) (b) and s. 26 of the Local Health System Integration Act 2006. The proposed integration decision was posted on the WWLHIN's website on June 14, 2013 and issued to the parties in writing on June 20, 2013. The WWLHIN received nine submissions about the proposed decision on or before the deadline of July 31, 2013.

6. The Process

The WWLHIN released its 2010-2013 Integrated Health Service Plan (IHSP) to the public in early 2010. One of the eight priorities was: Improving Outcomes for Stroke Patients through Integrated Programs.

The WWLHIN funds each of the parties to the decision.

The WWLHIN worked with HSP partners to support the completion of the draft report: Improving Access to Stroke Care in Waterloo Wellington.

The WWLHIN funded the phase two working group, which was led by GGH to analyze the data and determine the feasibility of implementing the recommendations from the review, and also to develop a model of care that would allow access to best-practice stroke care for every resident of Waterloo Wellington. This work resulted in an addendum to the stroke review.

The WWLHIN funded a review of rehabilitation services in Waterloo Wellington, through the project sponsor, SJHCG.

The WWLHIN provided project funding to SJHCG to implement the recommendations from the rehab review, which included implementing an integrated, best-practice stroke program across WW.

The following items were brought forward to the WWLHIN Board of Directors:

- **March 29, 2012** – Update on Rehabilitation Services Review and Integrated Stroke Program Implementation
- **December 6, 2012** – Funding decision for SJHCG, as the sponsor organization to implement recommendations from Rehab Review and an integrated stroke program across Waterloo Wellington.
- **January 31, 2013** – Update on status of stroke implementation and development of business case
- **March 28, 2013** – Update on status of stroke program implementation, highlighting next steps to complete the business case
- **May 9, 2013** – High-level overview of the status of the stroke business case submitted by SJHCG in support of a voluntary integration. WWLHIN staff identified to the Board that the business case was incomplete for a number of reasons and laid out next steps in collecting the necessary information.
- **June 13, 2013** – The proposed integration decision was presented and the WWLHIN Board of Directors passed a motion to issue the proposed integration decision pursuant to s. 26 (3) of the Local Health System Integration Act, 2006.

Following the WWLHIN Board of Directors meeting on June 13, 2013, and in accordance with the consultation requirements in LHSIA the briefing note and proposed integration decision were posted on the WWLHIN website and hard copies were made available at the WWLHIN office. Information was given on how to contact the WWLHIN to provide feedback. A letter was sent out to all affected Parties on June 20, 2013 and included a copy of the

proposed integration decision with details about how to provide feedback to the WWLHIN. Details about the consultation process were also included in the WWLHIN Board Highlights, which were circulated to all Health Service Providers (HSPs), media, local government officials and WWLHIN advisory committees.

7. The Analysis

The Waterloo Wellington integrated model of stroke care that was outlined in the voluntary integration submitted to the WWLHIN by the Rehabilitative Care Council represents a truly collaborative approach to developing a regional program; one that will provide best practice stroke care to every resident in Waterloo Wellington. This is evidenced by the work of many people over almost three years and all hospital boards endorsing the clinical aspects of the model of care.

When issuing a decision under s. 26 of the *Local Health System Integration Act. 2006* that requires parties to undertake certain integration activities, the WWLHIN Board of Directors must consider the decision to be in the public interest. The WWLHIN finds that it is in the public interest to require the changes sought by local providers, not only because of the benefits that will result for residents who suffer from a stroke, but also because of the degree of support for these changes amongst the many professionals, service providers and other interested parties.

Feedback Received During the 30 Day Consultation Period:

In total, feedback was received from nine sources, eight of which were Health Service Providers (HSPs) affected by the proposed integration decision and one stroke survivor. HSPs commented on issues directly related to the proposed integration, which would involve the consolidation and in some cases, the relocation of inpatient (hospital based) acute and rehabilitation stroke services. They also commented on existing issues not arising from the proposed integration but that will also need to be addressed in order to bring the entire system of stroke care up to best practice, for example, community and home-based services, including aphasia programming.

Issues directly related to the proposed integration:

1. ***Clarity on implementation date.***

   Through the consultation period it was identified that there was some ambiguity from the perspective of the Health Service Providers (HSPs) about the timing of the implementation of best-practice levels of care in both acute and inpatient rehabilitative care settings.

   WWLHIN Response: The proposed integration decision has been updated to ensure that there is clarity around the expectations of the implementation deadline.

2. ***Disputing the February 28, 2014 implementation date – Service providers requested an April 1, 2014 date.***

   Concerns were raised about the reasonability of having all the changes outlined in the draft decision implemented by February 28, 2014; the concerns included:

   I. implementation of human resources plans will require several months, as recruitment and union notices will take significant time;
   II. the acute care units could not operate to the specified number of beds without the transfer of acute stroke volumes from the other acute care hospitals.

   WWLHIN Response: an implementation deadline of February 28, 2014 provides six months to allow for proper union notifications to take place. St. Joseph's Health Centre

Guelph (The Sponsor Organization) is to notify the WWLHIN in writing of the dates that patients are to be transferred which shall be no later than April 1, 2014, and the WWLHIN will ensure that the funding transfers are aligned with the transfer of patient volumes. Accountability agreements (H-SAAs) will be amended to reflect the new patient volumes for stroke care. The transfer of patients for acute stroke care, and the provision of best-practice care in both acute stroke and in-patient rehabilitation stroke units in line with the QBP guidebook shall take place by April 1, 2014.

3. No-Refusal Policy

Rural Hospitals have highlighted the need for a no refusal policy to ensure timely transfer of patients from rural hospitals to designated acute stroke care sites.

WWLHIN Response: a no refusal policy will help to ensure timely transfer of patients to one of the designated acute stroke sites and the decision has been revised accordingly.

4. Local Choice

Rural hospitals have made a request for exceptions for patients who request local versus more distant regional care.

WWLHIN Response: GMCH and NWCH are not able to meet the standards of care that will ensure optimal patient outcomes.

5. Transportation Costs:

Rural hospitals have identified potential costs related to the transfer of patients who present in their emergency department and then need to be transferred to another site.

WWLHIN Response: Rural hospitals will have cost savings related to the discontinuation of providing inpatient acute and rehabilitative care for stroke patients that will help to off-set any additional transportation costs.

6. Financial Implications.

HSPs highlighted concerns which related to the timing of QBP funding rollout. The business case submitted by the Rehabilitative Care Council for a voluntary integration of stroke services highlighted that stroke care is not currently being provided to best-practice standards outlined in the Quality Based Procedure (QBP) handbook for stroke. The QBP handbook states that stroke patients should receive three hours of therapy per day, six days per week. Currently, the QBP funding for 2012/13 reflects an average price and not a best practice price. According to HSPs, they do not have the resources within their current allocation to provide best-practice stroke care. As such, HSPs requested that best-practice therapy levels be implemented only after the QBP funding has been rolled out.

In addition, it was noted that HSPs who will be transferring all stroke patient volumes (CMH, GMCH, NWHC) would experience a financial impact as they would not be able to reduce all costs associated with serving those patients in the short term. As a result, HSPs requested that the WWLHIN provide transitional funding to ensure an appropriate transition of acute stroke care volumes or additional time to mitigate the loss of weighted cases and financial impact on the transferring hospitals.

WWLHIN Response: Completing the implementation of best-practice stroke care by April 1, 2014 is in both patients' and the hospitals' best interest as it is expected that funding will be linked to the delivery of best-practice stroke care starting April 1, 2014. Likewise, the new funding formulas will require that hospitals are delivering care efficiently and any additional funding that would support ongoing inefficiencies will not be

sustainable. Moving to an April 1, 2014 implementation date will simplify the accounting and funding transfers by aligning with the start of the new fiscal year.

7. ***Items requiring clarification***

GMCH and NWHC indicated that the proposed decision did not explicitly mention the repatriation of palliative patients to their home community.

WWLHIN Response: In response to this feedback a provision has been included in the direction to each affected Party regarding the provision of palliative care to stroke patients.

Existing issues not arising from the proposed integration:

1. ***Continuum of Care***

The proposed decision for the integration of stroke services addresses changes that need to be made in acute care and in-patient rehabilitative care to align with best-practice guidelines. The feedback received from hospitals points to the important role that community-based service options also play in the full recovery of stroke patients. Specifically, the feedback identified that best-practice stroke care is currently not being provided by the Waterloo Wellington Community Care Access Centre (WWCCAC), and there is a need for community-based aphasia programs (speech language therapy) to support stroke patients in a full recovery. HSPs noted that the ability to discharge a stroke patient home within the recommended length of stay targets outlined in the QBP handbook is dependent upon best-practice care also being provided in the community.

WWLHIN Response: The WWLHIN agrees that community services play an important role in the continuum of care, and after reviewing information it is clear that best-practice stroke care is currently not being provided to patients by the WW CCAC. However this should not delay establishing dedicated acute stroke units and dedicated stroke rehab units, both of which are required to deliver best practice stroke care.

The WWCCAC has acknowledged that current service levels are not in line with best-practice care and have been working with WWLHIN staff and the Rehab Care Council to identify needs and develop a plan to deliver best-practice stroke care in the community. Recent physiotherapy investments from the provincial government are being fully leveraged to support best-practice care delivery in the community. The WWLHIN will request that the WWCCAC submit a plan to the WWLHIN, by November 1, 2013 outlining how they plan to delivery best-practice stroke care in the community within their existing funding allocation.

2. ***Health Human Resources***

The feedback provided to the WWLHIN indicated that there are also human resource issues that need to be addressed during this integration. Recruitment of Physiatrists has been, and continues to be a challenge. There is a medical model work group that continues to explore options to ensure appropriate coverage for stroke rehabilitative care units.

WWLHIN Response: The human resource challenges identified by HSPs are issues that have existed, currently exist and will continue to exist regardless of the integration decision that is being proposed. This is a valid concern that needs to be addressed at the system level.

3. Conversion of Complex Continuing Care Beds

Included in the business case for the voluntary integration submitted by the HSPs was a request to convert 10 Complex Continuing Care (CCC) beds to in-patient rehabilitation beds in order to be able to provide best-practice therapy levels for all stroke patients. A working group is currently reviewing system-wide Rehab and CCC bed requirements and will present to the Rehabilitative Care Council, which will provide a recommendation to the WWLHIN.

WWLHIN Response: Hospitals have made an informal request to the WWLHIN to convert some Complex Continuing Care (CCC) beds to Rehabilitative Care beds in order to better reflect the care that is being provided in those beds and improve the data quality that is informing the Health System Funding Reform calculations. A working group is developing a plan that will be reviewed by the Rehabilitative Care Council who will then make a recommendation to the WWLHIN.

8. Implementation Considerations

Financial Impact:

The MOHLTC is in the process of implementing the stroke QBP in Fiscal 2013-14. The LHIN will make adjustments to hospital funding consistent with the QBP and to reflect the movement of patient volumes required under this integration decision.

Human Resources:

An integration framework was developed by the leads for Human Resources (HR) to identify the implications of service integration where staff transfers between organizations may occur. The integration of stroke services will have an HR impact on both the sending and receiving organizations and organizations will require time to work through the implications and to have appropriate dialogue with staff and unions.

Recruitment of physical medicine physicians is ongoing and may be difficult as there are so few trained annually. To mitigate, a virtual physical medicine program has been developed with Grand River Hospital being the lead. Strategies will need to be developed that increase the accessibility of these physicians throughout the WWLHIN including the use of telemedicine and other technology. Adequate recruitment will take both time and a funding model that is sustainable.

Currently, there are neurologists available for consults at both GGH (two plus another being added July 2013) and GRH (two neurologists).