

Report to
The Honourable Deb Matthews
Minister of Health and Long-Term Care
on Restructuring of the Niagara Health System

Dr. Kevin P.D. Smith
Supervisor
Niagara Health System

September 2012

INDEX

| | |
|---|--|
| Executive Summary..... | 3-5 |
| Outline of Significant Revisions to Interim from Final Report | 6-7 |
| Recommendations..... | 8-15 |
| Overview..... | 16-18 |
| Observations..... | 19-24 |
| Environment | 25-30 |
| Accomplishments to Date | 31-34 |
| Future Siting Options | 35-42 |
| Governance | 43-45 |
| Transitional Plans..... | 46-51 |
| Interim Clinical Service Siting Plan | 52-54 |
| Additional Considerations..... | 55-58 |
| Feedback Process | 58 |
| Appendix “A” | Hanscomb Report on Capital Costs |
| Appendix “B” | Pollara Report on Community Feedback |
| Appendix “C” | Report of Maternal/Child Services Expert Panel |

Executive Summary

Minister:

It has been just over one year since my appointment as Supervisor of the Niagara Health System (NHS) on August 30, 2011. I have been privileged to **hear from literally thousands of people** from across the communities of Niagara, and from the staff, volunteers and physicians of the NHS, and other partner provider organizations. In addition, I have **consulted with many experts** in the field with expertise in quality, multi-site health care delivery models, and examined data ranging from population density, projected staff/physician turnover rates, financial forecasts, and patient care information, to name but a few. This report **details my final recommendations** and builds on the Interim Report released on May 3rd 2012.

For the most part, the recommendations in the Interim Report remain unchanged. This is a testament to the wise and thoughtful advice of the thousands of individuals with whom we met. Much has improved since August 2011, and I want to express my gratitude to Team NHS and our community partners for their unwavering support and guidance. This includes the past board members who were helpful and gracious in this difficult transition.

While I am pleased that we have **begun** our journey of restored confidence, the road ahead will be challenging and **require focus and fortitude**. What is underway is **a cultural change** at the NHS which typically takes 5-10 years to embed in a large and complex organization. Walking the talk and rewarding what we say is important will demonstrate our **focused commitment from this point forward**.

The key is **leadership** and never has it been more important that we **retain and attract** an aligned, accountable, experienced and tenacious group of leaders at both **the Board and management levels - especially physician managers**. The creation of a comprehensive, consultative and explicit strategic and tactical plan will allow the future leaders of the NHS to be aligned in the points of the destination, and ensure all those who take up the challenge of leadership **sign on to clear directions**. With your approval, we will launch the early phase of the NHS **Strategic Planning Process**, which will transition to the new **Board and Senior Management Team** in the coming months.

For **more than a decade**, the NHS has undergone repeated clinical planning exercises and now must expeditiously **implement the clinical site changes** described herein. **Further study is most definitely not required!** While consensus was not to be found on all issues, most notably obstetrics and pediatrics, I am pleased to say that **most recommendations have received almost unanimous support**.

Since the inception of the NHS, **disagreement with respect to clinical siting** seems to have prevented the formation of a truly integrated single organization across multiple sites. The test before the NHS is to demonstrate that chapter has closed, and **a new era focused on creating a sustainable, high quality health system is upon us**. The test will be in implementing these changes while rebuilding trust in our communities. I am confident this report offers a blue-print to do so.

The **successful opening of the new St. Catharines site and the successful planned consolidations** will demonstrate to you that the **NHS is ready and able to move forward**. The implementation of the other major recommendations in this Report, namely the closure of five (5) aging sites and the creation of a single replacement **site should be contingent on the successful implementation of the clinical reconfiguration, and as appropriate, consolidation detailed herein**.

I recognize constructing a new “southern site” is a challenging recommendation, especially in the backdrop of the fiscal pressures facing our province and country. It is made more so by the necessary delay of some previously approved capital projects. I believe, however, **Niagara is a unique situation which offers significant opportunities to improve how we care for patients and families, the quality of work life and retention/recruitment of qualified staff, and the education and training of future health professionals** in partnership with our university and college partners. In addition, it offers **significant operating and ongoing capital savings**, unlike any other region in Ontario of which I am aware. That being said, **my appointment was not about "bricks and mortar" but a loss of community confidence** as stated above. Such a commitment from the Province must be as a result of having created **a well governed and managed hospital system with high community support and workplace satisfaction**. I know you will be looking for actions and outcomes to demonstrate this healthy evolution. **Moving a broken culture into a new home is simply not a solution**.

I have **many colleagues to thank** and would be remiss if I didn't acknowledge them herein.

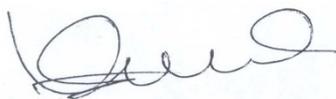
- NHS Staff, Physicians and Volunteers who passionately offered their thoughtful insights and recommendations;
- The HNHB LHIN, most especially CEO Donna Cripps and Chair Michael Shea who have been tireless in their support and assistance;
- The Mayors and Regional Chair have been nothing short of outstanding partners in this process and stepped firmly up to the plate throughout my time in Niagara;
- Your colleague MPP's, Mr. Bradley, Mr. Craitor, Ms. Forster and Mr. Hudak have shown keen interest and offered essential observations and advice;
- The Senior Management Team and Medical Advisory Committee of the NHS led by Drs. Sue Matthews and Joanna Hope, who worked tirelessly on the road to improvement and in offering creative and patient focused solutions;

- The Medical Staff Association, led by Dr. Arvinte and previously Dr. Reddy;
- Our partner health care provider groups, especially EMS and Public Health;
- The Expert Panel members for Obstetrics and Pediatrics, Mary Jo Haddad, Brenda Flaherty, Dr. Nicolas Leyland and Dr. Lennox Huang;
- Tom Closson, Chair, ad hoc Base Budget Review Taskforce;
- Professor John Eyles, Department of Geography, McMaster University;
- Lynne Pollard and Diane Martin who organized and supported our Team beyond compare;
- And, most especially, my colleague Mr. Brian Guest, without whom this work would not have been possible.

At your instruction, our focus has, and continues to be, on **building a high quality, sustainable hospital system which enjoys the confidence and trust of the communities and individuals it exists to serve. I am confident these recommendations reflect what is best for patients and their families, enables a high quality of work life environment and incrementally rebuilds trust and confidence in the NHS.** I have tried to be extremely mindful of the economic reality upon us, and very much considered a value for money investment strategy for the NHS. Thank you for the opportunity to work with the NHS Team and the community leaders who are so dedicated to their hospital.

Following are **the revisions to the Interim Report and the final recommendations.** While we await your response, we are actively moving forward with board member selection and recruitment of the leadership team.

Sincerely,



Dr. Kevin Smith

Outline of Significant Revisions from Interim to Final Report of Supervisor

September 2012

Following public release of the Interim Report to the Niagara Community on Restructuring of the Niagara Health System on May 3, 2012, I have received thoughtful input from members of our community. Below is an outline of significant revisions to the Interim Report:

- 1) *Input from Mayors/Regional Chair on siting of a single hospital to replace the aging sites in Niagara Falls, Welland, Port Colborne, Fort Erie and Niagara-on-the-Lake.*

*There are two unanimously acceptable options for a southern site proposed by the Regional Chair and Mayors of "South" Niagara. Following detailed review, the recommended location, should a southern site be constructed, is the **QEW and Lyons Creek area of Niagara.***

- 2) *Urgent Care Centres and Hours of Operation*

*The Regional Chair and Mayors of "South" Niagara also requested the **operation of two Urgent Care Centres in South Niagara (locations to be determined).** We support this **recommendation** but must be clear that these should be freestanding entities in leased space, which **work closely with the evolving primary care network and EMS.** As there are very low volumes of patients between the hours of 10 p.m. to 8 a.m. at our existing UCC's, hours of operation for our existing and future UCC's must be carefully monitored and keep pace with practices elsewhere in Ontario. **We see a very important opportunity for the HNHB LHIN to create a provincial model for primary care planning and community service integration through this process.***

- 3) *Consolidation of Obstetrics/Pediatrics*

*The recommendation that both programs **be consolidated at our new hospital in St. Catharines and then relocated to the new South site,** if approved, has been the subject of significant discussion and in-depth review. We were fortunate to establish an ad Hoc Expert Panel of internationally recognized leaders in maternal child health. The Expert Panel reviewed the prior studies, data and other background material, and heard directly from "both sides" in this important matter. A special meeting was held for this purpose and the presentations were both well-articulated and passionate. The final recommendation is consistent with my interim report - to **consolidate both inpatient obstetrics and pediatrics, subject to the caveats as recommended by the Expert Panel** - initially at the new St. Catharines site (March 2013) and to transfer both programs to the new purpose built facility in the South, if approved.*

Outline of Significant Revisions from Interim to Final Report of Supervisor (cont'd)

These caveats are:

- *Gynecology day surgery should continue to be offered at all full service acute sites. Consolidation should be for inpatient and birthing services.*
- *Ultrasound and other associated services remain at all acute sites.*
- *Interprofessional Models of Care be clearly identified drawing from the work of the Provincial Council for Maternal Child Health.*
- *A model for low risk hospital-based family medicine obstetrics be clearly defined.*
- *Midwifery with a full scope of practice be offered.*
- *Obstetricians and Pediatricians should continue to be based in the communities of Niagara where they can provide the vast majority of consultative and ongoing care to the people in these communities.*
- *Physician and administrative leaders support all members on the Interprofessional Team to build an integrated Niagara Health System inpatient model at the St. Catharines site.*
- *EMS and NHS will utilize protocols for the very rare medical emergencies of any nature.*

*A proposal to determine the **feasibility for a Birthing Centre** in Niagara remains a possibility.*

4) The Welland City Council

The Welland City Council requested that a review of costs to renovate the existing Welland Hospital as the “new” South site be undertaken. That review conducted by a leading consulting firm is included in this report, and based on that analysis, it is not a viable option from a cost/benefit perspective.

5) Accomplishments

An outline of accomplishments by our staff, physicians, volunteers, and management over the past several months to improve care at the NHS is included in this report.

6) Decommissioned Sites

If the consolidation of the aging sites is approved, any municipality that wishes to purchase an existing site slated for closure will be given the right of first refusal at fair market value. A number of suggestions for community based programs have been proposed for some of these sites. Revenue for the sale of decommissioned sites will be reinvested in capital improvements at the NHS.

Recommendations

It is recommended that:

- *A new skills-based Board of Directors for the NHS be constituted. A community-based Nominating Committee will be formed to recommend appointments to the Board. This model should remain in place for a 3-5 year period for Board renewal. The establishment of two advisory committees (North and South) will follow the establishment of the Board.*

Page 43

- **Interim Recommendation:**

The Maternal Child, In-Patient Pediatric Program, In-Patient Mental Health be consolidated at the new St. Catharines Hospital in the interim, with the full Maternal Child, In-Patient Pediatric Program ultimately moving to the “new South site” when it is built.

Final Recommendation:

Following consideration of prior reviews, examination of utilization data and both internal and external expertise, the recommendation from the Interim Report is confirmed - to consolidate Maternal Child, In-Patient Pediatrics, Inpatient Mental Health at the new St. Catharines Hospital in the interim, with the full Maternal Child, In-Patient Pediatric Program ultimately moving to the new facility in the South when it is built subject to the following caveats:

- *Gynecology day surgery should continue to be offered at all full service acute sites. Consolidation should be for inpatient and birthing services.*
- *Ultrasound and other associated services remain at all acute sites.*
- *Interprofessional Models of Care be clearly identified drawing from the work of the Provincial Council for Maternal Child Health.*
- *A model for low risk hospital-based family medicine obstetrics be clearly defined.*
- *Midwifery with a full scope of practice be offered.*
- *Obstetricians and Pediatricians should continue to be based in the communities of Niagara where they can provide the vast majority of consultative and ongoing care to the people in these communities.*
- *Physician and administrative leaders support all members on the Interprofessional Team to build an integrated Niagara Health System inpatient model at the St. Catharines site.*
- *EMS and NHS will utilize protocols for the very rare medical emergencies of any nature.*

Page 48

Recommendations (cont.)

- *Due to noted concerns with respect to access, the feasibility of a low risk Birthing Centre, a model recently announced by the Government of Ontario, be treated as a high priority, and the NHS be recommended as a pilot program through the Hamilton Niagara Haldimand Brant (HNHB) LHIN. The MOHLTC has recently made a call for proposal for Birthing Centres.*
Page 49

- *In concert with EMS, and Public Health:*
 - *Expand the Advanced Care Paramedic Program across the Region, already a leader in this practice; and,*
 - *Actively explore innovative models of care in which paramedics offer appropriate services to divert ER presentations, support appropriate use of home care, and continue to evolve the Critical Care Transport Service.***Page 47**

- *In addition to the St. Catharines site currently under construction, the NHS should:*
 - *Construct a new general acute care hospital in “South Niagara”;*
 - *Locate two free-standing Urgent Care Centres in “South Niagara”;*
 - *Close the existing sites in Port Colborne, Fort Erie, Niagara Falls and Welland; and,*
 - *Relocate the Nurse Practitioner-led walk in clinic and Family Health Program to a suitable location with much lower operating costs than the existing site in Niagara-on-the-Lake with the closure of that site when complex continuing care can be consolidated to other sites.***Page 37**

- **Interim Recommendation:**
The recommendations of the Mayors of the “Southern Tier” with input from the Regional Chair be utilized to determine:
 - *The location of the new hospital in the “South”;*
 - *The location of a stand-alone “new” Urgent Care Centre; and,*
 - *Population density and access should be the primary consideration in determining location.*

Recommendations (cont.)

Local Response to this Recommendation:

The unanimous recommendation of the Mayors of the Southern Region (6 in total) and Regional Chair follows:

“2 Geographic areas, being described as QEW & Lyons Creek area, and East Main Street and Highway 140 area be considered as short-listed locations for the proposed development of a south Niagara hospital complex, conditional that Urgent Care Centres continue to operate in Port Colborne and Fort Erie. I cannot stress enough that the southern Mayors are unanimous in their support of a south Niagara hospital being built.”

Final Recommendation:

*Following significant deliberations, considering external expertise and in keeping with alternatives approved by the Mayors and Regional Chair, the final recommendation, subject to approval by the Ministry, is to build the new facility in the QEW and Lyons Creek area of Niagara. Two additional freestanding UCC's, site and location to be determined, can be supported. Hours of operation should be in keeping with patient volume and other provincial practice. **Page 41***

- *NHS will establish a Patient Advisory Committee to ensure the continued evolution of patient and family centered care. **Page 30***
- *With the Region of Niagara, and interested volunteer agencies, establish a limited transportation model for lower income frail seniors and chronic mental health patients and their families. **Page 55***
- *Ensure clarity of roles and responsibilities across the NHS. Immediately implement a management structure with on-site leads, and where appropriate, physician leads (acute sites) with clearly defined standards and accountability measures. It should never be unclear “who’s in charge” and accountable. **Page 21***
- *All programs and support services develop consistent standards across all the sites of the NHS based on evidence and accepted best practices. Eliminate variation by site unless rationale clearly indicated and approved. **Page 23***

Recommendations (cont.)

- *As LHIN's have recently been charged with planning for primary care, the MOHLTC request that the Hamilton Niagara Haldimand Brant (HNHB) LHIN to develop a prototype model for primary care planning, which supports the implementation of this report and the restructuring of the NHS. **Page 57***
- *The approved recommendations of the NHS Task Force on employee morale and employee satisfaction be a high priority for implementation. **Page 20***
- *The NHS Code of Conduct and Standards of Behaviour for physicians, staff and patients/visitors be communicated and consistently enforced. **Page 21***
- *The continued development of an Academic Health Centre in conjunction with McMaster University, Brock University, Niagara College, and community partners be a primary goal of the NHS. **Page 22***
- *Develop formal education plans for leaders across the organization to ensure leading edge knowledge and personal development as well as to support a comprehensive retention/recruitment strategy for physicians and staff at all levels. **Page 30***
- *National searches be undertaken to recruit 1) Chief Executive Officer and 2) Vice-President Medical/Chief of Staff. Search Committees will include representatives of the newly formed Board of the NHS or Board Nominating Committee and other important stakeholder representatives. **Page 45***
- *The immediate priorities of the new NHS Board be:*
 - *Approve a process to develop a strategic plan for NHS, which includes consultation and input from community and provider organizations;*
 - *Form Board Structure; and,*
 - *Oversee the implementation of a comprehensive performance management system. **Page 44***

Recommendations (cont.)

- *The “OHA Guide to Good Governance” be adopted as the primary resource for Board activities. A governance coach should work with the Board for the first year.*
Page 45
- *As requested by many physicians, the potential of a stand- alone Ophthalmology and Minor Surgery Centre is currently being explored conditional on providing emergency and inpatient coverage at the NHS sites. A formal Request for Proposal document has been prepared for this initiative.*
Page 50
- *Support for the review by our Foundations that potential realignment be considered to meet the philanthropic needs of the NHS.*
Page 56
- *Recognize and celebrate the essential role and impact of NHS Volunteers and Auxiliary organizations, and develop an effective retention/recruitment plan for volunteers, who are the backbone of the NHS.*
Page 56
- *Develop a plan for the disposition of NHS sites designated for closure. Each municipality that has an existing site slated for closure will be given first option to purchase the site and buildings from the NHS at fair market value through a process to be determined. The NHS will not retain ownership of any of these sites and will utilize proceeds to fund capital costs for existing operations.*
Page 58

Recommendations (cont.)

- *Interim Clinical Service Siting Plan*

During the transition period, ongoing clinical viability and coverage requirements on a “24/7” basis of the two acute care sites in Niagara Falls and Welland will be a high priority.

The following is a high level overview of the interim clinical service siting plan. As implementation planning evolves for the new ‘South’ site, there could be further refinement within the context of providing quality, safe, efficient and cost-effective patient care to accommodate the transition in a phased-in approach.

Page 51-54

| | New “North” Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|---|---|---|--------------------------|-----------------------------|--------------------------|--------------------------------------|
| Emergency and Critical Care Services | | | | | | |
| Emergency | x | X | x | | | |
| Urgent Care | | | | x | x | |
| Critical Care | X | X | x | | | |
| Surgical Services -- NOTE: Age Criteria for out-patient pediatric surgery to be confirmed for services outside of the new ‘North’ healthcare complex | | | | | | |
| General Surgery | In and Out-Patient | In and Out-Patient | In and Out-Patient | | | |
| Orthopedics* | In and Out-Patient | In and Out-Patient | In and Out-Patient | | | |
| | | *NOTE: Discussions regarding potential consolidation of the Total Joint Program prior to the “new South site” will commence immediately to assess feasibility of early consolidation. | | | | |
| Urology | In and Out-patient + Cystoscopy | Out-patient + Cystoscopy | Out-patient + Cystoscopy | | | |
| Gynecology* | In and Out-Patient | Out-patient | Out-Patient | | | |
| Ear Nose Throat | In and Out-Patient | Out-Patient | Out-Patient | | | |
| Plastics | X In and Out-Patient | X In and Out-Patient | | | | |
| Dental | In and Out-Patient | In and Out-Patient | | | | |
| Ophthalmology | | | x | | | |

| | New "North" Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|---|---|---|----------------|---------------------|------------------|-----------------------------|
| Vascular | X In and Out- Patient | | | | | |
| Ambulatory Clinics | | | | | | |
| Clinics | x | x | x | x | x | |
| Maternal Child Services | | | | | | |
| Obstetrics | x | | | | | |
| Level 2 Neonatal Nursery | x | | | | | |
| In-Patient Pediatrics | X | | | | | |
| Medicine | | | | | | |
| General Internal Medicine | x | x | x | | | |
| Regional Geriatric Assessment | | x | | | | |
| Nephrology | In-Patient | | | | | |
| Dialysis - Ambulatory | X | X Satellite in Niagara Falls | X Satellite | | | |
| Stroke | | X *NOTE: discussions regarding potential stroke program expansion to take place | | | | |
| Cardiology | x | X | X | | | |
| Cardiac Care Unit and Heart Investigation Unit | x | | | | | |
| Respirology | x | x | X | | | |
| Oncology/Walker Family Cancer Centre | x | | | | | |
| Diabetes Hub | | | X | | | |

| | New "North" Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|-------------------------------------|---|---|-------------|---------------------|------------------------------------|-----------------------------|
| Mental Health and Addictions | | | | | | |
| Mental Health | X In and Out- patient | Out-patient | Out-patient | Out- Patient | | |
| Addictions | Consolidated Site TBD | | | | Residential and Out- Patient | |
| Complex Care | | | | | | |
| Complex Care | | x | x | x | x | x |
| Assess Restore | | X *NOTE: Assess and Restore program may need to relocate to Welland to accommodate potential stroke program expansion at GNG | | | | |
| Long-Term Care | | | | | | |
| LTC | | | x | | | |

Note:

- All sites will have access to appropriate clinical support services [e.g. diagnostics, lab, pharmacy etc.] as appropriate.

Overview

The purpose of this report is to outline, for both internal and external stakeholders, a series of recommendations for restructuring the Niagara Health System (NHS).

On August 30, 2011, I was appointed as Supervisor for the NHS by the Government of Ontario.

The appointment of a Supervisor for a hospital or system of hospitals is not taken lightly by any government but was felt necessary at the time for a number of reasons - primarily a loss of confidence in the NHS by the Niagara community, including its elected officials at all levels.

In the intervening twelve (12) months, I have engaged in a widespread consultation process including but not limited to:

- Meeting face-to-face with community leaders, elected officials and existing/former patients/families cared for by the NHS;
- Release of an interim report with detailed recommendations for community and provider feedback;
- Establishing a confidential “NHS Supervisor” email address in which I have received, read and responded to over twelve hundred (1200) email submissions;
- Meetings/updates with important partner organizations of the NHS including but not limited to Emergency Medical Services (EMS), Public Health, our member Foundations, Hotel Dieu Shaver Health and Rehabilitation Centre, the Hamilton Niagara Haldimand Brant (HNHB) Local Health Integration Network (LHIN) and Community Care Access Centre (CCAC);

Overview (cont.)

- Ongoing dialogue and embracing a culture of transparency with our colleagues in the media throughout the Region as a means to communicate with the broader community in a meaningful fashion;
- Many meetings, with both large and small groups of our staff and physicians at all levels – executive team, management, union leadership, front line staff; and,
- Engaging external expertise to complement internal stakeholders to assist in determining the best solutions related to program realignment of obstetrics and pediatrics and the most appropriate location of the new South hospital in order to meet future needs.

In total, there have likely been interactions with thousands of individuals from the Niagara community. All those I spoke to or corresponded with have a common goal of providing the best health care delivery system possible for our community.

Without question, this assignment has proven to be more complex and multi-faceted than I initially anticipated. Normally a Supervisor is faced with one or two major goals to accomplish (e.g. financial solvency or community relations), but in this case, the NHS was and still is facing multiple challenges.

Overview (cont.)

Prior to addressing observations and recommendations in this report, I feel it appropriate to express the following comments:

- To our patients and families who have received less than optimal care or caring at the NHS, please accept my sincere apologies. Many of you have shown remarkable courage in sharing your stories with me and please be assured your suggestions to improve the NHS have been taken seriously;
- To our staff, volunteers and physicians who work diligently on the front line to provide the best possible care – your work to support our Mission, Vision, and Values on a day to day basis is much appreciated;
- To our leadership team at the management, physician and union levels – your support, insight and recognition of opportunities have been very helpful; and,
- To the former NHS Board of Directors – as volunteer leaders from the community, your contribution in an extremely challenging environment is recognized. While no Board wants to reach the point where an external appointment is necessary, you clearly did the best you could as volunteer governors and your many contributions to the betterment of health care in Niagara is recognized.

Observations

Based on the feedback from both the NHS “family” and the Niagara community, I have the following observations which influence the various recommendations in the report.

1) A Regional Approach to Health Care

When I first arrived in Niagara, I heard the expression “there is no Niagara” from many of its citizens. However, over the period of this review, many insightful observations were shared with me that all communities in Niagara are interdependent for health care delivery. The spirit of cooperation was clearly demonstrated by the Southern Tier Mayors and Regional Chair in developing a recommendation on siting of a new hospital.

2) A “North-South” Mentality Seems to Exist

One hears consistently of a “North and South” division in Niagara, but the basis and “Mason-Dixon Line” does not appear on any map nor is it clearly defined on any logical basis. My conclusion is that for most people in Niagara, at least related to the NHS, St. Catharines represents the “North” and all other communities the “South”. For the purpose of this report only I will refer to “North” and “South” in this context.

3) Lack of Community Confidence in the NHS

The independent report by Dr. Terry Flynn from McMaster University, “The NHS Trust and Reputation Study Report” (November 2011) contained many troubling findings. No healthcare provider can ever achieve total community satisfaction but trust, confidence and support for the NHS – “your NHS” - was at an extreme low at the time of that report. As noted in the Interim Report, I commissioned an updated community feedback report which was conducted by a well-respected national polling firm - Pollara. That report has been made public and is included as Appendix “A”. While there is widespread support

Observations (cont.)

for the building of a new state-of-the-art hospital in the South, there clearly remains much work to do to regain trust and support for the NHS from both internal and external stakeholders.

4) Poor Morale at all Levels of the Organization

It was obvious through our initial meetings with the staff and physicians that morale was/is a major concern. This of course impacts on the delivery of care, caring and attitude of our colleagues in interactions with our patients. Concerns expressed by our staff included a perception of punishment for speaking out, favoritism in promotions and overall poor communications and recognition of contributions. The overall poor morale at the NHS was confirmed in a recent National Research Corporation (NRC) Picker Employee Survey Report on Employee Satisfaction.

The approved recommendations of the NHS Task Force on employee morale and employee satisfaction be a high priority for implementation.

5) Complex Decision-Making Process at the NHS

Initially, on arriving in Niagara, I heard many individuals comment that the NHS was too big and too complex to work and that it needed to be “broken into smaller parts” to work effectively. This is simply not true and there are many larger, more complex health care organizations in place across Canada that work effectively and efficiently. The current decision-making process at the NHS is not universally understood nor consistently applied across the various sites in the organization.

Observations (cont.)

6) Lack of Accountability

This observation is related in part to the lack of a clear decision-making framework but appears to apply throughout the organization. All staff and physicians from the front line to the executive team need to have clear guidelines and standards of accountability and be held responsible. This doesn't mean moving to a punitive system as mistakes will happen, but we need to learn from that experience.

Ensure clarity of roles and responsibilities across the NHS. Immediately implement a management structure with on-site leads, and where appropriate, physician leads (acute sites) with clearly defined standards and accountability measures. It should never be unclear "who's in charge" and accountable.

7) Little Reinforcement of Code of Conduct and Culture of Mutual Respect

Many of the concerns we heard from our staff involved lack of support and reinforcement of a standard code of conduct, consistently applied, at all levels of the organization. All employees and physicians from front line to executives should be required to "follow the same rules" with respect to their interactions with colleagues, and be held accountable if they don't meet accepted standards of behaviour.

The NHS Code of Conduct and Standards of Behaviour for physicians, staff and patients/visitors be communicated and consistently enforced.

Observations (cont.)

8) Openness to Learning from Outside Organizations

Until recently, the NHS appears to have taken on a somewhat isolated approach both in terms of learning from other organizations and also demonstrating our successes to others. Continuous learning involves sharing and adopting best practices from other like organizations – provincially, nationally and internationally.

9) Support for Development of Academic Health Centre

The NHS has a unique opportunity to develop a first class academic environment for learners in partnership with McMaster University, Brock University, and Niagara College. Teaching, research and related scholarly activity have a direct positive impact on the quality of care, and are a key factor in developing a successful retention/recruitment process. Quite simply, learners are often influenced by an academic placement when choosing a future place of employment.

The continued development of an Academic Health Centre in conjunction with McMaster University, Brock University, Niagara College, and community partners be a primary goal of the NHS.

Observations (cont.)

10) Lack of Recognition/Celebration of Advances

There has been a tremendous amount of work done over recent years to bring state-of-the-art programs and facilities in Cancer Care, Regional Tertiary Cardiac Program, and expanded Mental Health Programs to all citizens of the Niagara Region. It is not my intent to be critical, but in my interactions with some residents of Niagara, there seems to be little acknowledgement of these enhanced services, despite the efforts of our staff and media colleagues to inform the community. The Walker Family Cancer Centre will bring much needed services closer to home for over 1200 cancer patients who now are required to leave the community for care. The Regional Tertiary Cardiac Program at the Heart Investigation Unit will result in reduced wait times and improved access to services. The expanded Mental Health Program will provide much needed assistance to those most vulnerable in our community.

11) Lack of Standardization

At a program and service level, there is a lack of standardization at the level of best practices. Examples range from a lack of consistent housekeeping standards from site to site, to inconsistent adoption of best practices in clinical care delivery from one department to another. This is both costly and confusing for our staff, physicians and patients.

All programs and support services develop consistent standards across all the sites of the NHS based on evidence and accepted best practices. Eliminate variation by site unless clearly indicated and approved.

Observations (cont.)

12) Location of St. Catharines Site

I certainly heard many concerns expressed on the location of our new NHS site in St. Catharines. While I can relate to the varied opinions expressed, we need to move on, recognize that it can't be "moved", and celebrate the tremendous improvements in clinical care for all the citizens of Niagara that will result. In addition, the location of the new South site, if approved, is more important than ever, and it should be designed to complement the new facility in St. Catharines.

Environment

For hospitals in the Province of Ontario, there are a number of factors that influence the delivery of patient centered care and are the new reality.

These include the following:

a) **Financial Pressures**

With the current economic situation in Ontario, and throughout the developed world for that matter, the prior government practice of matching funding levels to increased costs is not sustainable. The current budget projections for hospitals in Ontario includes a 0% increase for the next three years. As costs will continue to rise at a rate of approximately 3% per year, this translates into the following forecast deficits for the NHS of approximately 10% per year if no further action is taken;

| Fiscal Year | Forecast Deficit (Cumulative) |
|--------------------|--------------------------------------|
| 2012/13 | 13.7 M |
| 2013/14 | 21.7 M |
| 2014/15 | 29.2 M |

As a result of this economic pressure, future consolidation of programs and services, increased efficiencies and reduced costs are both essential and unavoidable.

In addition, hospitals are moving to a patient-based funding model with two components:

- i) Health Based Allocation Model (HBAM) based on demographics for communities served as well as measurement of complexity of care and type of care; and

Environment (cont.)

- ii) Quality Based Procedures (e.g. hip/knee replacements, dialysis, etc). Funding will be based on achieving efficiencies and best practices by procedure. In other words, the NHS will be measured against comparable hospitals and hospital systems throughout the province and reimbursed accordingly.

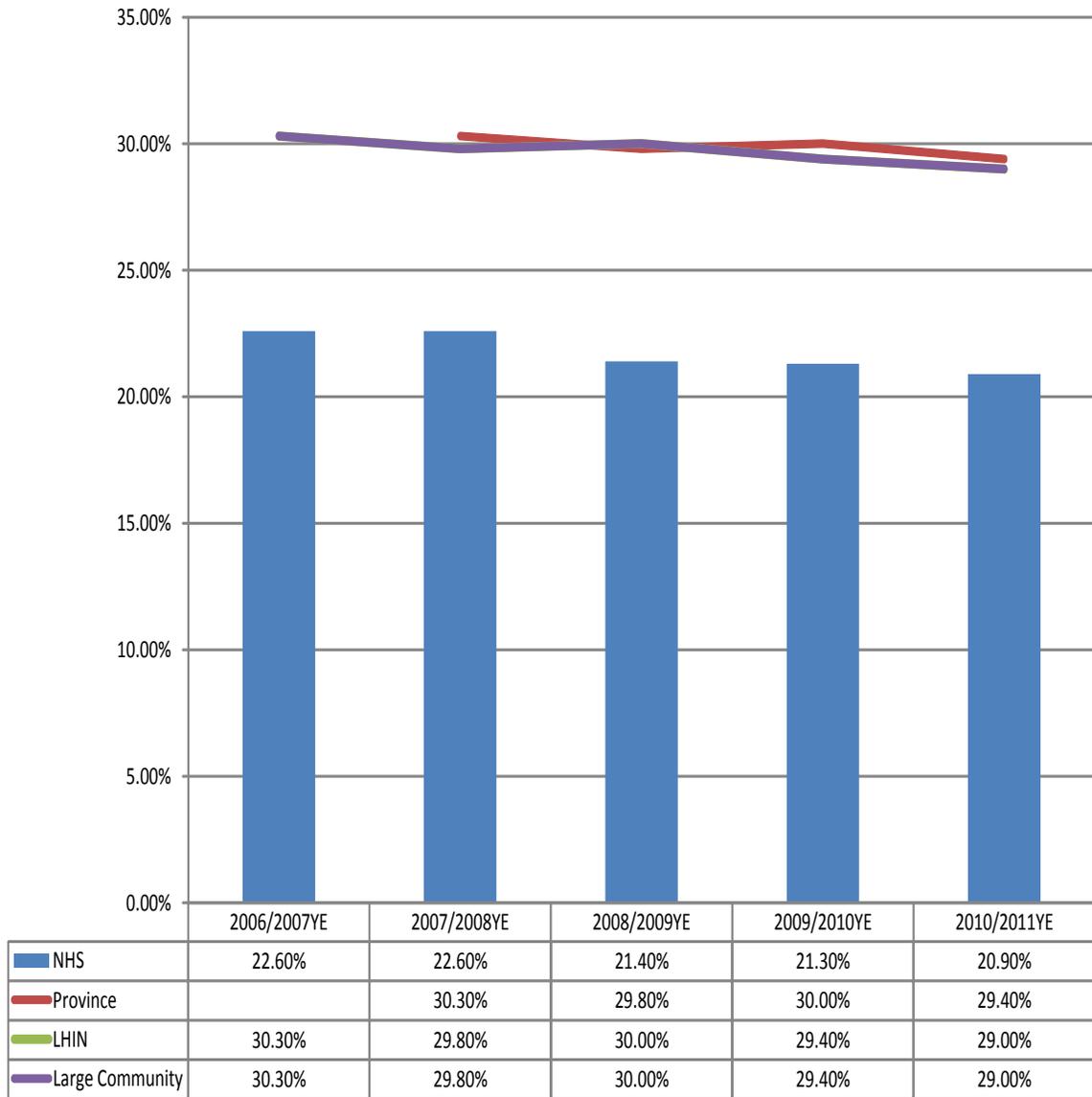
To assess the ability of the NHS to balance its operating budget for 2012/13, and to achieve ongoing financial stability, I have formed a team consisting of experts in the field to conduct a formal review. This review is now underway and will assist the NHS in identifying additional opportunities to improve efficiency of operations and effectiveness of health care services, while achieving its performance obligations, and preparing to successfully transition to the opening of the new St. Catharines hospital.

I would also like to take this opportunity to dispel a rumour related to the administrative costs for the NHS. During the consultation process, I have heard comments such as “The NHS is top heavy” or “Get the money out of administration”. The data produced through our LHIN and Government of Ontario indicates that this is not the case, and in fact, the NHS has lower administrative costs than comparable hospital systems.

Facility: 962 - ST CATHARINES Niagara Health System

Indicator: 1 - F/C Operating Expense to Total Operating Expense of Facility/LHIN/Type/Framework

Functional Centre: 711 - Administration



Source Data: Healthcare Indicator Tool, Ministry of Health and Long-Term Care

Notes:

NHS (Facility) – Provides data of a selected indicator for the specific facility.

Province – Provides the average or minimum or maximum for all facilities within Ontario.

LHIN – Provides the average or minimum or maximum of facilities within the LHIN of the selected facility.

Large Community (Type) – Provides the average or minimum or maximum of facilities within the type of the selected facility.

Environment (cont.)

Please be assured that effectiveness and efficiency in limiting administrative costs will continue to be an important goal, but the evidence is that this has not contributed to the current NHS budget deficit.

b) Retention/Recruitment

The retention and recruitment of staff and physicians must be a high priority in order to deliver high quality patient centered care to the community.

There is intense pressure and frankly competition to attract the best and the brightest to any organization and the NHS is currently at a disadvantage in that regard due to:

- i) The reputational damage associated with the requirement for an intervention involving a provincially appointed Supervisor;
- ii) No current Board in place and “interim” appointments for the two most senior positions in the organizations - Chief Executive Officer and Chief of Staff;
- iii) Lack of a clear strategic plan and vision for health care delivery in the region;
- iv) Low morale resulting in lack of encouragement from NHS physicians/staff to recommend the NHS to colleagues;
- v) Lack of trust and confidence in the community for the NHS which impacts patient/staff satisfaction; and,
- vi) Fragmented academic programming and lower than optimal number of learners experiencing the NHS.

Environment (cont.)

For the purposes of this report, a review of anticipated turnover was undertaken for both staff and physician classifications at the NHS. Turnover projections are compounded by an aging workforce which is not uncommon in Ontario hospitals today. While new state-of-the-art facilities will be a key factor in recruiting strong external candidates to the NHS, improving staff/physician morale, community support, and a strong academic environment for learners are also important considerations.

For staff, the projected turnover by year for all staff categories is 5.7 % or approximately two-hundred and fifty (250) positions to be filled each year through 2019 based on current staffing levels. This projection is based on the average age of our staff and the average turnover rate experienced at the NHS over the past three year period.

For physicians, there is a comprehensive Medical Manpower Plan which includes assumptions based on anticipated retirements, introduction of new programs and historical turnover data.

The current 2012 plan projects that the NHS will need to recruit seventy (70) new hospital based physicians by December 31, 2019. Of this number, approximately fifty (50) physicians will need to be recruited over the next three years.

Projected Turnover to 2019

| | NHS Staff | NHS Physicians |
|--|----------------------------|---------------------------|
| Current # | 4390 | 300 |
| Average age of Retirement | 59 | 70 |
| | | |
| Projected Turnover Rate to 2019 | | |
| – Resignation | 2.7% (120 per year) | 1.4% (4 per year) |
| – Retirement | 3% (130 per year) | 2.0% (6 per year) |
| Total | 5.7% (250 per year) | 3.4% (10 per year) |

Comment

1. Approximately 1,750 staff will need to be replaced over the period 2013-2019
2. Approximately 70 physicians will need to be replaced over the period 2013-2019

Environment (cont.)

On the positive side, it is hard to imagine a more attractive community than Niagara to raise a family. One can choose virtually any type of housing, costs are reasonable, quality education at the post-secondary level is available, and Niagara is centrally located. Our recruitment goals present both an opportunity and a challenge to the NHS and our community to find the best possible candidates to fill these positions in the organization.

Develop formal education plans for leaders across the organization to ensure leading edge knowledge and personal development, as well as to support a comprehensive retention/recruitment strategy for physicians and staff at all levels.

c) Patient/Family Expectations

Ultimately, the NHS will and should be judged by how we meet patient and family expectations of patient centered care delivery. With that, comes a responsibility for enhanced communications, follow up to concerns expressed, and a commitment to both quality care and caring.

There is no question that any intervention with a hospital places undeniable stress on a patient and their family. Often it can be a life changing experience. That being said, there is also an expectation of civility and respect from the patient/family to our staff. In other words, those we serve also are expected to adhere to a code of conduct.

NHS will establish a Patient Advisory Committee to ensure the continued evolution of patient and family centered care.

Accomplishments to Date:

Since my work started in September 2011, most of the focus has been on “listening” and learning from those individuals and groups that I have met or who have taken the time to forward their concerns and insights to me. Again, I very much appreciate your constructive feedback.

While much attention has been focused on the new model of delivery for the future, there have been a number of new initiatives introduced during this consultation period. My appreciation to the leadership team and all the staff and physicians at the NHS for their support in this regard.

a) Culture of Transparency

Health care organizations have a responsibility and obligation to be transparent with the community. Too often in the past, important information was “held back” and the relationship with the local media understandably became strained. For the most part, I have found the media to be fair and balanced. I have strived to be available for comment and clarification, and in return, our media partners have served a vital role in communicating with the community at large on new developments. This relationship must continue to be fostered to rebuild trust in the NHS.

b) Process of Handling Patient Complaints/Concerns

The prior system of responding to complaints/concerns from our patients/families was a major source of frustration in our community. Several months ago, the process was completely overhauled and concerns are now addressed in a timely fashion with one to one contact. We follow up on concerns expressed so that we can learn from those experiences.

Accomplishments to Date (cont.)

c) Ad Hoc Committee on Decision-Making

An ad hoc committee was formed in February 2012 to review the decision-making process for other multi-site health care systems at the corporate/program/site levels as well as their accountability framework.

A report was released to our management, physician and union leadership team, and, based on that feedback, a clearer model of decision-making and accountability is being introduced. There is strong consensus that the model should be:

- patient centred;
- clear;
- communicated effectively; and,
- have a clear accountability framework.

d) Encouraging Education for Staff

Incentives have been put in place to encourage our staff to seek further education and enhance their skills. We are gratified that many members of the NHS family have taken advantage of this opportunity.

e) Structured Interviews

One- on-one structured interviews and questionnaires were completed during March 2012 with management, physician leadership, and our union presidents to gain their insights on a wide range of topics including;

- Likes/dislikes with the current NHS model;
- Ways to improve quality of care and quality of work life;
- “If I was Supervisor I would focus on.....”

Accomplishments to Date (cont.)

A report on the findings of their review has been integrated into the overall NHS goals and objectives for the organization.

f) Employee Satisfaction

An ad hoc committee has been formed to address key findings of the NRC Picker Employee Survey Report on Employee Satisfaction. This multidisciplinary team has studied the results, and developed and prioritized a series of recommendations to improve the quality of work life at the NHS.

g) Partnership with Unions on Workplace Safety

Our NHS Unions - Ontario Nurses' Association (ONA), Service Employees International Union (SEIU), and Ontario Public Sector Employees Union (OPSEU) – have established a unique partnership with the NHS and external safety experts to develop an innovative approach to improving workplace safety through accident prevention and return to work improvements.

h) Ongoing Improvements

I would be remiss if I didn't recognize the many contributions of staff, physicians, volunteers and management at the NHS to improve the quality of care and caring for our patients, and the quality of work life for our staff during my tenure as Supervisor. These initiatives include but are not limited to the following:

- We've become a leader in infection prevention and control with other hospitals seeking our advice on how to combat superbugs;
- Reduction of sick time with \$1.3m reduction in sick costs;
- Launch of Return- to-Work pilot project in partnership with our three unions and four external organizations;
- Regional Laboratory Partnership within the LHIN;

Accomplishments to Date (cont.)

- Signed Partnership Agreement with Hamilton Health Sciences for Radiation Treatment Services;
- Implementation of Mosaiq – Regional Oncology Information Management System;
- Development of pilot Rapid Cardiac Assessment Clinic;
- Lung Diagnostic Assessment Program;
- Approval for GNG Satellite Dialysis - construction has begun;
- 100% Oncology Outpatient Nurses achieve Canadian Nursing Association Certification; and,
- New hospital on time, on scope and on budget.

Future Siting Options

Much of the attention over the past several months has been directed to future siting of hospital-based services outside of St. Catharines or as many refer to it “the South”. Many meetings have been held, suggestions made, concerns expressed and considered, and options studied.

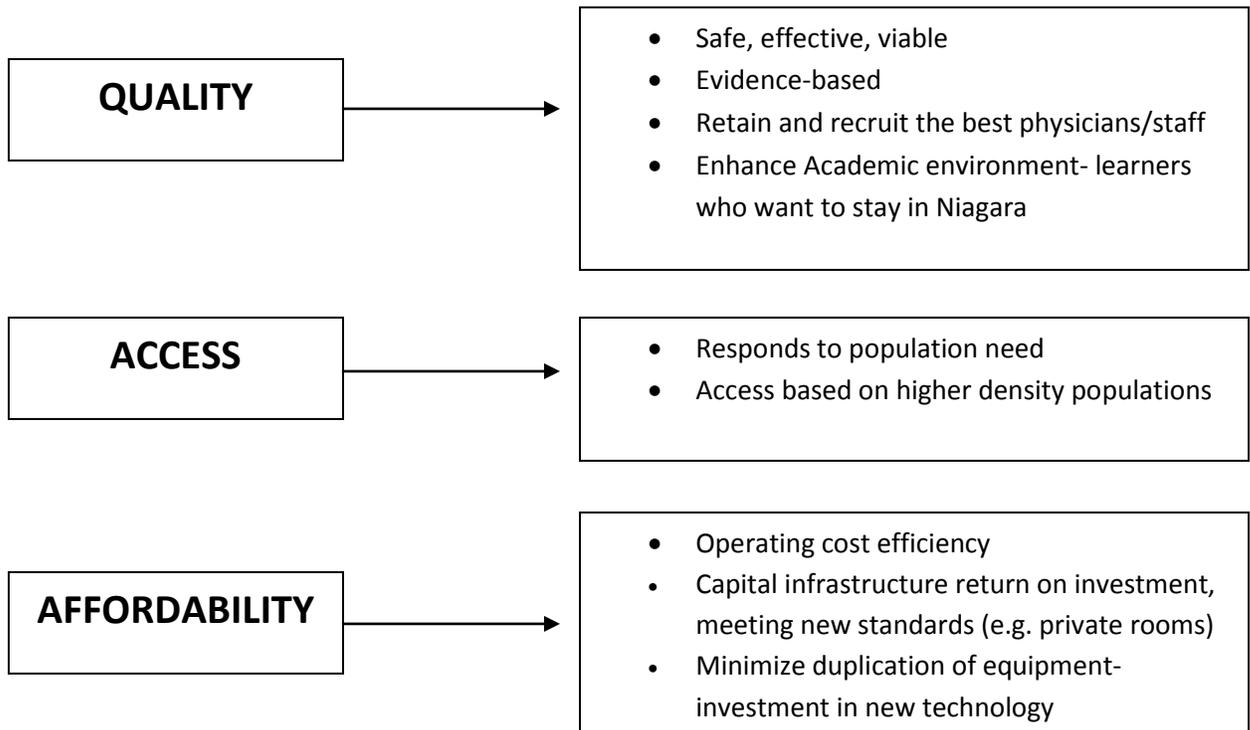
| OPTIONS CONSIDERED | | |
|--------------------|--|---|
| 1) | Two Sites and One UCC | <ul style="list-style-type: none"> • New SOUTH Niagara Hospital • NORTH St. Catharines Healthcare Complex • One “new” stand-alone Urgent Care Centre (UCC) • Closure of all other sites |
| 2) | Two Acute, One Ambulatory, Two Complex Care (CC) Sites | <ul style="list-style-type: none"> • Redevelop GNGH • NORTH St. Catharines Healthcare Complex • Ambulatory Centre in Welland with UCC • CC in PCG and DMH |
| 3) | Status Quo | <ul style="list-style-type: none"> • 3 acute sites: GNGH, SCGH, Welland • 3 CC sites: NOTL, DMH, PCG • 3 ER’s • 2 UCC’s |

At the request of the Welland City Council, a review of additional options to renovate the current Welland Hospital site to serve as the hospital for the entire Southern tier were undertaken. A report on capital costs prepared by Hanscomb consultants is included as Appendix “B”.

Future Siting Options (cont.)

Each option was evaluated based on analysis and feedback on the following criteria;

Evaluation Criteria



The recommended option for siting is "Option 1".

Future Siting Options (cont.)

The recommended configuration of programs and services for the recommended option is outlined below;

| <u>New South Tier Hospital:</u> | <u>North St. Catharines Healthcare Complex:</u> |
|--|--|
| <ul style="list-style-type: none"> • Emergency and Level 3 Critical Care • Regional Stroke Centre • Regional Geriatrics Program • Total Joint Replacement Centre • General Internal Medicine and Surgical Services, including General Surgery, Cancer Surgery, Orthopedics and Ambulatory Clinics (e.g. endo/cyst, oncology, outpatient mental health, etc) • Complex Care including specialized Regional Services (i.e. Behavioural Health, Bariatric and Vented) | <ul style="list-style-type: none"> • Emergency and Level 3 Critical Care • Cancer Centre • Heart Investigation Unit • In-patient Mental Health • Chronic Kidney Disease Program • Maternal Child/In-Patient Pediatrics * • General Internal Medicine and Surgical Services, including General Surgery, Cancer Surgery, Orthopedics and Ambulatory Clinics |
| <p>PLUS Two NEW UCC's situated based on location chosen for South hospital site</p> | |
| <p>Develop business case proposal - free standing Eye and Minor Surgery Centre</p> | |
| <p>* Move to new South site when built</p> | |

In addition to the St. Catharines site currently under construction, the NHS should:

- *Construct a new general acute care hospital in "South Niagara";*
- *Locate two free standing Urgent Care Centres in "South Niagara";*
- *Close the existing sites in Port Colborne, Fort Erie, Niagara Falls and Welland; and,*
- *Relocate the Nurse-Practitioner-led walk in clinic and Family Health Program to a suitable location with much lower operating costs than the existing site in Niagara-on-the-Lake with the closure of that site when complex continuing care can be consolidated to other sites.*

Future Siting Options (cont.)

An alternative to the initial program alignment is to move the consolidated Maternal Child/In-Patient Pediatrics service to the “South site”, if approved, when it is completed. The rationale for this recommendation is that it will be more central to the majority of the population and, furthermore, the expected growth of the “new” cancer and cardiac programs will likely impact on the capacity of the “North site” to expand these essential services.

Rationale for Recommendation

The rationale for recommending “Option 1” is as follows;

i) Quality

- By consolidating the critical mass of clinical activity in 2 sites, providers will develop and maintain valuable skills based on exposure to higher volume activities;
- All evidence points to consolidation of expertise as a key determinant of quality health care;
- Physicians and staff coverage will be simplified based on fewer sites to cover, and response time including off hours coverage will be enhanced;
- By concentrating clinical care in two sites, learners will be more attracted to the NHS as a preferred option; and,
- The retention/recruitment issue cannot be overemphasized, and the projected turnover of physicians and staff by discipline to 2019 is outlined previously in this report.

Future Siting Options (cont.)

ii) Access

While some would prefer a full service hospital in every community, we now know that is not feasible in today's environment for the following reasons:

- Lack of critical mass to provide expertise in procedures and clinical practice;
- Major increase in costs to duplicate equipment and infrastructure (buildings);
- Inability to recruit expertise with low volume workload; and,
- Costs to maintain coverage when clinical volumes do not support physician income. (Please note the NHS currently spends approximately \$2.2 million to provide on-call coverage when the volume of patients does not provide expected physician income). These funds should be used to provide direct patient care, not to supplement volumes.

I am pleased that our Mayors from the Southern Tier and our Regional Chair took on the important task of recommending the preferred site of both the proposed new facility and stand-alone Urgent Care Centre to address access considerations. They have recommended two acceptable options for siting of the new hospital and also have recommended an additional Urgent Care Centre (UCC) - total of two.

Future Siting Options (cont.)

I requested that siting recommendations be based on current population density information, and future projections of population growth to ensure the most appropriate location for the most people in our community. I engaged a well-respected external expert to assist me in determining the most appropriate site based on demographic data and population density projections provided through the Mayors and Regional Chair. The recommendation is that the preferred site of the proposed new hospital in the south be in the QEW and Lyons Creek area of Niagara.

With respect to the siting of the UCC's, I also want to review hours of operation, especially as I am supporting the recommendation of the Mayors/Regional Chair for a second UCC site in the South. Our data demonstrates there are very few patients presenting at the Fort Erie and Port Colborne UCC's between the hours of 10 p.m. and 8 a.m., and the challenges to maintain nurse/physician staffing levels and resultant costs to maintain coverage during those hours are very significant. In addition, normal travel time to a full service hospital is much less during those hours due to decreased traffic on the road. We have also discussed the potential of having the flexibility to maintain coverage when there are threatening weather forecasts through an on-call system as required. There may be opportunities with EMS siting to ensure after hours supports.

Future Siting Options (cont.)

Interim Recommendation:

The recommendations of the Mayors of the “Southern Tier” with input from the Regional Chair be utilized to determine:

- The location of the new hospital in the “South”;*
- The location of a stand-alone “new” Urgent Care Centre; and,*
- Population density and access should be the primary consideration in determining location.*

Local Response to this Recommendation:

The unanimous recommendation of the Mayors of the Southern Region (6 in total) and Regional Chair follows:

“2 Geographic areas, being described as QEW & Lyons Creek area, and East Main Street and Highway 140 area be considered as short-listed locations for the proposed development of a south Niagara hospital complex, conditional that Urgent Care Centres continue to operate in Port Colborne and Fort Erie. I cannot stress enough that the southern mayors are unanimous in their support of a south Niagara hospital being built.”

Final Recommendation:

Following significant deliberations, considering external expertise and in keeping with alternatives approved by the Mayors and Regional Chair, the final recommendation, subject to approval by the Ministry, is to build the new facility in the QEW and Lyons Creek area of Niagara. Two additional freestanding UCC’s, site and location to be determined, can be supported. Hours of operation should be in keeping with patient volume and other provincial practice.

iii) Affordability

Previously in this document, the financial pressures on the NHS with the status quo alignment of programs and services was noted. Simply put, business as usual is not even remotely an option. As part of this review, external experts were engaged to review and

Future Siting Options (cont.)

confirm capital and operating costs for the options under consideration. At a high level, an outline comparing the options is noted below:

Capital Costs (Total Project Cost)

(on new versus renovated facilities to today's standards)

| | |
|----------|-----------------|
| Option 1 | \$878,800,800 |
| Option 2 | \$1,164,961,200 |
| Option 3 | \$883,256,900 |

Operating Saving (from Current Configuration)

| | |
|----------|-------------|
| Option 1 | \$9,500,000 |
| Option 2 | \$2,750,000 |
| Option 3 | \$2,000,000 |

While projections into the future are by nature speculative, it can be expected that consolidation of services in the Southern tier will be very cost effective from both a capital and operating perspective. While health care costs will certainly continue to rise, the relative savings are undeniable.

Also, two additional options studied at the request of Welland City Council resulted in the following cost estimates:

| | | |
|-----------|---|-----------------|
| Option 4: | New Acute Site (North), Redevelop Welland for Acute (South), One Ambulatory at Greater Niagara (minimally invasive surgical site), Two Complex Care Sites (Port Colborne & Douglas) - Maintains UCC, Complex Care | \$1,292,493,500 |
| Option 5: | New Acute Site (North), Redevelop Welland for Acute (South) including consolidation of Ambulatory, Complex Care, UCC and Extended Care | \$1,432,984,700 |

Governance

A number of models for governing the NHS were considered ranging from “divorce”- forming separate autonomous Boards for each site, to reviewing the pre-existing model based on good governance practices.

To support an integrated system of health care delivery in Niagara, a single governing Board is essential. To do otherwise would perpetuate friction and destructive competition between communities. Patient centred quality health care would suffer as all current and future sites of the NHS are interdependent and serve the entire Niagara community in a complementary manner.

My plan is to form a community-based Nominating Committee (CBNC) to select the NHS Board based on necessary skills and abilities together with a consciousness for broad-based community representation. As any new start up Board will have staggered terms for Board members to ensure orderly turn over, the Nominating Committee will remain in place for a 3-5 year period. This will also deal with a perception that former Boards were a “closed shop” and only friends/colleagues were chosen to replace departing Board members. Members of the Nominating Committee will be widely respected in their community and not be eligible to be a member of the Board itself.

A new skills-based Board for the NHS be constituted. A community-based Nominating Committee will be formed to recommend appointments to the Board. This model should remain in place for a 3-5 year period for Board renewal. The establishment of two advisory committees (North and South) will follow the establishment of the Board.

Governance (cont.)

Immediate priorities for the newly formed Board will be to:

- Approve a process to develop a strategic plan for NHS, which includes consultation and input from community and provider organizations;
- Form Board structure; and,
- Oversee the implementation of a comprehensive performance management system.

In addition to the NHS governing Board of Directors, two Community Advisory Committees will be formed to advise the Board on local issues and form an important linkage to the community.

I would like to express our sincere appreciation to all members of the community-based Standing Committees of the Board who served with distinction, and were an important linkage to our local communities.

The immediate priorities of the new NHS Board be:

- *Approve a process to develop a strategic plan for NHS, which includes consultation and input from community and provider organizations;*
- *Form Board structure; and,*
- *Oversee the implementation of a comprehensive performance management system.*

During the same general time period that we are recruiting members of the Board, we will begin a national search process for a permanent Chief Executive Officer and Vice-President Medical/Chief of Staff. Members of the Board and other key stakeholders will be represented on the Committee which will be chaired by and report to me as Supervisor.

Governance (cont.)

National searches be undertaken to recruit 1) Chief Executive Officer and, 2) VP Medical/Chief of Staff. Search Committees will include representatives of the newly formed Board of the NHS or Board Nominating Committee, and other important stakeholder representatives.

The Board will be recruited and formed in the fall of 2012, and will serve in an advisory capacity to the Supervisor for an initial three month period. This will allow for a comprehensive orientation process and governance policy development.

The Board will follow a policy governance model and be based on the Ontario Hospital Association (OHA) Guide to Good Governance which is widely accepted as best practice in the health care industry.

The “OHA Guide to Good Governance” be adopted as the primary resource for Board activities. A governance coach should work with the Board for the first year.

Transitional Plans

If the proposal to build a new facility in the Southern tier is approved by the Government of Ontario, the time frame from approval to occupancy will be approximately six (6) years. This will allow for the various critical stages of the planning cycle as well as tendering of contracts, selection of site, etc. With a “greenfield” site, construction can occur much more quickly than extensive renovation of an existing site. In a renovation project, construction must be staged to allow for the continued operation of the hospital.

The clinical programs and services that have been planned for the St. Catharines site will proceed as scheduled. This will include of course new programs, equipment and facilities in your region for oncology, cardiac and mental health. Please be assured this will represent one of the largest advances in health services for your community in many years.

In my discussions over the last several months, the most debated program consolidation is related to Maternal/Child and In-Patient Pediatrics to the new St. Catharines site. I have consulted with many professionals both inside Niagara and throughout Ontario, and there is universal support for consolidation to achieve the safest and highest level of quality care possible. I have received another proposal from physicians in Welland and Niagara Falls to maintain Obstetrics/Pediatrics at both sites during the transition period. The Medical Advisory Committee (MAC) reviewed this proposal and, based on the information provided, made a unanimous recommendation to support the consolidation of both programs to a single site. In addition, the NHS Medical Staff Association (MSA) has also expressed concern with the recommendation in the Interim Report. As there was no strong local consensus, I engaged an

Transitional Plans (cont.)

external expert panel to assist me in this process. The panel considered several prior reviews, examined current utilization data, and participated in a special meeting held to listen to presentations from “both sides” in this important debate. While the presentations were very well-articulated and passionate as to a particular position, there was also an environment of mutual respect by all parties. The report of the expert panel is included as Appendix “C”.

This plan will allow for on-site pediatricians at all times to support obstetrics as well as better focused care for our children. The main concern relates to travel time. Protocols have been developed with our existing Emergency Departments/Urgent Care Centres for immediate support if a mother or child arrives unannounced for care at any of our sites. Our EMS partners will have clear instructions on where to take all patients requiring emergency care when an individual calls “911”. EMS will also treat any emergency patient transfers for obstetric and pediatric patients as a high priority call.

In concert with EMS and Public Health:

- *Expand the Advanced Care Paramedic Program across the Region, already a leader in this practice; and,*
- *Actively explore innovative models of care in which paramedics offer appropriate services to divert ER presentations, support appropriate use of home care, and continue to evolve the Critical Care Transport service.*

I recommend to the Ministry of Health and Long Term Care /HNBH LHIN that Maternal Child/ In-Patient Pediatrics be relocated to the proposed new facility in the South when it is built. The rationale for this recommendation is two-fold, namely:

Transitional Plans (cont.)

- 1) The new South hospital will be more centrally located to serve the most patients requiring these services and,
- 2) With the introduction of new regional programs in oncology and cardiac care in the St. Catharines site, program expansion is anticipated with the result being that there is increased pressure on space utilization.

Interim Recommendation:

The Maternal Child, In-Patient Pediatric Program, In-Patient Mental Health be consolidated at the new St. Catharines Hospital in the interim, with the full Maternal Child, In-Patient Pediatric Program ultimately moving to the “new South site” when it is built.

Final Recommendation:

Following consideration of prior reviews, examination of utilization data and both internal and external expertise, the recommendation from the Interim Report is confirmed - to consolidate Maternal Child, In-Patient Pediatrics, Inpatient Mental Health at the new St. Catharines Hospital in the interim, with the full Maternal Child, In-Patient Pediatric Program ultimately moving to the new facility in the South when it is built subject to the following caveats:

- *Gynecology day surgery should continue to be offered at all full service acute sites. Consolidation should be for inpatient and birthing services.*
- *Ultrasound and other associated services remain at all acute sites.*
- *Interprofessional Models of Care be clearly identified drawing from the work of the Provincial Council for Maternal Child Health.*
- *A model for low risk hospital-based family medicine obstetrics be clearly defined.*
- *Midwifery with a full scope of practice be offered.*
- *Obstetricians and Pediatricians should continue to be based in the communities of Niagara where they can provide the vast majority of consultative and ongoing care to the people in these communities.*
- *Physician and administrative leaders support all members on the Interprofessional Team to build an integrated Niagara Health System inpatient model at the St. Catharines site.*
- *EMS and NHS will utilize protocols for the very rare medical emergencies of any nature.*

Transitional Plans (cont.)

We will also review the Ministry plans to introduce low risk “Birthing Centres” in the province.

At this time, there is not enough detail to determine applicability to our region, but strong consideration will be given as government plans develop. An expanded role for midwives will also be considered in developing this proposal in keeping with accepted provincial standards related to scope of practice.

During the period of my appointment as Supervisor of the NHS, a delay of the planned capital redevelopment of West Lincoln Memorial Hospital (WLMH) was announced. My Interim Report did not address the potential impact of this delay to the broader Niagara Peninsula. Since my Interim Report, I have had the opportunity to speak with the LHIN leadership and the senior leadership at WLMH, and believe it is prudent to explore delivery models of obstetrical and pediatric care for the geography spanning Grimsby and Niagara, as well as the appropriate links to tertiary pediatric and obstetrical care in Hamilton. The future model of care in Niagara should contribute to a broader LHIN-wide vision in obstetrics, gynecology and pediatric care. The Expert panel was asked to take this into consideration as they deliberated on advice to inform our final recommendations.

Due to noted concerns with respect to access, the feasibility of a low risk Birthing Centre, a model recently announced by the Government of Ontario, be treated as a high priority, and the NHS be recommended as a pilot program through the Hamilton Niagara Haldimand Brant (HNHB) LHIN. The MOHLTC has recently made a call for proposal for Birthing Centres.

Transitional Plans (cont.)

Other proposals that have been forwarded to me such as a stand-alone Ophthalmology Centre are being considered, but with any proposal, it must enhance or at a minimum maintain safe quality care.

As requested by many physicians, the potential of a stand-alone Ophthalmology and Minor Surgery Centre is currently being explored conditional on providing emergency and inpatient coverage at the NHS sites. A formal Request for Proposal document has been prepared for this initiative.

With a six year period from approval to occupancy, we must commit to maintaining the existing buildings/sites at an acceptable level in the short term. This will involve careful planning and sound judgment, but the NHS has that experience with the pending move to the new St. Catharines site occurring after years of planning.

We must begin immediately with plans and program alignment to ensure critical “24/7” services are maintained at the Niagara Falls and Welland sites during the transition period to the proposed new South site. While the Port Colborne, Fort Erie and Niagara-on-the Lake sites are also important in providing services to their respective communities, these sites are not as directly impacted by the opening of the St. Catharines site.

As part of the overall review of options related to siting, it is critical that the move to the new St. Catharines site be accomplished in an orderly and effective manner. A re-examination of the NHS Hospital Improvement Plan (HIP) took place along with other internal/external reviews.

Transitional Plans (cont.)

Following extensive additional review and consultation, the following transitional clinical services plan is recommended.

During the transition period, ongoing clinical viability and coverage requirements on a “24/7” basis of the two acute care sites in Niagara Falls and Welland be a high priority.

The following is a high level overview of the interim clinical service siting plan. As implementation planning evolves for the proposed new ‘South’ site, there could be further refinement within the context of providing quality, safe, efficient and cost-effective patient care to accommodate the transition in a phased-in approach.

Interim Clinical Service Siting Plan

The following is a high level overview of the interim clinical service siting plan. As implementation planning evolves for the new 'South' site, there could be further refinement within the context of providing quality, safe, efficient and cost-effective patient care to accommodate the transition in a phased-in approach.

| | New "North" Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|---|---|----------------------------|--------------------------|---|--------------------------|--------------------------------------|
| Emergency and Critical Care Services | | | | | | |
| Emergency | x | X | x | | | |
| Urgent Care | | | | x | x | |
| Critical Care | X | X | x | | | |
| Surgical Services -- NOTE: Age Criteria for out-patient pediatric surgery to be confirmed for services outside of the new 'North' healthcare complex | | | | | | |
| General Surgery | In and Out-Patient | In and Out-Patient | In and Out-Patient | | | |
| Orthopedics* | In and Out-Patient | In and Out-Patient | In and Out-Patient | *NOTE: Discussions regarding potential consolidation of the Total Joint Program prior to the "new South site" will commence immediately to assess feasibility of early consolidation. | | |
| | | | | | | |
| Urology | In and Out-patient + Cystoscopy | Out-patient + Cystoscopy | Out-patient + Cystoscopy | | | |
| Gynecology* | In and Out-Patient | Out-patient | Out-Patient | | | |
| Ear Nose Throat | In and Out-Patient | Out-Patient | Out-Patient | | | |
| Plastics | X In and Out-Patient | X In and Out-Patient | | | | |
| Dental | In and Out-Patient | In and Out-Patient | | | | |
| Ophthalmology | | | x | | | |
| Vascular | X In and Out-Patient | | | | | |
| Ambulatory Clinics | | | | | | |
| Clinics | x | x | x | x | x | |
| Obstetrics | x | | | | | |
| Level 2 Neonatal Nursery | x | | | | | |

| | New "North" Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|---|---|---|----------------|---------------------|------------------------------------|-----------------------------|
| In-Patient Pediatrics | X | | | | | |
| Medicine | | | | | | |
| General Internal Medicine | x | x | x | | | |
| Regional Geriatric Assessment | | x | | | | |
| Nephrology | In-Patient | | | | | |
| Dialysis - Ambulatory | X | X Satellite in Niagara Falls | X Satellite | | | |
| Stroke | | X *NOTE: discussions regarding potential stroke program expansion to take place | | | | |
| Cardiology | x | X | X | | | |
| Cardiac Care Unit and Heart Investigation Unit | x | | | | | |
| Respirology | x | x | X | | | |
| Oncology/Walker Family Cancer Centre | x | | | | | |
| Diabetes Hub | | | X | | | |
| Mental Health and Addictions | | | | | | |
| Mental Health | X In and Out- patient | Out-patient | Out-patient | Out- Patient | | |
| Addictions | Consolidated Site TBD | | | | Residential and Out- Patient | |
| Complex Care | | | | | | |
| Complex Care | | x | x | x | x | X |

| | New "North" Healthcare Complex | Greater Niagara | Welland | Douglas Memorial | Port Colborne | Niagara- on-the- Lake |
|-----------------------|---|---|---------|---------------------|------------------|-----------------------------|
| Assess Restore | | X *NOTE: Assess and Restore program may need to relocate to Welland to accommodate potential stroke program expansion at GNG | | | | |
| Long-Term Care | | | | | | |
| LTC | | | x | | | |

Note:

- All sites will have access to appropriate clinical support services [e.g. diagnostics, lab, pharmacy etc.] as appropriate.

Additional Considerations

There are many important additional considerations which must be addressed in a timely fashion once the recommendations of the Supervisor are approved.

These considerations include but are by no means limited to the following:

a) Transportation

Transportation within Niagara has been one of the most consistent concerns expressed during the consultation process. The concerns include non-urgent transportation to outpatient appointments in adjacent communities, visiting relatives who are inpatients, and transportation in the event of an emergency.

Meetings have been held with senior representatives of the EMS on the various models on an ongoing basis. The Region has invested significantly in coverage of paramedics including the investment of the Region in training for Advanced Care Paramedics. While payment for non-urgent transportation is not an approved hospital expense, I am prepared to review this important matter with both the Niagara Region and our LHIN. One suggestion would be a system of reimbursing those in need with taxi vouchers, but a funding source would need to be identified.

We will also review existing successful services such as the Fort Erie Accessible Specialized Transit (FAST) program.

With the Region of Niagara, and interested volunteer agencies, establish a limited transportation model for lower income frail seniors and chronic mental health patients and their families.

Additional Considerations (cont.)

b) Review the Structure and Role of the Foundations that Support the NHS

Our Foundations work tirelessly to raise funds to support the programs and services of the NHS. Foundations are separately incorporated entities and not included in the mandate of the Supervisor. If asked, I would be happy to provide advice to our Foundations, but I have every confidence that our community leaders in our Foundations will adjust to the new reality for the NHS in an appropriate fashion. I am very pleased that our Foundation leaders have begun the process of reviewing their respective mandates and best way to serve the health care needs of our community through the NHS.

Support for the review by our Foundations that potential realignment be considered to meet the philanthropic needs of the NHS.

c) Maintain and Enhance the Role of Volunteers at the NHS

Volunteers provide an essential service to our patients, families and staff. For the most part, individual volunteers are aligned to a specific site. We must do everything possible to maintain a positive volunteer experience and express our appreciation for their many contributions.

Recognize and celebrate the essential role and impact of NHS Volunteers and Auxiliary organizations, and develop an effective retention/recruitment plan for volunteers, who are the backbone of the NHS.

Additional Considerations (cont.)

d) Primary Care Reform

A number of the Region's Mayors have expressed interest in primary care reform models through Family Health Teams and associated services. I believe this an exciting opportunity and encourage our LHIN to establish a task force with the goal of developing a pilot for a regional primary care consortia. This would represent an excellent opportunity to collaborate on an academic model for learners with McMaster University.

As LHIN's have recently been charged with planning for primary care, the MOHLTC request the Hamilton Niagara Haldimand Brant (HNHB) LHIN to develop a prototype model for primary care planning , which supports the implementation of this report and the restructuring of the NHS.

e) Adjust to New Health Care Models

Innovations in health care delivery are continually being introduced, and we must remain both flexible and leaders in innovation.

f) Sale of Sites

The NHS owns all sites, and the Ontario Street Site and St. Catharines General Site have already been sold. If the recommendations in this report are approved, an important priority of our NHS Board will be to meet with local elected officials to find the best use of the property. I recommend to the Minister that each municipality be given the right of first refusal for purchase of a decommissioned site at fair market value. Criteria will include both revenue from sale of property and potential utility to meet other community needs.

Additional Considerations (cont.)

In this analysis, it will be important to note that hospitals are very expensive buildings to both construct and maintain.

Develop a plan for the disposition of NHS sites designated for closure. Each municipality that has an existing site slated for closure will be given first option to purchase the site and buildings from the NHS at fair market value through a process to be determined. The NHS will not retain ownership of any of these sites and will utilize proceeds to fund capital costs for existing operations.

This report is available in full on the NHS website at www.niagarahealth.on.ca

As Supervisor, I will make myself available to our media colleagues for comment.

Thank you for taking the time to read this material and I look forward to the implementation of the recommendations in this report and moving ahead with the exciting vision for your Niagara Health System.

APPENDIX "A"

HANSCOMB REPORT

ON

CAPITAL COSTS

**NIAGARA HEALTH SYSTEM
OPTIONS ANALYSIS
ST. CATHARINES, ONTARIO**

ORDER OF MAGNITUDE ESTIMATES

June 5, 2012

Hanscomb

Table of Contents

| | Page No. |
|--------------------------|-----------------|
| 1.0 Introduction | |
| 1.1 General | 1 |
| 1.2 Methodology | 1 |
| 1.3 Construction Phasing | 1 |
| 1.4 Cost Considerations | 1 |
| 1.5 Ongoing Cost Control | 2 |
| 2.0 Gross Floor Areas | 3 |
| 3.0 Main Summary | 4 |

APPENDICES

| | |
|---|----|
| A Option 1 : Two New Acute Sites (North & South) (UCC to be determined) | 6 |
| B Option 2 : New Acute Site (North), Redevelop Greater Niagara for Acute (South), One Ambulatory at Welland (minimally invasive surgical site), Two Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care) | 8 |
| C Option 3 : New Acute Site (North), Redevelop Greater Niagara for Acute (South), Redevelop Welland Site for Acute, Three Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care, NOTL - Maintains Complex Care) | 10 |
| D Option 4 : New Acute Site (North), Redevelop Welland for Acute (South), One Ambulatory at Greater Niagara (minimally invasive surgical site), Two Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care) | 12 |
| E Option 5 : New Acute Site (North), Redevelop Welland for Acute (South) including consolidation of Ambulatory, Complex Care, UCC and Extended Care | 14 |

1.0 Introduction

1.1 General

These Order of Magnitude Estimates are intended to provide a realistic assessment of the total project costs associated with the proposed options for the hospital sites of the Niagara Health System in St. Catharines, Welland and Port Colburne Ontario as outlined in the documents provided by the Niagara Health System.

Accordingly, these Order of Magnitude Estimates should only be considered within the full context of the above noted documentation.

1.2 Methodology

Generally, the areas of work projected are priced using parametric quantities and unit rates considered appropriate for a project of this scope and nature.

Costs reported in this estimate provides for all building construction and include related site development work, allowances for Furnishings & Equipment and Professional Fees & Expenses. Separate provision has also been made where appropriate for such things as building demolition, site clearance, etc.

For the purposes of these estimates, Hanscomb has reported the projected building areas and priced the work in these areas based on the scope outlined in the documentation received from Niagara Health System.

1.3 Construction Phasing

Allowances have been made to cover premiums for phased construction, where applicable.

1.4 Cost Considerations

All costs are estimated on the basis of competitive bids (a minimum of 6 general contractor bids and at least 3 subcontractor bids for each trade) being received in April 2012 from general contractors and all major subcontractors and suppliers based on a stipulated sum form of contract. Pricing shown reflects probable costs obtainable in the St. Catharines area on the effective date of this report and is therefore a determination of fair market value for the construction of the work and not a prediction of low bid.

Escalation to tender has been allowed at 5% per annum.

Escalation during the construction period is included in the unit rates used in this estimate.

An allowance of 10% has been included to cover design and pricing unknowns. This allowance is not intended to cover any program space or quality modifications but rather to provide some flexibility for the designers and cost planners during the redevelopment design stages.

An allowance of 5% has been made to cover construction (post contract) unknowns for Option 1 and 10% for Options 2 and 3 to reflect the complexity of these redevelopments and the associated risks.

1.4 Cost Considerations (continued)

The unit rates in the preparation of these Order of Magnitude Estimates include labour and material, equipment, subcontractor's overheads and profits.

The following items have been specifically excluded from these Order of Magnitude Estimates:

- owner's staff and management expenses
- financing and/or fund raising expenses
- operating and maintenance costs

1.5 Ongoing Cost Control

Hanscomb has no control over the cost of labour and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, or actual construction costs will not vary from this or subsequent estimates.

Hanscomb recommends that the Owner and the design team carefully review these Order of Magnitude Estimates documents, including line item description, unit price clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the bidding phase.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that a final updated estimate be produced by Hanscomb using Bid Documents to determine overall cost changes which may have occurred since the preparation of these estimates. The final updated estimates will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

2.0 Gross Floor Areas

GROSS FLOOR AREAS:

| | OPTION 1 (SF) | OPTION 2 (SF) | OPTION 3 (SF) | OPTION 4 (SF) | OPTION 5 (SF) |
|---|------------------|------------------|------------------|------------------|------------------|
| ACUTE SITES | 849,900 | 640,990 | 703,190 | 714,190 | 714,190 |
| North - New Facility (NIC for Analysis) | NIC | NIC | NIC | NIC | NIC |
| South - New Facility | 849,900 | 0 | 0 | 0 | 0 |
| South - Redevelop Greater Niagara General | 0 | 640,990 | 322,290 | 0 | 0 |
| Redevelop Welland Site | 0 | 0 | 380,900 | 640,990 | 640,990 |
| Extended Care Unit at Welland | 0 | 0 | 0 | 73,200 | 73,200 |
| COMPLEX CARE SITES | 0 | 186,960 | 225,960 | 186,960 | 186,960 |
| Port Colborne (UCC, Complex Care) | 0 | 100,000 | 100,000 | 100,000 | 100,000 * |
| Douglas (UCC, Complex Care) | 0 | 86,960 | 86,960 | 86,960 | 86,960 * |
| Niagara on the Lake (Complex Care) | 0 | 0 | 39,000 | 0 | 0 |
| AMBULATORY CARE | 0 | 380,900 | 0 | 380,900 | 380,900 |
| Greater Niagara General (min invasive Surg) | 0 | 0 | 0 | 380,900 | 380,900 * |
| Welland (minimally invasive Surgical Site) | 0 | 380,900 | 0 | 0 | 0 |
| Total | 849,900 | 1,208,850 | 929,150 | 1,282,050 | 1,282,050 |

The above areas are approximations of the potential gross floor areas required and are very preliminary.

* All areas reported for Option 5 are to be consolidated on the Welland Site.

Notes and Assumptions:

[1] The New North Acute Care Facility is common for all options and is excluded from this study.

[2] The New South Acute Care Facility assumes the following:

| | | | |
|------------------------------|----------|----------------|--------------|
| Acute beds | 192 Beds | 2,700 bgsf/bed | 518,400 bgsf |
| Complex Continuing Care Beds | 195 Beds | 1,700 bgsf/bed | 331,500 bgsf |
| Total Potential GFA | | | 849,900 bgsf |

[3] Redeveloped GNG assumes the following:

| | | | |
|--|---------|----------------|--------------|
| Existing Facility per VFA | | | 298,000 bgsf |
| Demolition of portion of existing building per MP | | | -96,710 bgsf |
| Phase 1 South Addition per MP June 2010 (Surg) | | | 65,000 bgsf |
| Phase 2 South East Addition MP June 2010 (Inpatient) | | | 56,000 bgsf |
| Acute beds | 96 Beds | 2,700 bgsf/bed | 259,200 bgsf |
| Complex Continuing Care Beds | 35 Beds | 1,700 bgsf/bed | 59,500 bgsf |
| Total Potential GFA Option 2 | | | 640,990 bgsf |

| | | | |
|--|--|--|--------------|
| Existing Facility per VFA | | | 298,000 bgsf |
| Demolition of portion of existing building per MP | | | -96,710 bgsf |
| Phase 1 South Addition per MP June 2010 (Surg) | | | 65,000 bgsf |
| Phase 2 South East Addition MP June 2010 (Inpatient) | | | 56,000 bgsf |
| Total Potential GFA Option 3 | | | 322,290 bgsf |

[4] Redevelopment of the Welland site includes areas from the VFA as follows:

| | | | |
|----------------------------------|--|--|--------------|
| Main Building per VFA | | | 348,900 bgsf |
| MacLean Building per VFA | | | 27,000 bgsf |
| Regional Health Building per VFA | | | 5,000 bgsf |
| Total Potential GFA | | | 380,900 bgsf |

| | | | |
|------------------------------|-----------|-------------|-------------------------|
| Extended Care Unit (75 Beds) | nsf / bed | cgsf / bed | Building Gross |
| Allow | 75 beds | 450.00 1.55 | 52,300 1.40 73,200 bgsf |

[5] Renovation of the Port Colborne site includes 100,000 SF of existing building per the VFA.

[6] Renovation of the Douglas site includes 86,960 SF of existing building per the VFA.

3.0 Main Summary

PROJECT COST SUMMARY:

| | OPTION 1 | OPTION 2 | OPTION 3 | OPTION 4 | OPTION 5 |
|-------------------------------------|----------------------|------------------------|----------------------|------------------------|------------------------|
| Acute Sites | \$382,455,000 | \$259,601,000 | \$265,161,500 | \$314,243,600 | \$314,243,600 |
| Complex Care Sites | \$0 | \$51,414,000 | \$62,139,000 | \$51,414,000 | \$82,236,000 |
| Ambulatory Care Sites | \$0 | \$133,315,000 | \$0 | \$142,837,500 | \$190,450,000 |
| Infrastructure Upgrade Allowance | \$0 | \$36,191,600 | \$42,588,900 | \$38,206,900 | \$23,075,600 |
| Hazardous Materials Allowance | \$0 | \$13,325,300 | \$13,937,300 | \$13,429,800 | \$5,768,900 |
| Site Works Allowance | \$10,000,000 | \$5,710,400 | \$6,968,700 | \$6,259,400 | \$8,630,700 |
| Phasing & Logistics Allowance | \$0 | \$22,157,700 | \$32,840,700 | \$24,306,000 | \$29,654,000 |
| SUB-TOTAL | \$392,455,000 | \$521,715,000 | \$423,636,100 | \$590,697,200 | \$654,058,800 |
| Design & Pricing Allowance | \$39,245,500 | \$52,171,400 | \$42,363,700 | \$59,069,700 | \$65,405,900 |
| LEED Silver Allowance | \$10,792,500 | \$14,347,200 | \$11,650,000 | \$16,244,200 | \$17,986,600 |
| SUB-TOTAL | \$442,493,000 | \$588,233,600 | \$477,649,800 | \$666,011,100 | \$737,451,300 |
| Construction Contingency | \$22,124,700 | \$58,823,300 | \$47,765,000 | \$66,601,100 | \$73,745,100 |
| TOTAL CONSTRUCTION COST | \$464,617,700 | \$647,056,900 | \$525,414,800 | \$732,612,200 | \$811,196,400 |
| Ancillaries (soft costs) | \$107,791,300 | \$150,117,200 | \$121,896,200 | \$169,966,000 | \$188,197,500 |
| FF&E / IT | \$116,154,400 | \$110,583,300 | \$95,446,000 | \$119,103,200 | \$120,627,800 |
| SUB-TOTAL | \$688,563,400 | \$907,757,400 | \$742,757,000 | \$1,021,681,400 | \$1,120,021,700 |
| Escalation to Construction Start | \$190,237,400 | \$257,203,800 | \$140,499,900 | \$270,812,100 | \$312,963,000 |
| SUB-TOTAL | \$878,800,800 | \$1,164,961,200 | \$883,256,900 | \$1,292,493,500 | \$1,432,984,700 |
| Land Acquisition | \$0 | \$0 | \$0 | \$0 | \$0 |
| Sale of Property | \$0 | \$0 | \$0 | \$0 | \$0 |
| TOTAL PROJECT COST | \$878,800,800 | \$1,164,961,200 | \$883,256,900 | \$1,292,493,500 | \$1,432,984,700 |
| Gross Floor Area | 849,900 | 1,208,850 | 929,150 | 1,282,050 | 1,282,050 |
| PROJECT COST PER SQUARE FOOT | \$1,034.00 | \$963.69 | \$950.61 | \$1,008.15 | \$1,117.73 |

| | | | | | |
|----------------------------------|-------------|------------|------------|------------|------------|
| Percentage New Facilities | 100% | 36% | 13% | 40% | 70% |
| Percentage Old Facilities | 0% | 64% | 87% | 60% | 30% |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.
- [8] The above costs exclude the following:
 - owner's staff and management expenses
 - financing and/or fund raising expenses
 - operating and maintenance costs
 - land acquisition costs
 - income from sale of property

APPENDIX A

Option 1

Option 1 : Two New Acute Sites (North & South) (UCC to be determined)

| Option 1 | Construction Type | GFA | Net Constr. Rate (\$/SF) | Net Construction Cost (\$) | Infra-Structure Upgrade Allowance | Hazardous Materials Abatement \$10.00 | Site Works Allowance | Phasing & Logistics Allowance | Design & Pricing Allowance 10.0% | LEED Silver Allowance 2.5% | Construction Contingency 5.0% | Total Construction Cost | Allowance for Ancillaries 23.2% | Allowance for FF&E / IT | CURRENT PROJECT COST with FF&E / IT | Escalation to Construction Start | | TOTAL PROJECT COST | |
|---|-------------------|-------------------|--------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------|-------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|----------------------------------|----------------|----------------------|---------------|
| | | | | | | | | | | | | | | | | Yrs | 5.0% per annum | | |
| ACUTE SITES | | 849,900 SF | 450.00 | \$382,455,000 | \$0 | \$0 | \$10,000,000 | \$0 | \$39,245,500 | \$10,792,500 | \$22,124,700 | \$464,617,700 | \$107,791,300 | \$116,154,400 | \$688,563,400 | \$190,237,400 | | \$878,800,800 | |
| North - New Facility (NIC for Analysis) | New | NIC | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| South - New Facility | New | 849,900 SF | 450.00 | \$382,455,000 | \$0 | \$0 | \$10,000,000 | \$0 | \$39,245,500 | \$10,792,500 | \$22,124,700 | \$464,617,700 | \$107,791,300 | 25% | \$116,154,400 | \$688,563,400 | 5 | \$190,237,400 | \$878,800,800 |
| South - Redevelop Greater Niagara General | Reno/New | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Redevelop Welland Site | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| COMPLEX CARE SITES | | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Port Colborne (UCC, Complex Care) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Douglas (UCC, Complex Care) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Niagara on the Lake (Complex Care) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| AMBULATORY CARE | | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Greater Niagara General (min invasive Surg) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Welland (minimally invasive Surgical Site) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| Total | | 849,900 SF | 450.00 | \$382,455,000 | \$0 | \$0 | \$10,000,000 | \$0 | \$39,245,500 | \$10,792,500 | \$22,124,700 | \$464,617,700 | \$107,791,300 | \$116,154,400 | \$688,563,400 | \$190,237,400 | | \$878,800,800 | |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.

- [8] The above costs exclude the following:
 owner's staff and management expenses
 financing and/or fund raising expenses
 operating and maintenance costs
 land acquisition costs
 income from sale of property

APPENDIX B

Option 2

Option 2 : New Acute Site (North), Redevelop Greater Niagara for Acute (South), One Ambulatory at Welland (minimally invasive surgical site), Two Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care)

| Option 2 | Construction Type | GFA | Net Constr. Rate (\$/SF) | Net Construction Cost (\$) | Infra-Structure Upgrade Allowance | Hazardous Materials Abatement \$15.00 | Site Works Allowance | Phasing & Logistics Allowance | Design & Pricing Allowance 10.0% | LEED Silver Allowance 2.5% | Construction Contingency 10.0% | Total Construction Cost | Allowance for Ancillaries 23.2% | Allowance for FF&E / IT | CURRENT PROJECT COST with FF&E / IT | Escalation to Construction Start | | TOTAL PROJECT COST | |
|---|-------------------|---------------------|--------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|----------------------------------|----------------|----------------------|------------------------|
| | | | | | | | | | | | | | | | | Yrs | 5.0% per annum | | |
| ACUTE SITES | | 640,990 SF | 405.00 | \$259,601,000 | \$11,537,800 | \$4,807,400 | \$2,403,700 | \$5,567,000 | \$28,391,700 | \$7,807,700 | \$32,011,600 | \$352,127,900 | \$81,693,700 | \$70,425,600 | \$504,247,200 | \$79,482,000 | | \$583,729,200 | |
| North - New Facility (NIC for Analysis) | New | NIC | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| South - New Facility | New | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| South - Redevelop Greater Niagara General | Reno/New | 640,990 SF | 405.00 | \$259,601,000 | \$11,537,800 | \$4,807,400 | \$2,403,700 | \$5,567,000 | \$28,391,700 | \$7,807,700 | \$32,011,600 | \$352,127,900 | \$81,693,700 | 20% | \$70,425,600 | \$504,247,200 | 3 | \$79,482,000 | \$583,729,200 |
| Redevelop Welland Site | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| COMPLEX CARE SITES | | 186,960 SF | 275.00 | \$51,414,000 | \$5,608,800 | \$2,804,400 | \$1,402,200 | \$4,592,300 | \$6,582,100 | \$1,810,100 | \$7,421,400 | \$81,635,300 | \$18,939,400 | | \$8,163,600 | \$108,738,300 | | \$36,981,400 | \$145,719,700 |
| Port Colborne (UCC, Complex Care) | Reno | 100,000 SF | 275.00 | \$27,500,000 | \$3,000,000 | \$1,500,000 | \$750,000 | \$2,456,300 | \$3,520,600 | \$968,200 | \$3,969,500 | \$43,664,600 | \$10,130,200 | 10% | \$4,366,500 | \$58,161,300 | 6 | \$19,780,400 | \$77,941,700 |
| Douglas (UCC, Complex Care) | Reno | 86,960 SF | 275.00 | \$23,914,000 | \$2,608,800 | \$1,304,400 | \$652,200 | \$2,136,000 | \$3,061,500 | \$841,900 | \$3,451,900 | \$37,970,700 | \$8,809,200 | 10% | \$3,797,100 | \$50,577,000 | 6 | \$17,201,000 | \$67,778,000 |
| Niagara on the Lake (Complex Care) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | |
| AMBULATORY CARE | | 380,900 SF | 350.00 | \$133,315,000 | \$19,045,000 | \$5,713,500 | \$1,904,500 | \$11,998,400 | \$17,197,600 | \$4,729,400 | \$19,390,300 | \$213,293,700 | \$49,484,100 | | \$31,994,100 | \$294,771,900 | | \$140,740,400 | \$435,512,300 |
| Greater Niagara General (min invasive Surg) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 0% | \$0 | \$0 | 8 | \$0 | \$0 |
| Welland (minimally invasive Surgical Site) | Reno | 380,900 SF | 350.00 | \$133,315,000 | \$19,045,000 | \$5,713,500 | \$1,904,500 | \$11,998,400 | \$17,197,600 | \$4,729,400 | \$19,390,300 | \$213,293,700 | \$49,484,100 | 15% | \$31,994,100 | \$294,771,900 | 8 | \$140,740,400 | \$435,512,300 |
| Total | | 1,208,850 SF | 367.56 | \$444,330,000 | \$36,191,600 | \$13,325,300 | \$5,710,400 | \$22,157,700 | \$52,171,400 | \$14,347,200 | \$58,823,300 | \$647,056,900 | \$150,117,200 | | \$110,583,300 | \$907,757,400 | | \$257,203,800 | \$1,164,961,200 |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.

- [8] The above costs exclude the following:
 owner's staff and management expenses
 financing and/or fund raising expenses
 operating and maintenance costs
 land acquisition costs
 income from sale of property

APPENDIX C

Option 3

Option 3 : New Acute Site (North), Redevelop Greater Niagara for Acute (South), Redevelop Welland Site for Acute, Three Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care, NOTL - Maintains Complex Care)

| Option 3 | Construction Type | GFA | Net Constr. Rate (\$/SF) | Net Construction Cost (\$) | Infra-Structure Upgrade Allowance | Hazardous Materials Abatement \$15.00 | Site Works Allowance | Phasing & Logistics Allowance | Design & Pricing Allowance 10.0% | LEED Silver Allowance 2.5% | Construction Contingency 10.0% | Total Construction Cost | Allowance for Ancillaries 23.2% | Allowance for FF&E / IT | CURRENT PROJECT COST with FF&E / IT | Escalation to Construction Start | | TOTAL PROJECT COST |
|---|-------------------|-------------------|--------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|----------------------------------|----------------|----------------------|
| | | | | | | | | | | | | | | | | Yrs | 5.0% per annum | |
| ACUTE SITES | | 703,190 SF | 377.08 | \$265,161,500 | \$35,810,100 | \$10,547,900 | \$5,274,000 | \$29,140,600 | \$34,593,500 | \$9,513,200 | \$39,004,100 | \$429,044,900 | \$99,538,400 | \$85,809,000 | \$614,392,300 | \$96,843,600 | | \$711,235,900 |
| North - New Facility (NIC for Analysis) | New | NIC | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| South - New Facility | New | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| South - Redevelop Greater Niagara General | Reno/New | 322,290 SF | 350.00 | \$112,801,500 | \$12,956,100 | \$4,834,400 | \$2,417,200 | \$19,951,400 | \$15,296,100 | \$4,206,400 | \$17,246,300 | \$189,709,400 | \$44,012,600 | 20% \$37,941,900 | \$271,663,900 | 3 | \$42,821,000 | \$314,484,900 |
| Redevelop Welland Site | Reno | 380,900 SF | 400.00 | \$152,360,000 | \$22,854,000 | \$5,713,500 | \$2,856,800 | \$9,189,200 | \$19,297,400 | \$5,306,800 | \$21,757,800 | \$239,335,500 | \$55,525,800 | 20% \$47,867,100 | \$342,728,400 | 3 | \$54,022,600 | \$396,751,000 |
| COMPLEX CARE SITES | | 225,960 SF | 275.00 | \$62,139,000 | \$6,778,800 | \$3,389,400 | \$1,694,700 | \$3,700,100 | \$7,770,200 | \$2,136,800 | \$8,760,900 | \$96,369,900 | \$22,357,800 | \$9,637,000 | \$128,364,700 | \$43,656,300 | | \$172,021,000 |
| Port Colborne (UCC, Complex Care) | Reno | 100,000 SF | 275.00 | \$27,500,000 | \$3,000,000 | \$1,500,000 | \$750,000 | \$1,637,500 | \$3,438,800 | \$945,700 | \$3,877,200 | \$42,649,200 | \$9,894,600 | 10% \$4,264,900 | \$56,808,700 | 6 | \$19,320,400 | \$76,129,100 |
| Douglas (UCC, Complex Care) | Reno | 86,960 SF | 275.00 | \$23,914,000 | \$2,608,800 | \$1,304,400 | \$652,200 | \$1,424,000 | \$2,990,300 | \$822,300 | \$3,371,600 | \$37,087,600 | \$8,604,300 | 10% \$3,708,800 | \$49,400,700 | 6 | \$16,801,000 | \$66,201,700 |
| Niagara on the Lake (Complex Care) | Reno | 39,000 SF | 275.00 | \$10,725,000 | \$1,170,000 | \$585,000 | \$292,500 | \$638,600 | \$1,341,100 | \$368,800 | \$1,512,100 | \$16,633,100 | \$3,858,900 | 10% \$1,663,300 | \$22,155,300 | 6 | \$7,534,900 | \$29,690,200 |
| AMBULATORY CARE | | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Greater Niagara General (min invasive Surg) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Welland (minimally invasive Surgical Site) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | | 929,150 SF | 352.26 | \$327,300,500 | \$42,588,900 | \$13,937,300 | \$6,968,700 | \$32,840,700 | \$42,363,700 | \$11,650,000 | \$47,765,000 | \$525,414,800 | \$121,896,200 | \$95,446,000 | \$742,757,000 | \$140,499,900 | | \$883,256,900 |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.

- [8] The above costs exclude the following:
 owner's staff and management expenses
 financing and/or fund raising expenses
 operating and maintenance costs
 land acquisition costs
 income from sale of property

APPENDIX D

Option 4

Option 4 : New Acute Site (North), Redevelop Welland for Acute (South), One Ambulatory at Greater Niagara (minimally invasive surgical site), Two Complex Care Sites (Port Colborne & Douglas - Maintains UCC, Complex Care)

| Option 4 | Construction Type | GFA | Net Constr. Rate (\$/SF) | Net Construction Cost (\$) | Infra-Structure Upgrade Allowance | Hazardous Materials Abatement \$15.00 | Site Works Allowance | Phasing & Logistics Allowance | Design & Pricing Allowance 10.0% | LEED Silver Allowance 2.5% | Construction Contingency 10.0% | Total Construction Cost | Allowance for Ancillaries 23.2% | Allowance for FF&E / IT | CURRENT PROJECT COST with FF&E / IT | Escalation to Construction Start | | TOTAL PROJECT COST |
|---|-------------------|---------------------|--------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|----------------------------------|----------------|------------------------|
| | | | | | | | | | | | | | | | | Yrs | 5.0% per annum | |
| ACUTE SITES | | 714,190 SF | 440.00 | \$314,243,600 | \$23,075,600 | \$5,768,900 | \$2,952,700 | \$15,735,700 | \$36,177,700 | \$9,948,900 | \$40,790,300 | \$448,693,400 | \$104,096,800 | \$78,978,800 | \$631,769,000 | \$99,582,600 | | \$731,351,600 |
| North - New Facility (NIC for Analysis) | New | NIC | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| South - New Facility | New | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Redevelop Welland Site | Reno/New | 640,990 SF | 440.00 | \$282,035,600 | \$23,075,600 | \$5,768,900 | \$2,403,700 | \$14,097,800 | \$32,738,200 | \$9,003,000 | \$36,912,300 | \$406,035,100 | \$94,200,100 | 17% \$70,447,100 | \$570,682,300 | 3 | \$89,953,800 | \$660,636,100 |
| Extended Care Unit at Welland | New | 73,200 SF | 440.00 | \$32,208,000 | \$0 | \$0 | \$549,000 | \$1,637,900 | \$3,439,500 | \$945,900 | \$3,878,000 | \$42,658,300 | \$9,896,700 | 20% \$8,531,700 | \$61,086,700 | 3 | \$9,628,800 | \$70,715,500 |
| COMPLEX CARE SITES | | 186,960 SF | 275.00 | \$51,414,000 | \$5,608,800 | \$2,804,400 | \$1,402,200 | \$4,592,300 | \$6,582,100 | \$1,810,100 | \$7,421,400 | \$81,635,300 | \$18,939,400 | \$8,163,600 | \$108,738,300 | \$36,981,400 | | \$145,719,700 |
| Port Colborne (UCC, Complex Care) | Reno | 100,000 SF | 275.00 | \$27,500,000 | \$3,000,000 | \$1,500,000 | \$750,000 | \$2,456,300 | \$3,520,600 | \$968,200 | \$3,969,500 | \$43,664,600 | \$10,130,200 | 10% \$4,366,500 | \$58,161,300 | 6 | \$19,780,400 | \$77,941,700 |
| Douglas (UCC, Complex Care) | Reno | 86,960 SF | 275.00 | \$23,914,000 | \$2,608,800 | \$1,304,400 | \$652,200 | \$2,136,000 | \$3,061,500 | \$841,900 | \$3,451,900 | \$37,970,700 | \$8,809,200 | 10% \$3,797,100 | \$50,577,000 | 6 | \$17,201,000 | \$67,778,000 |
| Niagara on the Lake (Complex Care) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 10% \$0 | \$0 | 6 | \$0 | \$0 |
| AMBULATORY CARE | | 380,900 SF | 375.00 | \$142,837,500 | \$9,522,500 | \$4,856,500 | \$1,904,500 | \$3,978,000 | \$16,309,900 | \$4,485,200 | \$18,389,400 | \$202,283,500 | \$46,929,800 | \$31,960,800 | \$281,174,100 | \$134,248,100 | | \$415,422,200 |
| Greater Niagara General (min invasive Surg) | Reno/New | 380,900 SF | 375.00 | \$142,837,500 | \$9,522,500 | \$4,856,500 | \$1,904,500 | \$3,978,000 | \$16,309,900 | \$4,485,200 | \$18,389,400 | \$202,283,500 | \$46,929,800 | 16% \$31,960,800 | \$281,174,100 | 8 | \$134,248,100 | \$415,422,200 |
| Welland (minimally invasive Surgical Site) | Reno | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | | 1,282,050 SF | 396.63 | \$508,495,100 | \$38,206,900 | \$13,429,800 | \$6,259,400 | \$24,306,000 | \$59,069,700 | \$16,244,200 | \$66,601,100 | \$732,612,200 | \$169,966,000 | \$119,103,200 | \$1,021,681,400 | \$270,812,100 | | \$1,292,493,500 |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.

- [8] The above costs exclude the following:
 owner's staff and management expenses
 financing and/or fund raising expenses
 operating and maintenance costs
 land acquisition costs
 income from sale of property

APPENDIX E

Option 5

Option 5 : New Acute Site (North), Redevelop Welland for Acute (South) including consolidation of Ambulatory, Complex Care, UCC and Extended Care

| Option 5 | Construction Type | GFA | Net Constr. Rate (\$/SF) | Net Construction Cost (\$) | Infra-Structure Upgrade Allowance | Hazardous Materials Abatement \$15.00 | Site Works Allowance | Phasing & Logistics Allowance | Design & Pricing Allowance 10.0% | LEED Silver Allowance 2.5% | Construction Contingency 10.0% | Total Construction Cost | Allowance for Ancillaries 23.2% | Allowance for FF&E / IT | CURRENT PROJECT COST with FF&E / IT | Escalation to Construction Start | | TOTAL PROJECT COST |
|---|-------------------|---------------------|--------------------------|----------------------------|-----------------------------------|---------------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|----------------------------------|----------------|------------------------|
| | | | | | | | | | | | | | | | | Yrs | 5.0% per annum | |
| ACUTE SITES | | 714,190 SF | 440.00 | \$314,243,600 | \$23,075,600 | \$5,768,900 | \$2,952,700 | \$15,735,700 | \$36,177,700 | \$9,948,900 | \$40,790,300 | \$448,693,400 | \$104,096,800 | \$78,978,800 | \$631,769,000 | \$99,582,600 | | \$731,351,600 |
| North - New Facility (NIC for Analysis) | New | NIC | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| South - New Facility | New | - SF | 0.00 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Redevelop Welland Site | Reno/New | 640,990 SF | 440.00 | \$282,035,600 | \$23,075,600 | \$5,768,900 | \$2,403,700 | \$14,097,800 | \$32,738,200 | \$9,003,000 | \$36,912,300 | \$406,035,100 | \$94,200,100 | 17% \$70,447,100 | \$570,682,300 | 3 | \$89,953,800 | \$660,636,100 |
| Extended Care Unit at Welland | New | 73,200 SF | 440.00 | \$32,208,000 | \$0 | \$0 | \$549,000 | \$1,637,900 | \$3,439,500 | \$945,900 | \$3,878,000 | \$42,658,300 | \$9,896,700 | 20% \$8,531,700 | \$61,086,700 | 3 | \$9,628,800 | \$70,715,500 |
| COMPLEX CARE SITES | | 186,900 SF | 440.00 | \$82,236,000 | \$0 | \$0 | \$1,869,000 | \$4,205,300 | \$8,831,000 | \$2,428,500 | \$9,957,000 | \$109,526,800 | \$25,410,200 | \$8,762,100 | \$143,699,100 | \$48,871,400 | | \$192,570,500 |
| <i>Welland (UCC, Complex Care)</i> | New | 186,900 SF | 440.00 | \$82,236,000 | \$0 | \$0 | \$1,869,000 | \$4,205,300 | \$8,831,000 | \$2,428,500 | \$9,957,000 | \$109,526,800 | \$25,410,200 | 8% \$8,762,100 | \$143,699,100 | 6 | \$48,871,400 | \$192,570,500 |
| AMBULATORY CARE | | 380,900 SF | 500.00 | \$190,450,000 | \$0 | \$0 | \$3,809,000 | \$9,713,000 | \$20,397,200 | \$5,609,200 | \$22,997,800 | \$252,976,200 | \$58,690,500 | \$32,886,900 | \$344,553,600 | \$164,509,000 | | \$509,062,600 |
| <i>Welland (minimally invasive Surgical Site)</i> | New | 380,900 SF | 500.00 | \$190,450,000 | \$0 | \$0 | \$3,809,000 | \$9,713,000 | \$20,397,200 | \$5,609,200 | \$22,997,800 | \$252,976,200 | \$58,690,500 | 13% \$32,886,900 | \$344,553,600 | 8 | \$164,509,000 | \$509,062,600 |
| Total | | 1,281,990 SF | 457.83 | \$586,929,600 | \$23,075,600 | \$5,768,900 | \$8,630,700 | \$29,654,000 | \$65,405,900 | \$17,986,600 | \$73,745,100 | \$811,196,400 | \$188,197,500 | \$120,627,800 | \$1,120,021,700 | \$312,963,000 | | \$1,432,984,700 |

Notes:

- [1] Please note that the above costs are PRELIMINARY and are subject to change with design.
- [2] An allowance of 10% for design & pricing has been included to provide some further flexibility in design.
- [3] An allowance of 2.5% for LEED silver has been included.
- [4] An allowance of 5% construction contingency has been included for Option 1 and 10% for Options 2 and 3.
- [5] An allowance of 23.2% on construction has been included for project soft costs.
- [6] FF&E / IT costs have been included as a % of construction costs. This will require verification as the project advances.
- [7] An allowance for escalation at 5% per annum has been included to cover potential cost increases in labour and material from this current date to the time of construction start to allow for project approval and design.

- [8] The above costs exclude the following:
 owner's staff and management expenses
 financing and/or fund raising expenses
 operating and maintenance costs
 land acquisition costs
 income from sale of property

APPENDIX "B"

POLLARA REPORT

ON

COMMUNITY FEEDBACK



NIAGARA HEALTH SYSTEM
SYSTÈME DE SANTÉ DE NIAGARA
Working within an integrated system for a healthier Niagara.

Niagara Health System: 2012 Public Opinion Survey

POLLARA

Final Research Report

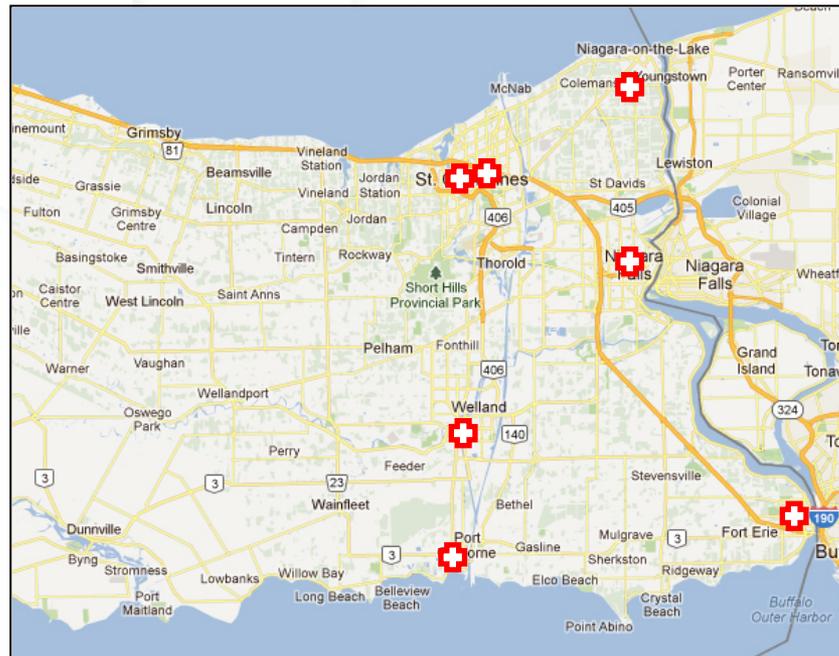
June 2012

Contents

| | |
|---|-----------------|
| Methodology | Slide 3 |
| Key Findings & Recommendations | Slide 5 |
| Part 1: Hospital Site Usage | Slide 8 |
| Part 2: Impression Ratings | Slide 12 |
| Part 3: Traveling to Local Hospital | Slide 20 |
| Part 4: Attitudes Towards Hospital Care Delivery | Slide 25 |
| Part 5: Community Response to Restructuring Proposal | Slide 28 |

Methodology

- From May 25 to June 5, 2012, Pollara conducted a telephone survey among a randomly selected, representative sample of at least 75 adult residents in each of the 12 communities comprising the Niagara Health System catchment area. For the purpose of this research, the Niagara Health System catchment area was defined as the area including the communities of Fort Erie, Grimsby, Lincoln, Niagara-on-the-Lake, Niagara Falls, Pelham, Port Colborne, St. Catharines, Thorold, Wainfleet, Welland and West Lincoln as depicted in this map:



☒ - Existing NHS site

Methodology

- The overall sample size for all 12 communities combined is n=1000. The margin of error for the overall sample is +/- 3.1%, 19 times out of 20. The table below shows the distribution of completed surveys across the communities:

| Community | Sample Size | Margin of Error (95% Confident Interval) |
|---------------------|-------------|---|
| Fort Erie | 83 | +/- 10.7% |
| Grimsby | 80 | +/- 10.9% |
| Lincoln | 77 | +/- 11.1% |
| Niagara-on-the-Lake | 79 | +/- 11.0% |
| Niagara Falls | 81 | +/- 10.9% |
| Pelham | 76 | +/- 11.2% |
| Port Colborne | 80 | +/- 10.9% |
| St. Catharines | 127 | +/- 8.7% |
| Thorold | 81 | +/- 10.9% |
| Wainfleet | 75 | +/- 11.2% |
| Welland | 80 | +/- 11.0% |
| West Lincoln | 81 | +/- 10.9% |

- The results have been statistically weighted according to Statistics Canada's 2011 Census data for age, gender and region to ensure a representative sample of the entire Niagara Health System catchment area. Discrepancies in or between totals are due to rounding.

Key Findings & Recommendations:

Usage and Impressions

- Although NHS sites comprised 68% of the hospitals used most often by patients, they are considered “My local community hospital” by 83% of Niagara Region residents.
- The overall impression rating for the NHS is 4.5 out of 10, which can be considered below average compared to other hospitals in Ontario. Impressions of key NHS attributes were also below average except for the quality of doctors and the nursing staff.
- The key attributes to focus on in order to improve the region’s overall impression of the NHS are “meeting the health care needs of your community,” “the quality of hospital administration within the NHS” and “the ease and speed of access to health care.” Improving perceptions of other attributes will not have as great an impact on overall impression as these.

Key Findings & Recommendations:

Appetite for Restructuring

- Currently, it takes residents 11:41 to drive to their local hospital on average, but they are prepared to drive as much as 19:35 to their local hospital. In fact, three quarters say they are willing to drive as much as 30 minutes further if they knew they could get the highest quality of care possible.
- Respondents overwhelmingly prefer a model of care based on a distribution of programs and services across sites focused more on quality over quantity.
- As such, residents of the Niagara Region support the principles behind the supervisor's proposed restructuring plan. Support for the plan itself, however, is a different story, as outlined on the next slide.

Key Findings & Recommendations:

Response to Restructuring Proposal

- Despite a stated preference for quality over quantity and a willingness to travel further to receive better care, most Niagara residents oppose the supervisor's recommendation to close the sites in Port Colborne, Fort Erie, Niagara Falls and Welland and replace them with two new facilities in South Niagara.
- The four directly-affected communities are among the most opposed. Meanwhile, Niagara-on-the-Lake and Pelham are the only communities in favour of the restructuring plan.
- The main reason for opposing the restructuring plan is location. Gaining public support will depend largely on a careful study and selection of optimal locations for the new sites that are well within the region's travel time threshold of 19:35.
- The proposed closures represent the primary hospital sites used by residents of Fort Erie, Niagara Falls, Pelham, Port Colborne and Welland, as well as secondary sites used by Niagara-on-the-Lake, St. Catharines and Thorold. Taking such broad regional considerations into account when selecting new sites will be an important challenge to overcome.
- If residents are to accept longer travel times, the "highest quality of care possible" part of the promise must be kept. In other words, trading off quantity must yield quality.

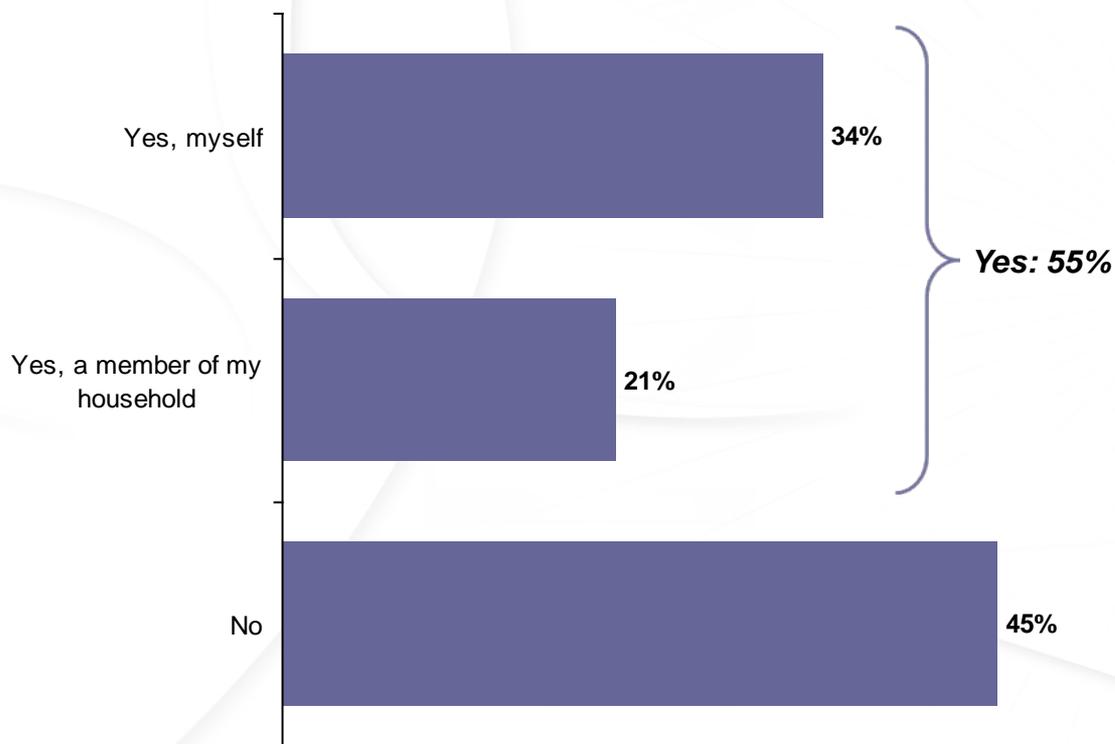
Part 1:
Hospital Site Usage

POLLARA 

Recent Visitation for Hospital Care:

Majority of Niagara households have required hospital care in past year

- More than half of all households in the Niagara Region (55%) have received health care treatment at a hospital within the past 12 months. There is not a great deal of variability in hospital visitation across the region, although households in Welland (65%) and Fort Erie (62%) are the most likely to have visited a hospital in the past year, whereas households in Pelham (40%), West Lincoln (42%) and Thorold (43%) are the least likely.



Question: "To the best of your knowledge, have you or anyone in your household received health care treatment at a hospital within the past 12 months?" [n=1000]

Local Hospital Usage:

NHS sites first choice for two-thirds of region's hospital care needs

- Combined, the seven NHS sites accounted for 68% of the hospitals gone to most often for health care services over the past 12 months by Niagara Region households. The top three – St. Catharines General, Niagara General, and Welland County General – account for a majority on their own (59%). NHS sites also comprised the majority of hospitals cited most often as being respondents' "local community hospital" (83% combined).

Hospital Gone to Most Often in Past 12 Months

- St. Catharines General Hospital Site (24%)
- Greater Niagara General Hospital Site (20%)
- Welland County General Hospital Site (15%)
- West Lincoln Memorial Hospital (10%)
- Douglas Memorial Hospital Site (4%)
- Hamilton General Hospital (3%)
- Port Colborne General Hospital Site (3%)
- Juravinski Cancer Centre (3%)
- Hotel Dieu Shaver Health & Rehab Centre (3%)

- All others: 2% or less
- Don't know (<1%)

Site Considered "My Local Hospital"

- St. Catharines General Hospital Site (34%)
- Greater Niagara General Hospital Site (24%)
- Welland County General Hospital Site (17%)
- West Lincoln Memorial Hospital (13%)
- Douglas Memorial Hospital Site (3%)
- Port Colborne General Hospital Site (3%)

- All others: 1% or less
- Don't know (1%)

Local Hospital Usage by Community:

Significant regional variance in choice

- This slide depicts only the most prevalent hospital sites gone to most often by households in each community for the health care services they have needed over the past 12 months.
- **Fort Erie** ▶ Greater Niagara General (38%) > Douglas Memorial (36%) > Welland County General (12%)
- **Grimsby** ▶ West Lincoln Memorial (70%) > Juravinski Cancer Centre (10%)
- **Lincoln** ▶ West Lincoln Memorial (71%) > St. Catharines General (7%)
- **Niagara-on-the-Lake** ▶ St. Catharines General (41%) > Greater Niagara General (27%) > Hotel Dieu Shaver (8%)
- **Niagara Falls** ▶ Greater Niagara General (71%) > St. Catharines General (11%)
- **Pelham** ▶ Welland County General (37%) > St. Catharines General (22%)
- **Port Colborne** ▶ Port Colborne General (50%) > Welland County General (37%)
- **St. Catharines** ▶ St. Catharines General (59%) > Hotel Dieu Shaver (7%) > Greater Niagara General (6%)
- **Thorold** ▶ St. Catharines General (55%) > West Lincoln Memorial (15%) > Welland County General (9%)
- **Wainfleet** ▶ Haldimand War Memorial (37%) > Welland County General (31%) > Port Colborne General (21%)
- **Welland** ▶ Welland County General (67%) > Greater Niagara General (10%)
- **West Lincoln** ▶ West Lincoln Memorial (58%) > Haldimand War Memorial (15%)

Question: "Which hospital have you or a member of your household gone to most often for the health care services you have needed over the past 12 months?" [n=532]

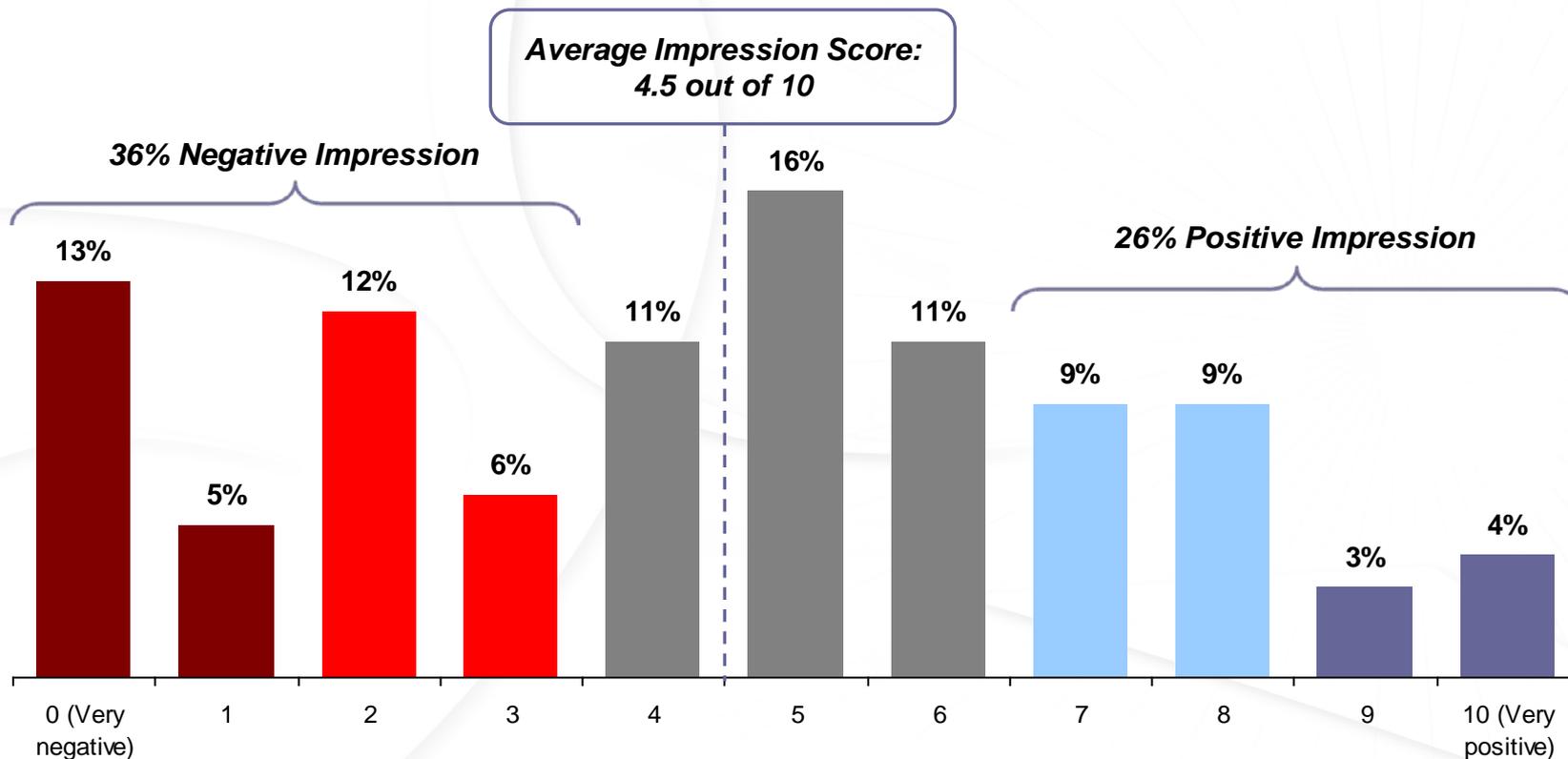
Part 2:
Impression Ratings

POLLARA 

Overall Impression of NHS:

Average impression score of 4.5 out of 10 among the lowest in Ontario

- The average impression score for the NHS among its catchment residents is 4.5 out of 10.

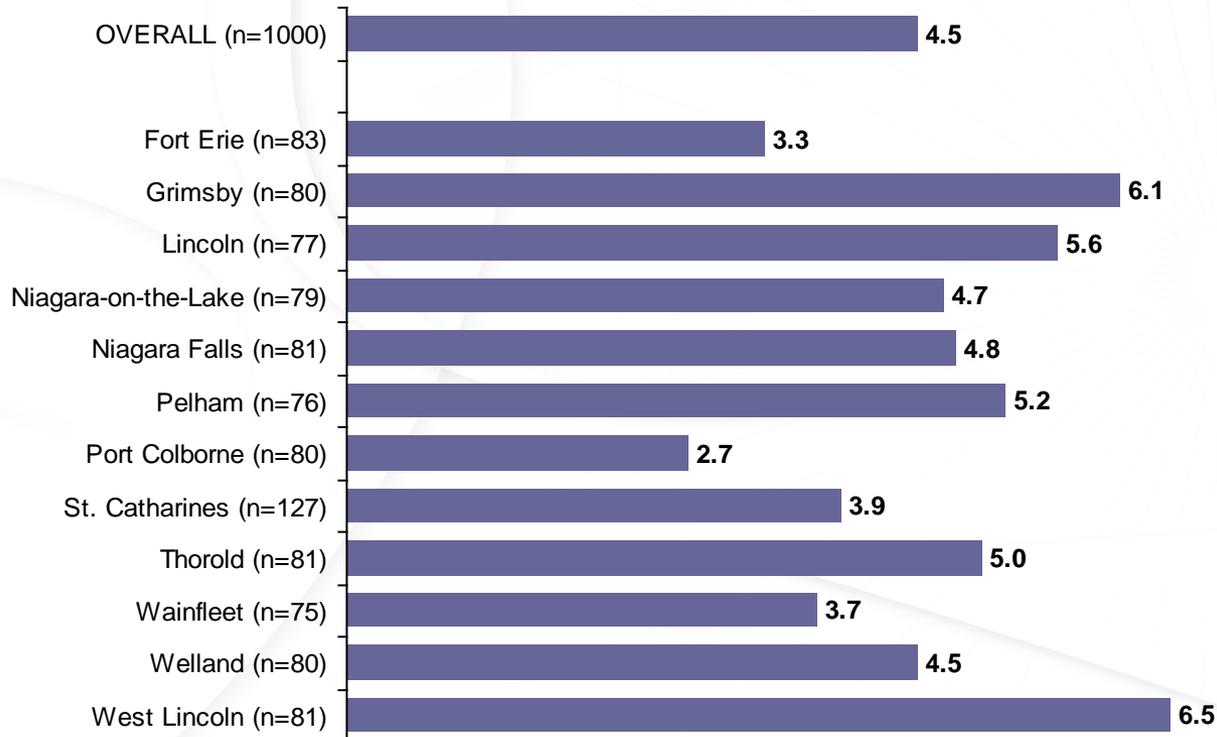


Question: "Overall, what is your impression of the Niagara Health System? Please use a scale from zero to 10, where zero means you have a 'very negative' impression and 10 means you have a 'very positive' impression." [n=1000]

Overall Impression of NHS by Community:

10 out of 12 communities have below-average impressions of the NHS

- The impression scores within each of the 12 component communities of the NHS catchment areas reveal particularly poor impressions within Port Colborne (2.7), Fort Erie (3.3), Wainfleet (3.7) and St. Catharines (3.9). The two best scores are in West Lincoln (6.5) and Grimsby (6.1).

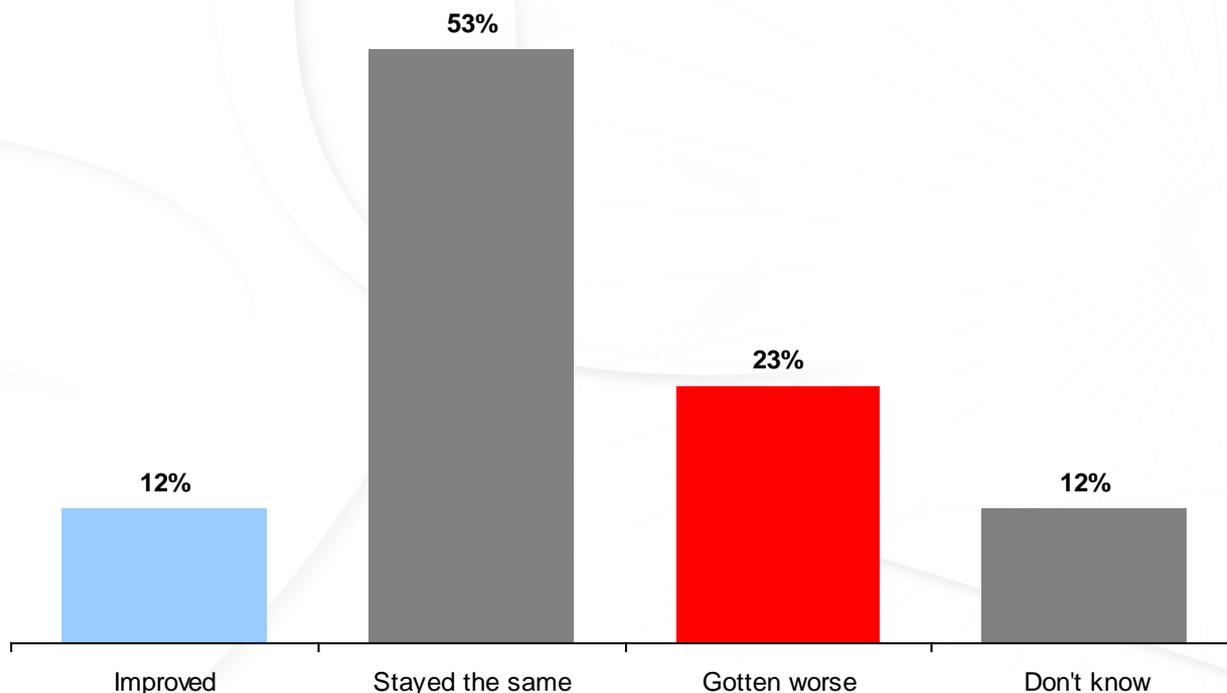


Question: "Overall, what is your impression of the Niagara Health System? Please use a scale from zero to 10, where zero means you have a 'very negative' impression and 10 means you have a 'very positive' impression." [n=1000]

Impression Momentum:

Most opinions of the NHS have not changed since the supervisor's appointment

- Most residents (53%) say their impression of the NHS has not changed since the appointment of the supervisor. Pelham is the only community wherein more residents say their opinion of the NHS has improved (21%) since the appointment of the supervisor than gotten worse (9%). There is a noteworthy difference among income groups: the improved/gotten worse ratio is better among higher-income groups (22%/19% among those earning >\$100k, 12%/21% among those earning \$50-\$100k, 7%/30% among those earning <\$50k).

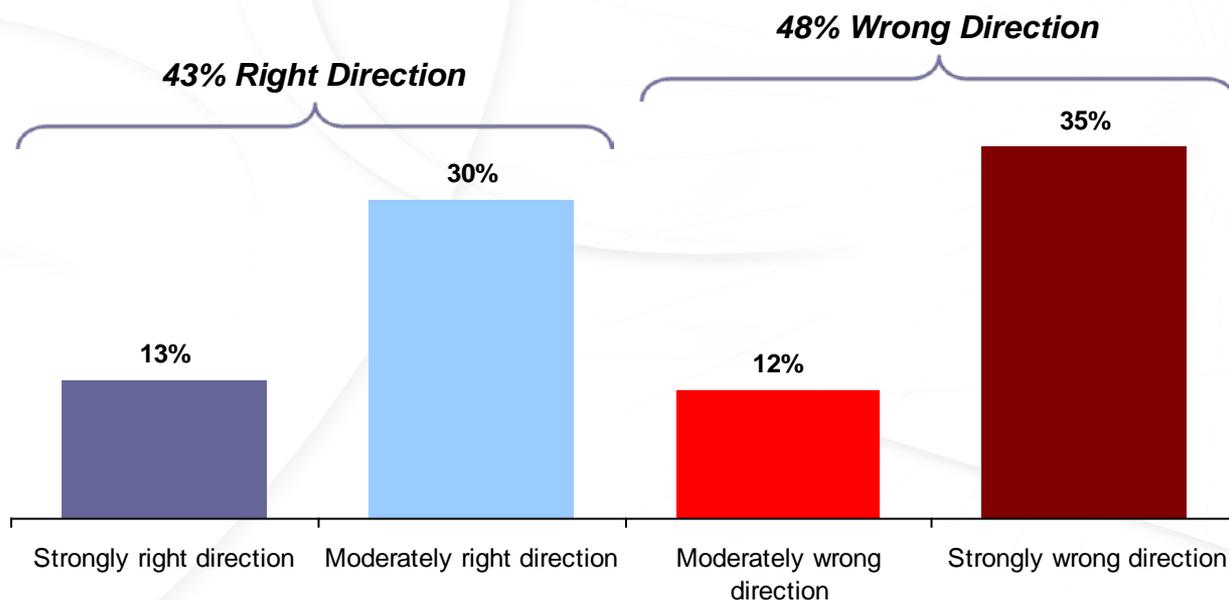


Question: "As you may know, the Ontario government appointed a supervisor to take control of the Niagara Health System in August 2011. Would you say your overall impression of the Niagara Health System has improved, gotten worse or stayed the same since the appointment of the supervisor?" [n=1000]

Current Direction of the NHS:

Moderate opinions divided; Strong opinions point to wrong direction

- Overall, residents are fairly divided on whether the NHS is currently headed in the right direction (43%) or the wrong direction (48%) (NB: 9% don't know). However, strong opinions on the matter tell a different story, as 35% feel strongly the NHS is headed in the wrong direction compared to just 13% who feel strongly that it is headed in the right direction. Residents in Pelham (57%), Thorold (56%) and St. Catharines (54%) are the most likely to say the NHS is currently headed in the right direction. Meanwhile, residents of Port Colborne (71%), Welland (64%) and West Lincoln (62%) are most likely to say the opposite. Those who have been to a hospital themselves in the past 12 months are significantly more likely to say the NHS is headed in the wrong direction than in the right direction (54% vs. 38%).

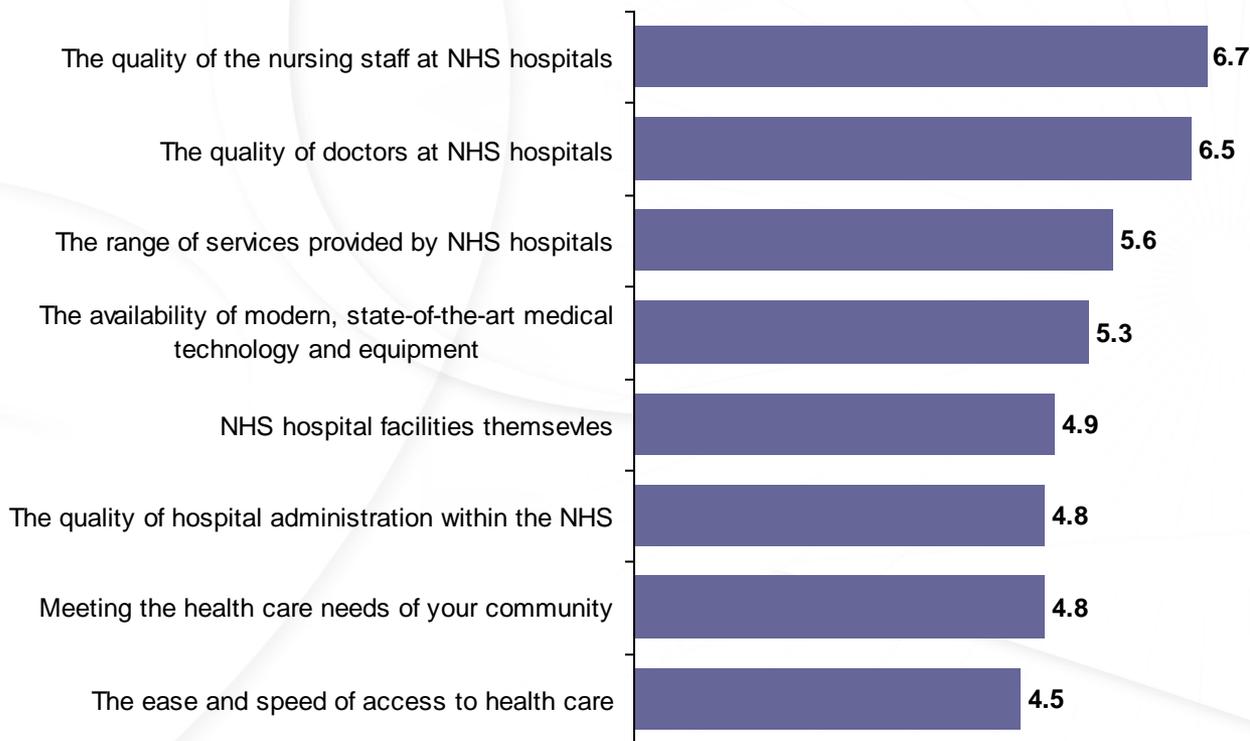


Question: "All things considered, would you say the Niagara Health System is currently headed in the right direction, or is it headed in the wrong direction? ...And do you feel strongly or moderately about that?" [n=1000]

Impression of NHS Attributes:

All attributes rated below average except quality of doctors and nursing staff

- NHS rated below average compared to other hospitals in Ontario on all of the attributes tested except the quality of the doctors and nursing staff. In terms of meeting the health care needs of the community, the NHS ranks highest in West Lincoln (6.4), Grimsby (5.9), Pelham (5.7) and Lincoln (5.5). Of those, only Pelham is principally served by an NHS site.

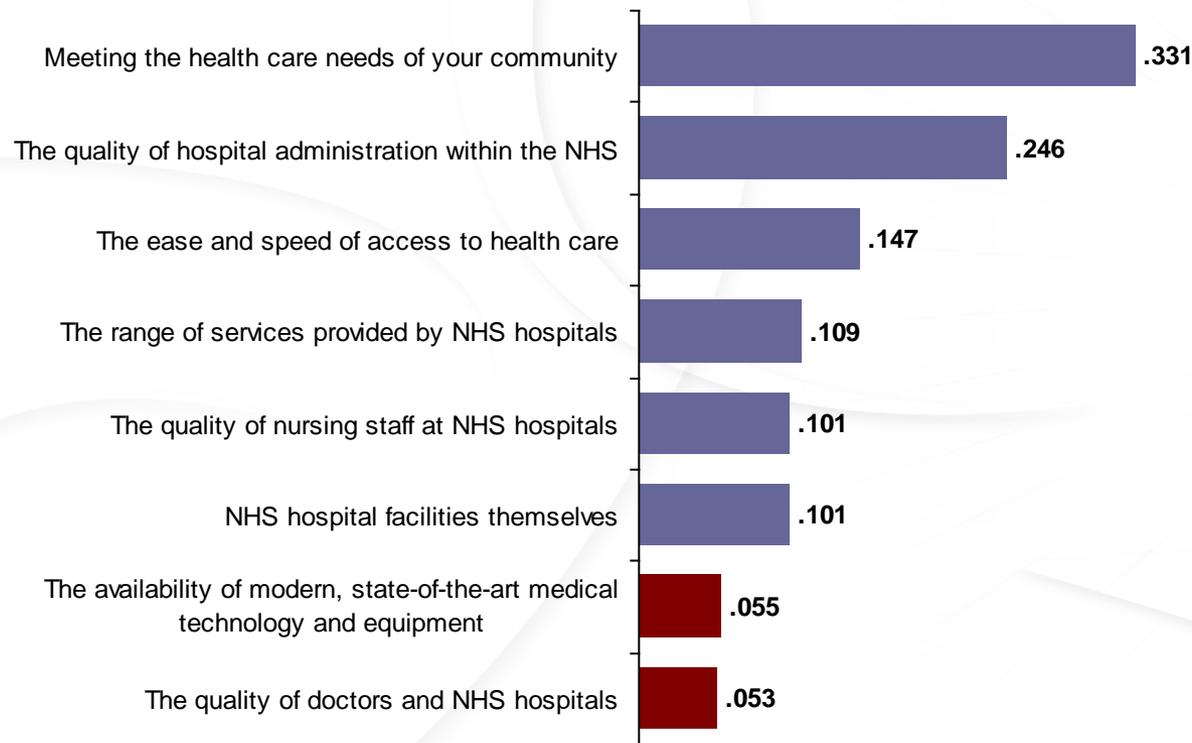


Question: "Now, I would like you to tell me your impression of each of the following aspects of the Niagara Health System. Please use the same zero-to-10 scale as before for each." [n=1000]

Relative Importance of Attributes on Overall Impression:

Quality of hospital administration should be a target for improvement

- A regression analysis was used to determine which attributes are the most important drivers of overall impression. Combined, these eight attributes explain 63% of an individual's overall impression of the NHS. The graph below shows the absolute standardized coefficient of each attribute, and this value shows how important each attribute is in explaining the overall impression ratings. Improving impressions of the attributes with the highest coefficients will have the most significant impact on improving overall impression.



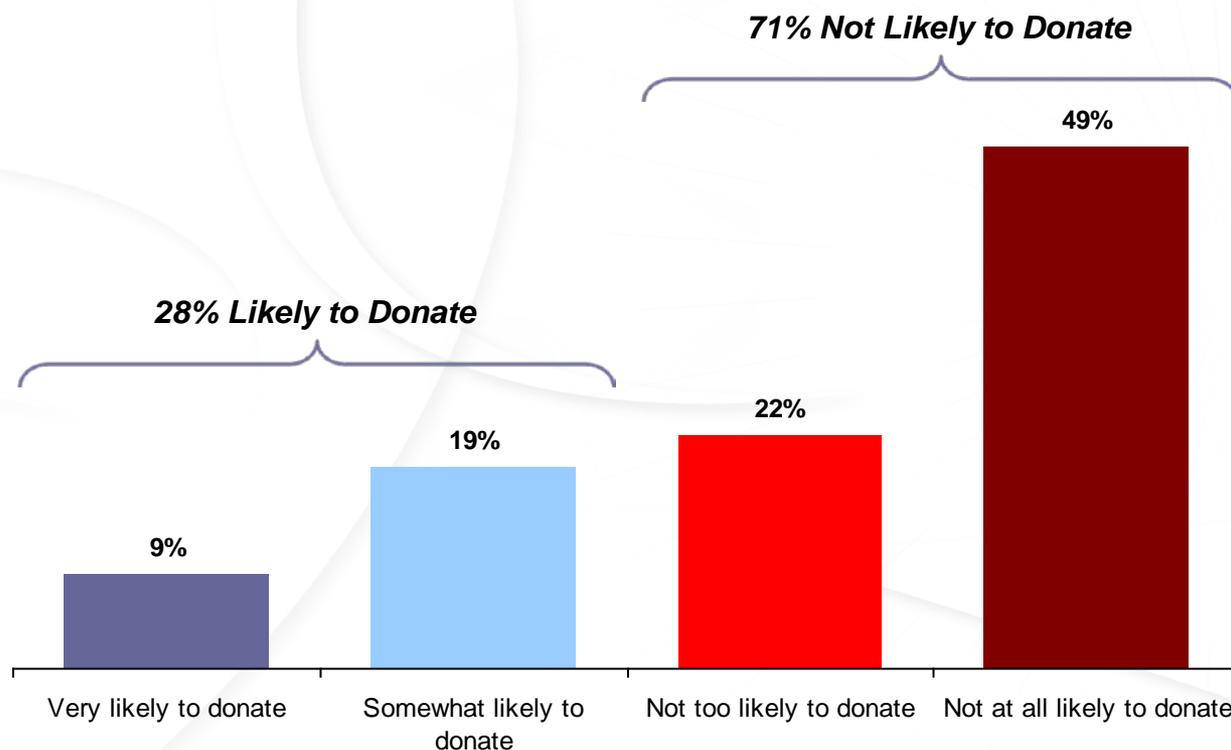
These attributes play a significant role in explaining overall impression of the NHS. Changes in these attributes will have an impact on overall impression.

These attributes do not contribute significantly to overall impression of the NHS. Changes to these attributes will make little difference.

Likelihood to Donate:

Experience with the NHS is not helping to create good will

- Niagara residents who have been themselves or have had a family member go to a hospital for treatment in the past 12 months are no more likely to express a likelihood to donate to the NHS than those who have not (27% vs. 28%). This stands in contrast to the pattern of responses observed for most other Ontario hospitals and suggests a degree of dissatisfaction with the experience they or a family member have had while in the NHS's care.



Question: "How likely would you be to make a financial donation within the next 12 months to the Niagara Health System?"
[n=1000]

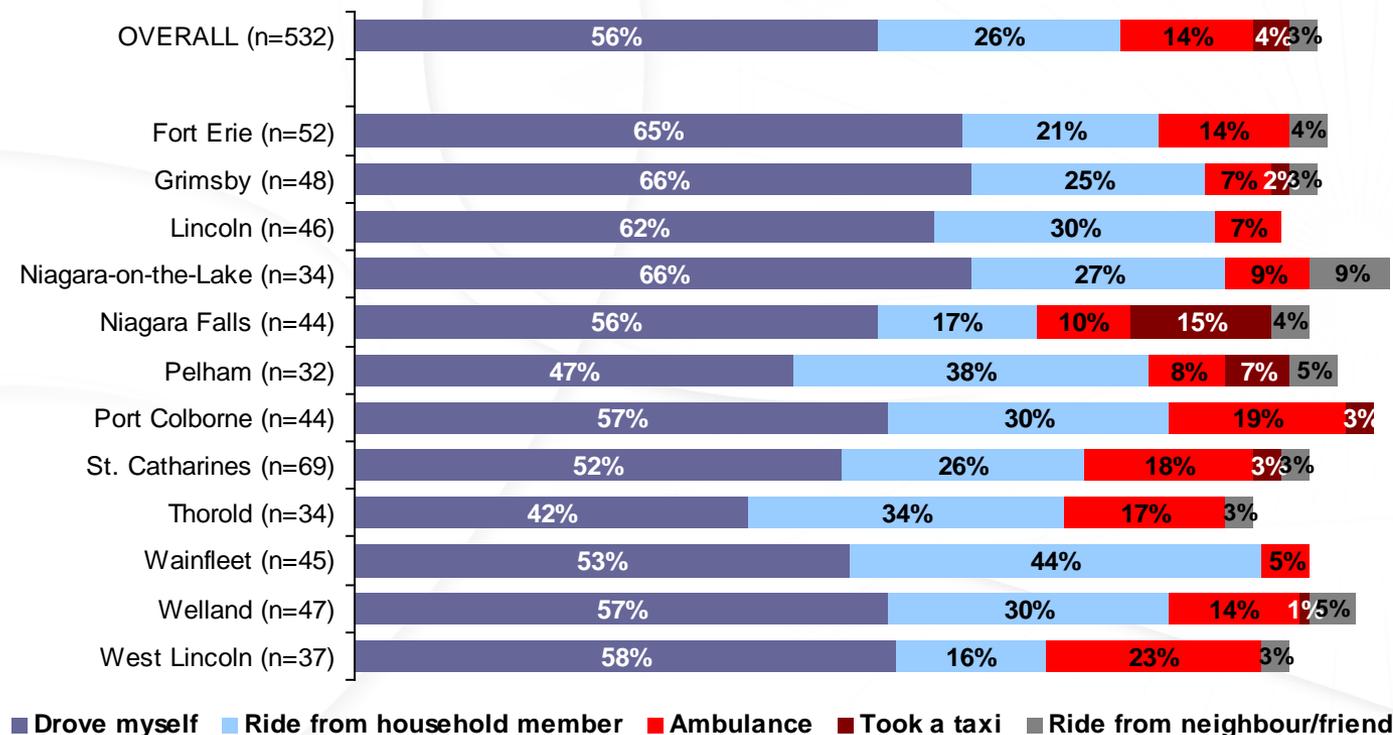
Part 3:
Traveling to Local Hospital

POLLARA 

Method of Transportation:

Most Niagara residents drive themselves to the hospital

- Income plays a notable role in method of transportation. Residents in higher income households (>\$100k/year) are much more likely to drive themselves to the hospital than lower income households (<\$50k/year) by a 76%-to-41% margin. Meanwhile 22% in lower income household took an ambulance, compared to just 5% in higher income households. Residents aged 55 and over are also more likely to have taken an ambulance to the hospital than those aged 18-34 (21% vs. 5%), although both age groups are equally as likely to have driven themselves.

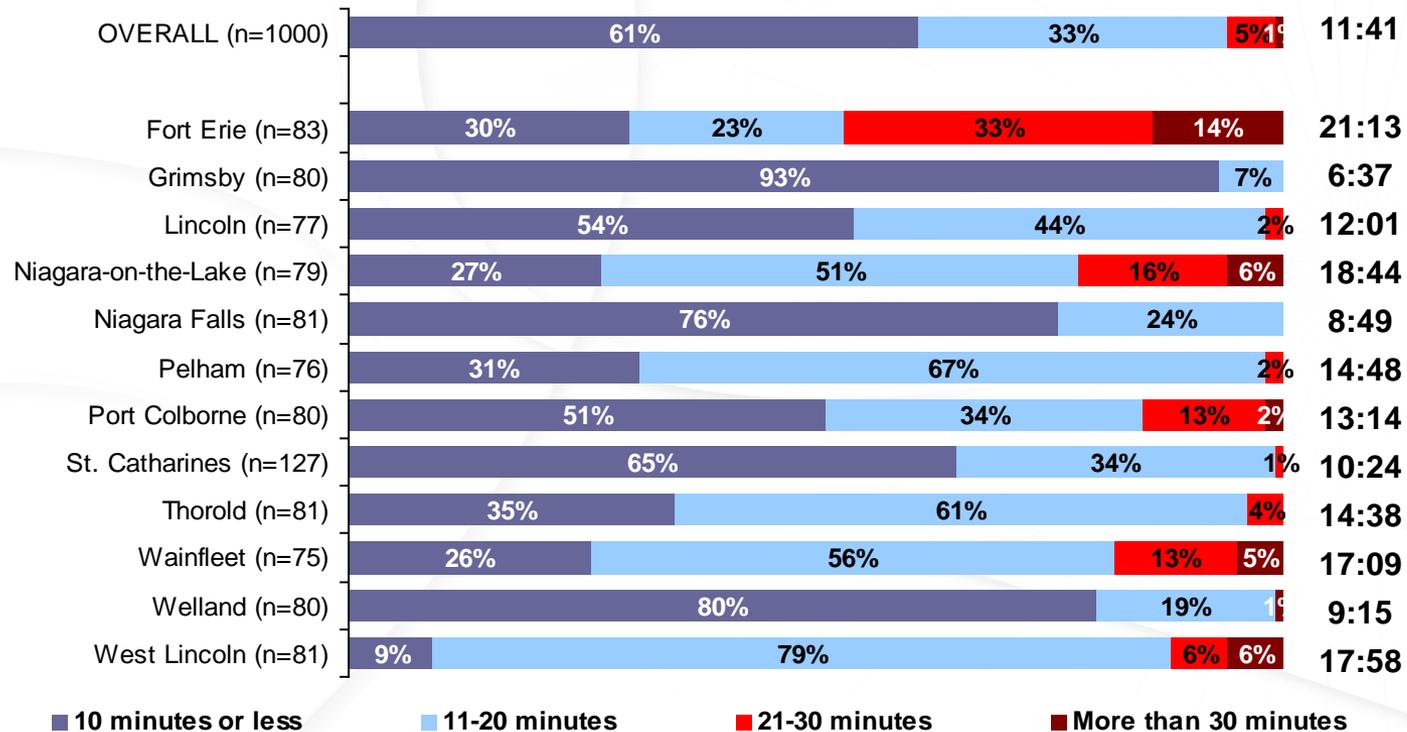


Question: "Thinking of the last time you or a member of your household went to a hospital as a patient, what method of transportation was used to get there?" [n=532]

Current Driving Distance:

Residents say they are a 11:41 drive from their closest hospital on average

- The average travel time of 11:41 across the region is not shared by all communities. Those living in Fort Erie (21:13), Niagara-on-the-Lake (18:44), West Lincoln (17:58) and Wainfleet (17:09) face significantly longer-than-average driving distances. Meanwhile, residents in Grimsby (6:37) and Niagara Falls (8:49) have below average travel times to their closest hospital. Whether related to geography or not, the perception of travel time increases with age, from an average of 9:55 among those aged 18-34 to an average of 13:22 among those aged 55 and over.

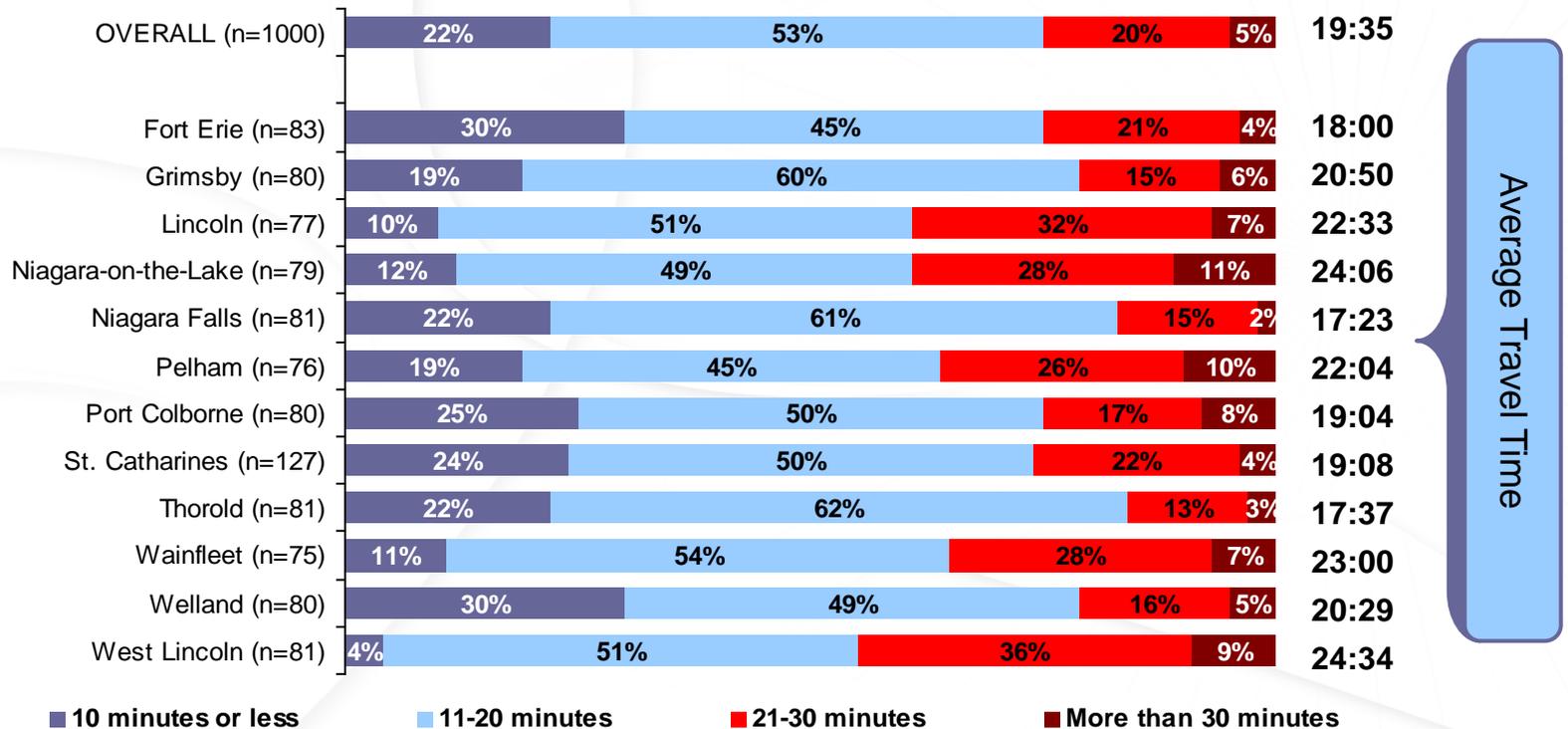


Average Travel Time

Maximum Acceptable Driving Distance:

Residents willing to drive as much as 19:35 to their closest hospital on average

- With a maximum acceptable driving distance of 18:00, Fort Erie is the only community not willing to drive longer for hospital care than currently on average (21:13). In fact, Niagara region residents are willing to travel for an average of 7:54 longer for hospital care – an increase of 68%. On an individual basis, 56% of residents are willing to have a longer travel time to the hospital than they do currently, compared to 34% who want travel times to stay the same and 10% who want to travel for less time.

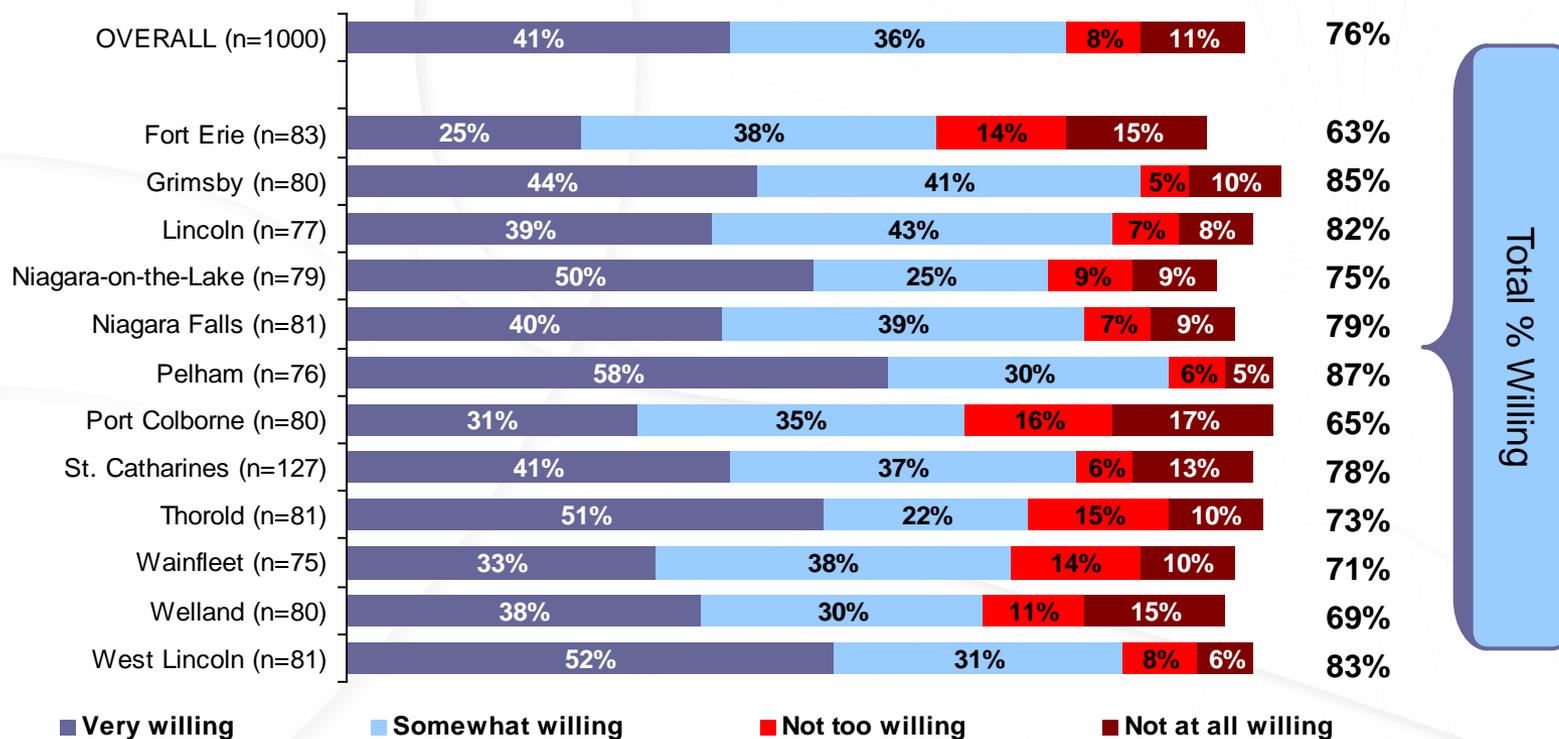


Question: "Generally speaking, what do you think is the maximum amount of time it should reasonably take somebody to drive to their local hospital from their home? That is, at what point would a hospital be too far away?" [n=1000]

Willingness to Travel for Higher Quality of Care:

Three quarters willing to drive as much as 30 minutes further for the best care

- It should be noted that this question was asked after respondents were asked about the supervisor's recommendation to close certain sites and open new facilities. This helps explain why the willingness to travel further – while still a majority – is somewhat lower in the four directly affected communities of Port Colborne, Fort Erie, Niagara Falls and Welland (72% combined). By comparison, the willingness to travel further for the best available care is 79% in the rest of the Niagara Region combined.



Question: "Overall, how willing would you be to travel as much as 30 minutes further for hospital care services if you knew the extra distance travelled meant that you could get the highest quality of care possible?" [n=1000]

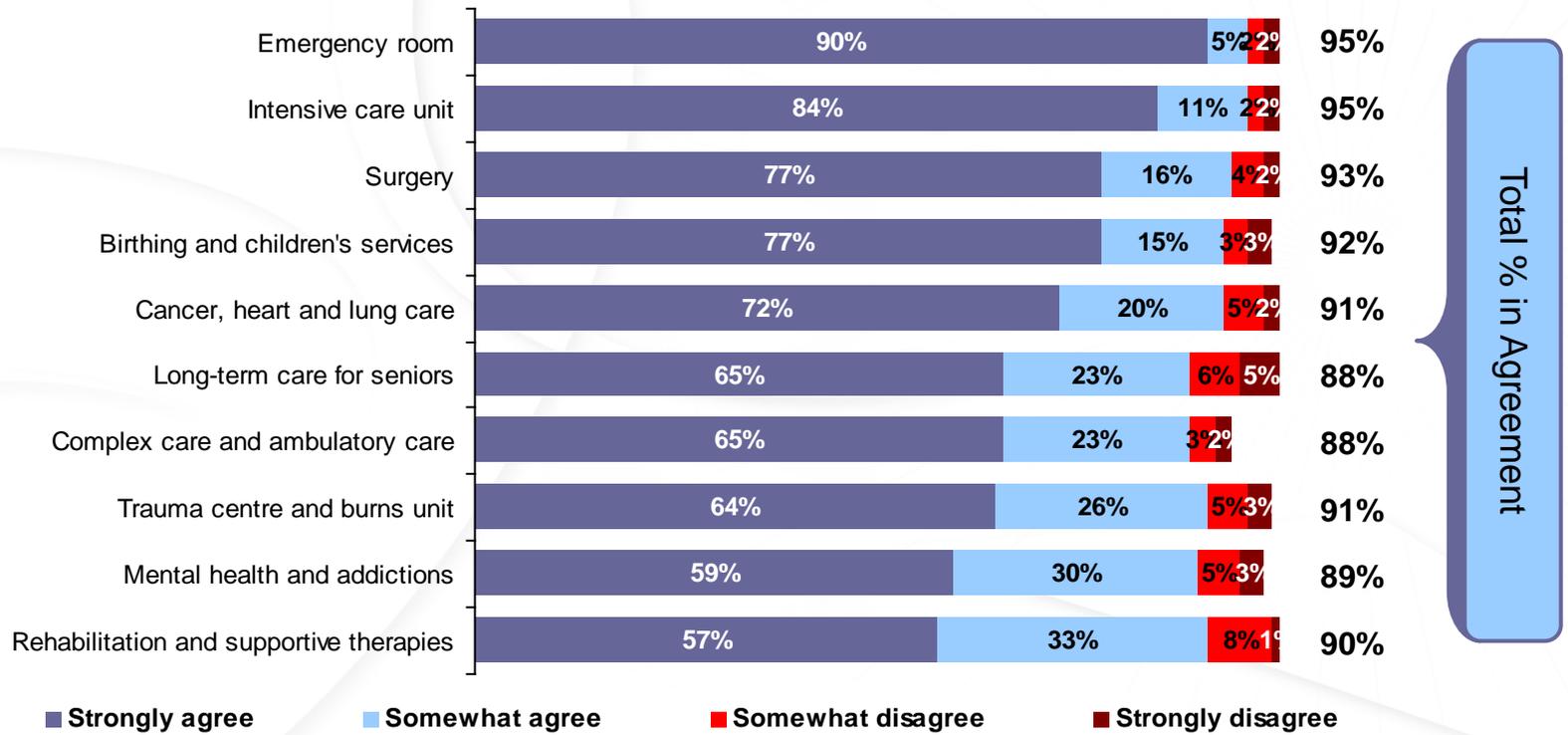
Part 4:
Attitudes Towards Hospital Care Delivery

POLLARA 

Essential Hospital Care Services:

Directly affected communities react most negatively to recommended closures

- As the “Total % in Agreement” figures in the chart below show, roughly nine in 10 respondents agree that all of the tested hospital services are essential to their community. It’s the *intensity* of that agreement that reveals priority areas – namely ER, ICU, surgery, and paediatrics/maternity. For each of the six remaining services, there is some flexibility from the public’s perspective in terms of what is offered and at what sites. Mental health/addictions is particularly important in St. Catharines (70%), but otherwise all services are similarly important to each community (within the survey’s margin of error).

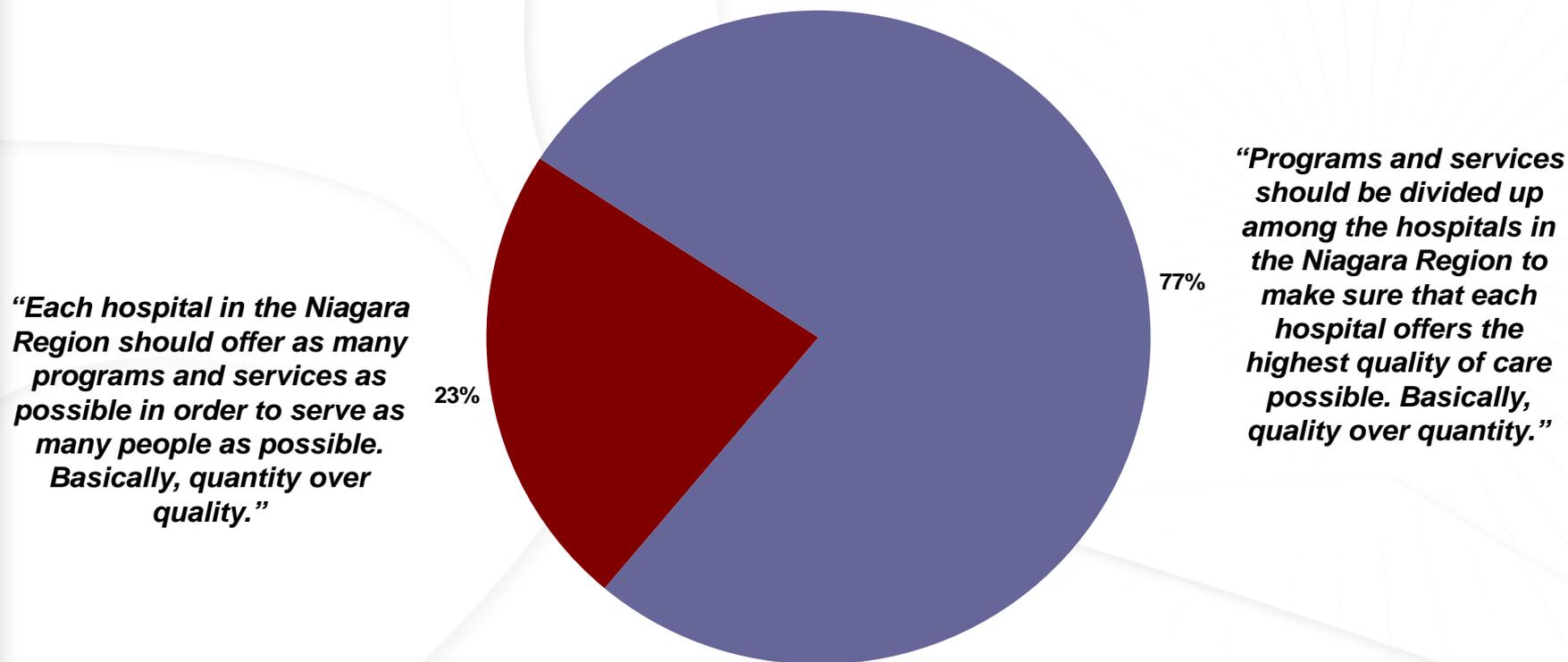


Question: “I am going to read you a list of some hospital care services that may or may not be offered at various hospitals throughout the Niagara Region. For each, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree that it is an essential service to your community?” [n=1000]

Attitudes Towards Guiding Principle of Care:

Three-quarters choose “quality” over “quantity”

- Most Niagara Region residents (77%) side with the viewpoint that “programs and services should be divided up among the hospitals in the Niagara Region to make sure that each hospital offers the highest quality of care possible. Basically, quality over quantity.” The principle of quality is preferential to the principle of quantity in all 12 communities and across all demographic and socio-economic groups.



Question: “I am now going to read you a couple different viewpoints regarding how hospital programs and services should be provided. Which one comes closest to your own viewpoint?” [n=1000]

Part 5:

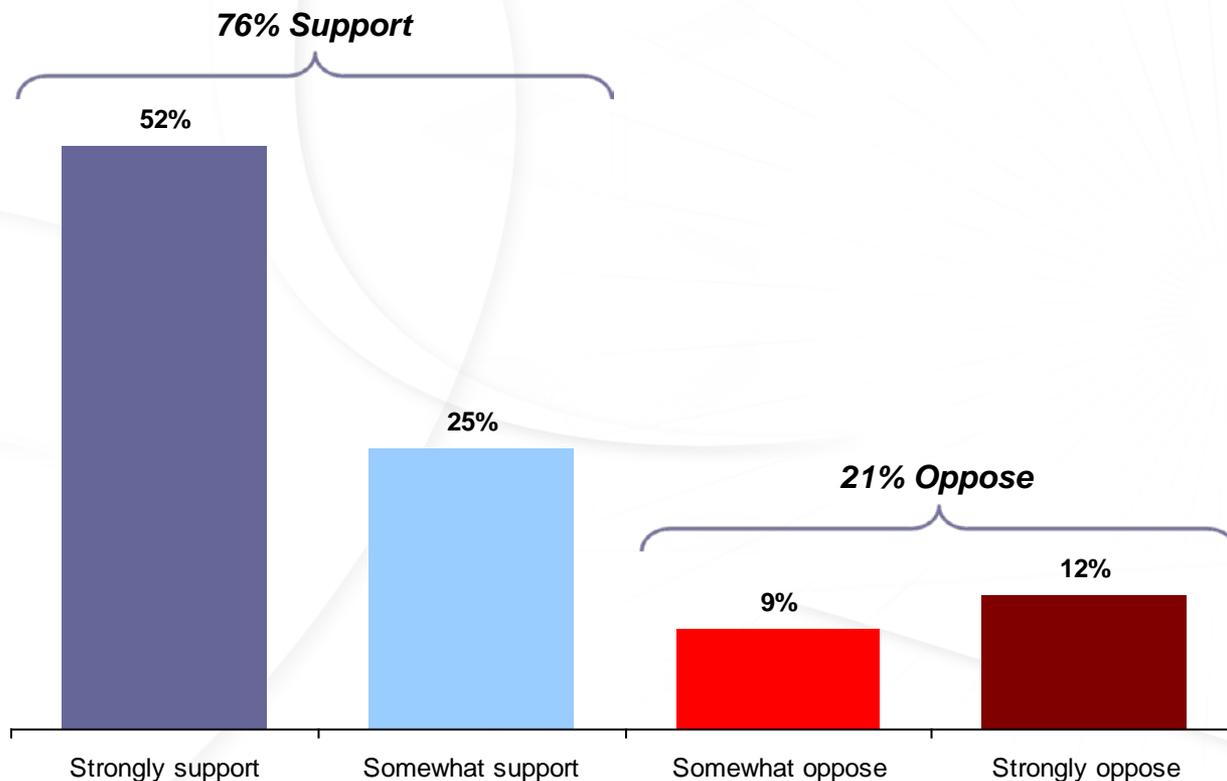
Community Response to Restructuring Proposal

POLLARA 

Support for New Facilities:

Three-quarters of residents support the proposed new facilities on their own

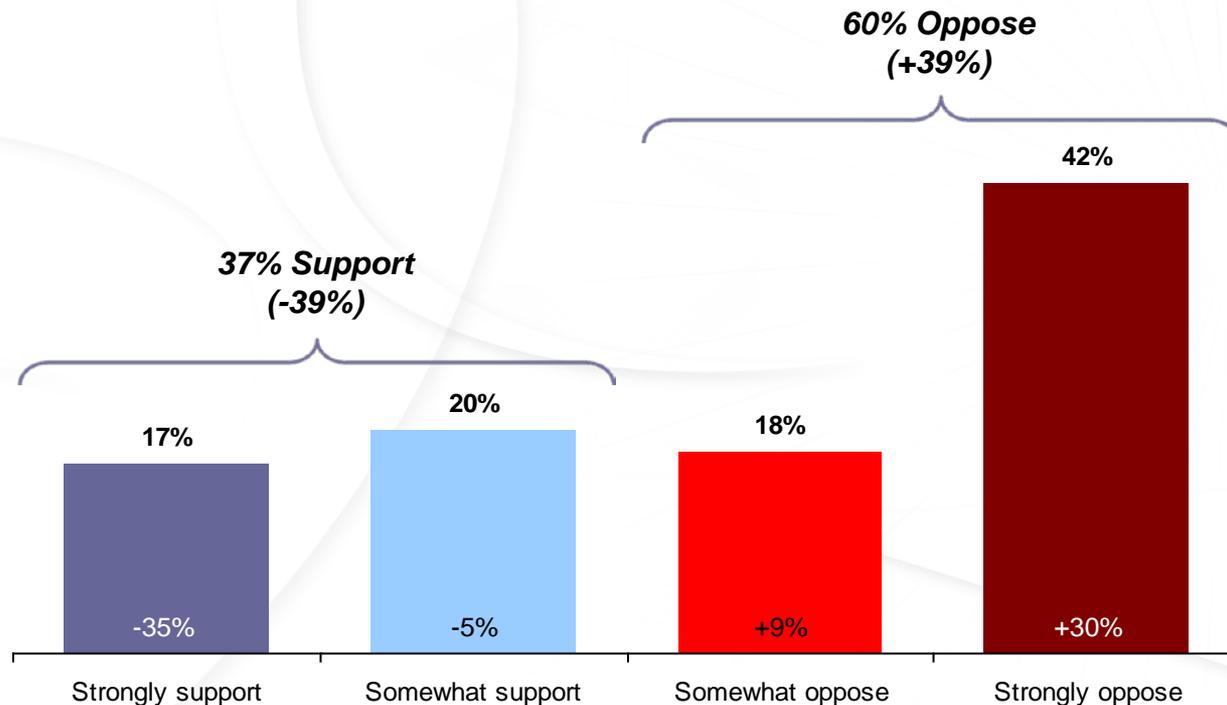
- Within a vacuum, 76% of Niagara region residents say they support opening a new general acute care hospital and a new urgent care centre in South Niagara. Support is strong across all 12 communities, even those in North Niagara such as Niagara-on-the-Lake (78%) and St. Catharines (85%).



Question: "How much would you support or oppose opening a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara?" [n=1000]

Support for New Facilities While Closing Others: Majority support reverts to majority opposed amid 39-point swing

- Support for the new facilities erodes when offset by the proposed closures in Port Colborne, Fort Erie, Niagara Falls and Welland. Only 37% of residents continue to support the restructuring in this case, a decrease of over 50%. However, a majority of those in households earning over \$100,000 annually would continue to support the recommended openings despite the closures (56%).



Question: "Now, how much would you support or oppose closing the existing hospital sites in Port Colborne, Fort Erie, Niagara Falls and Welland and replacing them with a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara?" [n=1000]

Support Retention Pools:

Most of those who support the openings would oppose them due to closures

- A majority of those who support opening a new general acute care hospital and a new urgent care centre in South Niagara would oppose it if it meant closures in Port Colborne, Fort Erie, Niagara Falls and Welland (53%). Meanwhile 15% of those who originally opposed the new openings would actually support them alongside the concomitant closures. Having said that, the general trend is that the recommended closures make Niagara Region residents less likely to support the recommended openings.

| Support for Openings → | TOTAL SUPPORT | Strongly Support | Somewhat Support | TOTAL OPPOSE | Somewhat Oppose | Strongly Oppose |
|-------------------------------------|---------------|------------------|------------------|--------------|-----------------|-----------------|
| Support for Openings/ Closures ↓ | | | | | | |
| TOTAL SUPPORT | 44% | 48% | 35% | 15% | 18% | 13% |
| Strongly Support | 21% | 27% | 7% | 6% | 3% | 7% |
| Somewhat Support | 23% | 21% | 29% | 10% | 15% | 6% |
| TOTAL OPPOSE | 53% | 48% | 63% | 84% | 81% | 86% |
| Somewhat Oppose | 19% | 17% | 22% | 14% | 23% | 9% |
| Strongly Oppose | 34% | 31% | 41% | 69% | 57% | 77% |

NB: Highlighted cells in table above denote the proportion of respondents who provided the same answer to both questions.

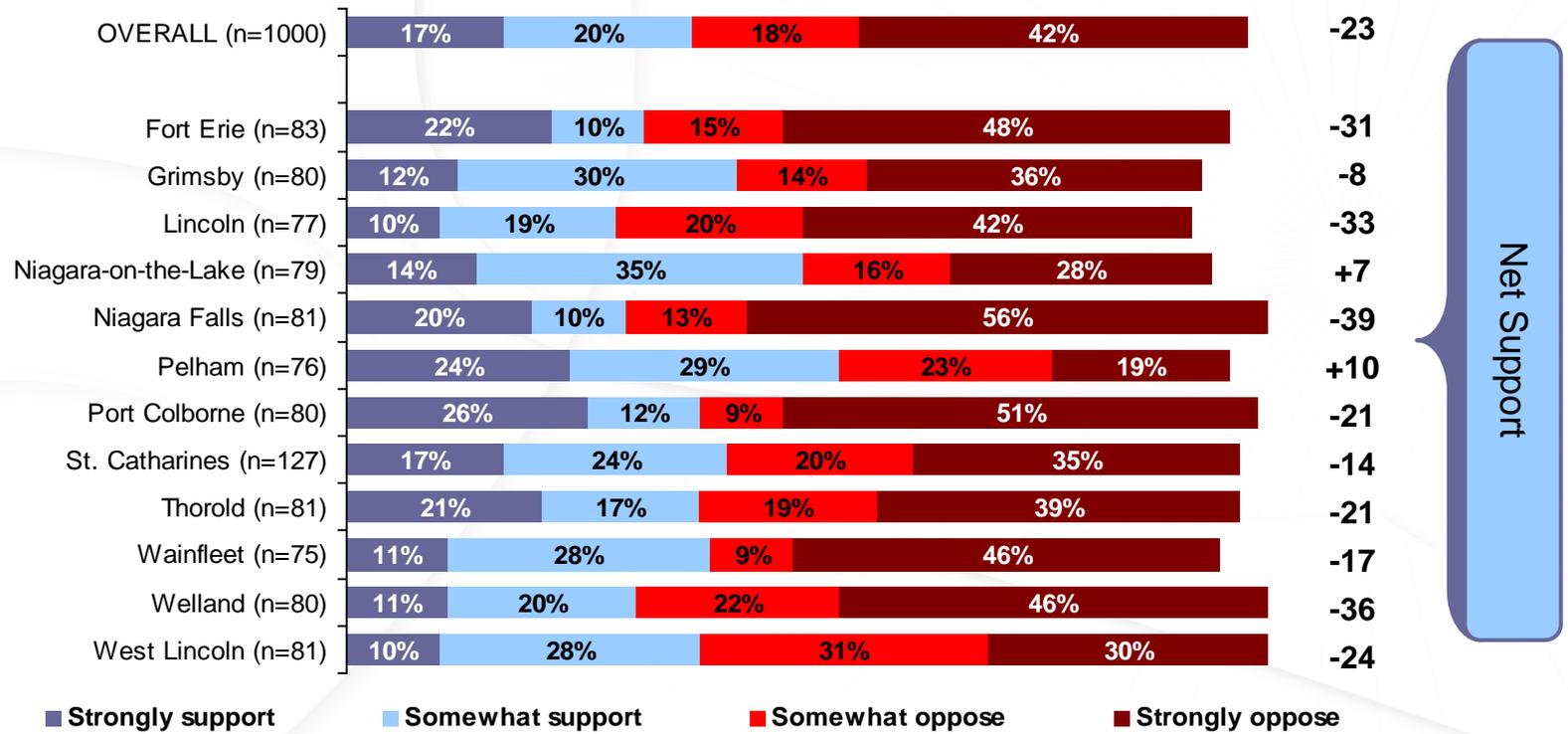
Questions: "How much would you support or oppose opening a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara?" [n=1000]; "Now, how much would you support or oppose closing the existing hospital sites in Port Colborne, Fort Erie, Niagara Falls and Welland and replacing them with a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara?"

[n=1000]

Support for Restructuring by Community:

Directly affected communities react most negatively to recommended closures

- A couple of communities continue to have majority support for the recommended openings and closures; i.e., Niagara-on-the-Lake (50%) and Pelham (52%). The four directly affected communities – Port Colborne, Fort Erie, Niagara Falls and Welland – all react negatively to the recommended closures. The combined net support of these four communities is a strongly negative -35. Meanwhile, net support throughout the rest of the Niagara Region combined is not nearly as negative, at -13.



Question: "Now, how much would you support or oppose closing the existing hospital sites in Port Colborne, Fort Erie, Niagara Falls and Welland and replacing them with a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara?" [n=1000]

Main Reasons for Position on Restructuring:

Site location is the most significant reason for opposing the restructuring

- Fears about the adverse impact of reducing/changing hospital site locations represent the primary reasons for opposing the recommended openings and closures. If the restructuring is to gain any measure of public support, location-related concerns must be allayed. A careful study into optimal locations for the proposed new facilities will be necessary to ensure easy access well within the 19:35 travel time tolerance threshold for the region and the 17:23 threshold for Niagara Falls in particular.

Main Reasons for Supporting the Recommendation

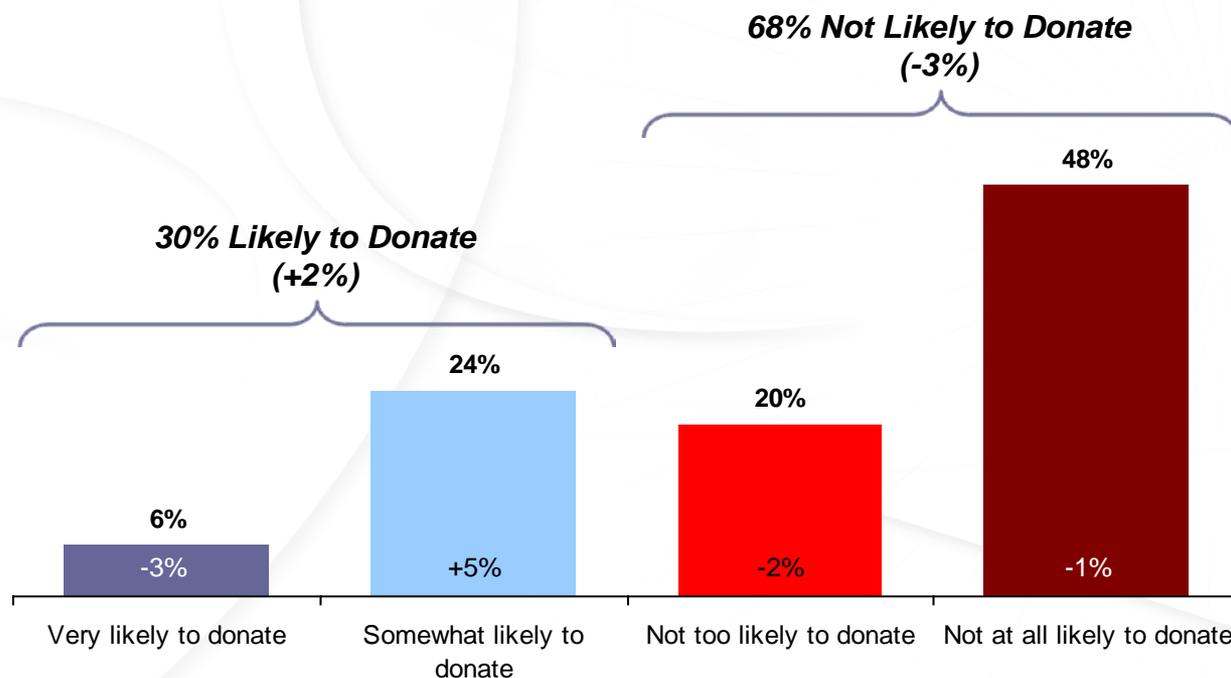
- Current facilities are old / in disrepair (23%)
- Good idea (20%)
- Location: Current sites not accessible / too far (13%)
- New facilities will have modern equipment / technology (12%)
- New facilities will provide better continuity / quality of care (11%)
- Location: Centralized / Conveniently located (10%)
- New facilities will be more cost efficient (9%)
- Location: Each city needs its own site (8%)
- All others: 4% or less
- Don't know (4%)

Main Reasons for Opposing the Recommendation

- Location: New sites not accessible / too far (51%)
- Location: Each city needs its own site (21%)
- Bad idea (9%)
- Concern about wait times increasing (8%)
- Nothing wrong with current facilities (7%)
- Location: Possible loss of life due to increased travel time (7%)
- Should improve current facilities instead (6%)
- Costing tax payers / wasteful (6%)
- All others: 5% or less
- Don't know (1%)

Likelihood to Donate If NHS Proceeds with Restructuring: *Net donor behaviour largely unchanged despite opposition to closures*

- Overall, the likelihood to donate to the NHS remains roughly the same if the restructuring plan is approved. However, the small changes in the overall numbers belie massive shifts in the underlying numbers. In terms of donor retention, just 61% who initially said they would be likely to donate would maintain this position if the plan were to proceed. Meanwhile, the closures and openings would inspire 18% of those who were initially unlikely to donate to become likely donors. Part of this is explained by gender as men grow less likely to donate and women grow more likely with the restructuring. There is also a regional component as likely donors in Grimsby, West Lincoln and Welland are lost while others are gained in St. Catharines and Wainfleet.

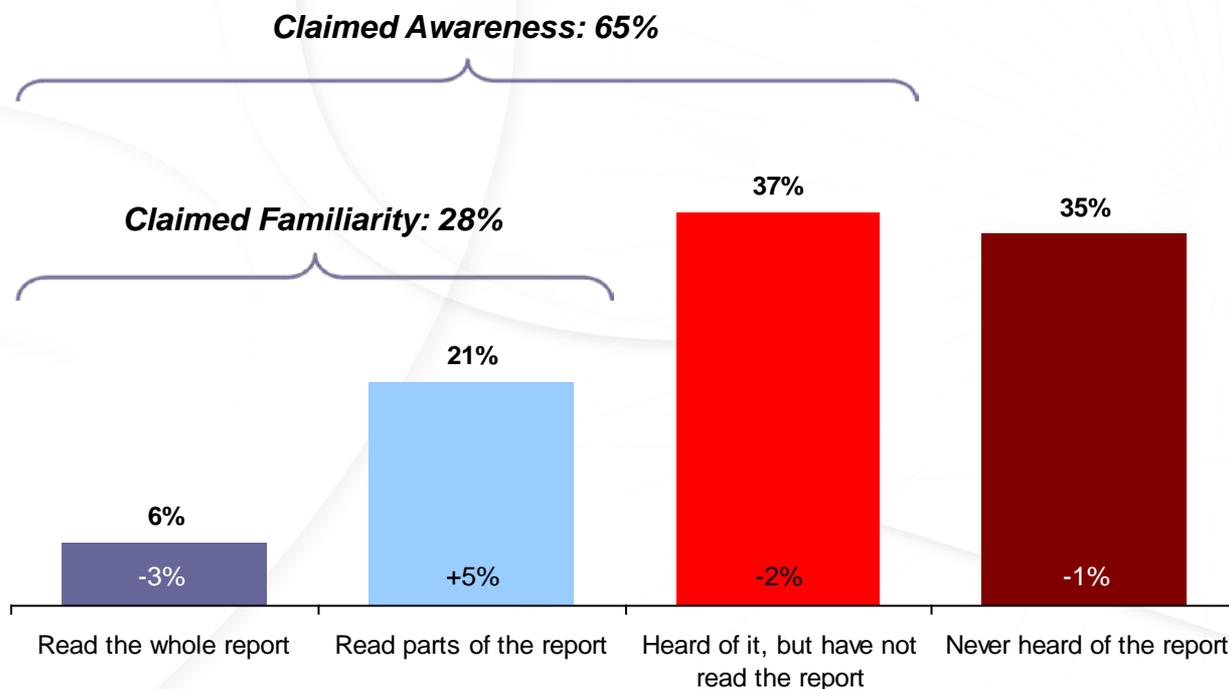


Question: "Now, please imagine that the plan to close the existing hospital sites in Port Colborne, Fort Erie, Niagara Falls and Welland and replace them with a new general acute care hospital and a new urgent care centre in a conveniently accessible location somewhere in South Niagara is approved. If this happens, how likely would you be to make a financial donation within the next 12 months to the Niagara Health System?" [n=1000]

Awareness of Supervisor's Interim Report:

Two-thirds say they are aware of the report; A quarter claim to have read it

- Those who claim to be aware of the report also tend to have a more negative impression of the NHS (4.1 out of 10 vs. 5.1 for the unaware) and are more likely to say the NHS is headed in the wrong direction (52% vs. 40% for the unaware). They are, however, more likely to support the restructuring plan (40% vs. 32% for the unaware).
- It should be noted that these are self-reported figures that likely suffer from the pitfalls of social desirability bias. As such, the claimed awareness and readership numbers are probably overstated to some degree.



Question: "As you may know, NHS Supervisor Dr. Kevin Smith recently released a report to the Niagara community on the restructuring of the Niagara Health System. How familiar are you with this report?" [n=1000]

POLLARA

1255 Bay Street, Suite 900

Toronto, ON M5R 2A9

Tel: 416.921.0090 | Fax: 416.921.3903

www.pollara.com

APPENDIX "C"

**REPORT OF
MATERNAL/CHILD SERVICES
EXPERT PANEL**

Date: August 2012

To: Dr. Kevin Smith
Supervisor Niagara Health System

From: Ms. Mary Jo Haddad, President and Chief Executive Officer, The Hospital For Sick Children, Toronto
Dr. Lennox Huang, Chair, Department of Pediatrics, Faculty of Health Sciences, McMaster University and
Chief, Department of Pediatrics, Hamilton Health Sciences and St. Joseph's Healthcare Hamilton
Ms. Brenda Flaherty, Executive Vice-President, Clinical Operations, Hamilton Health Sciences
Dr. Nicholas Leyland, Chair, Department of Obstetrics and Gynecology, Faculty of Health Sciences,
McMaster University and Chief, Department of Obstetrics and Gynecology Hamilton Health Sciences

Re: Obstetrics and Pediatrics Care in Niagara

Thank you for the opportunity to participate in the review of Obstetrics and Pediatrics care in Niagara to build a sustainable model of care. Both programs provide an essential component of health care delivery to any community and as we look across our province and country proposed changes to these programs often result in emotional and passionate perspectives. We acknowledge and compliment the presenters of both alternate options for their professionalism and focus on patient centered care in presenting their positions.

It is not our intent to elaborate on the history of debate and consulting reviews on this important matter. In addition to listening intently to all of the presentations on August 14, 2012 our panel carefully reviewed all material prepared for us including the following:

- Niagara Health System Maternal Child Program – A Case for Change: Proposal to Consolidate Maternal Child Care Program – August 2006
By NHS Maternal Child Care Program Management Team
- Niagara Health System Maternal Child Program Meeting Minutes of March 22, 2006
- Report on External Review of the Obstetrical and Gynecology Services in the Niagara Health System (Executive Summary) – January 2005
By Ron Livingstone, Remi Ejwunmi, Roseanne Hickey
- Review of the Niagara Health System Hospital Improvement Plan – October 2008 By Dr. Jack Kitts

Review Material (cont.)

- Pediatric Hospitalist/Ambulatory Care & Teaching Centre Proposal – NHS
- Maternal Child Program at the New Hospital Site – November 2009/Revised June 2012
By Donna Rothwell and NHS Pediatric Department
- Proposal to Maintain Maternal Child Services in Niagara South – June 2012
By the Greater Niagara Medical Society
- NHS Medical Advisory Committee Response – July 2012
- NHS Medical Advisory Committee Meeting Minutes – July 4 and July 12, 2012
- Niagara Emergency Medical Service Response – July 2012
- Niagara Health System – Statistics:
 - Maternal Child CHRP Quality Indicators
 - ER Visits for OBS-GYN-Peds
 - Key Statistics (Unit Bed Volumes, Occupancy, etc.)
 - Newborn Statistics (Deaths, Stillbirths, etc.)
 - Maternal Child Quarterly Indicators
 - New Born Quarterly Indicators
 - Pediatrics Quarterly Indicators

In addition, we also referenced the Provincial Council for Maternal Health (PCMCH) Benchmarking Report for the prior two periods which included benchmarking and quality indicators.

Basically, the two positions on the most appropriate model for delivery of Obstetrics and Pediatrics care are as follows:

1. Maintain the current decentralized model of delivery with inpatient programs remaining at the Niagara Falls, Welland and St. Catharines sites until the new hospital in the “South” is built. Niagara Falls and Welland physicians would have a shared on-call arrangement for those sites. There would be one scheduled weekend “by-pass” in Niagara Falls and one weekend “by-pass” in Welland for both services on a monthly basis during which physician coverage at the site on “bypass” would not be available.

2. Consolidate or centralize all inpatient Obstetrics and Pediatrics at the new NHS St. Catharines site when it opens in 2013. The Interim Report of the Supervisor (May 2012) further recommends that these programs move to the new “South” site when it is completed.

Please note that in our deliberations, our panel focused entirely on the best model for delivery of Obstetrics and Pediatrics for the future for the entire Niagara Region.

We observed that the delivery of these programs in the past and present is provided by competent and dedicated physicians, midwives, nurses and allied health professionals and support staff.

Based on our analysis, and considering all factors, but primarily the provision of high quality, safe patient care on a sustainable basis our committee unanimously recommends:

That the recommendation for consolidation of Obstetrics and Pediatrics contained in the Interim Report of the Supervisor (May 2012) be confirmed and that all parties commit to comprehensive transition process to begin immediately within a targeted completion in the Spring of 2013. In addition the following recommendations should be implemented.

- a. Gynecology day surgery should continue to be offered at all full service acute sites. Consolidation should be for inpatient and birthing services.
- b. Ultrasound and other associated services remain at all acute sites
- c. Interprofessional Models of Care be clearly identified drawing from the work of the Provincial Council for Maternal Child Health
- d. A model for low risk hospital based family medicine obstetrics be clearly defined
- e. Midwifery with a full scope of practice be offered
- f. Obstetricians and Pediatricians should continue to be based in the communities of Niagara where they can provide the vast majority of consultative and ongoing care to the people in these communities
- g. Physician and administrative leaders support all members on the Interprofessional team to build an integrated Niagara Health System inpatient model at the St. Catharines site
- h. EMS and NHS will utilize protocols for the very rare medical emergencies of any nature.

Without question, this is both a complex and emotional matter for decision at both the provider and community levels. The primary rationale for the recommendations of our panel is as follows:

A) SUSTAINABILITY

1. We believe the proposed three site model is unsustainable for recruitment and retention of quality physician, midwifery, nursing, and allied health professionals. The competition for the best and most highly sought physicians, midwives, nurses and allied health professionals is intense at the provincial, national and international levels. The consolidated model clearly provides the most competitive advantages to attract the level of specialized skill and expertise to the Niagara Region for both programs. Practitioners would be offered state of the art facilities and equipment and an attractive on-call schedule. Please note that while much of the attention at our meeting was on physicians, the ability to retain and attract highly quality midwives, nurses and allied health professionals is no less important.
2. From an academic point of view, a decentralized model will be less appealing to health professional trainees. The consolidated model provides- by far- the best opportunity to attract nursing, midwife and physician learners to Niagara, leading to improved recruitment and an enhanced profile in education and research translates to improved quality of care and has additional advantages of exposing potential new recruits to work at the NHS.
3. While the dedication and commitment of the existing care providers is commendable there are significant concerns with the aging of current compliment of staff in all classifications and the added pressure of covering multiple sites and resultant diminished capacity to address short and long term unplanned absences.
4. Financial projections are complex and often the subject of skepticism of validity. We have reviewed material presented and feel confident that the consolidated model provides the

best opportunity for cost saving at both the operational and capital levels for the organization. With decreased government funding for health care all opportunities for savings while maintaining quality care must be realized.

B) PATIENT SAFETY

1. It was noted that even under the proposed model we would begin with planned “by-pass” or closures once a month. Current experience is that there are also unplanned periods of “by-pass” resulting from unavoidable absences by key providers. This model of care increases risks to mothers and children and is confusing to consumers. Expecting patients to know when Welland or Niagara Falls is closed is concerning and potentially dangerous.
2. One site on-call coverage offers significant advantages from patient safety and quality perspectives for both mothers and children. While physicians in both Welland and Niagara Falls tend to live close to the respective sites, shared emergency on-call proposed under the decentralized model will require travel between sites. The centralized model includes provisions for back-up of the emergency departments without in-patient pediatrics or obstetrics.
3. Standardization and adoption of best practices translate directly to higher quality safe patient care. These are many examples at the Niagara Health System (NHS) where efforts are being made to adapt best practices. Under a decentralized model this has proven to be much more difficult.

C) FUTURE VISION OF HEALTH CARE IN ONTARIO

1. Innovation and expanded services are much more likely under a consolidated in patient model with a strong teaching and research focus through advantages of critical mass, 24/7 on site coverage and economies of expertise and scale.
2. The future vision for health care delivery in Ontario as well as nationally and internationally is to increase out-patient and home care services and correspondingly reduces higher cost inpatient services. This focus applies to all clinical programs and services that are currently provided in hospitals and is evidenced by the overall reduction in inpatient beds in recent years. This trend in health care delivery will certainly continue and having a highly skilled workforce providing specialized care in a consolidated unit is very much in keeping with this vision.
3. For the NHS to be a recognized leader in Obstetrics and Pediatrics a culture needs to be developed and embraced that fosters Interprofessional practice and education, leveraging of scope of practice and maximizing access to competent care. The NHS and Niagara Region have an exciting opportunity to create a dynamic and rewarding work environment at a time when the competition for talent and resources is immense.

As with any comparison of this nature there are also valid concerns on the negative impact of one model versus another and this is no exception. The potential concerns expressed with the consolidated model must be addressed to the fullest extent possible and include but are not limited to the following:

1. Increased travel time to a single site is a real and legitimate concern in all regions of the province providing obstetrical, newborn and pediatric care. Our understanding is that the Niagara Emergency Medical Services (EMS) is well situated with a highly qualified complement of Advanced Care Paramedics and has been actively involved in the review of the Supervisor to date. EMS is committed to continue to be actively involved in the transition process and plan. In addition, an extensive communication plan with the community at large and obstetricians, midwives and pediatricians in particular on access related matters and to reinforce that outpatient services would remain in the communities under the consolidated model.
2. Both the Greater Niagara General and Welland Hospitals must remain as comprehensive acute care hospitals until the new hospital in the “South” is built. The NHS Administration and Medical Advisory Committee needs to focus on the residual impact on other services, particularly Emergency Medicine, with the transfer of Obstetrics and Pediatrics to the new St. Catherines Hospital.
3. There is no escaping the additional stress that these recommendations may have on the professional practices, including physicians, the dedicated nursing staff and allied health workers at all facilities. Rationalization of clinical services is our new reality both provincially and nationally and naturally results in this unavoidable consequence. We are grateful to those who will be required to undergo the needed changes for the betterment of the NHS

and the population of the Niagara Region. These necessary changes will require the focus and collaboration of physicians, nurses, and allied health workers at all facilities, working together to create improved services and outcomes for patient and improved quality of life and satisfaction for staff and physicians.

In conclusion, our panel, following careful consideration for all information provided, is unanimous in our recommendations for a consolidated model. In our view it clearly provides the best opportunities for enhanced quality of care and patient safety and address as the critical retention and recruitment considerations for now and into the future. We very much appreciate the opportunity to provide our recommendation to the Supervisor on these important programs and services and compliment the professionalism and commitment of all parties to finding the best possible solution for the Niagara Region.



Mary Jo Haddad

2012/08/21

Date



Dr. Lennox Huang

2012/08/21

Date



Brenda Flaherty

2012/08/21

Date



Dr. Nicholas Leyland

2012/08/21

Date