

# Waterloo Wellington Local Health Integration Network Rural Health Care Review Appendices January 19, 2010



## WWLHIN Rural Health Care Review Appendices

- Appendix A – Rural Health Working Group Mandate, Objectives and Membership
- Appendix B - The Rural Health Challenge
  - B.1 National/International Research
  - B.2 Provincial Rural Health Reports
  - B.3 Rural Health Services Planning Frameworks used in Ontario
- Appendix C - Rural Health Services Delivery Models
  - C.1 Rural Health Service Delivery Models in the Research Literature
  - C.2 Innovative Rural Health Delivery Models in Ontario
- APPENDIX D – National and Provincial Indices of Rurality
  - D.1 Variables for Proposed National Index of Rurality
  - D.2 Original Variables for Rurality Index of Ontario (RIO) Developed by OMA
  - D.3 Original (2000) and Current (2008) RIO Scores for WWLHIN Communities
- APPENDIX E – Themed Notes from WWLHIN Rural Health Community Consultation Sessions
- APPENDIX F - Patient Volumes, Conservable Patient Days and Referral Populations of Wellington Hospitals
- APPENDIX G – WWLHIN Specialist Needs Survey (2008)
- APPENDIX H – Rural Wellington Admissions and Patient Days to Homewood Health Centre (2008)
- APPENDIX I – Long-term Care Facility Occupancy Rates across the WWLHIN (Jan. 2009)
- APPENDIX J – Schedule of Community and Stakeholder Consultations (Nov. – Dec. 2009)

## Appendix A – Rural Health Working Group Mandate, Objectives and Membership

### Mandate

- Develop an overall vision for Rural Health including acute care with consideration to links and dependencies on other care components such as primary care providers, community agencies and long term care;
- Draw on existing research and reports to help shape basis for analysis, and include appropriate supplemental information;
- Include community consultation to better ensure needs of population being served is considered;
- Align efforts and provide flexibility to integrate recommendations into the overall COSC;
- Provide direction to external consultants as appropriate.

### Objectives

- Identify and analyze health issues faced by rural residents;
- Develop strategies and identify opportunities that build on community resources within the rural community to meet the identified needs;
- Develop a long term plan for the rural areas of WWLHIN;
- Conduct community consultations appropriate for consideration for health planning.

### Membership

<b>Name</b>	<b>Representing</b>
Dr. Chris Rowley, Chair	Rural Physician (North Wellington)
Suzanne Trivers	Rural Primary Care (FHT)
Andrea Parsons	Long-term Care
Dr. Peter McPhedran	Rural Physician (Centre Wellington)
David Murray	WWCCAC
Jerome Quenneville	Rural Hospitals, COSC member
Joanne Ross-Zuj	County Warden
Fred Wagner	Community Mental Health
Denise Squire	Rural Primary Care (CHC)
Glenyis Betts	Community Support Services
Gloria Whitson-Shea	WWLHIN Staff
Thomas Custers	WWLHIN Staff
Kim Hodgson, James Whaley	Facilitators, Consultants

## Appendix B - The Rural Health Challenge

### B.1 National/International Research

In Canada as well as other developed countries, there have been longstanding concerns about rural residents' access to health services coupled with chronic shortages of health care professionals. Increasing concern about these rural health challenges has led to more national and international research about rural health.

At the national level, research and policy attention regarding rural health seemed to peak at the dawn of the 21<sup>st</sup> century. On June 12, 2000, then federal Minister of Health, Allan Rock, announced a new national rural health strategy which would be coordinated through a relatively new federal Office of Rural Health. The main components of the strategy, based on advice from a Ministerial Council on Rural Health, were as follows:

- Address the shortage of rural health practitioners;
- Improve rural health infrastructure;
- Develop health information technology;
- Improve primary health care;
- Foster research; and
- Promote good health.

In 2002, four national reports were released which comprehensively defined the rural health challenge in this country:

- *Rural Health in Rural Hands: Strategic Directions for Rural, Remote, Northern and Aboriginal Communities*, (Ministerial Advisory Council on Rural Health);
- *Rural Canada: Access to Health Care*, (Statistics Canada);
- *The Health Transition Fund Synthesis Series: Rural Health/Telehealth* (Health Canada);
- *Building on Values: The Future of Health Care in Canada*, (Commission on the Future of Health Care in Canada), a.k.a. 'The Romanow Report'

The first report by the Ministerial Advisory Council concluded that:

*Generally, the health of people living in rural, remote, northern and Aboriginal communities is poorer than that of their urban counterparts; indeed, health status declines with distance from urban centres. Compared with urban residents, people living in rural communities have shorter life expectancies, higher death rates and higher infant mortality rates...the poor health status in rural areas is linked to a broad range of personal, social, economic and environmental factors and conditions that influence health such as income, work conditions, education and personal health practices.*

*Rural realities and rural health needs are different from those in urban areas, and people throughout rural Canada have expressed serious concerns about their inability to obtain the health services they need in a timely fashion and closer to home. A major problem for rural people is the distance they must travel to reach health services... There is a*

*fundamental mismatch between the health care needs of people living in rural Canada and the availability of health care providers and health services.* (Ministerial Advisory Council, p. 1)

The report recommended a number of strategic directions to address these rural health problems which were submitted as advice to the then federal Minister of Health:

1. Building Healthy Communities through Model Development and National Policies including:
  - a. Supporting the development of Healthy Communities models
  - b. Establishing community capacity-building coalitions and networks
2. Building Infrastructure to Enable Rural Communities to Develop Community-based Solutions to Health Challenges including:
  - a. Developing a network of 'rural health innovation centres' whose mandate would include facilitating community development, strengthening community capacity, fostering community health research and supporting health professional training, recruitment and retention
3. Fostering Greater Intersectoral Collaboration on Health Issues including:
  - a. Collaboration across sectors, (e.g. housing, transportation etc.) and across jurisdictions (e.g. national, provincial/territorial, municipal)
4. Expanding Rural, Remote, Northern and Aboriginal Health Research including:
  - a. Enhancing national data collection on the health status of people living in rural and remote communities;
  - b. Building research capacity in rural and northern Canada;
  - c. Promoting community-based research;
  - d. Developing, documenting and disseminating best practice models of rural service delivery
5. Creating a Nationwide Telehealth and Distributed Learning Network to Serve the Health and Health Care Needs of Rural, Remote, Northern and Aboriginal Communities;
  - a. Improving community readiness for telehealth;
  - b. Seizing opportunities provided by broadband
6. Supporting the Training, Recruitment and Retention of Health Human Resources;
  - a. Developing a nationwide rural human resources strategy;
  - b. Promoting health careers to young people in rural and remote communities;
  - c. Developing rural health and aboriginal health curricula;
  - d. Increasing rural community-based learning opportunities;
  - e. Maximizing distance education and continuing professional development.

A second report by Statistics Canada contained the following highlights:

- Generally, rural Canadians have higher death rates, higher infant mortality rates, and shorter life expectancies than do urban Canadians;
- It seems that the health care needs of certain groups are often not met, nor are they always understood, in rural environments;

- Physicians are not evenly distributed throughout the country. The problem of physician distribution is particularly serious in rural areas and appears to be worsening: as of 1996, only 9.8% of physicians were practicing in rural Canada, while 22.2% of Canada's population lived in rural areas;
- The recruitment and retention of physicians is a significant challenge for rural communities. Personal and professional considerations (e.g., social isolation and longer hours with less support) consistently rank as the most important factors in the location decisions of physicians.

The third report was released as part of the *synthesis series* of the Health Transition Fund (HTF). The HTF was a joint collaborative effort between federal and provincial governments to encourage and support “evidence-based decision-making in health care reform” and between 1997 – 2001 funded 140 different pilot projects across Canada (HTF, p. i). The projects were synthesized into nine(9) theme areas one of which was ‘Rural Health/Telehealth’. The Rural Health report summarized key learnings from 33 HTF projects. The report’s key findings were summarized under three headings: Rural Health, Telehealth, Health Human Resources and within each, several key themes:

### **Rural Health**

- Access to Care
- Inadequate Health Care Resources
- Special Approaches (including Integration of Services, Community Development and Mobile Services)
- Determinants of Health

With respect to the related issues of ‘community development’ and ‘determinants of health’, the report noted:

*“Solving rural health problems may require new ways of thinking or doing things which may not be welcomed by some rural residents or health care practitioners who resist change or are skeptical of novel approaches”* (HTF, p. 7).

*“Although many innovative ideas have been put forward and many approaches have been tried...several studies have pointed out that rural health problems are often the result of more deep-rooted factors...referred to as the determinants of health: the social, cultural, behavioural, economic and environmental factors that shape the health of a population. The argument is that unless these fundamental conditions are modified, merely adding more practitioners or services may not substantially improve the health status of the rural population”* (HTF, p. 8).

### **Telehealth**

- Uses of Telehealth
- Benefits of Telehealth
- Costs of Telehealth

*“Although there are still many questions to be answered and many technological breakthroughs are still waiting to happen, the effectiveness of telehealth and its acceptance by both practitioners and users have been demonstrated...thus, telehealth*

*should be considered one of the strategies for strengthening health services delivery in rural and remote regions” (HTF, p. 9).*

### **Health Human Resources**

- Enhancing Competency
- Collaborative Practice
- Personnel Substitution
- Informal Caregivers

The main recommendations from the report are as follows:

- Because many piecemeal and symptomatic solutions have been attempted and found wanting, a comprehensive rural health strategy is needed which must address at least some of the broader determinants of rural health and must look beyond the healthcare domain for effective solutions to some of its problems;
- The shortage of health care practitioners is considered by many to be the most urgent and intractable problem facing rural communities; an effective and long-term rural health workforce strategy cannot depend exclusively on incentives to attract health care practitioners to work in rural settings;
- Telehealth is a useful technology for enhancing rural health; in order for it to be effective in supporting rural health, it must be ‘owned’ by rural communities and practitioners rather than being another urban-imposed solution (HTF, pp. iii-iv).

The previous three national reports were somewhat overshadowed by the prominent release of the Romanow Report near the end of 2002. In his report there was a special chapter devoted to “Rural and Remote Communities” with findings and conclusions that were similar to other reports. Specifically, the report confirmed that there are significant disparities in health status and access to health services between urban and rural communities and identified the following health challenges:

- Life expectancy for people in predominantly rural regions is less than the Canadian average;
- Disability rates are higher in small communities;
- Rates for accidents, poisoning and violence are higher in smaller communities;
- People living in remote northern communities are the least healthy and have the lowest life expectations;
- The health of a community appears to inversely related to the remoteness of its location;
- Canadians in rural communities often have difficulty accessing primary health care and keeping health care providers in their communities, let alone accessing diagnostic services and other more advanced treatments;

- People in rural communities also have the added burden of paying for the high costs of travel in order to access the care they need.

The report summed up this rural health challenge as the “Inverse Care Law”:

*People in rural communities have poorer health status and greater needs for primary health care, yet they are not as well served and have more difficulty accessing health services than people in urban centres” (Romanow, p. 162).*

The report recommended a significant commitment of new funding for rural and remote health issues and that ongoing system development be based on the following principles:

- Rural health initiatives should be designed to provide equity in both access to health care and health outcomes;
- No single strategy is appropriate for all communities;
- Strategies developed for urban centres may or may not be appropriate for rural communities;
- Both short term and immediate issues (such as access to nurses and doctors) and long-term, more fundamental issues (such as economic conditions) must be addressed;
- Health strategies should be focused on outcomes;
- Strategies should be based on evidence and informed by research;
- Key stakeholders (community, government, regional authorities, health care providers) need to work together to find solutions and take action.

The most recent major Canadian report on the health status of rural versus urban residents was released in 2006 titled “How Healthy are Rural Canadians?”. The report was part of a larger collaborative research project – *Canada’s Rural Communities: Understanding Rural Health and its Determinants* - co-funded by the Canadian Population Health Initiative of the Canadian Institute of Health Information, the Public Health Agency of Canada and the Centre for Rural and Northern Health Research.

The background research for the report was based on Urban vs. Rural definitions used by Statistics Canada, specifically where ‘rural’ is defined as four(4) different Metropolitan-influenced Zones (MIZ) depending on commuting flow between rural census subdivisions (CSD) and larger urban centres:

- Strong MIZ = >30% of rural labour force works in urban area;
- Moderate MIZ = 5-30% of rural labour force works in urban area;
- Weak MIZ = <5% of rural labour force in urban area;
- No MIZ = no rural commuters working in urban area.

Together these four (4) categories represent a sliding scale of 'rurality' in terms of distance (from an urban core) where commuter flows are considered a proxy for access to services including health services. According to Statistics Canada, approximately 20% of the Canadian population (6.2 million) lives in a small town or rural area.

Key findings from this 2006 report were as follows:

- People living in rural communities generally need to travel longer distances and often on more dangerous roads, for work, shopping and other reasons; not surprisingly, injuries and deaths due to traffic accidents are much more common in rural areas;
- Rural communities had higher overall mortality risks driven by higher death rates from causes such as circulatory diseases, injuries and suicide;
- Life expectancy for men was much lower in rural areas compared to urban areas;
- Determinants of health such as prevalence of smoking and obesity were elevated in rural Canada and healthy lifestyle choices (such as diet and levels of physical activity) were lower compared with urban residents;
- Respiratory disease rates were higher among rural residents but incidence rates for many cancers were lower.

The overall conclusion of the study was that:

*Rural residents of Canada are more likely to be in poorer socio-economic conditions, to have lower educational attainment, to exhibit less healthy behaviours and to have higher overall mortality rates than urban residents.*

This 2006 report basically confirmed the *Inverse Care Law* originally identified in the Romanow report.

There have been very few cross-national studies comparing rural and urban health and so as a follow-up to this 2006 study, researchers at the Centre for Rural and Northern Health Research took the Canadian mortality data and compared it to data published by the Australian Institute of Health and Welfare. Canada and Australia share similar rural health care challenges including recruitment, retention and education of health professionals; equitable access to health technologies; and funding of health care (Lagace, 2007, p. S67).

While urban-rural definitions differed between the two countries, the researchers were able to develop a common categorization scheme. Key results in terms of similarities and differences between the two countries were as follows:

**Similarities**

- ✓ All-cause mortality risks were similarly high in both Australia's and Canada's rural areas;
- ✓ Overall pattern of increasing risk with increasing rurality from circulatory disease was consistent in both countries;
- ✓ All rural categories for both men and women had elevated mortality risk for motor vehicle accidents;
- ✓ Rural men were at higher risk of committing suicide in both countries

**Differences**

- ✓ Cancer and diabetes mortality risks were lower among Canadian men and higher for Australian men compared to urban men;
- ✓ For a number of mortality risk indicators, the level of risk for Canadians in Rural 1 communities (i.e. those closest to urban areas) was actually less than in urban areas, while Australians in Rural 1 communities had higher risk levels

Accessibility and Distance to Care

The 'inverse care law' highlighted in much of the rural health care literature is based on the longstanding geographical concept of "distance-decay". The distance-decay effect is defined as: *"the interaction between two locales declines as the distance between them increases"*. In health services research this has been interpreted to mean the farther someone lives from a service, the less likely they are to use that service.

There is no consensus in the research literature or in government guidelines on appropriate distance to care. Part of the dilemma is that different reports and studies have measured different aspects of the accessibility equation including: (1) patient travel distance and/or travel time to a particular health service versus; (2) distance between hospitals and other health service providers; versus (3) travel or response times for emergency services.

For example, in terms of government reports, British Columbia released accessibility standards in 2002 for emergency and acute hospital services as follows (see Appendix B.2.2):

- **Emergency Services** - access to 24/7 emergency services within one hour travel time (or 50 km. of aerial distance) for 98% of residents; and
- **Acute Inpatient Services** - access to basic inpatient hospital services within two hours travel time (or 100 km. of aerial distance) for 98% of residents

In 1997, Ontario's Rural and Northern Framework, whose intent was to create small geographic clusters and larger networks of rural hospitals based on proximity, used the *"40 km. rule"* where small hospitals that were more than 40 km. from a full service emergency hospital needed to have enough secondary resources to provide Level B emergency services (24/7 on-call physicians).

The accessibility equation is further complicated by the issue of perceived distance and the willingness of consumers to travel different distances for different services. For

example, various studies have demonstrated that rural women are willing to bypass their nearest hospital and travel greater distances for obstetrical care depending on the perceived quality of local versus more distant health services (Connor et al, 1994, p. 366).

Two research studies, one Canadian and one American, highlight that measuring accessibility for rural residents is more complex than simply measuring distance from care. In a study of utilization of hospital services in rural British Columbia, Lin et al found that overall hospitalization rates decline as distance to hospital increases with the interesting exception of a reverse trend and a small peak in hospitalization rates in the range of 20-35 kilometers (km.) from a hospital. They concluded that the range of 20-35 km. is “neither overly burdensome nor particularly convenient when it comes to accessing hospital care”. They defined communities in the 20-35 km. range as ‘satellite’ communities:

*“These satellite communities are ‘outliers’ of an otherwise gradually declining urban population density function...Satellite communities represent a median distance range to hospital and therefore a reasonable hospitalization rate in terms of neutralized distance effects”.* (Lin et al, 2002, p. 2046)

In a study of health care utilization in rural North Carolina, Arcury and colleagues studied transportation options and the impact on health care visits. In the introduction to their study, they note that: “One of the most cited attributes of rural areas that affects health care utilization is low population density, isolation and large distances between residences and services. The ability to transverse these distances becomes imperative in obtaining health care. Without transportation, even a short distance to care can become an insurmountable problem” (Arcury et al, 2005, p. 31).

They found that two transportation characteristics had significant impacts on health care visits:

- Respondents who had a drivers license had 2.3 times more health care visits for chronic care and 1.9 times more visits for regular check-ups;
- Respondents who used a family-provided ride had 1.6 times more visits for chronic care

They note that distance is a barrier to health care access in the area they studied but it was “an equal barrier” for rural residents. They concluded that:

*“Transportation or ‘control of transportation’ as enabling factors may be more important than distance as a barrier within rural regions for understanding health care utilization...Further research needs to address the transportation behaviour related to health care and the factors that influence this behaviour. Having community residents and leaders simply state that transportation is a problem during community assessments is insufficient to understand how transportation enables access to health care”* (Arcury, pp. 36-37).

## B.2 Provincial Rural Health Reports

### **B.2.1 Alberta**

In 2001, one of Alberta's regional health authorities, in collaboration with Alberta's provincial health ministry, commissioned the Centre for Health and Policy Studies at the University of Calgary to conduct a rural health services literature review to achieve a better "...understanding of the utilization of health services in other rural, northern or remote regions, as well as knowledge of health status issues in those communities.." (Casebeer, Mistahia Project, 2001, p. 2)

Key findings from the review were guided by the following two research questions:

Q1: What are the health needs in rural, remote and northern areas in relation to the determinants of health?

- Northern rural regions tend to score more poorly on overall health status compared with other regions. Shorter life expectancies, increased prevalence of chronic illness and longer term disabilities, and greater limitations on activity levels are reported;
- Injury and poisoning in rural Canada represent over one-quarter of all rural emergencies. These tend to be more serious which is often associated with occupational and personal health practices;
- The literature provides information on a number of diagnoses or medical conditions that have been associated with increased frequency in rural or remote populations. Those reviewed here include tuberculosis, Parkinson's disease, obesity, coliform bacteria, multiple sclerosis, type 2 diabetes, and drug and alcohol abuse;
- Substance abuse is noted as a frequent reason for rural hospital admissions;
- Obstetric care in rural hospitals tends to be decreasing due to a growing shortage of primary care personnel and staff with the necessary skills to respond to obstetric emergencies. This results in more obstetric patients being transported to larger facilities for childbirth and may impact length of stay as well as access to and acceptability of care.

Q2: How does health service delivery in rural, remote and northern regions differ from other areas?

- There is a direct relationship between the increase in age and an increase in the proportion of the population that required hospitalization in the 50+ age group;
- High users represented about 10% of those hospitalized and 50% of hospital days used yet represent only about 1% of the population. Typically these 'high user' patients have chronic conditions or serious illnesses affecting cognitive and/or physical functioning;

In a recent Provincial Services Optimization report from the Alberta Ministry of Health and Wellness, there is a section devoted to *enhancing access to high-quality services in*

*rural areas*. The report defines the challenge in rural health service delivery as being framed by the following 3 health system dimensions:

- Quality
- Access
- Sustainability

In terms of quality, they note that facilities should ideally perform a minimum threshold volume of certain procedures each year to ensure that staff members keep their skills sharp. This is a challenge for most rural hospitals since they are relatively small (fewer than 50 beds) and see a low volume of complex cases. The report highlights rural obstetrics specifically as an area of concern since 24 hospitals in Alberta deliver fewer than 50 babies per year, well below the suggested threshold of 500 deliveries. The report concludes that:

*“The risk of maintaining clinical volumes below accepted thresholds must be balanced against the need to provide adequate access to care. Some facilities will likely always have sub-scale volumes for certain procedures. However, consolidating cases where possible can help improve outcomes”.* (Alberta, Provincial Review, 2008, p. 22)

The report also highlights that there is no “one size fits all solution” for rural health but suggests the following 3 levers for change be deployed to improve the health system for rural Albertans:

- Creating distinctive ambulatory centres using existing infrastructure;
- Empowering and better coordinating Emergency Medical Services (EMS) and transport;
- Increasing the number and provincial management of telehealth programs.

### **B.2.2 British Columbia**

In 2002, the BC government released a set of accessibility standards to assist regional health authorities to “...*rationalize acute care services in their regions to ensure the services are the most appropriate within available resources*” (BC, 2002, p. 3).

The provision of quality acute care services was to be based on the following principles:

- Accessibility
- Safety and Effectiveness
- Sustainability and Appropriateness

The following factors were to be used in reviewing the quality of acute care services:

- Population/demographics
- Professional competence
- Critical mass

- Distance/geography

With respect to the fourth geographic factor, the report states:

*“Small communities located a significant distance from larger centres, despite the lack of critical mass, still need to provide a basic minimum of health services...in these circumstances, quality and cost considerations need to be balanced with ease of access”* (BC, 2002, p. 4).

The report then defines the minimum requirements for accessibility of acute care services as follows:

- **Emergency Services**
  - Access to 24/7 emergency services within one hour travel time (or 50 km. of aerial distance) for 98% of residents within a region, where emergency services is defined as *“24-hour call, minor treatment, triage and stabilization”* which can be provided in a number of rural health care settings including: non-hospital diagnosis and treatment centre, a community health centre, physician group practice, Red Cross outpost hospitals and federal nursing stations
- **Acute Inpatient Services**
  - Access to basic inpatient hospital services within two hours travel time (or 100 km. of aerial distance) for 98% of residents within a region where acute inpatient services refers to an acute care facility with GPs and a range of services including emergency services, general medicine, low risk obstetrics, observational paediatrics, convalescence, palliative and respite care
- **Specialty Services**
  - Access to core specialty services within four hours travel time for 98% of residents within a region, where core specialty services include general surgery, anaesthesia, psychiatry, internal medicine, obstetrics & gynaecology, and paediatrics

The report also stipulates minimum catchment population sizes to support sustainable services. For example, based on a rural doctor:population ratio of 1per 1,000 residents, a community of 5,000 could support 5 family physicians and a 1 in 5 on-call coverage. Other community health services such as primary health care networks could also be sustainable with a population size of 5,000.

**Primary Health Care Networks** are defined as a “combination of group practices, diagnostic and treatment services, and community health centres” which together could offer the following types of services: (BC, 2002, p. 7)

- 24/7 emergency services
- Ambulance
- Basic diagnostic services
- Chronic disease management
- Day surgery

- Home care
- Health education, prevention, promotion
- Referral to secondary services
- Rehabilitation
- Telemedicine

### **B.2.3 Ontario**

In response to ongoing evidence about difficulties in accessing health care services for rural and northern residents, the Ontario Hospital Association released a report in 2003 to frame the key issues. It defined the rural health challenge as follows:

*“Access to quality health care for residents of rural, remote and northern communities, which comprise rural Ontario, is a critical issue. Rural populations, in general, experience a higher burden of illness and less access to health care services, due to major challenges related to barriers of distance, lower population densities, and scarce human resources...”* (OHA, 2003, p. 3).

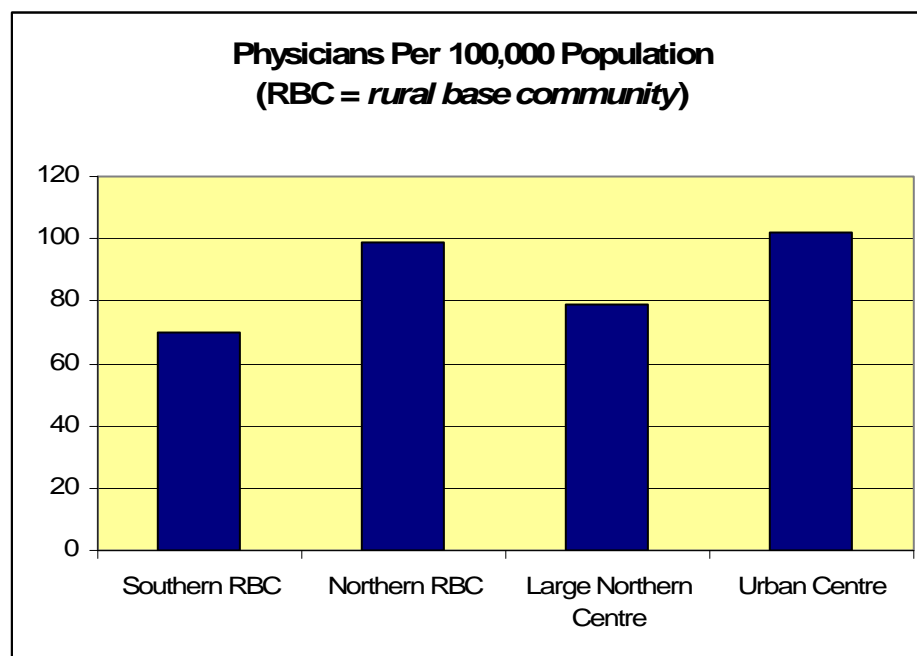
The report made the following recommendations to the Ministry of Health and Long-Term Care:

1. Revitalize the vision and principles of the Government’s *Rural and Northern Health Care Framework (1997)* and ensure that the vision guides all provincial health initiatives;
2. Advance community-based rural, remote and northern health care delivery models that enhance integration and co-ordination of health services at the local and regional levels, emphasizing linkages through information and communications technology;
3. Reaffirm the *Rural and Northern Health Care Framework’s* philosophy of “care close to home”, through developing and supporting repatriation policies, programs and funding mechanisms, with the goal of maximizing access to quality care provided in the least costly/most clinically appropriate setting;
4. Expedite implementation of primary care reform initiatives and ensure the applicability of the policies and strategies to rural, remote and northern communities;
5. Develop provincial policy providing for access to “core services” – minimum level of services to be available for residents of rural, remote and northern communities – at the local and regional levels;
6. Expedite release and implementation of the redesigned Underserved Area Program in order to address physician recruitment and retention challenges in rural, remote and northern communities;
7. Ensure adequate and appropriate funding (operating and capital) of rural, remote and northern hospitals and services;

8. Establish an Ontario Government Office of Rural, Remote and Northern Health to coordinate the development of a rural health care vision and policies, and monitor their implementation;
9. Establish a rural, remote and northern health advisory body amongst the various organizations with rural-based interests to provide leadership on rural, remote and northern health issues through advocacy, communication, education and research.

In 2006, the Institute for Clinical Evaluative Sciences (ICES) released a report profiling rural and northern communities in Ontario and the physicians who work there. Key findings from the report are as follows:

- 14% of general practitioners and family physicians (GPs/FPs) and 2.5% of specialists are practicing in rural and northern Ontario and they cared for approximately 20% of the Ontario population;
- Urban areas had a higher number of physicians per capita for both family physicians and specialists; however, northern rural areas had higher physician to population ratios than southern rural areas;



- Rural GP/FPs were more likely to be less than five years in practice while their urban counterparts were more likely to be female and trained outside of Canada;
- Rural areas had the highest levels of turnover compared to all other settings for both specialists and GP/FPs; northern Ontario had the highest rates of turnover which speaks to the relative instability of physician workforce in these areas.

According to ICES, the health human resource policy and planning implications of the report are as follows:

- The rural South is facing greater challenges than the rural North in terms of physician availability; policymakers may want to consider extending some of the recruitment tools traditionally available in the north into other southern rural areas with demonstrated need;
- Physician workforce strategies have been focused on recruitment but because of the higher turnover rates in northern and rural communities, this needs to be balanced with greater attention to retention strategies;
- Rural specialists are diminishing in number so if policymakers want to avoid residents having to travel farther to larger centres then more strategies to attract International Medical Graduates (IMGs) are needed to increase rural specialist supply;
- The increase in numbers of both young and female family physicians where new alternate payment plans (APPs) have been introduced suggests that these new APPs may be important recruitment tools which could be expanded to other rural areas.

The report also introduced a new categorization scheme for rural and northern communities based on geography, infrastructure and physician supply. Communities were categorized as follows:

- **Rural Base Community** = any census subdivision (CSD) that contained a hospital but had fewer than five sub-specialists resident in the community;
- **Affiliate Community** = CSDs with resident physicians but no hospital with an Emergency Department; these physicians were assigned to the nearest rural base community;
- **Urban Centres** = CSDs with a hospital and five or more sub-specialists with the exception of North Bay, Sault Ste. Marie, Sudbury, Thunder Bay and Timmins which were designated as **Large Northern Centres**;

Applying the first two definitions to the Waterloo-Wellington LHIN area produced the following categorization of communities:

Rural Base Community (RBD)	Emerg Dept Catchment Population	Affiliate Communities (KM distance to RBD)
Fergus	36,303	Elora (5) Eramosa (19) Arthur (19) East Luther Grand Valley (24)
Mount Forest	12,057	Egremont (10) Harriston (13)
Palmerston	10,478	Maryborough (13) Drayton (17)

In the spring of this year, the Ontario Government announced that it would establish a provincial expert panel on rural and northern health. In preparation for this new panel and in response to several LHIN reports calling for closure or reduced function of selected small hospital emergency departments, the Ontario College of Family Physicians in partnership with the Ontario Medical Association, the Society of Rural Physicians and the Canadian Association of Emergency Physicians organized a provincial think tank in May 2009 on *“Stabilizing Health Services in Rural Communities”*. The summary proceedings from this recent think tank included a variety of recommendations to the new provincial panel, the Ministry and the LHINs. The specific recommendations to the LHINs and to the Ministry & LHINs were the following:

1. The MOHLTC and the LHINs should ensure that investments are made to provide more services in rural and small communities. Given the reduced health status of rural citizens compared with their urban counterparts and in keeping with the principle of equity, more services, not less, are required in these settings;
2. The LHINs should map patient needs and public expectations in each rural/small community. Citizens and front-line provider engagement is required in rural and small communities to determine the core services that should be provided to meet local needs and to ensure that a patient-centred system is established that aims to improve health outcomes for each rural/small community citizen;
3. LHIN planning should focus on realignment of services, rather than centralization. Centralization usually results in a shift of services to larger centres with a further decrease in access to services to rural/small communities. Regionalization, on the other hand, affords the best opportunity to develop a system with an equitable access for all citizens. This may include developing and enhancing ‘Centres of Excellence’ in rural/small communities with a much needed shift in resources from larger centres to smaller ones;
4. The LHINs should overcome the tendency to respond to individual organizational budgetary concerns by developing strong regional governance structure that bases decisions on the evidence of how to improve health outcomes rather than financial expediencies;
5. The MOHLTC and LHINs should recognize that communities need both strong primary care/community-based care and emergency services. Both are required

- and neither one can substitute for the other. The LHINs should concentrate on building strong primary care/community-based services in rural/small communities and ensure that they are effectively linked to emergency service providers local and regionally;
6. The LHINs should focus on the establishment of collaborative, interdependent, interprofessional teams in the community in light of the changing needs of our growing and aging population with chronic diseases especially for patients with multiple co-morbidities to relieve pressures on emergency departments and inpatient beds;
  7. The MOHLTC and the LHINs should ensure person-to-person contact amongst virtual team members are enabled by effective telecommunication systems including telehealth and interconnected EMRs/EHRs;
  8. Each LHIN should ensure consistent quality of care throughout their region based on the following means:
    - a. A single Medical Advisory Committee in each LHIN with common credentials and shared responsibilities for care amongst the physicians in the LHIN;
    - b. Compulsory acceptance of patients from smaller centres by the on-call specialist in regional or academic health centres;
    - c. Implementation of minimum standards of care in emergency departments and care maps and medical directives that are implemented consistently throughout the LHIN/province;
    - d. Easy access to comprehensive, affordable education programs for physicians and nurses to ensure knowledge, skills and confidence to meet those standards;
    - e. An emergency services team-building strategy modeling best practices/standards for care similar to the MORE-OB programs;
    - f. Effective linkages between community-based family doctors and emergency service providers to ensure two-way transfer of information about individual patients;
    - g. Effective linkages between rural/small hospitals and larger centres to ensure that consultations and advice is available 24/7/365;
    - h. Point-of-care diagnostic technology, telemedicine and PACS.

### B.3 Rural Health Services Planning Frameworks used in Ontario

### **B.3.1 Rural and Northern Health Care Framework (1997)**

The *Rural & Northern Health Care Framework (RNHCF)*, released in 1997, represented a broad policy framework for planning the restructuring of services within formal networks of rural and northern hospitals with the goal of facilitating 24-hour access to services for residents served by the networks. The *Framework* recognised that the circumstances and conditions affecting rural and northern Ontario health care systems are unique and cannot be properly addressed through the uniform application of planning tools deemed more appropriate for urban areas – specifically, the acute care restructuring benchmarks which at the time were being implemented by the Health Services Restructuring Commission.

The *Framework* was based on the following provincial vision and planning principles:

#### **Vision:**

*"Our vision is a fully integrated and co-ordinated network that provides access to a range of programs and services which puts the patient first while using resources more effectively - and efficiently - the right care, in the right place, at the right time. Small hospitals in rural and northern communities will have new opportunities to evolve in their role and rural health care providers will be supported in addressing the needs of these communities. The rural health networks will use new and emerging health care and communications technology to support physician and health care professionals in the provision of 24 hour access to care, and appropriate linkages to more specialized services when required."*

#### **Planning Principles:**

- Rural and northern health networks will offer access to a comprehensive range of programs and ensure 24 hour access to quality health care services as close to home as possible. This will require that small hospitals no longer work in isolation of one another but become part of a comprehensive network;
- Rural and northern health services will be effective, sustainable and responsive to community needs. This will require working together across disciplines with respect to the various roles and responsibilities which are essential to meet defined needs;
- Flexible and innovative approaches to service delivery will be required including the exploration of alternatives including a sharing of medical/professional staff and technology within the network;
- Networks are expected to improve the ability of small communities to recruit and retain physicians and other health care professionals. The efficiencies which result from the clustering of smaller hospitals close together within a network will increase referral population and help achieve the critical mass necessary to support and sustain the provision of high quality health services;
- Support small hospitals to develop or enhance their current roles in communities as a focal point for the provision of other health and related services, and for non-institutional patient care. The hospital may be further developed as a nucleus within

the network from which medical, dental and other health professionals, could offer their services on a permanent basis or provide accommodation for visiting specialists;

- Planning for hospital-based service delivery will be the initial priority of the networks but hospitals are expected to work in partnership with community-based service providers in order to enhance primary health care service delivery and achieve greater access to health care locally.

*“Hospitals will no longer operate in isolation but will link with larger hospitals in the area, developing networks of care and sharing resources with other small hospitals near by. By working together, hospitals within these networks will, for the first time, be able to offer a comprehensive range of programs and assure residents access to quality health care services as close to home as possible. The Rural and Northern Healthcare Framework will encourage the development of flexible and innovative approaches to service delivery, improve the ability of small communities to recruit and retain physicians and other health care professionals, and lead to closer ties between small hospitals and community-based services”.* (RNHCF, 1997, p. 5)

The Framework indicated that all hospitals in a network should be formally designated as A-B-C-D as per definitions below:

#### Level A Hospitals

These hospitals will provide 24-hour emergency triage, i.e. assessment, resuscitation and stabilization usually provided by an on-duty Registered Nurse with access to a physician for advice and direction, as well as necessary medical transportation services. Level A hospitals may or may not have inpatient beds and may have one or more 24-hour observation beds.

#### Level B Hospitals

Level B hospitals will use on-call physicians (up to approximately 15 minutes away) to provide 24-hour care. These hospitals will provide some secondary services (e.g. general surgery, internal medicine, anesthesia, some diagnostics and other support services). They will have some acute care beds and will operate emergency units that, in addition to Level A emergency care, will provide some physician emergency services such as suturing wounds and setting simple fractures.

#### Level C Hospitals

These full-service emergency hospitals will offer 24-hour a day coverage by on-site and on-call physicians, have more advanced technological and diagnostic capabilities, and offer additional specialty services such as orthopaedics, cardiac care, obstetrics, gynaecology, paediatrics and psychiatry. Level C hospitals will have acute care and specialty care beds. Their services will vary according to community needs, service volumes and the availability of health care providers. Each Rural and Northern Health Care Network will contain at least one designated Level C hospital.

#### Level D Hospitals

All Rural and Northern Health Care Networks will be linked to highly specialized hospitals, i.e. Academic Health Science Centres, Hospital for Sick Children etc. These

Level D facilities will work with Networks to improve access to specialty services, consultation, and most current medical information, training and continuing physician education resources available. (p. 6).

Hospitals within 40 kilometres from each other will be expected to form clusters with shared administrative, support and clinical functions...If a hospital cluster is more than 40 kilometres away from a full service emergency hospital, at least one of the hospitals within the network will have enough secondary resources to provide Level B emergency services. The remainder will provide Level A access, triage and transportation. In some areas of the province, there may be a need to establish more than one hospital cluster within the same network. Rural hospitals which are the only hospital in their community will provide 24-hour access to care unless it is determined that a nearby hospital is better equipped to provide such services through the network planning process. (p.7).

When Rural and Northern Health Care Networks are established, some hospitals may provide different types of services than they have in the past and assume new responsibilities...for example, small hospitals could make space available for other services such as those provided by community workers, physician and dentist offices, visiting clinics, day programs and Community Care Access Centres. Rural and northern hospitals could also provide programs and services such as:

- Physiotherapy, occupational therapy, speech therapy and audiology
- Aftercare or convalescent care for patients who have had major surgery or received acute care in a more specialized setting;
- Dialysis services;
- Mental health programs;
- Palliative care;
- Geriatric programs including assessment and rehabilitation;
- Seniors' day programs; and
- Visiting specialty clinics, including well baby clinics

All rural and northern hospitals will be encouraged to increase patient access to health care by making office space available to physicians and other health care providers at reasonable cost. This will allow administrative services and equipment to be shared in order to reduce overhead and redirect funds to patient services. (p. 8).

### **B.3.2 Rural and Northern Health: Parameters and Benchmarks (1998)**

To assist with the implementation of the 1997 RNHCF, the Ministry and the Ontario Hospital Association created a joint committee to develop parameters and benchmarks for rural and northern hospital/health services. The Joint Committee also provided additional clarification about the intent of the Framework and additional planning principles as follows:

*While the framework does not exempt rural, northern and isolated communities from restructuring, it supports the development of new integrated models for delivery. Hospitals in rural communities will not face closure under this framework but will be asked over time to evolve their roles and to work more closely together and with local providers to better respond to community needs. (Joint Committee, 1998, p. 1)*

**Additional Planning Principles:**

- Emphasis is on evolution of the hospital's role, not closure;
- Any existing hospital that is farther than 40 km. from the next closest site will be designated at least a B-level facility;
- There will be no Level A hospitals in the north because of distance;
- When two or more hospitals are in close proximity to one another, program transfers will occur to maximize the viability of programs at each site;
- Once designated, hospitals are expected to maintain their level and scope of service as part of the cluster and the network;
- Savings realized from common administrative and support services can be reinvested in information and communications technology and new programs;
- Plans should support and complement the Ministry's *Standards for Hospital Emergency Services*;
- Initiatives related to recruitment/retention of health human resources for isolated areas should be strengthened. (Joint Committee, 1998, p. 11)

The planning parameters developed by the Joint Committee for A-B-C hospitals in rural networks were as follows:

	<b>Level A</b>	<b>Medical B</b>	<b>Med-Surg B</b>	<b>Level C</b>
ER Visits	<10,000	10,000 – 20,000	20,000 – 30,000	>25,000
ER Nurse Availability	24/7 on-site	24/7 on-site	24/7 on-site	24/7 on-site
ER Physician Availability	On-call Monday-Friday	24 hour on call	24 hour on call	24 hour on call
Family Physicians	< 5 FTEs	5-7 FTEs	>7 FTEs	
Specialists	No	May have general surgeon and GP specialty services	Will have general surgeon, anesthetist & obstetrician; May have internist	Range of medical specialists
Total Weighted Cases	NA – may have observation beds in ER	1,000 – 2,000	2,000 – 5,000	>5,000
Intensive Care	NA	May have beds for monitoring	Designated ICU beds	Designated ICU beds
CCC Beds	NA	Yes	Yes	Yes

Rehab Beds	No	No	Not generally	Yes
Schedule 1 MH Beds	No	No	Not generally	Yes

There has been ongoing debate about the relative success of the *Rural and Northern Health Care Framework* as a policy and planning framework for rural health services. On the positive side the *RNHCF*, with support by the District Health Councils and the Health Services Restructuring Commission, did lead to a range of new governance and management arrangements between groups of small hospitals including mergers and administrative alliances, many of which are still in existence today. In terms of the criticisms of the *RNHCF*, the Ministry did not follow through on the formal designation of A,B,C hospitals and failed to provide any meaningful incentive funding for network development and network projects.

### B.3.3 Integrated Service Plan for Northwestern Ontario (2005)

This report was prepared by special advisor, Tom Closson, (with the support of the Hay Group) initially in response to budget and utilization challenges faced by the Thunder Bay Regional Health Centre (TBRHC) but emerged as a useful health services planning framework for rural and northern LHIN regions with a focus on integration and 'care closer to home' given the significant distances that residents of Northwestern Ontario have to travel for health care. The key recommendations from the Closson report are as follows:

<b>Health Sector</b>	<b>Recommendations</b>
Primary Care	<p>The MOHLTC should ensure that each Family Health Team approved outside Thunder Bay is operationally integrated with the services of the CCAC and the closest hospital;</p> <p>The MOHLTC should adapt primary health models for isolated and remote communities to include 'virtual teams' that make use of Nurse Practitioners as the primary care givers linked together and to a supporting family practitioner and other health professionals by telemedicine linkages;</p>
Hospital Services	<p>Small, rural hospitals should be designated as either 'local' or 'district' based on the following definitions:</p> <p><b>Local Hospital</b> = provides support for office and treatment space for Family Health Teams, diagnostic technologies that would allow care decisions to be made locally, emergency care, inpatient medical care for observation, treatment and stabilization, GP procedures, and continuation of treatment and recovery for local patients after they have recovered from their initial stages of acute treatment in a district or regional hospital (Thunder Bay);</p> <p><b>District Hospital</b> = provides advanced diagnostic technologies (e.g. CT Scanner), emergency care, general inpatient medicine, specialty outpatient medicine services, some inpatient general</p>

	surgeries, selected subspecialty surgery by visiting surgeons, low risk birthing by GPs, visiting paediatricians and visiting psychiatrists;
Long-Term Care	The MOHLTC should expand long term care places in NW Ontario including more supportive housing units in various communities;
Health Human Resources	The LHIN should establish a Northwestern Ontario-wide approach to all human resources planning;
Utilization Management	The LHIN should establish a Northwest-wide program for utilization management to ensure that patients are cared for in the most appropriate setting reducing the utilization of inpatient beds at TBRHC to enable it to respond to the needs of the region;
Telemedicine	The NW LHIN should ensure that all isolated communities have a 24-hour telemedicine link to their closest district hospital and to the Thunder Bay Regional Health Centre;  The LHIN should establish a telemedicine and outreach partnership to provide psychiatric support to community and hospital mental health services in Northwestern Ontario.

### B.3.4 JPPC Core Services Review (2007)

The Joint Policy and Planning Committee (JPPC) of the Ontario Health Association and the Ministry of Health and Long-Term Care conducted a multi-year project to determine the core services that should be available in small hospitals. The project was overseen by a provincial advisory committee and undertaken in three distinct phases:

- Phase 1 – A utilization-based review of services currently provided by small hospitals
- Phase 2 – Recommendations regarding core services based on Phase 1 findings
- Phase 3 – A look at the future opportunities for small hospitals

Each phase resulted in a separate report building on the previous phase and all 3 reports plus a summary document were released in May 2007. The Joint Policy and Planning Committee was disbanded in 2008 but all of its archived reports are still available on its website ([www.jppc.org](http://www.jppc.org)).

Based on the analysis of hospital discharge data in Phase 1 of the JPPC review, 93 small hospital sites in Ontario were divided into two categories based on the number of weighted cases. According to the Advisory Committee, 1500 weighted cases appeared to represent a natural 'break point' in service volumes, where core medical staffing at the smallest hospitals was provided by family physicians and above 1500 weighted cases, there was sufficient critical mass to support at least one specialist.

<b>Very Small Hospitals</b>	<1500 weighted case	62 hospital sites
-----------------------------	---------------------	-------------------

<b>Small Hospitals</b>	1500 – 3,999 weighted cases	31 hospital sites
------------------------	-----------------------------	-------------------

A current hospital service was defined as a “core service” if it was provided by at least 75% of the hospitals in a particular category.

For **very small** hospitals, the JPPC recommended the following core services:

- Emergency Services
- Inpatient Medical Beds
- Inpatient Allied Health Services
  - Physiotherapy, OT, Speech Pathology, Respiratory Therapy
  - Pharmacy, Clinical Nutrition
- Laboratory
- Ultrasound/ General Radiography

For **small** hospitals, the JPPC recommended the following additional core services:

- General Internal Medicine
- General Surgery/Day Surgery
- Obstetrics
- Special Care Units

With regard to multi-site hospital corporations, the JPPC report recommended that for multi-site corporations where the combined volumes of all small sites is greater than 1,500 weighted cases that these corporations be treated the same as single site hospitals with cases greater than 1,500 with the caveat that *“The corporation as a whole would be expected to provide the same core set of services to its catchment population as any of the single site small hospitals. This does not require every site within a corporation to provide the same complement of core services”*.

The JPPC report also recommended that *“...the identification of additional site-specific core services to be provided in any given facility will require consideration of the unique position of individual facilities, the available evidence in the context of LHIN planning and the services provided by others in the catchment population. These include ambulatory clinics and outpatient allied health services tailored to meet the specific needs of the population being served”*.

The third and final report of the JPPC’s core services review for small hospitals focused on future opportunities. Notwithstanding the challenge of delivering health care to rural

and remote communities, the JPPC report suggested there are a range of strategic opportunities for small hospitals which it described under the following 5 headings:

- ***Enhance and Extend Primary Care;***
  - Small hospitals partnering with integrated, multi-disciplinary primary health care teams such as Family Health Teams and Community Health Centres in order to cost-effectively share space, clinical staff, and administrative resources and to provide an attractive professional practice environment for rural family physicians
- ***Expand Community Networks;***
  - Small hospitals acting as catalysts to develop local access points for health, not just health care, by providing support to community-based health care and social service providers, community agencies, volunteer associations and human service organizations in their catchment area
- ***Expand Hospital Networks;***
  - Strengthen existing, or build new, affiliations with urban multi-hospital systems in order than small hospitals get the resources and technical assistance they need to provide services that otherwise would not be available to patients unless they traveled (e.g. satellite chemotherapy, dialysis, visiting specialists and clinics)
- ***Integrate and Manage Primary, Acute and Long Term Care;***
  - Diversification into long term care and other post-acute services such as rehabilitation can provide similar advantages to those associated with expanded secondary care, specifically the efficiencies gained from sharing both administrative and clinical resources
- ***Make Greater Use of Technology;***
  - EHealth will facilitate and provide improved patient flow, standardization of are processes, and greater knowledge sharing among health care professionals and is especially important in addressing the needs of small, rural hospitals

***Summary Highlights of Provincial Rural Health Planning Frameworks:***

All three previous rural health planning frameworks used in Ontario have certain common elements:

- formal networked linkages between hospitals; and between hospitals and other health care providers;
- integration of acute (hospital) care and primary care (e.g. FHTs);
- categorization of small hospitals into basically two categories based on patient volumes: smaller rural hospitals where medical staffing is largely provided through family doctors and some visiting specialists; and larger rural hospitals where medical staffing is provided through family doctors and some on-site specialists (general surgery, internal medicine):

**RNHCF:** Level A (no beds) Hospital (<1000 weighted cases)  
 Level B Medicine Hospital (1000 – 2000 weighted cases)  
 Level B Med-Surg Hospital (2000 – 5000 weighted cases)

**Closson:** Local vs. District Hospital

**JPPC:** Very Small Hospital (<1500 weighted cases)  
 Small Hospital (1500 – 3999 weighted cases)

## Appendix C - Rural Health Services Delivery Models

### C.1 Rural Health Service Delivery Models in the Research Literature

In terms of international rural health research, Rygh and Hjortdahl conducted a literature review to “*explore evidence on how to promote continuity and integration in healthcare services in order to meet the special demands of populations in rural areas*” (p. 2). Through a PubMed and MEDLINE search, they identified 50 research articles and systematic reviews for the period 1995-2005. From their review, they identified four(4) broad strategies for integrating rural health services:

- Delegation and substitution of tasks, team-based work, and flexibility of roles;
- Integrated care programs and managed care;
  - Including care pathways and rural-based case managers
- Intermediate care, shared care and specialist outreach;
  - Where intermediate care is defined as the “expansion of primary health care and social care services to bridge the interface with secondary care”
- Telemedicine.

Australia is considered a world leader in the planning, organization and delivery of rural health services. Their stated rationale for developing alternative models for delivering more effectively an appropriate level and mix of health services to rural communities is as follows:

- Many rural communities are too small to support all the services needed by residents and typically provided in larger centres;
- Some small rural communities are characterized by inappropriate services (such as an oversupply of acute beds) alongside gaps in service functions (such as palliative and respite care);
- Existing ways of providing health services to small communities have a limited capacity to ensure continuity of care;
- Existing service arrangements often fail to recognize the need for and importance of close intersectoral links;

- Existing service arrangements often do not facilitate the effective monitoring of the health outcomes of service provision (Humphreys, 2002, p. 275)

In 1994, Australia released its National Rural Health Strategy and then subsequently renewed this framework in 1999 with the release of the *Healthy Horizons*, a national framework to guide the development of health programs and services in rural, regional and remote Australia. The revised framework was built upon the following key principles:

- An orientation to primary health care and public health in order to address causative factors underpinning poor health status;
- Increased consumer participation and community involvement in health care planning in order to bring about real improvements in the health status of people;
- Accessibility, in order to ensure that health care and health services are actually available at times of need;
- Flexibility, in order to cope with the diverse health needs, demographic and workforce changes and the unique local circumstances characterizing many communities;
- Intersectoral coordination and multidisciplinary collaboration in order to maximize the limited resources available to service the health needs of the community;
- Enhancing community capability and ensuring sustainability of the health care system (Humphreys, 2002, p. 276)

In his review of Australia's rural delivery models resulting from these national rural health planning frameworks, Humphreys makes the following observations about determinants of health, continuum of care, core services and integration:

*“As a result, there now exists general agreement across governments on the need for a specific policy response to rural health issues and the principles that should underpin planning for the provision of health care services. There is also recognition that improved health outcomes for residents of rural and remote communities may depend on changes and improvements in areas other than health services per se – in other words, a whole-of-health approach which recognizes the wide range of social and environmental determinants that impact upon the health status of people...”* (p. 277)

*“In seeking to ensure the delivery of appropriate and effective health care and services for residents of small dispersed rural and remote communities, a continuum of care is desirable. Services such as disease prevention, health promotion, comprehensive primary care, emergency medical care and some inpatient care represent core services that become the initial focus of attention...”*

*There are some ‘core’ health services, particularly those required to fulfill primary health care needs, that should be available to all residents in these small rural and remote communities. These services would meet the majority of regular personal health needs, and might include some or all of the following: medical, pharmaceutical, domiciliary, dental and day care, mental health, social work, and counseling, rehabilitation, alcohol and drugs, family planning and health education.*

*The particular combination of health care services and facilities for any rural community should reflect its particular geographical circumstances and mix of health care needs. (p. 285)*

*“Integrated health service models are distinguished by the need to maximize efficiency and coordination across health services, particularly through the sharing of resources, geographical collocation, and simple management structures. Economies thus gained enable service providers to maximize the range and mix of health care that they can make available locally in the community”. (p. 286)*

**Rural Primary Care**

Because of the critical importance of primary care in the provision of rural health services closer to home, Wakerman and colleagues reviewed the rural primary delivery models that currently exist in Australia and developed the following typology based on a sliding scale of rurality from ‘large rural’ to ‘small remote’: (Wakerman, 2008, p. 5)

	<b>Category</b>	<b>Health Service Model</b>	<b>Rationale</b>
LARGE RURAL	Discrete Services	<ul style="list-style-type: none"> <li>• Walk-in clinics</li> </ul>	Sustainable medical workforce (getting GPs into rural service)
	Integrated Services	<ul style="list-style-type: none"> <li>• Shared care</li> <li>• Coordinated care trials</li> <li>• PHC teams</li> <li>• MPS program</li> </ul>	Coordination between <u>and</u> access to services otherwise not available locally
	Comprehensive PHC Services	<ul style="list-style-type: none"> <li>• Aboriginal-controlled community health services</li> </ul>	Primary focus on improved access to services
↙			
SMALL REMOTE	Outreach Services	<ul style="list-style-type: none"> <li>• Hub and spoke</li> <li>• Visiting services</li> <li>• Fly in services</li> </ul>	Access to service for communities too small to support discrete rural services
	Virtual Outreach Services	<ul style="list-style-type: none"> <li>• Telehealth/telemedicine</li> <li>• Virtual clinics – video pharmacy</li> </ul>	Use of IT to increase access to and sustain service for communities too small to support discrete rural service

They summarize their findings as follows:

*“While larger rural communities are generally able to support a greater variety of local, discrete, more specialized health care services, increasing remoteness and diminishing population size and density constrain service model options and increase the impetus for the development of more integrated and comprehensive primary health services in order to maximize the economies of scale and use of existing health workforce”*

### Rural Health Networks

The American research literature on rural health delivery models contains extensive information about rural hospital and health care networks. They define ‘Rural Health Networks’ as:

*“A formal organizational arrangement among rural health care providers (and possibly others) that uses the resources of more than one existing organization and specifies the objectives and methods by which various collaborative functions are achieved”*  
(Wellever, 2001, p. 2)

These Networks have the following attributes:

- Include at least 1 rural hospital;
- A written agreement that specifies the purpose and membership of the network, and duties/obligations of network members;
- Individual autonomy of members (but delegation of limited portions of their autonomy to the network to foster greater coordination and integration);
- Joint plan of collaborative action.

Many U.S. states provide grant funding to help rural providers establish networks and these structures (variously known as affiliations, alliances, consortia, cooperatives) have become an increasingly popular strategy for addressing community health care issues. In a 2003 survey of rural health networks in the U.S., researchers found that:

- The number and average size of rural health networks had increased significantly (e.g. 40% of all networks have more than 20 members);
- The diversity of rural health network membership had increased significantly (e.g. participation of public health, mental health, nursing homes and social service agencies had tripled) (Moscovice, 2003, p. 7)

Unlike rural network models in Ontario (see section 5.2), the predominant structure for rural networks in the U.S. is a non-profit corporation where the network has a governance structure and management staff. The median operating budget of U.S. networks in 2003 was \$260,000 (U.S.) although “networks differ widely in the resources they use to support operations” (Moscovice, 2003, p. 15)

Rural health networks typically pursue a wide range of objectives including:

- Developing local service capacity;
- Expanding health improvement and risk reduction services;
- Strengthening service coordination;
- Developing marketable products to generate additional revenue

However, the sub-set of 'hospital-only' rural networks were more likely to pursue operational efficiencies rather than developing additional community services.

### Rural Elderly

The Canadian Policy Research Networks has recently reviewed the literature on integrated models of health and social care for the elderly and conducted national and international surveys of policy makers. From their review and the survey results, they note the following key features of efficient and effective comprehensive models of care for the elderly: (CPRN, 2009, p. iv)

- Longitudinal case management, spanning time, setting and discipline;
- Intensive interdisciplinary team care (including physicians);
- Cross-sectoral and cross-professional linkages for collaborative care planning;
- Geriatric philosophy, meaning a commitment to a holistic approach to care of the elderly;
- Appropriate targeting (i.e. serving the right population and keeping the size of patient load within manageable limits);
- Mechanisms to pool funding streams to allow for administrative and clinical flexibility;
- Development of appropriate financial and other incentives to encourage involvement of organizations and professionals in shared program goals

There is also research literature on service delivery models to meet the unique needs of the rural elderly. The well-respected PACE model in the U.S. (which was developed from the famous On-Lok model in San Francisco) is an integrated model of care built on the foundation that "seniors with complex health care needs should be able to live in as least restrictive environment for as long as possible". Most eligible seniors in a PACE program receive services at a seniors centre from a multi-disciplinary team whose focus is prevention, wellness and quality of life.

Because of the higher proportion of seniors in rural communities coupled with low population densities, greater distances and the lack of transportation options, a more flexible Rural PACE programs has been introduced in various rural communities with the following modifications: (NRHA, 2004, pp. 1-2)

- Alternative Centres:
  - Rather than bringing seniors to a central location, rural PACE models include use of 'mobile' centres to bring services to seniors and the use of outreach/satellite centres
- Linked Providers;
  - Use of information communication technologies to create 'virtual' teams of providers who do not work out of the same office
- Nontraditional Providers;

- Training of lay volunteers to play roles as community health workers, system navigators and health promoters
- Creative Partnerships;
  - Creating a multi-disciplinary team to serve rural seniors from diverse rural (and urban) organizations requires creative problem solving and new inter-agency agreements;
- Expanded Populations;
  - In rural areas where there is insufficient demand (or critical mass) for program development because of low numbers of seniors, other individuals with complex care needs (e.g. younger physically disabled, brain injured adults) are being offered PACE-like services

In Australia, rural elderly have been served through the Multi-Purpose Service (MPS) program which began in the 1990's as joint Commonwealth/State initiative designed to address aged care and health service delivery issues in rural and remote areas. The MPS concept 'pools funds' in order to provide small communities with the ability to integrate health services, better match service to community needs, increase productivity, share resources and reduce administrative costs (Neumayer et al, 2003, p, 288).

One review of the MPS program compared traditional small hospitals providing chronic/aged care with the MPS sites which provide hospital care, aged care and community services in one integrated facility. The overall evaluation concluded that the MPS sites performed better than the traditional hospital sites in terms of: (i) improved quality of care with better programming; (ii) improved access to residential care; (iii) flexibility in terms of bed usage and allocation of resources to support 'ageing in place'; and (iv) opportunities for new capital funding. At both the MPS and traditional hospital sites, there was an overemphasis on provision of acute care services by nurses suggesting that additional staff training was required in gerontology and the shift in organizational culture from an acute care facility to a long term care facility (Neumayer et al, 2003, p, 290).

## C.2 Innovative Rural Health Delivery Models in Ontario

There is no database of rural health innovations in Ontario so the following section is based on the consultant's experiences working with other rural communities and health care providers in other LHIN areas.

### **C.2.1 Health Care Campus Models**

A number of small hospitals in Ontario have been actively planning and developing local integrated models of rural health care based on a "campus of care" model. In all these models, there are formal linkages between acute care, primary care, long term care and other community-based health services through physical co-location with the hospital. Examples include:

- Campbellford Memorial Hospital ([www.cmh.ca](http://www.cmh.ca))

- Campus partners include: Campbellford Memorial Multicare Lodge (49 apartment units for seniors); Community Mental Health Centre; and the Campbellford Memorial Health Centre which houses the Trent Hills Family Health Team, the CCAC, a private physiotherapy clinic and private massage therapy clinic)
- Espanola General Hospital ([www.esphosp.on.ca](http://www.esphosp.on.ca))
  - Campus partners include: the Espanola and Area Family Health Team, 32 long term care facility beds, 30 seniors apartments, 18 assisted living (supportive housing) units
- Seaforth General Hospital (part of the Huron Health Care Alliance)
  - Campus partners include: the Seaforth medical clinic, the South West CCAC, and the new Huron East *Healthcare Centre of Excellence* which houses the Huron community Family Health Team, the Gateway Rural Health Research Centre ([www.gatewayresearch.ca](http://www.gatewayresearch.ca)) and Healthkick Huron (an innovative rural recruitment & retention project – see below)
- West Parry Sound Health Centre ([www.wpshec.com](http://www.wpshec.com))
  - Campus partners include: Lakeland long term care centre, aboriginal healing centre, ambulance station & dispatch, and 5 satellite nursing stations (staffed by nurse practitioners) located the hospital's catchment area

### C.2.2 Rural Health Networks

Following the release of the 1997 Rural and Northern Healthcare Framework (RNHF) and at the direction of the Health Services Restructuring Commission, all small hospitals in Ontario were required to join designated rural hospital networks for the purpose of achieving administrative efficiencies and clinical partnerships. For example, the Wellington County Hospitals Network which operated prior to the formation of the Waterloo Wellington Local Health Integration Network was one example of this 'horizontal integration' strategy. The RNHF also prompted the administrative alliance and eventual amalgamation of the Palmerston and Mount Forest hospitals as the North Wellington Health Care corporation, and eventually led to the current administrative alliance between North Wellington Health Care and the Groves Memorial Community Hospital.

While the initial intent of the RNHF was 'horizontal' integration, the longer term goal was the evolution of rural hospital networks into rural health networks as part of a longer term vertical integration strategy. For many reasons, this longer term goal was not achieved and many of these rural hospital networks either dissolved or were re-configured with the creation of LHINs.

However, there are a few notable exceptions. The Grey Bruce Hospitals were able to successfully transform their hospital network into a rural health network prior to the creation of LHINs. The *Grey Bruce Health Network* today is a legal partnership between the 3 hospital corporations (Grey Bruce Health Services, South Bruce Grey Health

Centre), the South West CCAC and the Grey Bruce Health Unit and devotes dedicated resources each year to specific projects designed to improve patient care. The other noteworthy rural health network in Grey-Bruce, which has received provincial recognition as an innovative rural strategy, is *Mental Health Grey Bruce*, a legal partnership between the providers of mental health services (Grey Bruce Health Services, Grey Bruce Community Health Corporation and CMHA-Grey Bruce). Through this partnership structure, the 3 corporations operate 5 multi-disciplinary community mental health teams so there is equitable service provision throughout their large rural catchment area.

In addition to the *Grey Bruce Health Network* and *Mental Health Grey Bruce*, all health service providers in Grey Bruce have formed the *Grey Bruce Integrated Health Coalition* which is a governance and management coalition (i.e. Board Chairs and CEOs) established to work with the South West LHIN on broader issues of system integration in order to strengthen rural health services.

Another innovative rural network model is described in a proposal submitted last year to the Central West LHIN by the Dufferin Mental Health and Addictions Planning Project. The goal of the *Dufferin Integration Solution* is one coordinated community mental health and addictions system for Dufferin County where service providers are “*woven together in a service partnership which will ensure shared accountability, coordinated access to a range of clinical and support services, which will be delivered in a seamless, integrated manner reaching out into the community, at the door, behind the door, and in the back office*” (Jenny Carver & Associates for the CWLHIN Mental Health and Addictions Core Action Group, 2008).

The proposed service framework for the Dufferin partnership is the ‘Dufferin Hub’ with related satellite sites and outreach services. The Hub will be a visible front door to a coordinated community health and addictions service network with integrated information, referral and access processes and protocols, employing state-of-the-art eHealth and telehealth technologies. Consistent with LHIN priorities, one of the key goals of the *Dufferin solution* is to increase community capacity ‘upstream’ in order to reduce the historic reliance on ER and inpatient care.

### **C.2.3 Seniors Supportive Housing**

In its final report submitted to the Waterloo Wellington LHIN earlier this year, the Seniors Supportive Housing and Wellness Steering Committee of the Waterloo Wellington Community Support Services Network outlined a comprehensive and coordinated model for non-profit seniors’ supportive housing services. As noted in the report, even though there is strong research evidence about the cost-effectiveness of supportive housing as a key component of an integrated health system, there are no supportive housing services geared to seniors within the WWLHIN (Bessant Pelech Associates, 2009, p. 10). The report also highlights the gap in rural community support services, “*Of critical note is the disparity in CSS programs between the Region of Waterloo and Wellington County. The small operating budgets, geographically dispersed clients and limited*

*service offerings of the Wellington HSPs all contribute to this inequity within the WWLHIN” (Bessant Pelech Associates, p. 10).*

In the development of proposed service delivery models, the committee focused on two key principles:

- Person-Centredness; and
- Neighbourhood Connectedness;

And defined the following *core basket* of supportive living services:

- Personal support services (incl. assistance with activities of daily living);
- Homemaking services;
- Emergency response (i.e. electronic home device providing 24/7 monitoring);
- Attendant services;
- Security checks/reassurance;
- Friendly visiting;
- Restorative support services (provided by CCAC therapists);
- *The Care Centre* (as an alternative to ER and hospital services)

The latter two components are considered innovative and unique features of the Waterloo Wellington proposal.

The report describes four(4) “*Quick Start*” models:

- Supported Living Apartments
- Supported Living Apartment and Service Base
- Supported Living Apartment and Neighbourhood Service Centre
- Supported Living Apartment and **Rural** Neighbourhood Service Centre

In the latter two models, supportive housing services are provided to clients in apartments as well as those eligible seniors living in their homes. The service centre will accommodate CSS services and becomes the centre of service and activity in the neighbourhood for seniors who need support. In the rural version of the model, the neighbourhood service centre would need certain different functions including:

- Village square – to provide seniors living in more remote rural settings with a residential option to which they can come for the day;
- Winter safety and security service – involving the relocation of remote rural seniors who live at higher risk during the winter months to an appropriate hotel property in a proximal village or town.

#### **C.2.4 Recruitment and Retention of Rural Health Professionals**

Healthkick Huron ([www.healthkickhuron.ca](http://www.healthkickhuron.ca)), referenced earlier as part of the Seaforth health campus, has been formally recognized by the Ministry of Health and Long-Term Care as an innovative rural health strategy. It is the most comprehensive recruitment

strategy for rural health professionals organized through a stand-alone administrative structure and includes the following components:

- Financial support for local physician recruitment initiatives and events;
- Community Ambassador program that recognizes and supports interested citizens to support health care recruitment and encourages networking of local recruitment committees;
- Health career exploration opportunities for rural youth (including MedQuest camp for grade 10/11 students interested in medicine; classroom visits and an annual careers symposium);
- Student co-op work placements in local rural health organizations (hospital, family health team, nursing home);
- Local training programs for residents interested in Practical Nursing (in partnership with Georgian College).

In addition to its comprehensive scope, the other innovative feature of Healthkick Huron is its funding structure. Much of its annual operating grant is funded through the Rural Economic Development (RED) program of the Ontario Ministry of Agriculture and Rural Affairs along with financial support from the County of Huron, the Huron Business Development Corporation and the Huron East Community Development Trust.

## Appendix D – National and Provincial Indices of Rurality

### D.1 –Variables for Proposed National Index of Rurality

<b>Factor 1: Distance to a secondary referral centre</b>	<b>Distance Score</b>
• <20 km.	1
• 20-49 km.	2
• 50-99 km.	3
• 100-199 km.	4
• >200 km.	5
<b>Factor 2: Barriers to timely access to healthcare services</b>	<b>Barrier Score</b>
• Road access – closed fewer than 5 days per year	1
• Road access – closed 5 days or more per year	2
• Access by train and air only	3
• Access by train and air only with weather-dependent schedule	4
• Access by air only	5
<b>Factor 3a: Number of physicians</b>	<b>Physician FTE Score</b>
• >2 per 1000 residents	1

- |                      |   |
|----------------------|---|
| • 1.6 – 2.0 per 1000 | 2 |
| • 1.1 – 1.5 per 1000 | 3 |
| • 0.6 – 1.0 per 1000 | 4 |
| • 0 – 1.5 per 1000   | 5 |

<b>Factor 3b: Number of Nurses</b>	<b>Nurse FTE Score</b>
• >8.9 per 1000 residents	1
• 6.0 – 8.9 per 1000	2
• 4.5 – 5.9 per 1000	3
• 3.0 – 4.4 per 1000	4
• <3.0 per 1000	5

<b>Factor 4: Ability to provide services such as obstetrics, general surgery and anesthesia</b>	<b>Service Score</b>
• General surgery, anesthesiology, and specialized obstetrical services always available in town	1
• General surgery, anesthesiology, and specialized obstetrical services available most of the time in town	2
• General surgery, anesthesiology and specialized obstetrical services available occasionally in town	3
• No general anesthesia, only normal newborn delivery in town	4
• No general anesthesia, no healthcare provider available for normal deliveries	5

<b>Factor 5: Distance to tertiary referral centre</b>	<b>Distance Score</b>
• <20 km.	1
• 20-49 km.	2
• 50-99 km.	3
• 100-199 km.	4
• >200 km.	5

<b>Factor 6: Level of on-call responsibilities</b>	<b>On-call Score</b>
• 1 in 6 (or less) days (<120 hrs/month)	1
• 1 in 5 days (144 hrs/month)	2
• 1 in 4 days (180 hrs/month)	3
• 1 in 3 days (240 hrs/month)	4
• More than 1 in 3 days (>240 hrs per month)	5

<b>Factor 7: Difficulty in obtaining locums</b>	<b>Locum Score</b>
• Never difficult	1
• Seldom difficult	2

- Sometimes difficult 3
- Usually difficult 4
- Always difficult 5

<b>Factor 8: Availability of equipment such as x-rays and lab services</b>	<b>Equipment Score</b>
• Full suite of radiological and lab services in town, 24 hrs/day	1
• Full suite of radiological and lab services in town, limited hours	2
• Most radiological and lab services in town, limited hours	3
• Limited x-ray, lab services in town	4
• No x-ray or lab services in town	5

<b>Factor 9: Availability of public transportation to healthcare services</b>	<b>Transportation Score</b>
• Regular bus service within & between communities, taxi	1
• Regular bus service between communities, taxi	2
• Limited bus service between communities, taxi	3
• Taxi only	4
• No public transportation or taxi	5

<b>Factor 10: Size of catchment area</b>	<b>Catchment Score</b>
• <20 km. radius	1
• 20-49 km. radius	2
• 50-99 km. radius	3
• 100-199 km. radius	4
• >200 km. radius	5

#### D.2 Original Variables for Rurality Index of Ontario (RIO) developed by OMA

- **TIME<sub>b</sub>** = Measure of travel time to nearest basic referral centre;
- **TIME<sub>a</sub>** = Measure of travel time to nearest advanced referral centre;
- **POP<sub>m</sub>** = Measure of community population;
- **GPR** = Measure of population to GP ratio;
- **GP** = Measure of the number of active GP/FPs in community;
- **HOSP** = Measure of the presence of hospital;
- **AMB** = Measure of the availability of ambulance service;
- **SOC** = Measure of social indicators;
- **WTHR** = Measure of weather conditions;
- **MSS** = Measure of selected services (i.e., GP, obstetrics and anesthesia).

The overall RIO was then disaggregated into two separate measures or components:

- **RIO Component A** consists of a grouping of five of the factors that capture the geographic/physical or relatively fixed aspects of the community (where Component A = TIMEb + TIMEa + POPm + SOC + WTHR); and
- **RIO Component B**, composed of the other five factors, captures directly the factors relating to medical service delivery and physician workload (where Component B = GPR + GP + HOSP + AMB + MSS)

### D.3 Original (2000) and Current (2008) RIO Scores for WWLHIN Communities

#### **Original RIO Scores**

<b>Community</b>	<b>RIO</b>	<b>RIO_A</b>	<b>RIO_B</b>
Palmerston	61.6	41.4	81.8
Clifford	60.8	46.3	70.8
Minto	59.4	45.1	69.4
West Luther	58.9	43.6	70.8
Arthur (township)	57.9	42.3	70.8
Drayton	55.5	39.0	70.8
West Garafraxa	54.9	38.2	70.8
Peel	54.8	38.8	69.4
Pilkington	54.1	37.0	70.8
Maryborough	53.4	42.9	58.5
Nichol	52.3	34.6	70.8
Wellesley	51.4	34.9	67.9
Harriston	50.8	42.8	51.9
Erin (township)	49.6	31.8	69.4
Dundalk	49.5	38.5	56.5
Mount Forest	48.0	40.5	49.0
Guelph (township)	47.7	28.2	70.9
Eramosa	47.0	28.1	69.4

Arthur	46.4	36.1	53.4
Puslinch	45.3	29.6	62.4
Fergus	43.2	30.9	54.8
Elora	43.2	33.2	50.4
North Dumfries	42.0	22.9	66.5
Erin	41.7	31.9	49.0
Wilmot	40.3	27.5	53.5
Woolwich	30.7	21.4	40.5
Waterloo	12.1	4.7	24.2
Guelph	7.0	6.1	8.9
Cambridge	6.4	3.3	12.5
Kitchener	6.0	4.1	10.1

**Current (2008) RIO Scores**

<b>Community</b>	<b>RIO Score</b>
Minto	46
Wellington North	42
Southgate	48
Erin	31
Centre Wellington	25
Mapleton	39
Wilmot	26
Wellesley	35
Woolwich	26
North Dumfries	29
Cambridge	4
Kitchener	5
Waterloo	7
Puslinch	29

Guelph	4
Guelph/Eramosa	28

## Appendix E - 'Themed' Notes from WWLHIN Rural Health Community Consultation Sessions

### 1) *What do you see as some of the key issues and challenges in terms of access to rural health care services?*

#### **Access to Primary Care/ Lack of Family Physicians**

- 70% would use local health care provider – a large percentage do not an MD
- Some people don't necessarily want to have a consistent doctor
- Some younger people not necessarily wanting a GP vs. medical services "as needed"
- 4,800 orphan patient in the Ayr/Rockwood area
- Have Family Health Teams work in teams to refer clients to services
- Role and responsibility of GPs has expanded with an increase on demands for their time
- Without local primary care, you can let "situations slide" that become more complex and costly to treat
- Many seniors do not have an MD, and don't travel
- Need access first before other issues can be addressed
- Time to qualify IMGs (foreign trained physicians) is problematic
- Interdisciplinary team
- Role and responsibility of GP's

#### **Access to Specialists**

- Closing surgery may have a domino effect that closes the hospital eventually
- Number of physicians soon to retire
- Access to certain specialists is very limited
- Facility and technology needed to get new recruits
- Lack of access to psychiatrists is really problematic as they are the "gatekeepers" to be able to access money, housing, diet allowance
- Psychiatrists support for mental health needed

#### **Acute Care Facilities/Services**

- Inadequate facilities, re: infection control, privacy, washrooms
- Deserve to have services close to home in Hospital
- Communities have given a lot of money to local Hospital, lots of ownership/pride
- If Fergus is getting a brand new hospital facility, will this replace Louise Marshall Hospital & Palmerston and District Hospital?
- Physiotherapy is not funded by the Family Health Team yet the hospitals cuts include decrease by 75% of the outpatient service
- Regional Cancer site making inroads in rural sites
- People who don't have a GP go to the ER
- If OR is available, consider having specialist come here – better local access
- Rural needs are not the same in all rural areas e.g. Erin Township access to hospital care
- ER wait times
- Long wait times for CT/MRI/Cancer

- Closing of beds
- Lack of coordination
- Confusion of availability of services
- Back up in ER related to ALC patients in ward beds etc.
- Lack of system coordination

### **Generic Access to Health Services**

- In rural areas, timely access to certain therapies is compromised in the case of needed treatment
- Need to think differently i.e. decrease need/demand from city
- Do not need “city” solutions to rural concerns
- Knowledge how to access all
- People are not aware of where services are
- 7 day service is important incl. evenings and weekends
- Seniors vs. young family access varies
- Common access to all services
- Resources available list helps
- Many services are not funded by OHIP
- Access to dietician/physiotherapy with no MD
- Lack of knowledge of what is available
- Want to be able to access services
- How do we define “community”; i.e. what’s reasonable to consider “close to home”
- Does it make sense to have patients travel to provider?
- Home 2 last, waiting at home - services look good on paper but doesn’t meet the full need
- Need for more/focus on primary care services, more cost effective & responsive
- Accessibility – rehab & speech
- Need access first
- Lab services
- Access to information
  - Website information
  - Link information to the township website and regional website
  - Choice about where you go for services
  - Going into schools to provide information.....as resources allow
  - Go into churches esp. Senior/Horticulture, Senior Time Out, etc. Go where people are

### **Wait Times**

- ED wait times – even though better than in other parts of province still not acceptable
- People in KW/Guelph come to Groves and this adds to Fergus ED wait times
- No walk in clinic where you can just walk-in with no appointment
- Wait time for support services
- CCAC waits are long for Rehab & Speech
- Wait time for support services

### **Lack of Transportation Options**

- No access to vehicles in Wellington other than private taxi service but limited
- No public transportation
- Knowledge, knowing where, how, who to call to access services. Some didn’t know about volume based transport services

- Transportation for people with mobility issues – not always affordable
- Transportation to MD / ER / to visit family
- Transportation in terms of cost, availability, time
- Perceived vs. reality
- Concern with moving services – transportation - people may not drive
- Access for Mennonite populations reduced – longer travel
- Wheelchair access in transportation
- Travel – car, license, distance
- Distance, weather, horses & buggies
- Older patients may not drive
- Road closures in storms
- Wellington County transportation is private pay
- Mobility Plus – only M-F (no weekends) but you need to book ahead
- Age makes it difficult to travel
- Can't "rely" on kids to take you to appointments
- Age makes it difficult to travel to see a doctor far away
- Need organized and stable options for transportation, not necessarily volunteer based services
- Lots of volunteer delivered services
- Need a vision where services should be...what makes sense locally, cost-effectively, then look at transportation.

### **Ambulance/EMS**

- Emergency services for appendicitis, no ambulance, family had to drive
- Ambulance wait times
- Ambulances are particularly important in rural areas, skill/technology has increased, yet access to ambulance may not have improved
- Determining priority for ambulance services
- Stretcher transportation services

### **Services for Seniors (Community and Facility-based)**

- Growing population
  - Long term care
  - Palliative care
  - Community support services
- Coordination between families, elderly and healthcare providers in discharge planning
- Availability of "home at last" program
- Transportation growing concern as people get older
- Affordable test availability
- People are not aware of where services are
- 19% over 55+ years
- Monetary incentive to help seniors afford to live at home vs. nursing home
- Lack of availability of LTC beds
- Long-term care & Nursing Homes

### **Community Support Services**

- Lots of access but no people. Home care 1<sup>st</sup> month 120 hrs, ongoing 90 hours no people to provide services
- Husband had Alzheimer's – only 2 hours/week but needs more

- Community support service – not equal among counties i.e. home help services not available in rural Wellington but elsewhere
- Privatization of healthcare i.e. private homecare agencies
- Communication between CCAC & CSS not what should be, services are still silo'd
- If CSS services received more money could do more, e.g. transportation
- Community support service gaps (unequal)
- Pater Place is volunteer based
- Lang's is looking at youth services
- Lots of volunteer delivered services

### **Supportive/Affordable Housing**

- Need affordable housing
- Infrastructure needs to be in place e.g. H2O, sewage
- Supportive housing in rural setting
- Housing needs not just for seniors
- Very little subsidized housing
- Supportive housing in Ayr

### **Mental Health and Addiction Services**

- Need case coordinators/system navigators within mental health
- Access to addiction services
- GP needs to support these services
- Children's mental health issues; limitation on age level of patients who need help
- Interdisciplinary team approach would work well here

### **Lack of Coordination across LHIN borders**

- People are aligned with different services and different cities "patchwork"
- 2/3 Emergency ambulances may take you to a different hospital
- Home care/CCAC – situation similar to above with jurisdiction / crossover
- Ayr is home but different LHINs are accessed

### **Health Human Resource Issues**

- Wage disparities – act as disincentive
- Competition for staff if mileage is not reimbursed
- Equality and fairness for all employees
- New hires should not necessarily be covered at the same amount

### **Funding/ Administration**

- Residents should not be expected to fundraise for the whole amount
- Funding in the rural areas is disproportionate to the population; also a growing population
- I don't think the funding is sufficient for: (a) this LHIN; (b) the northern area of the LHIN due to the seniors' population
- Don't treat LHINs "differently" based on "healthy status"
- Cutting by 3% of the total budget of 19 million is very low %; after giving up these services, how do you get them back – rely for future growth in the area
- Too much time on record keeping rather than care

### **Focus on Prevention**

- Increased physical activity in schools – need equipment

- Better nutrition education

### **Miscellaneous**

- Audience focused communication mediums – LHIN bulletins too much. Don't spend money on bulletins spend on Healthcare awareness
- Outreach to those in the community
- Some people need patient advocates
- Isolated
- Pride in “self-sufficiency”; difficult to ask for help
- Ayr – no man's land – little choice
- Becoming more of a suburban area with young families

## **2) *How can we make our local health system more responsive to the needs of rural residents?***

### **More Rural-Focused Planning**

- Input from all rural residents in WWLHIN
- Unique in each rural area
- Base number on our demographics, age, seniors, teen needs, systematic approach to determine services.
- East Wellington under-serviced for doctors; only 1 doctor in Rockwood
- Demographics
- Apples to apple comparison
- Critical mass issues

### **Greater Awareness of Services**

- Public awareness of services
- Advertise the community resource centre on the tax bill, water bill, senior days in stores
- Incorporate money for spreading the word about services
- Centralized access points for health and social services i.e. 211
- Information on wait times could be posted or linked on township website
- The LHIN website could have this information, as well as HealthCare Connects
- Going into schools to provide information.....as resources allow
- Go into churches esp. Senior/Horticulture, Senior Time Out, etc. Go where people are
- Local wellness fairs to provide more awareness of services

### **More Coordinated Services/ Partnerships**

- Multi-service centre
  - Health, social service/legal
  - Medical (may be secondary)
  - Need “connections
- Have Family Health Team work more closely with community support services, e.g. co-locate in the same building
- Has Aging at Home created uncoordinated services?
- Is their duplication? Problems with communication? How do we work together?
- Lack of client centered service delivery
- Some overlap with regard to palliative care with Family Health Teams and Community Care Access Centre

- Follow-up care, Discharge care poorly coordinated; this is compounded by geography
- Discharge plans needs to be better coordinated
- Organizations could work more “smoothly” together; contribute to the flexibility
- Facilitate more community consultation and reaching out to other potential partners e.g. Conestoga College

### **Using “System Navigators”**

- Patient advocate
- Coordination of appointments look at others to help client navigate
- Look at others to help client navigate

### **Redevelopment/Better use of Rural Hospital Facilities**

- If backlogs in “city” hospitals, refer to rural facilities
- If Guelph is cancelling surgery – Groves for OR
- Move ahead with new facility in Fergus - costs will go up the longer we wait to build
- People are very generous in this community, yet aren’t seeing “new build”
- Feeling like punished by Liberal government...in a conservative riding – politics need to be removed
- Concern - Is there a 5 day limit on hospital stays?
- Hospitals in rural areas are different
- Bring urban services into rural areas e.g. Lab closer to home
- Difficulty access tertiary facilities for patients in ER
- 2 isolation beds may not be sufficient extra beds
- Support the campus concept – overlaid with a green model
- Keep nutrition and food access levels up (hospital food services)
- Look at more fully utilizing our services – dialysis, OR, cancer clinic
- Send urban clients up here

### **Improved Access to Services**

- Need more capacity in services for people at home
- Choice about where you go for services
- Need “urgent care”/walk-in clinic instead of more costly emerg visit
- Effectiveness of programs to discharge patients doesn’t seem to be working quickly....they are in beds
- Improve Wait times – colonoscopy is good SLP supportive services but wait time is 1.5 years
- Look at providing innovative ideas to keep services
- Physiotherapy – where else can it be provided? How?
- Concern re: transportation if hospital services divided up
- Lab services – possibility of offering these services at the community health centre (people go to Cambridge)
- Mobile models for doing blood work
- Primary care mobile services
- Mental health patients can fall through cracks
- Palliative/hospice closer to home – out of home not in home
- User fees as a way to “self select”/ limit access

### **Improve Transportation (incl. Ambulance Services)**

- Transportation to non-acute appointments
- Transportation between facilities

- Strengthen volunteer transportation services
- May not need a fixed location
- “Seniors Van” – there is a cost (seniors don’t want to pay for services) “I have paid into this all my life”
- Ambulances and non-urgent transportation for other sites e.g. tests – funded not user pay
- Ability to get ambulance to transfer not working well. This would need to be addressed extra? Flexibility?

### **Increase Supply of Health Professional/ Innovative HHR Strategies**

- Family Health Teams all need exercise specialists
- Access to specialists
- If you move patient to new hospital will they have their own MD?
- Community knowledge with decision made
- We have a great primary care system that has capacity let’s share -> so that they can be fully utilized to keep our services
- Listen to front line staff
- Links with schools to careers in rural areas
- Tuition reimbursement for local rural residents to fill HR gaps in our rural health system
- Need to get ear of MPs to advocate for increase number of nurse practitioners and to increase the scope of practice for many health professionals
- Nurse practitioner Led clinics
- Advocate for increased supply of Nurse practitioner “Grow Your Own”
- M.D. appears to be the “key” to access/resources
- Why aren’t we graduating more doctors?
- Canadian students who train overseas need to be allowed to practice here sooner
- Better utilize foreign trained doctors “balance accountability and speed”
- Should physician practices be reflective of community?
  - Yes-OMA has some rules in place...practices age along with doctor

### **Cross LHIN Planning**

- Ensure cross-LHIN discussions around planning and access (Brant, Niagara) to make sure that services are integrated and coordinated
- Encouraging organizations to be more “fluid” with respect to Tertiary Care
- Physician referral patterns appear to be based on collegial relationships, and not necessarily where the patient might receive the most appropriate care
- We need to better understand the “current” state of referral patterns of MD’s
- Getting services outside of our LHIN because wait times are longer in WWLHIN
- WWLHIN wide & neighbouring LHIN wait list to share capacity
- How can we increase the receptivity of specialists to take on patients both within our LHIN and in other LHINs when that is appropriate?

### **More Effective Communication**

- Make LHIN budget easy to read
- Speak plainly; go to where people are
- Access to information
- Website information
- Link information to the township website and regional website
- Need to get ear of MPPs

- Need education/information about LHINs
- Rockwood and Erin both need meetings
- LHIN needs to have clear communication about how people can participate

### **Utilize Information Technology**

- Technical support services
- Telemedicine
  - Sort out the difficulty with physician funding for “remote consultations”  
The IT is in place; a system for paying the doctors is not
- Electronic health record

### **More Prevention**

- Health in general needs to stay in the public eyeHealth promotion
- Need for preventive practices with attention to fitness, lifestyle

### **Miscellaneous**

- Learn/look at models from other countries
- “Processed to death”
- Move to a culture of action and reward. “Paralysis of Analysis”
- Accountability

## **Appendix F – Patient Volumes, Conservable Patient Days and Referral Populations of Wellington Hospitals**

### **Institution: 4326 - North Wellington Health Care - (PALMERSTON)**

<b>Total Acute Volume</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Patient Days	3,625	3,638	4,078	4,377	3,805
Separations	840	924	1,036	990	922
Weighted Cases	730.5	754.0	812.0	856.4	726.7
<b>Conservable Patient Day</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Alternative Level of Care (100%)	102	57	47	165	287
CMG851 (Dx Not Gen. Hosp. - 100%)	8	22	1	0	70
CMG910 (Not. Norm. Req. Hosp. - 100%)	0	0	0	0	7
Medical MNRH (25%)	18	15	14	19	26
Day Surgery (75 Percentile)	42	25	22	49	32
Day Surgery (50 Percentile)	39	17	14	33	11
Reduced Length of Stay (75 Percentile)	368	514	707	729	605
Reduced Length of Stay (50 Percentile)	222	220	416	403	309
<b>Referral Population</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>

Total Referral Population	9,336	10,234	10,907	11,184	10,399
ESI Referral Population	9,781	9,993	10,735	11,656	10,037
Expected Stay Index (ESI)	1.05	0.97	0.98	1.04	0.96
Patient Days Per 1000 ESI Population	370.6	364.1	379.9	375.5	379.1
Separations Per 1000 ESI Population	85.9	92.5	96.5	84.9	91.9

**Institution: 4323 - North Wellington Health Care - (MOUNT FOREST)**

<b>Total Acute Volume</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Patient Days	4,172	4,072	3,837	4,240	4,194
Separations	844	833	817	840	852
Weighted Cases	772.2	781.0	755.6	796.7	794.2
<b>Conservable Patient Day</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Alternative Level of Care (100%)	277	174	99	221	162
CMG851 (Dx Not Gen. Hosp. - 100%)	32	6	29	1	1
CMG910 (Not. Norm. Req. Hosp. - 100%)	0	0	0	0	1
Medical MNRH (25%)	15	10	9	8	22
Day Surgery (75 Percentile)	21	31	20	19	37
Day Surgery (50 Percentile)	18	27	16	12	25
Reduced Length of Stay (75 Percentile)	536	730	810	739	865
Reduced Length of Stay (50 Percentile)	311	337	524	441	494
<b>Referral Population</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Total Referral Population	9,174	9,206	9,033	9,549	10,325
ESI Referral Population	9,699	10,469	9,720	10,548	11,347
Expected Stay Index (ESI)	1.05	1.13	1.07	1.10	1.09
Patient Days Per 1000 ESI Population	430.2	388.9	394.8	402.0	369.6
Separations Per 1000 ESI Population	87.0	79.6	84.1	79.6	75.1

**Institution: 1936 - Groves Memorial Community Hospital - (FERGUS)**

<b>Total Acute Volume</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Patient Days	11,343	11,321	10,689	11,261	11,199
Separations	2,224	2,243	2,119	2,229	2,162
Weighted Cases	1,995.3	2,008.5	1,897.2	1,971.6	1,919.6
<b>Conservable Patient Day</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>

Alternative Level of Care (100%)	116	126	122	47	271
CMG851 (Dx Not Gen. Hosp. - 100%)	67	3	2	9	40
CMG910 (Not. Norm. Req. Hosp. - 100%)	3	0	1	0	3
Medical MNRH (25%)	39	50	51	48	63
Day Surgery (75 Percentile)	122	106	114	139	116
Day Surgery (50 Percentile)	83	54	48	53	49
Reduced Length of Stay (75 Percentile)	2,808	2,768	2,691	2,945	2,811
Reduced Length of Stay (50 Percentile)	1,673	1,520	1,597	1,860	1,697
<b>Referral Population</b>	<b>03/04</b>	<b>04/05</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>
Total Referral Population	24,273	24,798	23,148	24,645	24,488
ESI Referral Population	24,602	25,889	24,309	25,095	24,553
Expected Stay Index (ESI)	1.01	1.04	1.05	1.02	1.00
Patient Days Per 1000 ESI Population	461.1	437.3	439.7	448.7	456.1
Separations Per 1000 ESI Population	90.4	86.6	87.2	88.8	88.1

## Appendix G – WWLHIN Specialist Needs Survey (March 2008)

900 surveys were distributed and 200 were returned for a response rate of 22%. Respondents were asked to answer the following question: *"Based on your experience in making referrals to specialists, are additional specialists needed in our LHIN to enhance timely and safe care?"*

<b>RANK</b>	<b>Specialty</b>	<b># of respondents answering 'YES'</b>
1	Neurology	126
2	Psychiatry (Adult)	118
3	Rheumatology	112
4	Psychiatry, (Child & Adolescent)	109
5	Chronic Pain, Management	91
6	Dermatology	84
7	Gastroenterology	78
8	Plastic Surgery	77
9	Neurosurgery	73
10	Oncology, Medical & Hematology	73
11	General Internal Medicine	72
12	Endocrinology	70
13	Geriatric Medicine	67
14	Orthopaedics	62
15	Radiology, Interventional	62
16	Infectious Disease	60

17	Rehabilitation/Physiatry	59
18	Allergy	50
19	Nephrology	49
20	Emergency Medicine	46
21	Palliative Medicine	44
22	Vascular Surgery	44
23	Ophthalmology	43
24	Cardiology, Medical	39
25	Anesthesiology	36

## Appendix H – Rural Wellington Patient Days and Admissions to Homewood Health Centre (2008-09)

### Patient Days

	April - June	July - Sept.	Oct. - Dec.	Jan. - March	Totals
M2 Sumit (POA)	93	120	91	120	424
H3 Older Adults Dementia	543	451	369	572	1935
CPC	180	298	329	159	966
T1 ICU	35	65	124	78	302
T2 Assessment	197	196	308	355	1056
<b>Trillium Total:</b>	<b>232</b>	<b>261</b>	<b>432</b>	<b>433</b>	<b>1358</b>
<b>Patient day commitment</b>	<b>182</b>	<b>184</b>	<b>184</b>	<b>180</b>	<b>730</b>
<b>Grand Total:</b>	<b>1048</b>	<b>1130</b>	<b>1221</b>	<b>1284</b>	<b>4683</b>

### Homewood Admissions from 3 Rural Wellington Hospitals

	GMCH	LMH	PDH
October 2008	0	0	4
November 2008	2	0	1
December 2008	6	0	1
January 2009	5	2	2
February 2009	4	1	0
March 2009	3	0	4
<b>Total</b>	<b>20</b>	<b>3</b>	<b>9</b>

**Legend:**      **GMCH** = Groves Memorial Community Hospital  
**LMH** = Louise Marshall Hospital  
**PDH** = Palmerston & District Hospital

## Appendix I – Long-Term Care Facility Occupancy Rates across the WWLHIN (Jan. 2009)

Long Term Care Home	Long Stay Supply	Long Stay Vacancy	Utilization
FAIRVIEW MENNONITE HOME	84	1	98.8
A R GOUDIE EVENTIDE HOME(SAL. ARMY)	79	0	100
NITHVIEW HOME	96	0	100
GOLDEN YEARS NURSING HOME	90	2	97.8
HILLTOP MANOR CAMBRIDGE	90	2	97.8
FOREST HEIGHTS LONG TERM CARE CENTRE	240	14	94.2
CARESSANT CARE FERGUS NURSING HOME	87	3	96.6
LAPOINTE-FISHER NURSING HOME	91	1	98.9
CARESSANT CARE HARRISTON	89	0	100
SAUGEEN VALLEY NURSING CENTER	85	0	100
MORRISTON PARK NURSING HOME	28	0	100
TWIN OAKS OF MARYHILL	31	0	100
RIVERBEND PLACE	54	0	100
ELLIOTT HOME (THE)	85	0	100
PARKWOOD MENNONITE HOME	96	0	100
SAINT LUKE'S PLACE	112	3	97.3
SUNNYSIDE HOME	251	0	100
TRINITY VILLAGE CARE CENTRE	150	1	99.3
THE WESTMOUNT	161	8	95
STIRLING HEIGHTS	110	0	100
COLUMBIA FOREST LONG TERM CARE CENTRE	156	1	99.4
LEISUREWORLD CAREGIVING CTR-ELMIRA	94	0	100
RIVERSIDE GLEN LONG TERM CARE FACILITY	96	0	100
ST ANDREW'S TERRACE LONG TERM CARE COMMUNITY	128	1	99.2
LANARK HEIGHTS LONG TERM CARE CENTRE	160	0	100
WINSTON PARK NURSING HOME	95	0	100
EDEN HOUSE NURSING HOME	58	0	100
ROYAL TERRACE	67	0	100
CARESSANT CARE ARTHUR NURSING HOME	80	3	96.3
CHATEAU GARDENS ELMIRA LTC CENTRE	48	0	100
PINEHAVEN NURSING HOME	85	0	100
CAMBRIDGE COUNTRY MANOR	80	0	100
DERBECKER'S HERITAGE HOUSE	73	1	98.6
WELLINGTON TERRACE HOME	176	0	100
ST JOSEPH'S HEALTH CENTRE	143	0	100
<b>Waterloo Wellington CCAC/ LHIN</b>	<b>3648</b>	<b>41</b>	<b>98.9%</b>



## Appendix J – Schedule of Community and Stakeholder Consultations (Nov. 2009 – Jan. 2010)

### Community Consultations

<b>Date</b>	<b>Rural Community</b>
Nov. 16, 2009	Erin
Nov. 25, 2009	Swinton Park
Nov. 30, 2009	Dundalk
Dec. 1, 2009	Linwood
Dec. 2, 2009	Harriston

### Stakeholder Consultations

<b>Date</b>	<b>Stakeholder Group</b>
Nov. 26, 2009	Clinical Services Optimization Committee (Guelph)
Dec. 16, 2009	Rural Wellington physicians (Fergus)
Jan. 19, 2010	Rural Perth physicians (Listowel)