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HÔTEL DIEU GRACE HEALTHCARE AND WINDSOR
REGIONAL HOSPITAL

STAGE 1 PROPOSAL – PART A
1.0 SERVICE DELIVERY MODEL REPORT

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This document was developed by Agnew Peckham, Health Care and Facility Planners and reflects the collaboration between the Agnew Peckham consulting team, Hôtel Dieu Grace Healthcare, Windsor Regional Hospital and Erie St. Clair Local Integration Network (ESC LHIN). It is based on the planning process of the Ministry of Health and Long-Term Care.

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Table of Contents

Executive Summary

- Proposal Synopsis i
- Approach iii
- Provincial Planning Directions vi
- Current Roles ix
- Future Service Delivery Model x
- Siting Concepts xv
- Scope of Services xvi
- Service Delivery Model Changes xxii
- Historical and Projected Beds and Activity xxxiv
- Anticipated Outcomes xxxv
- Implementation Plan xxxvi

Stage 1 Part A Submission Checklist 1

Responses to MOHLTC Questions 8

Stage 1 Part A Submission Table of Contents

1.1 Background

- Introduction 1.1-1
- Community Engagement 1.1-2
- Provincial Planning Directions 1.1-5
- History of Windsor/Essex Hospital Reconfiguration 1.1-10
- New Hospital in Windsor/Essex 1.1-10
- Physical Facilities and Infrastructure 1.1-12
- Windsor Hospitals Study Task Force 1.1-13

1.2 Master Program

- Present and Future Service Delivery 1.2-1
- Utilization Management and Clinical Efficiency Studies 1.2-11
- Activity/Volume Projection Methodology 1.2-12
- Historical and Projected Workload 1.2-25
- Future Service Delivery Model 1.2-31
- Siting Concepts 1.2-36
- Scope of Services 1.2-37
- Current Services 1.2-44
- Service Delivery Model Changes 1.2-50
- Academic and Research 1.2-114
- Hospital Wide Systems and Support 1.2-119

Human Resources [redacted]

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1.4 Preliminary Operating Cost Estimate

Financial

[redacted]

Attachments

[redacted] Privacy
[redacted] Proprietary

C ESC LHIN IHSP 3 Priorities

D ESC LHIN Demographics

E Windsor Hospitals Strategic Plans:

- Windsor Regional Hospital
- Hotel Dieu Grace Healthcare

F Workload and Activity Projections (Source: HCM Group, Inc.)

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[redacted]

J ESC LHIN Community Capacity Updates ...TBD

- Adult Mental Health Services
- Chronic Disease Management
- Rehabilitation System Capacity Plan

K Erie St. Clair Balance of Care Project Windsor Essex, Final Report, April 2014, Dr. A. Paul Williams, University of Toronto ..TBD

[redacted] Human Resources

[redacted] Financial

M Patient Origin Analysis, Windsor Hospitals, July 2014 (Source: HCM Group, Inc.

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Executive Summary

Proposal Synopsis

This Stage 1 Proposal - Part A serves as Hôtel Dieu Grace Healthcare's (HDGH) and Windsor Regional Hospital's (WRH) Service Delivery Model report for the new acute care hospital in Windsor/Essex. It details the Master Program including the present and future service delivery model, and historical and projected services provided, workload and bed requirements. [redacted]

Human Resources/ Financial

[redacted] Part B will address siting and facility implications.

Part A serves as the foundation for the hospitals' long range capital plan to determine the physical space and site requirements as well the requirements for future stages (i.e., functional program) in the Ministry of Health and Long-Term Care's (MOHLTC) and the Erie St. Clair Local Health Integration Network's (ESC LHIN) joint capital planning process.

New Vision for Healthcare in Windsor/Essex

Following an extensive community engagement process and the recommendation of the Windsor Hospitals Study Task Force, the Boards of Directors of HDGH and WRH agreed on a proposed new vision for hospital care delivery in the Windsor/Essex region. The vision will realize a new, state-of-the-art single site acute care hospital, within the context of an

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integrated health system that continues to shift services located within the acute facilities to ambulatory settings, the community, patients' homes and other provider settings. Both Boards believe that the community will benefit from the economies of scale and a more consistent and coordinated approach to service delivery resulting from the realignment of acute care services under one roof. The Boards of the two Windsor hospitals implemented the two hospital corporation vision on October 1, 2013 with:

- WRH assuming responsibility for all acute services at the Metropolitan and Ouellette sites and the governance and management of the new hospital
- HDGH operating and assuming the governance and management of chronic care, regional rehabilitation, specialized mental health and addictions, and children's mental health (Prince Road site)

This is an exciting time for Windsor/Essex. The current governance and operational re-alignment provides a platform for Windsor/Essex to capitalize on the health system transformation opportunities presented by having one acute care and one post-acute care organization. These opportunities include but are not limited to

- Achieving clinical efficiencies to ensure the community has access to the right care, in the right place at the right time including: hospitals; community settings such as family health teams, health links and family physician offices, community health centres, community care access centres and outreach teams; urgent care centres; complex continuing care, long term care and rehabilitation centres; and public health
- Shifting where health care services are provided so that services are provided in the right setting; services that need to be provided in an acute hospital setting are supported and resourced; and, services required to care for patients in non-hospital settings are developed and implemented
- Infrastructure renewal to provide state-of-the-art facilities to support new models of service delivery, across the continuum of care

These opportunities facilitate the way forward for improvement in the delivery of acute services, and provide the needed special attention to post-acute care programs and services including community capacity.

A fundamental principle throughout the planning process was the scope of services and volumes provided by Leamington District Memorial Hospital (LDMH) would continue in the future.

Factors Driving Change in ESC LHIN

The key population drivers of health services planning and delivery in the ESC LHIN are:

- The large geography of the ESC LHIN and the rural nature of some of its communities pose challenges for some residents in the region to access health services.

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- The demands of an increasingly elderly population will continue to place pressure on the health care system and could disproportionately increase the demand/need for hospital services.
- The high prevalence of chronic conditions will continue to test the acute care hospital system and continued emphasis on existing and new strategies to avoid hospitalizations will be required to manage this pressure.
- The unemployment rate may have an adverse effect on select populations, increasing the need for mental health and addictions services beyond the current capacity.
- There will be increased pressures to contain the growth in healthcare costs while providing high quality and cost-effective care.

Approach

The development of the Service Delivery Model and planning parameters was guided by the Windsor Hospitals' Program and Planning Steering Committee in collaboration with

- Agnew Peckham, Health Care and Facility Planners
- HCM Group, Inc., Quantitative Data Experts
- The Hay Group, Strategic Advisor Service Delivery Models

The development of the Service Delivery Model was addressed in 3 stages:

- Stage 1 – Change Table Consultations
- Stage 2 – Community Capacity Planning
- Stage 3 – Response to MOHLTC Questions

Stage 1 – Change Table Consultations

As part of the development of the Stage 1 Proposal – Part A, over 150 local health care experts and community members were engaged in the following 12 Change Table meetings (11 clinical groups and 1 support services group) to discuss questions that were critical to achieving a new and progressive Service Delivery Model for hospital services for the Windsor/Essex community:

- Cancer
- Cardiac
- Critical Care
- Diagnostics
- Emergency
- Medicine
- Mental Health and Addictions
- Rehabilitation
- Renal
- Support Services
- Surgical Services
- Women and Children's

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As part of this engagement process, participants

- Reviewed a Discussion Document to stimulate their thinking about the future and considered leading edge information from other similar health systems, particularly ambulatory care models
- Created the vision for innovative service delivery models and directions necessary to meet community needs that reflect forward thinking about the location of services that have traditionally been in hospital settings
- Considered creative options and ideas regarding the organization and delivery of services and location of services
- Determined the implications of the service directions and assumptions on health service providers particularly the post-acute and community health service sectors
- Developed assumptions regarding projected activity
- Reviewed drafts of the Service Delivery Model for the Stage 1 Proposal – Part A

Outcomes of the Change Table meetings were reviewed by the Program and Planning Steering Committee and shared with all meeting participants in a plenary-style workshop, in which each Change Table presented their clinical directions and there was an opportunity to pose and respond to questions.

In addition, meetings were convened with

- Academic and research leaders from the University of Windsor and St. Clair College to discuss the future vision for education and research, and the implications for the new hospital
- The Medical Advisory Committee to discuss the Service Delivery Model
- Surgical representatives to review workload projections and assumptions

Stage 2 – Community Capacity Planning

A. Balance of Care

This component focused on answering the question: What services do patients need to remain at home and/or avoid admission to long term care and to reduce alternate level of care (ALC) in the acute care hospital? Dr. Paul Williams and his team from the University of Toronto conducted the study. The results of the study are essential to determine the "whole picture" of services required in the ESC LHIN. The process included data analysis, creation of "vignettes" tailored to the results from the local community, facilitation of Local Expert Panels, a high level strategy "Think Tank" session and a final report summarizing the process and results. The process was supported by a Project Advisory Panel, comprised of key local stakeholders.

This study will recommend new approaches to reduce ALC patient days in the acute hospital, prevent unnecessary hospitalizations and maintain people in their communities with the appropriate community supports.

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B. Service Delivery Model Change Table Implications

Step 1: Identify Service Delivery Model Shifts

Agnew Peckham Health Care and Facility Planners facilitated meetings with clinical and administrative leaders from the following programs/services where some services had been identified as possible to be located outside the hospital setting:

- Cancer
- Endoscopy/Cystoscopy
- Emergency
- Mental Health and Addictions
- Medicine
- Minor Procedures/Cataracts
- Renal

The focus of these discussions was to determine:

1 What volumes/workload could be located in community settings?
2 In what types of settings could/should the services be located?
3 What are the volume/workload implications for other health service providers?

Step 2: Identify a High-Level Implementation Plan

Once the service shifts were identified, the Change Tables were reconvened as Community Change Tables with representation from the following organizations:

- Canadian Mental Health Association – Windsor/Essex Branch (CMHA-WEB)
- Community Care Access Centre – Windsor/Essex
- Hotel Dieu Grace Healthcare (HDGH)
- Leamington District Memorial Hospital (LDMH)

In preparation to develop an implementation plan, each organization identified their capacity to absorb the activity/volume, the potential service gap, and resource implications (e.g., staffing, space). With this initial information, the following Community Change Tables met in March 2014 to identify a high-level implementation plan and next steps to achieve the workload shifts:

- Cancer
- Critical Care[1]
- Emergency
- Medicine
- Mental Health and Addictions
- Renal
- Women and Children's

[1] Critical Care included the Program Director only as the only workload shift issue was related to long term ventilated services.

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Stage 3 – Response to MOHLTC Questions

Upon review of the Stage 1A Submission and outcomes of the Community Capacity Plan, the MOHLTC required additional information, which has been incorporated in this Report.

Provincial Planning Directions

The future scope of services and service delivery model is based on the needs of the community served within the framework established through the MOHLTC's priorities and directions, highlighted below. The ESC LHIN, health service providers, and community used these priorities as a guide to develop innovative models to address local and regional needs.

Action Plan for the Health of Ontario

- Rebuilding Ontario's healthcare system to provide better access to the right care, at the right time, in the right place. The goal of the *Action Plan* is to create an "obsessively patient-centred" health care system by ensuring care is based on evidence, care is delivered in the right setting and care is coordinated so that patients move from one provider to another seamlessly.

The vision for Ontario health care is to make Ontario the healthiest place in North America to grow up and grow old and to provide better patient care through better value of public health dollars.

Health System Transformation

- ***Community Health Links***, which provides a model of health care delivery that is centred on patient care networks to integrate patients, and primary care and health service providers.
- ***Funding Reform*** to ensure that there is flexible funding and resources are focused where they can be used to deliver results. Hospital base budgets will be transitioned into a patient-centred funding model where the provider is rewarded for high-quality care and better use of resources. LHINs will work with hospital and community partners to transition procedures out of the high-cost hospital setting into non-profit community-based clinics.
- ***A new Seniors' Strategy that places renewed focus on keeping people from being unnecessarily admitted to hospital.***
  - improve patient transitions within and across the system and help to ensure patients are receiving more responsive care
  - improve the patient experience and deliver better value for our investment

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ESC LHIN Strategic Priorities 2013-2016

Vision and Mission

The ESC LHIN vision for the health care system is "Better Care, Better Experiences and Better Value", reflected in its mandate and mission to create a local health care system that

1 Generates better clinical and functional results especially for the most vulnerable, fragile patients.
2 Creates a more coordinated system that provides the right care, at the right place and the right time especially for the most vulnerable, fragile patients.
3 Boldly transforms the health care system, positioning it to become a highly efficient and effective performance leader.

The ESC LHIN continues to build on its previous successes and efforts underway to address its four key priorities:

1 Improved outcomes in alternate level of care.
2 Improved outcomes in the emergency department.
3 Improved outcomes in chronic disease management.
4 Improved outcomes in mental health and addictions.

The populations targeted by these priorities, in alignment with provincial directions, are:

- High users of the health care system – focus on the 1 per cent of users who consume a significant proportion of all health care resources, as well as the next 5 per cent (those at risk of becoming high users).
- Seniors – focus on chronic disease management. Key diagnoses of concern are chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and complications from diabetes.
- Mental health clients – focus on: people with serious, persistent, mental health (SPMI), people with schizophrenia, transitional-age youth, homeless people with SPMI, youth with eating disorders, older adults with responsive behaviours associated with mental health, addictions, dementia, or other neurological conditions.
- Rehabilitation clients – focus on stroke, orthopaedic, and geriatric-frail population.

To address these priority populations, the ESC LHIN is leading the development of the following plans:

1 Adult Mental Health Services
    - The vision for the service system is a full and integrated continuum of person-centred and accountable mental health services for adults with mental illness and their families.
    - 67 opportunities have been identified and grouped into 9 strategic directions to be implemented over 2012-2016.

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2 Chronic Disease Management
- 25 business cases are being developed to reduce ALOS and avoid unnecessary hospitalization
- The proposals address initiatives in
  - mobile services
  - clinics
  - prevention
  - support initiatives (i.e., telehomecare, electronic health records, etc.)

3 Rehabilitative Care
- The focus of this plan is development of business cases to address the needs of stroke, orthopaedic and frail medically complex older adults.
- The plan will include a bed-mapping component based on planning targets.
- There is a potential for additional rehabilitation beds and/or reclassification of beds.

While these initiatives are all in progress, all three present a significant opportunity to reduce acute hospital average length of stay (ALOS) and unnecessary hospitalizations. A summary of the plans is provided in the Report.

MOHLTC Planning Expectations
- Develop local program and service capacity based on interdisciplinary models of care which promote improved inter-sectoral access, quality and coordinated care
- Incorporate service delivery models based on best practice and strengthened service coordination building upon lessons of proven delivery models from other jurisdictions
- Maximize cost-effective community based service delivery
- Maximize use of electronic health technology solutions
- Streamline program and service delivery alternatives to maximize efficient use of service capacity and resources
- Planning and consultation with provincial agencies such as Cancer Care Ontario, Ontario Renal Network, Cardiac Care Network of Ontario, etc.
- Use of population data to estimate growth in service needs and adjust for project specific considerations
- Promote the least capital intensive infrastructure options where facility-based care is deemed to be the necessary option

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Current Roles

The organization of acute care hospitals in Windsor and Essex County is unique in Ontario with two large hospitals, HDGH and WRH, both providing a range of acute care services; neither of which is a fully affiliated teaching hospital (i.e., member of the Council of Academic Hospitals of Ontario).

Windsor Regional Hospital

Windsor Regional Hospital is a large multi-site health service organization providing acute medical and surgical services including emergency, family birthing centre, neonatal intensive care, paediatric services, critical care (ICU/CCU/telemetry) and regional cancer services at its Metropolitan campus. Under a local service realignment which took effect October 1st, 2013, WRH is now responsible for the Ouellette campus (formerly Hôtel Dieu Grace Hospital), a provider of advanced care in such areas as complex trauma, renal dialysis, cardiac care, stroke and neurosurgery, acute mental health and a broad range of medical and surgical services to support these specialized areas.

Hôtel Dieu Grace Healthcare

Hôtel Dieu Grace Healthcare is responsible for services at the Prince Road site (formerly the Tayfour site of WRH before the October 1st, 2013 service realignment and referenced to in previous drafts of this document as the Tayfour site). HDGH specializes in healthy aging and mobility which includes rehabilitation services and complex continuing care. As well, HDGH is a provider of neuro-behavioural health, specializing in adult mental health, children's mental health and crisis intervention.

Physical Facilities and Infrastructure

Master plan work at both WRH and HDGH has highlighted some of the challenges of the existing locations and infrastructure to meet current and future health care needs. As a result, the development of a new, state-of-the-art single site acute care hospital is a sensible direction.

WRH in collaboration with Agnew Peckham and Stantec Architecture Ltd. completed a Master Program and Master Plan for the Metropolitan (Met) Campus in 2009 and analyzed 3 options for future redevelopment. The existing facilities are outdated, undersized and cannot accommodate current patient volumes or future service needs. Most areas within the existing building require redevelopment; the areas sustaining the most pressure are the emergency department, diagnostic imaging, inpatient units and surgical suite. In addition, there are inadequate facilities to support the needs of medical students.

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The preferred option is for construction of a new facility on a greenfield site because it will: require shorter construction time and lower cost, result in the most operationally efficient and modern building; and be the least disruptive for patients, visitors and neighbours.

A Master Plan was completed for ***HDGH*** by Parkin Architects Ltd. in June 2008. Beyond an approved capital project to create a cardiac care centre that would allow 24-7 emergency angioplasty and other necessary advancements, the plan calls for a significant rebuild of seven inpatient floors.

The current VFA Canada Corporation (VFA) document reports that the building elements, beyond the additions within the last 10 years, are assessed as in fair or poor condition. A progressive replacement strategy needs to be developed for Ouellette campus.

Future Service Delivery Model

The new acute care hospital will focus as a comprehensive community-based teaching hospital and continue to provide secondary and tertiary acute care to its local and regional communities. It will continue to serve as a regional resource for provincial programs including cancer, cardiac and dialysis care.

At the core of the future Service Delivery Model is the acute hospital's mission to provide acute care services with strengthened coordination of care between multiple providers and local service integration with primary care and community services. Key elements of the Service Delivery Model will include:

- A continuum of acute care services at the new hospital and select ambulatory care off-site, including mental health and addictions, primary care and urgent care services in under-serviced communities.
- Almost all hospital-based services will continue to be provided locally with the exception of some surgical services and specialized services for children. The feasibility of future, new and expanded services will continue to be reviewed.
- Rehabilitation, mental health, and complex continuing care will continue to be provided at the Prince Road site. Mental health emergency services will be provided in the future at the Prince Road site.

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Academic and Research

The components of the future vision include:

- Create a hub of education and research, which is as active, productive and high quality as other education centres.
- Attract and retain medical, nursing and health professional staff who are interested in teaching and research.
- Provide a collaborative Windsor/Essex physician recruitment strategy.
- Enhance partnerships with external stakeholders with respect to education, research, scholarship and practice (Faculty of Nursing, Strategic Plan, 2012).
- Create a culture of inclusion that engages clinical, academic and community stakeholders (hospitals) in the business of the faculty such as committees, working groups, research collaboration (Faculty of Nursing, Strategic Plan, 2012).
- Provide hospital based full time clinical academic physicians who will form the core of the department. Other medical staff will be adjunct professors and will have the opportunity to progress in a streamlined approach to assistant, associate and full professor if they desire.
- Create a research and scholarship culture that is as strong as in London.
- Ensure alignment between the number of students and number of faculty members; the number of students will likely remain constant.
- Focus will be on clinical research and not on basic (wet lab) research. It will be integrated with community and primary care sectors in such a way that it supports building/maintaining a continuum of care and otherwise creates additional capacity across the health care system.
- Create excitement for health-related careers that will result in increased applications from the best and brightest young Windsor/Essex residents – thus building a long-term approach to the issue of health professional recruitment and retainment.

Summary

The proposed model takes a strong system approach that adapts to emerging system trends. This is exemplified by:

- Focusing on chronic disease management and ambulatory care targeted at priority community needs
- Keeping people out of hospital
- Emphasizing and utilizing outreach, partnerships and collaboration to improve access and continuity
- Building capacity to improve the health of the community
- Implementing the model on several sites, each with a distinct focus, but combined to serve the community

The bed and service volumes for the Windsor Hospitals are presented in Figure 1.

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Figure 1: Windsor Bed and Service Volumes by Site

Component	Current 2012/13 [a] O	M	P	Total	Projected 2017/18 New Acute Hospital	Urgent Care Centre	Prince Road	Satellite(s)/ Other	Total
Inpatient Beds									
Medical	137	118	–	255	259		–	–	259
Surgical	84	46	–	130	118		–	–	118
Paediatrics	–	20	–	20	12 [b]		–	–	12 [b]
Obstetrics	–	34	–	34	40		–	–	40
ICCU/CCU	29	19	–	48	55		–	–	55
Subtotal	250	237	–	487	484		–	–	484
Mental Health									
• acute - adult	68	–	–	68	8		60	–	68
• acute - paediatric	–	–	6	6	–		–	9	9
• specialized	–	–	48	48 [c]	–		65	–	65
Subtotal	68		54	122	8		125	9	142
CCC/Rehab					–				
• CCC		–	158	158			196	2	198
• Rehabilitation	18	–	52	70			90	–	90
Subtotal	18		210	228			286	2	288
Total	336	237	264	837	492		411	11	914
Surgery/Procedure Cases	16,918	13,436	–	30,354	34,708		–	–	34,708
Emergency Department Visits	–	–	–	130,899	90,000	26,324	–	18,379 [d]	116,324 [e]

[a] Beds available for admission.
[b] In addition, short stay and mental health crisis care areas will be required.
[c] In process of transferring.
[d] Dispersed.
[e] Excludes other volumes to be relocated/dispersed.
O - Ouellette M - Met P - Prince Road
Source: HCM Group, Inc.

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Guiding Principles

The ***Guiding Principles*** underpinning the model of care and service delivery are as follows:

Patient and Family Centred Care

The health care providers are dedicated to:

- Respect for the individual's values, preferences and expressed needs
- The coordination and continuity of care in the best interests of the patient and family
- Clear communication and information flow to the patient, family and caregivers
- Emotional support and alleviation of fear and anxiety
- Involvement of family and caregivers
- Smooth transitions between points of care

Evidence-Based Care

Evidence based care includes:

- Leading practice models of care that promote equitable access to care, improve quality of care, and increase efficiency
- Clinical pathways which standardize evidence-based practices to reduce variations in care across health care settings and improve patient outcomes and experiences.

Integrated Care

Integrated care is the concept of bringing together the inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation, and health promotion. Integration is a means to improve services in relation to access, quality, user experience and efficiency. Integration, from the patient and family perspective, is the result of an interprofessional model of care and coordinated, seamless processes of care within the hospital, between sites and among all providers in the continuum.

Efficient Value-Added Processes

This refers to the processes and service design from the patient perspective using proven methodologies to minimize non value add steps in the process of addressing the patients' needs.

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The role of the Windsor Hospitals in the Continuum of Care within the system is described below.

Health Promotion, Prevention and Education
The primary role in health promotion, prevention and education will be to identify and target high risk populations and provide secondary/tertiary prevention through lifestyle counseling to maintain health and prevent chronic disease or further events. The Hospitals will collaborate with others to educate targeted groups, enhance social supports and promote health.

Community and Post-Acute Care
The Hospitals' role in community and post-acute care will be to provide services that: enhance the transitions of care in the areas of focus; promote integrated care (e.g., shared care models); avoid hospital admission and emergency department visits; and/or facilitate safe early discharge. Services can be provided on-site (on an inpatient and outpatient basis), off-site or as outreach, in collaboration with other providers. Post-acute care (i.e., rehabilitation, complex continuing care, palliative care, mental health) will be located at the Prince Road site with satellite services at the satellite(s)/other (e.g., mental health and addictions).

Acute Care
Acute care will be located at the new hospital site. It includes emergency (ED) services, all clinical supports to the ED and services that must be provided in a hospital setting due to safety, complexity, costly infrastructure and/or multi-specialty interdependencies. Core acute services primarily include: ED, acute inpatient care (medical, surgical, paediatrics, obstetrics, mental health, critical care), diagnostic services, emergent/elective surgery and outpatient clinics. The satellite(s)/other will include an urgent care centre and renal services.

Facility planning will

- Leverage the potential of a new Greenfield site, but balance the capital costs
- Incorporate state-of-the-art processes/systems and technology
- Maintain potential to expand/regenerate areas over time and/or to change use as new services and clinical practices emerg, and as technology changes
- Consider recent investments in capital at the Prince Road site and Bell Building
- Create an affordable project balancing reasonable expectations with longer term value and flexibility.
- Support education and research in collaboration with the University of Windsor and St. Clair College

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Siting Concepts

Objectives

Guided by the strategic goals and principles, in order to determine the various options for the new delivery model, in addition to the LHIN/MOHLTC priorities, the Hospitals identified key objectives that need to be achieved.

The first set of objectives applies to all health care capital projects:

- ***Quality and Safety:*** This includes the infrastructure necessary for quality safe outcomes for patients (e.g., the ability to attract and sustain an expert professional work force, critical mass for services, building to all safety standards and collocating specific services).

- ***Access to Services:*** Access has two broad dimensions. The first revolves around community need and availability of services. Despite a sophisticated methodology developed by the MOHLTC, matching future need and availability is extremely difficult. There are multiple variables that influence the resulting volume projections, not the least of which are evolving community services and changes in practice. A case in point is the recent drastic reduction in rehabilitation beds required following knee replacement surgery. The second dimension revolves around how easily or quickly patients can receive services they need.

- ***Affordability:*** This includes capital costs, operating costs, value for money and the ability of the community to pay its share of the capital costs.

The second set of objectives reflect lenses that are key to the Windsor circumstances:

- ***Flexibility:*** Flexibility, critical to a project of this size and longevity, refers to remaining adaptable to the evolving nature of the health care system, new emerging delivery models for care and technology, changing clinical practice and ongoing changes in health system organization and directions to continually improve health care delivery.

- ***Community Support:*** Ongoing community support is critical to the success of the Windsor/Essex redevelopment to ensure the new facility meets the needs of the community and receives the financial support required to support the infrastructure renewal. This includes regular, transparent communications with stakeholders to engage them at key points in the capital planning process.

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Scope of Services

The Prince Road site will continue to be used for post-acute care. The new site will be used for acute care. The satellite(s)/other will be used for services that are essential for high risk patients/clients (e.g., mental health). In addition, during Stage 1B, the options analysis will review the capital, operational and transitional costs of delivering some procedures (e.g., cataract, endoscopy, cystoscopy, minor procedures) at the satellite(s)/other rather than in an ambulatory care wing adjacent to the new hospital.

The service distribution options addressed five key objectives:

1 Optimizing the recent build at the Prince Road site
2 Optimizing use of the Greenfield site (cheaper build with greater flexibility)
3 Differentiating and limiting duplication on the sites to address the affordability objective (i.e., consolidating services)
4 Maintaining flexibility for future adaption and change to the greatest extent possible
5 Ensuring required services are accessible for at risk patients/clients who live downtown and elsewhere in the county.

The current and projected scope of services is detailed below and in the report. Future recommendations have been based on the Windsor Hospitals Study Task Force for the "starting point" allocation of acute and non-acute services. The Task Force identified these services as:

- Acute inpatient care provides necessary treatment for a disease or severe episode of illness for a short period of time, with the goal of discharging patients as soon as they are stable.
- Non-acute care would include services often referred to as extended care, chronic care or complex continuing care, serving people who may not be ready for discharge from hospital, but who no longer need acute care services. This type of hospital care provides ongoing professional services to a diverse population with complex health needs.

The purpose of Figure 2 is to identify the current (C) and projected (P) location of clinical services in Windsor/Essex by hospital site (i.e., Metropolitan site, Ouellette site, Prince Road site) including what services will be located at the future satellite(s)/other. The siting of clinical services is a major space driver and provides the framework for facility planning to be completed in Stage 1B.

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Figure 2: Current and Projected (2017/18) Clinical Services by Site

	New Acute Hospital	Met C	Met P	Ouellette C	Ouellette P	Prince Road C	Prince Road P	Satellite(s)/ Other [a]
Inpatient Beds								
• Acute								
-- Med/Surg	●	●	--	●	--	--	--	--
-- ICU	●	●	--	●	--	--	--	--
-- Mat/Child	●	●	--	--	--	--	--	--
-- Mental Health	●	--	--	●	--	--	●	● (Maryvale)
• Post Acute								
-- Mental Health	--	--	--	●	--	●	●	--
-- Rehabilitation	--	--	--	●	--	●	●	--
-- CCC	--	--	--	--	--	●	●	--
Cancer								
• systemic therapy	●	●	--	--	--	--	--	●
• radiation therapy	●	●	--	--	--	--	--	--
• clinics	●	●	--	--	--	--	--	--
• supportive care	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--
• diagnostic assessment/screening	●	●	--	--	--	--	--	●[c,e]
• genetic counselling	●	●	--	--	--	--	--	--
Cardiac								
• cath/PCI	●	--	--	●	--	--	--	--
• pacemakers	●	●	--	●	--	--	--	--
• clinics	●	--	--	●	--	--	--	●
• diagnostic	●	●	--	●	--	--	--	--
• EPS services	●	--	--	--	--	--	--	--
• cardiac rehab	--	--	--	--	--	●	●	--
Critical Care								
• combined med/surg	●	●	--	●	--	--	--	●
• coronary care	●	--	--	●	--	--	--	--
Diagnostics								
• radiography/fluoroscopy	●	●	--	●	--	●	●	●
• interventional	●	●	--	●	--	--	--	--
• breast imaging	●	●	--	●	--	--	--	●[e]
• CT	●	●	--	●	--	--	●	--
• ultrasound	●	●	--	●	--	--	●	●
• nuclear med	●	●	--	●	--	--	--	--
• MRI	●	●	--	●	--	--	--	--
• bone density	●	●	--	●	--	--	--	--
• PET-CT	●	--	--	--	--	--	--	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.

[e] Expand for additional transitional youth and psychogeriatric populations.

[f] Planning underway to relocate to Bell Building.

[g] New services/equipment to support best practices in the existing specialties will be added when business cases are developed and approved by the LHIN.

C = Current P = Projected Met = Metropolitan

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Figure 2: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met C	Met P	Ouellette C	Ouellette P	Prince Road C	Prince Road P	Satellite(s)/ Other [a]
Emergency								
• emergency services	●	●	--	●	--	--	--	--
• urgent care service	●	●	--	●	--	--	--	●
• sexual assault/domestic violence	●	●	--	--	--	--	--	--
• mental health crisis	● [d]	● [d]	--	●	--	--	●	●
• disaster preparedness	●	●	--	●	--	--	--	--
• base hospital	●	●	--	●	--	--	--	--
• telemedicine for Pelee Island	●	●	--	●	--	--	--	--
Medicine								
• medical day care	●	--	--	--	--	--	--	●
• internal medicine	●	--	--	●	--	--	--	--
• AIDS	--	[b]	--	--	--	--	--	● [b]
• enterostomal	●	--	--	●	--	--	--	--
• general	●	●	--	●	--	--	--	--
• anticoagulant	●	--	--	●	--	--	--	● [b]
• pain management	●	--	--	●	--	--	--	● [b]
• respirology	●	●	--	--	--	●	●	● [b]
• diabetes	--	--	--	●	--	--	--	● [b]
• neurology	●	--	--	●	--	--	--	--
• lupus	--	--	--	●	--	--	--	● [c]
• Primary care NP/wound management	--	--	--	●	--	--	--	●
• outreach RN	--	--	--	●	--	--	--	● [b]
• geriatric assessment	--	--	--	--	--	●	●	● [b]
• adult day care	--	--	--	--	--	●	●	● [b]
• stroke strategy	--	--	--	●	--	--	--	●
• bariatric	--	[b]	--	--	--	●	●	● [b]
Mental Health and Addictions								
• day program	--	--	--	●	--	--	--	●
• injection clinic	--	--	--	●	--	●	●	●
• psychosis clinic	--	--	--	--	--	●	●	--
• crisis intervention	--	--	--	●	--	--	--	●
• ACTT teams	--	--	--	--	--	--	--	● [e]
• concurrent disorder	--	--	--	--	--	●	●	--
• mood/anxiety	--	--	--	--	--	●	●	--
• psychogeriatric outreach	--	--	--	--	--	●	●	●
• geriatric assessment	--	--	--	--	--	●	●	●
• problem gambling (residential/outpatient)	--	--	--	--	--	●	●	●
• addiction services -outpatient	--	--	--	●	--	●	●	●
• addiction - residential treatment	--	--	--	--	--	--	--	●
• withdrawal management	--	--	--	--	--	●	●	--
• dialectical behaviour therapy	--	--	--	--	--	--	●	--
• ECT	--	--	--	●	--	●	●	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

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[c] Primary Care/Specialist offices.

[d] Includes paediatric mental health patients along with crisis rooms in the paediatric inpatient unit.

[e] Expand for additional transitional youth and psychogeriatric populations.

[f] Planning underway to relocate to Bell Building.

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Figure 2: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Pathology/Laboratory								●
• chemistry	●	●	–	●	–	●	●	–
• haematology/coagulation	●	●	–	●	–	●	●	–
• transfusion/blood bank	●	●	–	●	–	–	–	–
• anatomic pathology/autopsy	●	●	–	●	–	–	–	–
• microbiology	●	–	–	●	–	–	–	–
• cytology	●	●	–	–	–	–	–	–
• histology	●	●	–	–	–	–	–	–
• toxicology	●	–	–	–	–	–	–	–
• molecular diagnostics/flow cytometry	●	–	–	–	–	–	–	–
• morgue	●	●	–	●	–	–	–	–
Rehabilitation								
• PT	●	–	–	●	–	●	●	●[b]
• OT	●	–	–	●	–	●	●	●[b]
• SLP	●	–	–	●	–	●	●	●[b]
• pulmonary rehab	–	●	–	–	–	●	●	●[b]
• audiology	–	–	–	–	–	–	–	●[b]
• chiropody	–	–	–	–	–	●	●	●[b]
• general rehab	–	–	–	–	–	●	●	–
• amputee rehab	–	–	–	–	–	●	●	–
• physiatry	–	–	–	–	–	●	●	–
• acute injuries/assessment	–	–	–	–	–	●	●	–
• head injury/ABI	–	–	–	–	–	●	●	–
Renal								
• inpatient treatment	●	–	–	●	–	–	●	–
• clinics	–	–	–	●	–	–	–	●[f]
• training	–	–	–	●	–	–	–	●[f]
• outpatient treatment	–	–	–	●	–	–	●	●[f]

[a] Further review of the optimal location will continue to occur as planning proceeds.

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Figure 2: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Surgical Services [g]								
Specialties								
• anaesthesia	●	●	--	●	--	--	--	--
• brachytherapy	●	●	--	--	--	--	--	--
• dental	●	●	--	●	--	--	--	--
• cardiovascular	●	--	--	●	--	--	--	--
• ECT	●	--	--	●	--	--	--	--
• endoscopy	●	●	--	●	--	--	--	●[e]
• ENT	●	●	--	●	--	--	--	--
• general	●	●	--	●	--	--	--	--
• gynaecology	●	●	--	--	--	--	--	--
• neurosurgery	●	--	--	●	--	--	--	--
• ophthalmology	●	--	--	●	--	--	--	●[e]
• oral/maxillofacial	●	●	--	●	--	--	--	--
• oncology	●	●	--	--	--	--	--	--
• orthopaedic	●	●	--	●	--	--	--	--
• paedodontist	●	●	--	--	--	--	--	--
• plastic	●	●	--	●	--	--	--	--
• thoracic	●	--	--	●	--	--	--	--
• urology	●	●	--	●	--	--	--	●[e]
Clinics [a]								
• general surgery	●	●	--	--	--	--	--	--
• minor surgery	●	●	--	●	--	--	--	--
• thoracic	●	--	--	●	--	--	--	--
• urology	●	●	--	--	--	--	--	--
• neurosurgery	●	--	--	●	--	--	--	--
• ophthalmology	●	--	--	●	--	--	--	--
• fracture	●	●	--	●	--	--	--	--
• burn	●	●	--	--	--	--	--	--
• hand	--	--	--	--	--	●	●	--
• preadmission	●	●	--	●	--	--	--	●

[a] Further review of the optimal location will continue to occur as planning proceeds.

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[c] Primary Care/Specialist offices.

[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.

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Figure 2: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Women and Children's								
Maternal								
• family birthing centre	●	●	--	--	--	--	--	--
• labour, birth and recovery (LBR)	●	●	--	--	--	--	--	--
• labour, birthing, recovery and postpartum (LBRP)	●	●	--	--	--	--	--	--
• operative birthing (C-section)	●	●	--	--	--	--	--	--
• antenatal and postpartum inpatient	●	●	--	--	--	--	--	--
• women's health clinic	●	●	--	--	--	--	--	--
• maternal newborn clinic	●	●	--	--	--	--	--	--
• Rhogam clinic	●	●	--	--	--	--	--	--
• maternal fetal medicine clinic	●	●	--	--	--	--	--	--
• obstetrical clinic	●	●	--	--	--	--	--	--
• emergency triage	●	●	--	--	--	--	--	--
• mid wife program	●	●	--	--	--	--	--	--
Newborn								
• NICU Level 3	●	●	--	--	--	--	--	--
• NICU follow-up clinic	●	●	--	--	--	--	--	--
• neurodevelopment program	●	●	--	--	--	--	--	--
• RSV clinic	●	●	--	--	--	--	--	--
• ROP program	●	●	--	--	--	--	--	--
• infant hearing/screening	●	--	--	--	--	--	--	●
• clinical trials	●	●	--	--	--	--	--	--
Paediatric								
Inpatient Services								
• general medical/surgical	●	●	--	--	--	--	--	--
• oncology	●	●	--	--	--	--	--	--
• Level I/II nursery	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--
• mental health	●	●	--	--	--	--	--	●
Outpatient Services								
• emergency paediatric triage	●	●	--	--	--	--	--	--
• metabolic clinic (diabetes and endocrine)	●	--	--	--	--	--	--	●
• cardiology	●	●	--	--	--	--	--	--
• asthma	●	●	--	--	--	--	--	--
• allergy	●	●	--	--	--	--	--	--
• cystic fibrosis	●	●	--	--	--	--	--	--
• nephrology	●	●	--	--	--	--	--	--
• psychiatry	●	●	--	--	--	--	--	--
• medical day care	●	●	--	--	--	--	--	--
• endoscopy	●	●	--	--	--	--	--	--
• day surgery	●	●	--	--	--	--	--	--
• haemophilia	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatric mental health patients along with crisis rooms in the paediatric inpatient unit.

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Service Delivery Model Changes

Changes to the Service Delivery Model include integration opportunities, program/service redesign and alternate Service Delivery Models to ensure best practice, clinical efficiencies, and seamless care.

The specific areas that have been identified for change in service delivery for each clinical program and support services are detailed in the Report according to the following categories:

- ***Relocations*** – services that will be located elsewhere.
- ***Organizational changes*** – services that will be provided differently.
- ***New and expanded services*** – services that will be required to address access and/or quality issues.

The Service Delivery Model for Support Services is detailed in the Report.

Universal Themes

Common to all programs are the following directions:

- Ensure 'right bed/place for patients' to facilitate the best care for patients.
- Create an Electronic Health Record (EHR) with all of the patient's information available to all health providers to facilitate shared care.
- Enhance telehomecare services as an alternative to monitor and support patients/families.
- Locate telehomecare satellite sites throughout the community, south east area of the County and in Leamington.
- Develop well defined end of life care plan for all patients.
- Enhance supports for end of life care in the home/community.
- Provide culturally sensitive and multilingual care.
- Advocate for a transportation system to support access.
- Provide more educational support for interprofessional provider teams.

Relocations

The "Change Tables" identified services that could be moved to the community from acute and ambulatory care, provided the appropriate resource and infrastructure requirements for community service provision have been identified, resourced and put in place.

The services that will be relocated from the Hospitals are outlined in Figure 3. The purpose of this Figure is to identify the workload that will shift from the Hospital setting. The Figure identifies the specific clinical service/activity to be relocated and the future location for service delivery. The detailed workload projections are provided in the Report from pages 1.2-54 to 1.2-106. Identifying the key clinical relocations is key to ongoing community capacity planning and identifying future capital requirements of health service providers in Windsor/Essex.

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Figure 3: Service Relocation

Clinical Services	A Satellite(s)/Other	B Prince Road	C Leamington District Memorial Hospital	D CCAC	E LTC, Residential Homes, Home, CMHA
1 Cancer					
1.1 Infusions: transfer to community			●	●	
1.2 Chemotherapy: review opportunities to transfer treatments for low risk populations to the community	●		●	●	
2 Cardiac					
2.1 Clinics, CDM	●				
3 Critical Care					
3.1 Some long term ventilated services		●		●	
4 Diagnostics					
4.1 Some mammography testing [a]	●		●		
4.2 Encourage private diagnostic centres to provide portable imaging services (i.e., radiology, ultrasound) to minimize the need for patients to be transferred to the hospital from LTC, homes, etc. [b]	●				●
5 Emergency					
5.1 Triage 4 and 5 visits avoided and/or shifted to some community based providers (i.e., GP offices, FHT, urgent care centre, NP led family practice clinic, etc.) [b]	●				
6 Medicine					
6.1 Day/night care medical: 10 per cent of IV therapy	●		●	●	
6.2 Anticoagulant clinic	●				
6.3 Adult diabetes	●				
6.4 Primary care NP/wound management	●				
6.5 Outreach nursing program	●				
6.6 Stroke strategy (education component)	●				
6.7 Geriatric assessment program and adult day care	●[b]				
7 Mental Health and Addictions					
7.1 Outpatient counselling and support programs	●				
7.2 Partial hospitalization and day treatment programs	●				
7.3 Injection clinics	●		●		●
7.4 Residential problem gambling	●				
7.5 High supportive housing	●				
7.6 Crisis and urgent care	●				
7.7 Geriatric services	●				
8 Rehabilitation [c]					
9 Renal					
9.1 Increase percentage of patients dialyzing at home [d]					●
9.2 Move outpatient renal services outside of hospital setting to a centralized "renal campus" [e]	Bell Building	●[f]			
9.3 Augment pre-dialysis services on an outreach basis, enabled by telehomecare	●		●		●

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Figure 3: Service Relocation (Cont'd)

Clinical Services	A Satellite(s)/Other	B Prince Road	C Leamington District Memorial Hospital	D CCAC	E LTC, Residential Homes, Home, CMHA
10 Surgery					
10.1 Preadmission Clinic	●				
11 Women and Children's					
11.1 Infant/paediatric hearing screening	●				
11.2 Paediatric diabetes	●				

[a] Potential for mobile team development.
[b] Further opportunities to be explored with community capacity planning and/or other hospital programs.
[c] To be determined by the LHIN as part of the predictive modeling exercise scheduled to be completed by Fall 2014.
[d] PD and home haemodialysis with expanded CCAC supports and telemedicine enabled monitoring.
[e] Outpatient stations, training, clinics, supports; ideally collocated with a CDM centre of excellence, point of care lab, pharmacy, Kidney Foundation.
[f] Develop satellite to serve inpatients and potentially outpatients living in the immediate area.
Source: Community Change Tables, Agnew Peckham.

Organizational Changes

Services that will be re-organized and provided differently are listed below.

Cancer

- Home chemotherapy services
- Integrated interprofessional clinics
- Windsor Cancer Research Group working toward Research Institute – will impact academic and research role and potential for a research centre
- Palliative Care: vision is to have coordinated, seamless service in all settings where patients die. Enhance to 24/7
- Improve/enhance primary care practitioners' role in follow-up services
- More 'at home' care delivery supported by community nurses and easy access to oncology physicians
- Direct access/24 hour response for active treatment patients especially for pain and symptom issues provided at the Cancer Centre (i.e., after hours service, enhance weekday capacity by adding nurses and physician resources; have optimized current model of care)
- Regional Comprehensive Men's Health Center including navigation throughout the journey – including testing/screening, diagnostics, treatment options, treatment, survivorship

Cardiac

- All acute services in one facility: diagnostics, interventions, and acute beds
- Patients with chronic diseases (e.g., renal, hypertension, cardiac, endocrine, etc.) will be more effectively supported with primary and secondary prevention services in a vascular health model. Outcomes will include
  - improved capacity for self-management

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- slower disease progression
- lower rates of admission/re-admission

Critical Care

- In new acute hospital
  - Level 2 care area adjacent to ICU managed by critical care program (consolidated model)
  - step-down/up beds on medical/surgical units
  - enhance nurse practitioner coverage to 365 days
  - remote telemetry to support "right patient, right services, right place"
  - provide additional support in community for vented patients
  - bipap patients – could be managed on medical/surgical units
  - telemedicine outreach support to LTC
  - maintain separate coronary care unit

Diagnostics

- Provide connectivity links (i.e., information and communication systems) with
  - community based diagnostic service providers to avoid the need to duplicate tests/exams
  - hospital programs and community based health care providers to ensure required information is available in a timely manner
- Ensure consistent standards among all providers by creating a regional imaging group to oversee/lead/facilitate collaboration in establishing quality standards, maintaining competencies, etc.
- To minimize the need for patients to have specimens collected at the Hospital, arrangements with qualified laboratory services in the community may be possible
- Provide point of care testing (e.g., satellite run by technologists in emerg.) where feasible

Emergency

- Create distinct flows, staff resources and appropriate facilities for paediatric, mental health, geriatric and end of life patients
- Provide dedicated imaging resources including general radiography, ultrasound and CT (2), and MRI
- Create capacity to provide more intensive intervention for admission avoidance
- Ensure pastoral care resource team resources are maintained
- Strengthen communication/collaboration with LTC homes, especially after hours
- Provide 'concierge/amenity' services to support patient/family centred care
- Review role of paramedics

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Medicine

- Preparing seniors for transitions (precrisis services); support physicians to have conversation about ageing, advance directives, end of life care
- Avoiding ALC by focusing on frequently admitted patients; enhancing follow-up in the community, CDM, etc.
- Improved social services; safety net to avoid social admissions and visits to ER
- Outreach teams to LTC homes need to be more specialized to support GP's
- Timely access/response from community based services
- Consolidate inpatient stroke care; designated stroke unit
- Bring services to patients (e.g., disperse telemetry)
- Creative substitution of resources (CCAC needs streamlined access to specialized services in hospital to support their clients especially marginalized, vulnerable elderly)
- Acute medical services for specialized mental health clients to prevent overuse of ER
- Changes in high intensity funding to CCC, rehab, retirement homes and assisted living facilities to prevent the need for residents with financial challenges who require hemodialysis having to be admitted to LTC
- Provide TPN/TNA in ambulatory centre adjacent to acute hospital
- Changes in admission criteria for LTC. Currently, LTC will not accept patients with acting out behaviors/aggressive behavior. Non-acute patients are hospitalized in acute care settings throughout this process.

Mental Health and Addictions

- There should be one central coordinating body that oversees mental health and addiction services and is responsible for service delivery to ensure
  - enhanced coordination through interprogram service delivery with a focus on recovery
  - enhanced access to services by allowing the right service to be provided in the right place, at the right time (reduce delays which currently result in exacerbation of preventable negative outcomes)
  - reduced duplication of services
  - reduced confidentiality issues related to the transfer of information across programs
  - enhanced opportunities to reduce client dependency on hospital based programs and transition them to community based programs
  - established system wide mental health and addiction priorities
  - established strategies to reduce/eliminate stigma associated with mental illness, across the board (i.e., within and beyond the health and community sectors)
  - client and family participation in the planning and delivery of mental health and addiction services
  - allowance for system wide program evaluation and the establishment of evidence based best practices

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Rehabilitation

The following organizational changes will be confirmed in conjunction with the ESC LHIN's Rehabilitation Services Capacity planning:

- Rehabilitation assessment, care planning and 7 day service delivery *across all acute care services including the emergency department* to identify the earliest intervention opportunities (target stroke, orthopaedic and elderly populations first)
- Direct admissions to rehabilitation: evidence informed criteria based access; streamline the process for early identification and transition of patients to the most appropriate rehabilitative care environment for example home with outreach team and CCAC support, specialized inpatient rehabilitation, restorative care or day/ambulatory programs.
- Case finding: "pull" patients to rehabilitation services
- Implement mechanisms to increase community supports to facilitate ED and acute admission avoidance through a Community Restorative Care Program (draft business case pending)
- Create more streamlined approaches to transition patients from acute care/inpatient and community settings to Convalescent Care
- Investigate ability to pre-book convalescent care beds in community for planned surgeries
- Implementation of CCAC Coordinated Access and Resource Matching and Referral (RM&R); CCAC managing waitlists for rehab and Complex Care
- Ensure increased funded rehabilitation provided along the continuum of care (e.g., outpatient and community rehabilitative care services: , LTC/assisted living, retirement homes, community clinics, CCAC)
- Maximize the scope of practice of rehabilitative nursing to focus on function (in addition to patients' medical care needs) and prevent deconditioning
- Earlier, supported discharge for mild to moderate stroke patients
  - Coordinated, interdisciplinary intensive community / outpatient rehabilitation team as an alternative to rehabilitation admission and/or to enable earlier discharge (draft business case submitted to ESC LHIN)
- Focus on implementation of established best practices for priority populations (per ESC LHIN Rehabilitation Strategic Plan)
  - Stroke
  - Orthopaedic conditions – especially fractured hip
  - Geriatric patients
- Integrate the rehabilitative care delivery system
  - Enable patients to move more easily along the continuum: bi-directionally with shared accountability for patients between programs
  - Patient-specific, responsive services: tailor to patient needs rather than fit the patient into set, criteria-based services

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  - Enhance direct admissions to rehabilitation from the community (bypass emergency and acute services)
- Align programs and services with emerging provincial directions
  - Rehabilitative Care Alliance Definitions Framework for Bedded Rehabilitative Care
  - Ontario Senior Strategy and MOHLTC Assess and Restore Policy

These will need to be confirmed and aligned with the ESC LHIN Rehabilitation System Capacity Plan to be completed in October 2014. Ongoing work in Year 3 will focus on standards of specialized geriatric and rehabilitative care expertise and system capacity for frail seniors / medically complex adults in community care settings, including self- management and fall prevention.

Renal

- Greater community based services/supports:
  - enhanced CCAC renal service role to support patients at the pre-dialysis stage with the goal of reducing/slowing progression to kidney failure
- Primary care physicians/providers will have increased competencies in managing patients with kidney disease and/or significant risk factors:
  - primary care mentorship through an ORN lead
  - Health Links initiative to effectively integrate the provider system
  - an integrated chronic disease management service/centre to support patients/families
  - there will be fewer crash starts for dialysis treatment
- Interventional nephrologist(s) will be recruited to enhance/supplement vascular access services

Surgical Services

- Create streamlined systems to reduce number of encounters patients have with the health system (e.g., rapid assessment clinics, early pregnancy assessment centre, patient tracking systems)
- Create patient centred flows
- Improve efficiency/throughput (e.g., grouping cases)
- Create focused centres. For example, in the neurosciences (neurology/ neurosurgery) program collocate beds and include a step down/up unit
- Increase efficiency and patient safety (and anesthesiologist recruitment) by incorporating anaesthesia assistants, specialist assistants, clinical nurse specialists, etc.
- Better integrate Cancer Centre brachytherapy services to ensure sufficient access to OR time
- Relocate pacemakers to the cardiac cath suite

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Women and Children's

- Seamless transition to adult services (e.g., diabetes, oncology, mental and physically challenged kids)
- Dedicated lead for ultrasound testing per service
- Specialized paediatric clinics will be available through telehealth
- One-stop diagnostic services and care for maternal and paediatric patients

New and Expanded Services

Health services will continue to improve to reflect clinical excellence and best practice. All new/enhanced services will require a ESC LHIN endorsed Business Case with confirmed support from applicable provincial agencies (e.g., Cancer Care Ontario, Cardiac Care Network, Ontario Renal Network, etc.). At a minimum, the Business Case will include the following:

a Confirmation of the provincial programs that presently exist in the region, including current workload and service volumes.
b Projected patient volumes.
c Where patients are currently being accommodated.
d A comprehensive acquisition plan for the necessary Human Resources.
e Operating impacts.
f How the operating impacts will be managed (in the context of Health System Funding Reform).
g How the proposed program fits within the regional and provincial strategies for the specific service.

The proposed new and expanded services, where there was consensus among the program representatives, are listed below:

- Cancer
  - autologous transplant program
  - testing for personalized medicine
  - designated lymphedema clinic
  - increase oral chemotherapy
  - local provision of post-operative breast reconstruction for breast cancer patients
  - enhanced psychosocial services including psychology, grief counselling, etc.
  - enhanced pain and symptom management (seamless; developing service now)
  - enhanced palliative care services
  - coordinated follow-up surveillance testing and psychosocial services for survivorship
  - increased access to PET CT
  - lodging for patients
  - enhanced survivorship follow-up
  - enhanced navigator role for all patients at all stages of their journey

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- Cardiac
  - electrophysiology program
  - enhanced PCI service to 24 hours
  - enhanced/formalized urgent chest pain service to provide responsive outpatient assessment for patients seen in emergency who require cardiology evaluation within 24 to 72 hours
  - introduce a multi-disciplinary Congestive Heart Failure clinic, integrated with community providers
  - consider the need to enhance the clinical nurse educator service now available at WRH to support inpatients and outpatients
- Critical Care
  - weaning strategy for chronic vented patients; 3 tiers include
    - ICU
    - Rehab/CCC
    - LTC/community
  - dialysis for chronic vented patients who could be on a medical or CCC unit, or LTC home
  - enhanced rehabilitation and other allied health services; currently very limited on week days and none on weekends
  - dedicated/enhanced pastoral care and bioethicist re: end of life
- Diagnostics
  - *Diagnostic Imaging*
    - enhance nuclear medicine services by adding PET CT or PET MR
  - *Laboratory*
    - Add toxicology and molecular diagnostics/flow cystometry
- Emergency
  - urgent follow-up clinic
  - ambulatory wound management clinic
  - nurse practitioner led family practice clinic in downtown core for patients without access to family physician
  - rapid assessment, chronic disease prevention and management (CDM) and urgent care clinics
  - mental health emergency services at Prince Road
  - enhanced paediatric services/resources in ER
  - enhanced geriatric services/resources in ER and rest of the system
  - improved addiction services/detox with either physician assistant/nurse practitioner to avoid emergency visit
  - improved health system navigation

- Medicine
  - CDM clinics
  - more direct service in the community especially for seniors with dementia; more collaboration among providers
  - more geriatricians to inform best practices

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  - extended hours for outreach services, clinics, etc.
  - enhanced services 7 days per week and extended hours (evening, night) for OT, PT, SLP, social work, discharge planning, CCAC, pharmacy consults
  - additional peritoneal dialysis services in rehab/CCC and support from CCAC
  - additional facilities in the community with lockdown capacity for patients with Alzheimer's and dementia, individuals who wander or are exit seeking
  - enhanced CCAC services (particularly PSWs) for the elderly population; these needs are mainly self-care deficits that can be managed by a PSW
  - enhance the hours for the Anticoagulant clinic or provide partial service – particularly during weekends, holidays and during OR shutdown
- Mental Health and Addictions
  - mental health emergency services[2] at Prince Road
  - expand existing withdrawal management program to include a community based withdrawal management service and a day program
  - central intake and assessment
  - services for dual diagnosis population
  - high supportive housing beds and supports
  - community crisis beds and supports
  - shared care models with primary care/family practice programs
  - assessment and stabilization program
  - peer support programs (alumni programs)
  - mobile health bus
  - comprehensive geriatric mental health (spanning hospital and community)
  - enhanced child and adolescent services including transitional services
  - additional Assertive Community Treatment Teams (ACTTs or ACT teams)
  - increased specialized addiction resources in the community
  - comprehensive program evaluation for the entire mental health system
  - enhanced prevention programs (incl. schools)
- Renal
  - paediatric nephrology clinic
  - Prince Road site: 6 treatment stations for CCC and rehab, and potentially for local LTC residents
  - LTC homes: PD services/supports
  - Leamington: expanded satellite treatment unit (enhanced to address demand)

[2] The projected workload will be defined as planning continues.

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- Surgical Services
  - lithotripsy
  - hepatobiliary surgery
- Women and Children's
  - capacity reconfigured to provide
    - 6 short stay paediatric places
    - 14 intrapartum places
  - neonatal/newborn surgical consultant and general surgery
  - gynae-oncology surgery
  - early pregnancy assessment
  - services for addicted newborns
  - interventional radiology support
  - specialized paediatric clinics via telehealth or on-site on an itinerant basis
  - Level III NICU designation
  - fetal developmental clinic to include assessment of intra-utero fetal anomalies (e.g., fetal medicine, diagnostic imaging)
  - enhanced emergency paediatric services
  - enhanced mental health and crisis intervention for women and children

Services Requiring Further Review and Future Proposals

The proposed services that require considerable review and/or where there was not full consensus include:

- Cancer
  - bone marrow transplant
  - POGO site
  - stereotactic radiotherapy
  - full lab capability including molecular and biogenetics
- Cardiac
  - designated Regional Cardiac Centre including cardiac surgery
- Emergency
  - hyperbaric chamber
- Rehabilitation
  - resources for rehabilitation beds and post-acute services
  - slow stream rehabilitation beds
- Renal
  - transplant service
- Surgical Services
  - lithotripsy
  - hepatobilitary surgery
  - bariatric surgery
  - breast reconstruction surgery
  - transplant surgery (liver, kidney, lung)
  - cochlear implants

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  - neonatal surgery
  - feasibility of adding new technology (e.g., Gamma knife for neurosurgery, CO_2 laser for ENT and gynecology procedures, etc.)
- Women and Children's
  - enhanced scope of paediatric surgery

Support Services

Organizational Changes

- Off-site clinical programs will be served as needed
- Continue to review contract service providers
- Support services need to be provided on-site
- Call centre will create one-stop shop; users will call one number for any support services
- Integrated systems will report potential failures directly to support services; users may not need to ask for a repair
- Positive patient identification will reduce risks and track patients throughout their stay
- Central equipment holding depot

New and Expanded Services

- Call centre
- Fully integrated electronic medical record
- Consumer access portals (for access to scheduling, patient records, registration, etc.)
- Closed loop medication management system
- Central equipment holding
- Enhanced ESC LHIN/corporate-wide, integrated systems
  - appointment booking
  - scheduling
  - health records
  - information systems
  - medication management (centralized manufacturing)
- Enhanced connectivity/automation
  - devices will self-monitor and report status to biomedical engineering and facilities maintenance
  - health records and registration; barcoded wristbands and RFID tagging will provide positive patient identification and tracking

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Historical and Projected Beds and Activity

Overall, the new acute care hospital bed requirements are projected to remain relatively constant over the immediate planning period with some growth in the next ten to twenty years. There were 561 acute staffed and in operation beds in Windsor in 2012/13. In the future, bed requirements will remain at 561 in 2017/18 and increase to 613 in 2022/23 and 738 in 2032/33. At the same time beds at the Prince Road site will increase.

The summary of ***bed adjustments*** is provided in Figure 4 and details by functional centre are provided in the Report. Highlights include:

- Hospital wide
  - incorporate occupancy rate targets for inpatient beds
  - incorporate inpatient clinical efficiencies
- Oncology
  - double visits for palliative care visits; then, apply population growth and aging
- Cardiac
  - adjust cath lab projections to 2,920 diagnostic and 900 interventional (for 2015/16)
  - add ICD projections
- Emergency
  - incorporate emergency department efficiencies and relocations
- Renal
  - adjust projected stations to match recent planning work
- Surgical Services
  - use higher of 2011/12 vs. 2012/13 for base data
- Mental Health
  - assume 59 + 6 growth specialized mental health beds for all years
- Non-acute
  - assume 196 CCC beds for all years

Material supplied in confidence [redacted]

No assumptions have been made about repatriation.

The activity projections incorporated natural growth as well as a number of adjustments made in consultation with the Change Tables.

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Figure 4: Summary of Acute Beds and Adjustments

	Total Windsor - Acute			Projected		
Adjustment	2010/11	2011/12	2012/13	2017/18	2022/23	2032/33
Base Population Growth & Aging	555	547	561	618	677	817
Occupancy Adjustments				12	13	20
Days Saved via Conversion to Day Surg				-7	-7	-10
Acute LOS Tgt. Days Saved				-43	-48	-62
50% ALC Reduction				-42	-46	-57
Add ED Equivalent Beds				19	20	26
HSRC Directions				4	4	4
Final beds				561	613	738

Source: HCM Group, Inc.

Anticipated Outcomes

Human Resources/
Financial

[redacted]

Health System Alignment

The Service Delivery Model

- Ensures strategic alignment and accountability with the Ministry of Health and Long-Term Care's Health System Transformation agenda
- Addresses ESC LHIN strategic imperatives: improved outcomes in ALC, emergency department, chronic disease management, mental health and addictions
- Demonstrates quality and excellence through critical mass and clinical coherence
- Facilitates health equity and accessibility to meet identified needs
- Provides a safe environment for patients and staff
- Reflects innovation in service delivery, that supports leading practices and builds on best evidence
- Supports efficiency of operations to optimize health and other benefits within the system, including sustainability
- Achieves service integration, collaboration and partnerships to ensure service quality enhancement, improve cohesiveness, optimal resource use, minimal duplication, and/or increase coordination

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Implementation Plan

A detailed implementation plan for each of the initiatives that are outlined in the Report will be developed. The implementation will occur in parallel with the facility planning. The major milestones are:

2014

- Complete renovation of the Bell Building to accommodate the renal program realignment

2014 to 2018

- Implement Health Links, the strategic plans for CDM, Mental Health and Rehabilitation, Balance of Care directions and Service Delivery Model relocations and adjustments where possible.

Scenario A: Preferred outcome is new satellite(s)/other and/or renovated existing building site.

- Develop new acute hospital and satellite(s)/other.
- Enhance Prince Road site.

Scenario B: Preferred outcome is renovated Ouellette site.

- Develop new acute hospital.
- Enhance Prince Road site.
- Renovate Ouellette site once services are relocated to new acute site.

Impacts on Other Hospital Programs and Health Service Providers

The shift of services out of the Hospitals will impact other hospital programs and health service providers. The initial anticipated implications are referenced in the Report.

Further community capacity planning to reduce length of stay and unnecessary hospitalization will be led by the ESC LHIN with its agencies including the Canadian Mental Health Association – Windsor/Essex, Community Care Access Centre – Windsor/Essex, and Leamington District General Hospital to detail the implementation plan. Ongoing work will integrate the strategies being developed through ESC LHIN-led initiatives in adult mental health, chronic disease management, rehabilitation, and the recommendations of the Balance of Care Study.

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Ontario Stage 1 Submission Requirements Checklist Ontario

MOHLTC-LHIN Joint Review Framework for Early Capital Planning Stages
Stage I: Proposal Submission Requirements Checklist

Health Services Provider Name:	Windsor Regional Hospital (WRH)
Site:	
Proposed Project Name:	New Acute Hospital
Proposed Project Ministry Number:	
Contact:	

Stage 1: Proposal
- 1.0 Service Delivery Model Report
- 2.0 Service Support infrastructure Report
- 3.0 Business Case / Options Analysis
- 4.0 Facility Development Plan

Stage 2: Functional Program
- 1.0 Program Parameters (Optional)
- 2.0 Functional Program
- 3.0 Block Diagrams
- 4.0 Phasing Plan
- 5.0 Project Budget
- 6.0 Project Schedule

Stage 3: Preliminary Design Development
- 3.1 Block Schematic Report
- 3.2 Sketch Plan Report

Stage 4: Contract Document Development
- 4.1 Working Drawings and Specifications
- 4.2 Final Estimate of Cost

Stage 5: Implementation

* **References**
- Canadian Standard Form of Contract for Architectural Services, Document 6, 2002
- Canadian Handbook of Practice for Architects (CHOP)

The Health Care Facility has ensured that:
1. *This submission meets the policies and procedures identified in the Capital Planning Manual*
2. *This submission is complete, with explanation when requirements have not been met*
3. *It will comply with all regulations under applicable legislation relating to this health care facility*

Board Chair Name:	Gay Wrye
Board Chair Signature:	Gay Wrye.
CEO Name:	David Musyj
CEO Signature:	

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Ontario **Stage 1 Submission Requirements Checklist** Ontario

It is important that HSPs ensure their submissions closely follow the format outlined in the guidelines and checklists for each stage, to ensure LHIN and ministry review and to facilitate endorsement /approval.

***All information marked as "Not Submitted" must be accompanied with a rationale explaining why the information is not required to be submitted.*

	Submitted	Not Submitted**
i. Executive Summary	☒	☐
Proposal Synopsis	☒	☐
Key Facts	☒	☐
Anticipated outcomes	☒	☐
PART A Elements		
1.0 Service Delivery Model Report	☒	☐
1.1 Master Program *The master program is a document that reflects the health care facility's present and future service role within the community. It outlines current and projected program, staffing, and departmental space requirements based on the demographic data in the health care services plan.*	☒	☐
1.1.1 Present service delivery	☒	☐
1.1.1.1 Program parameters	☒	☐
1.1.1.1.1 Model of care	☒	☐
1.1.1.1.2 Organizational Structure	☒	☐
1.1.1.1.3 Hours of operation	☒	☐
1.1.1.2 Scope of services provided	☒	☐
1.1.1.3 Historical workload for each service for the past 3 years	☒	☐
1.1.1.4 Historical service volumes for the past three years	☒	☐
1.1.1.5 Historical attendances for the past 3 years	☒	☐
1.1.1.6 Historical beds for the past 3 years	☒	☐

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Ontario **Stage 1 Submission Requirements Checklist** Ontario

			Submitted	Not Submitted**
1.1.2	Future service delivery		☒	☐
	1.1.2.1	Program parameters	☒	☐
		1.1.2.1.1 Model of care	☒	☐
		1.1.2.1.2 Organizational structure	☒	☐
		1.1.2.1.3 Hours of operation	☒	☐
	1.1.2.2	Scope of services provided	☒	☐
1.1.2.3		Projected workload	☒	☐
	1.1.2.4	Projected service volumes	☒	☐
	1.1.2.5	Projected attendances	☒	☐
	1.1.2.6	Projected beds	☒	☐
	1.1.2.7	Other factors affecting space (e.g. Non-clinical staff)	☒	☐
1.1.3	Options for Delivering Changes in Service Delivery		☒	☐
	1.1.3.1	Model of care options	☒	☐
	1.1.3.2	Operating implications	☒	☐
	1.1.3.3	Capital implications	☒	☐

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Ontario Stage 1 Submission Requirements Checklist Ontario



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Ontario Stage 1 Submission Requirements Checklist Ontario

MOHLTC-LHIN Joint Review Framework for Early Capital Planning Stages
Stage I: Proposal Submission Requirements Checklist

Health Services Provider Name:	Hôtel Dieu Grace Healthcare (HDGH)
Site:	
Proposed Project Name:	New Acute Hospital
Proposed Project Ministry Number:	
Contact:	

Stage 1: Proposal
- 1.0 Service Delivery Model Report
- 2.0 Service Support Infrastructure Report
- 3.0 Business Case / Options Analysis
- 4.0 Facility Development Plan

Stage 2: Functional Program
- 1.0 Program Parameters (Optional)
- 2.0 Functional Program
- 3.0 Block Diagrams
- 4.0 Phasing Plan
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- 6.0 Project Schedule

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- 3.1 Block Schematic Report
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Board Chair Name:	Carol Derbyshire
Board Chair Signature:	Carol Derbyshire
CEO Name:	Ken Deane
CEO Signature:	

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Ontario Stage 1 Submission Requirements Checklist Ontario

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Proposal Synopsis	☒	☐
Key Facts	☒	☐
Anticipated outcomes	☒	☐
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1.1.1 Present service delivery	☒	☐
1.1.1.1 Program parameters	☒	☐
1.1.1.1.1 Model of care	☒	☐
1.1.1.1.2 Organizational Structure	☒	☐
1.1.1.1.3 Hours of operation	☒	☐
1.1.1.2 Scope of services provided	☒	☐
1.1.1.3 Historical workload for each service for the past 3 years	☒	☐
1.1.1.4 Historical service volumes for the past three years	☒	☐
1.1.1.5 Historical attendances for the past 3 years	☒	☐
1.1.1.6 Historical beds for the past 3 years	☒	☐

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Ontario **Stage 1 Submission Requirements Checklist** Ontario

			Submitted	Not Submitted**
1.1.2	Future service delivery		☒	☐
	1.1.2.1	Program parameters	☒	☐
		1.1.2.1.1 Model of care	☒	☐
		1.1.2.1.2 Organizational structure	☒	☐
		1.1.2.1.3 Hours of operation	☒	☐
	1.1.2.2	Scope of services provided	☒	☐
1.1.2.3		Projected workload	☒	☐
	1.1.2.4	Projected service volumes	☒	☐
	1.1.2.5	Projected attendances	☒	☐
	1.1.2.6	Projected beds	☒	☐
	1.1.2.7	Other factors affecting space (e.g. Non-clinical staff)	☒	☐
1.1.3	Options for Delivering Changes in Service Delivery		☒	☐
	1.1.3.1	Model of care options	☒	☐
	1.1.3.2	Operating implications	☒	☐
	1.1.3.3	Capital implications	☒	☐

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment [a]	Response/Page No.
General Comments	
1 A Master Program (MP) must include a section for each program/service associated with the healthcare facility (as outlined in the *Ministry-LHIN Joint Review Framework for Early Capital Planning Stages Toolkit, 2010*, page 2.2.5-2.2.6).	Noted.
a Further clarification regarding program parameters, models of care and the scope of services is required. Provide further detail regarding current and future service delivery and models of care for each service area to provide an adequate base case comparator for proposed future service delivery and associated elements.	Noted. This will be addressed in Stage 1B.
b Further clarification regarding specific programs and services that will be shifted to the community to outline where services will be provided and anticipated volumes is required. Also, details regarding the community relationships/partners to facilitate the MP assumptions are required. The MP responses should clearly articulate what will remain in the hospital and what will move to the community.	See Stage 1A Report Figure 3 and Pages 1.2-50 to 1.2-105. Further discussion among HSPs is under way and will continue as part of Stage 1B and Stage 2.
c Provide a clear vision and rationale about what programs and services will be provided, at which site and when (i.e., implementation/phasing timing).	See Figures 17, 18, 15, 21. The overall vision is outlined on Pages 1.2-37 to 1.2-43; and Pages 1.2-50 to 1.2-105. Implementation/phasing/timing will be determined in Stage 1B.
Note: The MP responses should also be positioned as a specific plan of action in definitive terms; the submission currently positions the MP options as a variety of plausible scenarios for consideration without identifying a strategic path for implementing the MP.	Noted. See Stage 1A Report Pages 1.2-50 to 1.2-105. Further discussion among HSPs is under way and will continue as part of Stage 1B and Stage 2.
2 Complete the following program and service tables:	
a Program and Service Plan Tables (Regional and Site) as presented by the Ministry of Health and Long-Term Care (the ministry), Health Capital Investment Branch, at the June 2013 Steering Committee Meeting in Windsor.	Tables are provided in Stage 1A Report, Pages 1.2-50 to 1.2-105. Further discussion among HSPs is underway and will continue as part of Stage 1B and Stage 2.
b Figure 17, MP page 1.2-68-71, is blank and needs to be completed.	See completed Figure 17.
c Figure 5, MP page 1.2-21-22 the Ouellette Site does not appear to be used. As the list of programs and services in Figure 5 is not a comprehensive list of WRH and HDGHs services please indicate if the Ouellette site will be used moving forward. Clarify if the heading "New Site" in table is referring to the new acute care facility.	Whether the Ouellette site will be the future downtown site will be determined in Stage 1B. 'New' site is referring to the new acute facility.
3 Provide a current definition of an acute care and non-acute care setting in line with the vision for the new acute care facility.	Acute inpatient care provides necessary treatment for a disease or severe episode of illness for a short period of time, with the goal of discharging patients as soon as they are stable. Non-acute care would include services often referred to as extended care, chronic care or complex continuing care, serving people who may not be ready for discharge from hospital, but who no longer need acute care services. This type of hospital care provides ongoing professional services to a diverse population with complex health needs. (Source: Windsor Hospitals Study: A public conversation on the future of hospital services in Windsor-Essex, July 2012).

[a] Based on Stage 1A Proposal - Part A Service Delivery Model Report, November 1, 2013.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
4 Further clarification is required regarding any support/alignment this project will have with other ministry strategic priorities (i.e., Community Based Clinics, Quality-Based Procedures, etc.)	Noted. Will be addressed in Stage 1B.
5 See Appendix A1 for further ministry questions/comments on program specific items.	Reviewed and responses provided. See Stage 1A Report, Pages 1.2-29 to 1.2-31.
1.1 Background	
1.1 MASTER PROGRAM	
1.1.1 Present Service Delivery	
A Program Parameters	
1 Provide a comprehensive list of current programs and services provided by WRH and HDGH, not only those involved in the specific improvement initiative. Indicate why and how these current programs needs to be modified.	Stage 1A Report: Pages 1.2-37 to 49, Figure 21, Attachment F and [redacted] Section Redacted
B Workload and Service Volumes	
1 Clearly outline base year assumptions for all acute, non-acute and ambulatory care services.	Stage 1A Report: Figure 13 and Figure 14; Volume Projection Methodology pages 1.2-12 to 1.2-25; Attachment F.
1.1.2 Future Service Delivery	Section Redacted
A Program Parameters	Section Redacted
1 Describe any new programs and services that will be introduced; provide a rationale for providing the new programs and services.	Stage 1A Report: Pages 1.2-37 to 43; Pages 1.2-50 to 1.2-126; Figure 21; Figure 36 [redacted] Question #2 [redacted]
2 Describe service relationships or dependencies within the facility and between other sites and community partners in order to meet the needs of the local health system context (i.e., Local Health Integration (LHIN) priorities, site specific needs, regional programs, etc.)	Stage 1A Report: Pages 1.2-8 to 11; 1.2-106 to 118 [redacted] Questions #10 and #11) [redacted] Attachment J; Attachment K. Section Redacted Section Redacted
3 Clarify/correct inconsistencies amongst services and programs through the document. For example, transfusions on page x of the Executive Summary (ES) are listed as transfers to medical day care and home. On ES page xi, transfusions are mentioned as shifting to the community; cancer volumes are stated beds; cardiac volumes has a bed count, other areas do not include bed numbers; Mental Health and Addictions includes a bed count, but the numbers in this list do not add up.	Noted.
4 Page 1.2-12 of the MP mentions that the "...Windsor hospitals must investigate innovative approaches to reduce service demands and costs..." Provide details about the "innovative approaches considered and explored and provide an option analysis indicating which approaches were selected/rejected and why. Using the current service delivery model, indicate how the transformation initiatives listed on MP page 1.2-12 will shape future service delivery models.	Stage 1A Report: Pages 1.2-50 to 105 [redacted] Further system design and planning are occurring via the ESC LHIN's CCP in Stage 1B. Section Redacted

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
5 Planning parameters provided on MP page 1.2-12 are very broad. Please provide planning parameters as they relate to each individual service and program.	The planning parameters formed the foundation for the detailed information on pp. 1.2-31 to 105 [redacted] Section Redacted
6 The proposal indicates the addition of a significant number of new and expanded services on MP page 1.2-60. An ESC LHIN endorsed Business Case for new and/or expanded provincial programs with confirmed support from applicable provincial agencies (Cancer Care Ontario, Cardiac Care Network, Ontario Renal Network, etc.) is required. At a minimum, the Business Case should confirm the following:	Noted.
a Provide confirmation of the provincial programs that presently exist in this region, including current workload and service volumes.	
b What are the projected patient volumes requiring these services?	
c Where are these patients currently being accommodated?	
d Is there a comprehensive acquisition plan for the necessary Human Resources?	
e What are the operating impacts of these services?	
f How will these operating impacts be managed (in the context of Health System Funding Reform)?	
g Outline how the proposed program fits within the regional and provincial strategies for the specific service.	
B Workload and Service Volumes	
1 Out-year volume assumptions, used to adjust program and service volumes, require further clarification (i.e., outline how specific adjustments equate to incremental volumes).	Stage 1A Report: Figure 13, Figure 14; Attachment F Workload and Activity Projections.
2 Population Projections Consistency and Rationale:	
a There appears to be a discrepancy between the Figure 3: Population Projections for ESC LHIN and the written document: MP page 1.2-13 states that the younger population, those between 0-44 years of age is decreasing when the chart demonstrates that the population is decreasing in the 0-64 age cohorts. Please clarify.	Figure 7 shows the population decreasing for all age cohorts including 0-14 years, 15-19 years, 20-44 years and 45-64 years.
b Population Characteristics on MP page 1.2-14 should be updated to reflect most recent data; i.e., employment statistics.	Noted. Section Redacted
c On MP page 1.2-15, a list of key priority populations is given. What approach and service model for each relevant program and service will be used to target these populations moving forward? How will the approaches be initiated and when?	Stage 1A Report: pages 1.2-50 to 1.2-105 [redacted]
3 On page 1.2-16, a list of key drivers of health care service planning and delivery is given. What approach and service model for each relevant program and service will be used to target these key drivers moving forward?	As above.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
4 Provide the following information as it relates to Figure 6A and 6B on MP page 1.2-23-25 and historical and projected Workload and Activity/Volume Projection Methodology MP page 1.2-26-27:	
a Figure 6B: clarify how the ER bed numbers were projected and adjusted to arrive at final calculations for ER.	Emergency department bed numbers are calculated by projecting the inpatient days reported in the emergency department functional centre. The inpatient days were allocated 75 per cent to medical units and 25 per cent to surgical units, and projected by their respective growth drivers.
b MP page 1.2-35: Explain why Obstetrics/Labour, Delivery (Del), Recovery, (Rec), PP is increasing when the population for this age cohort is clearly decreasing?	Obstetrics/labour/delivery/recovery/post partum activity is driven by the Essex County population aged 0. Ministry of Finance aged 0 population projections are used so that the volume projections are consistent with Statistics Canada's assumptions for fertility, immigration and migration. Essex County population aged 0 continues to increase and peaks in year 2024, and then decreases. Bed projections are also calculated using occupancy rate targets. It is important to note that although patient days change directly with the drivers, the actual change in beds may appear different. For example, if current occupancy for a functional centre is at X%, applying a lower target occupancy would add beds first to achieve the target occupancy, and then add new beds for growth. The 10 escalation beds; have been removed. The projected LDRP beds are now 5 less for each projection year.
c Confirm if the patient clinical efficiency targets proposed by the Hay Group (June 2002) have been met to date. Describe the patient clinical efficiency targets used for future beds (MP page 1.2-26).	Opportunities to reduce use of inpatient days through shifting inpatient surgery to ambulatory surgery are based on the CIHI coding of inpatient cases as ambulatory surgery candidates, and comparisons of the per cent use of ambulatory surgery by CACS and patient age. "Best Practice" benchmarks for per cent use of ambulatory surgery by CACS and patient age combination are based on the peer hospital with at least 30 inpatient and day surgery cases in the combination, with the highest per cent use of day surgery.
	"Best practice" benchmarks for acute length of stay are based on the shortest average acute (i.e., exclusive of ALC day) length of stay in each CMG/patient age/resource intensity level (RIL) combination of hospitals with at least 30 "typical" cases in the fiscal year. LOS benchmarks are based only on "typical" cases (as defined by CIHI) and the benchmarks are applied only to the typical cases in each hospital. Reduction of ALC days is very dependent on access to post-acute services. The analysis showed the differences across hospitals in per cent distribution of discharges by post-acute placement, but the ALC target for the Windsor hospitals is to reduce the use of ALC day by 50 per cent.
	Patient clinical efficiency targets used:
	• Conversion from inpatient surgery to day surgery (1,400 cases and 2,000 days in 2011/12)
	• ALOS reduction (13,000 target days saved in 2011/12)
	• 50 per cent ALC reduction (12,0000 ALC days removed in 2011/12)
	• Note that acute efficiencies are applied to base year, population growth and aging driver follow
d Explain the statement, "Outreach teams to Long-Term Care Homes need to be more specialized to support GPs" (ES page xvii).	Clarification: Specialized outreach teams to long term care homes are required to support GPs.
e Will the ESC LHIN regional plan for Orthopaedics change any of the acute health service providers' proposals?	The ESC LHIN will provide clarification.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

	Ministry Comment *	Response/Page No.
f	The submission suggests a Vascular Health model related to Cardiac patients (ES, page xvi). Describe the Model of Care and proposed location.	The model is incorporated and detailed in the ESC LHIN led CDM planning. Outcomes will be available in April.
g	Of the proposed 78 intensive care unit (ICU) beds, are any of these step down? The proposed 78 ICU beds represent 11 per cent of the total acute becs (735).	The percentage of the critical care beds would be step down beds; however, the specific alignment and distribution will be further detailed in following phases. The percentage of ICU beds (of total beds) increases for the projections. However, this is largely due to aggressive clinical efficiencies applied to medical and surgical beds (i.e., reduction in the denominator). The 8 per cent assumption is also based on a historical average, and the projected distribution of becs is purposely different than historic averages. Furthermore, small hospitals and teaching hospitals can be significantly different than the 8 per cent average (teaching hospitals typically having a higher percentage). By focusing on the ICU beds specifically (not CCU beds), the projections indicate 7 per cent (43 ICU beds excluding CCU/total of 610 acute beds) for 2022/23.
h	The ministry expects a community hospital with the proposed medical/surgical bed complement to be planning for 8 per cent or approximately 59 ICU beds.	See above.
i	Given that the acute care provider is proposing Transplant, Cardiac and Surgical Oncology, identify the proposed break down of surgical beds by subspecialty.	Additional beds for these new services have not been incorporated in the projections. Appropriate processes may be pursued in the future when/if the need for the services have been confirmed as a priority.
j	What is the current demand for long term ventilated services in the Windsor catchment area? Where are long term ventilated patients currently cared for?	For the projection, the 712403000 ICU - Combinec Med/Surg at WRH was split into three separate units: 14 ICU, 5 CCU and 2 chronic vents. The projections assumed the chronic vents would be part of the complex continuing care bed projections. The projections assumed the recent planning initiatives indicate that will increase to 196 complex continuing care beds from the current baseline to 160; therefore capturing the anticipated demand for long term ventilated services.
k	Does Windsor currently have a bariatric Program? If so, provide workload data to justify this new program, if not provide justification for this new program.	Yes there is a program. The Bariatric and Medical Management Clinic had 4,366 visits in 2012/13.
l	The acute care provider is proposing Psychiatric Intensive Care (PICU) (ES page xiii) however neither PICU beds nor workload have been identified. Are these new beds? Supporting workload data is required to justify these beds.	They are included in the mental health bed projections.
m	Does Windsor have an Electrophysiology Program? If not, how will the Implantable Cardiac Defibrillator (ICD) Program be realized?	No there is not. Detailed planning for the ICD program and other unmet needs will follow MOHLTC/LHIN and CCN submission requirements.
n	Are any of the efficiencies outlined on ES page xxi currently in place? What is the contingency plan if the proposed efficiencies are not realized?	Yes they are in place. Contingency plans will be identified as part of ongoing planning.
o	Describe how the Chronic Diseases Prevention and Management Program (CDPM) will address the four components of the provincial initiative: Health Promotion, Primary Prevention, Secondary Prevention, Tertiary Prevention.	The ESC LHIN led CDM initiatives and report will address this.
p	Option B for rehabilitation: "under one umbrella with potential for satellite services" is supported. As above, has Windsor considered some of these services being led and provided by other partners?	The ESC LHIN led rehab services review will outline the preferred model.
q	Provide information regarding which procedures are to be done in hospital and those to be done in the community.	See Stage 1A Report Figure 3; Pages 1.2-50 to 1.2-107; including Figures 23, 25, 27, 29, 30, 31, 32, 33; Attachment F.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
5 On MP page 1.2-76, Provide a comprehensive list of Support Services required i.e., administration, volunteers. Each support service should outline its current and future service delivery model detailing any workload/volumes relevant to each service.	The detailed directions outlined in the Stage 1A Report; Pages 1.2-119 to 1.2-126 including Figure 36 will be supplemented in Stage 1B and Stage 2 documents. In addition other services that require priority offices/workstations (i.e., administration, finance, foundation, human resources, spiritual care and volunteers) will be addressed in Stage 1B. The HSPs in Windsor Essex are committed to achieving efficient 'back office' service delivery models.
1.3 Human Resources Plan	
1 Only the programs with the most substantial increases were listed. A more comprehensive list will be required in future submissions.	Noted.
1.4 Preliminary Operating Cost Estimate	
1 On page MP 1.4-89, current operating cost projections are reliant on the Post Construction Operating Plan methodology. Provide an operating cost estimate that reflects a movement towards Health System Funding Reform. Financial	[redacted]
2 Will current operating funding for services that will be shifted out flow to the new facilities and be removed from the hospitals' budgets? If not, how will these services be funded? Financial	[redacted]
3 How does the funding shift align with Health System Funding Reform? How will funding be calculated for non-QBP procedures? Financial	[redacted]

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
PROGRAM SPECIFIC QUESTIONS	
Diagnostics	
1 Provide a breakdown of diagnostic tests by inpatients and outpatients.	Please see Stage 1A Report: Figure 24; Attachment F Workload and Activity Projections.
2 Provide a table listing all Diagnostic Imaging (DI) services and indicate where they will be offered (i.e., community vs. hospital). For portable diagnostic imaging services, (Radiology & Ultrasound), what Radiology services will be provided for Long Term Care (LTC), homes? Has the Human Resources impact been addressed particularly the availability of credentialed Sonographers?	Please see Stage 1A Report Figure 24. In addition this will continue to be addressed in Stage 1B and through detailed operational planning.
3 Provide further details regarding the provision of new testing modalities (i.e., molecular diagnostics and toxicology) to support new or enhanced programs or unmet community needs.	This will be addressed in Stage 1B and Stage 2 and through detailed operational planning.
4 Provide more details regarding Surgical Services to be relocated from Acute and Ambulatory Care as outlined in Figure 17 on MP, page 1.2-71, 10.2 Surgical Services: "Laboratory services for perioperative care (i.e., contractual agreement with designated community lab)".	Please see Stage 1A Report; Pages 1.2-98 to 1.2-103 including Figure 32. To minimize the need for patients to have specimens collected at the Hospital, arrangements with qualified laboratory services in the community may be possible. The operational planning will occur in subsequent stages.
Emergency Program	
1 MP page 1.2-52: two scenarios are proposed to manage Triage 4 and 5; indicate which scenario has been chosen; indicate how the volumes from Triage 4 and 5 will be addressed and where it is anticipated the volumes will go in the community.	Please see Stage 1A Report; Pages 1.2-65 to 1.2-74 including Figures 26, 27 and 28.
a Provide a breakdown of Emergency Visits by Canadian Triage and Acuity Score (CTAS) Level.	See Stage 1A Report; Figure 27 on Page 1.2-72; Attachment F Workload and Activity Projections.
b Confirm that the Emergency equivalent beds included in the current and historical medical/surgical bed count.	Stage 1A: Figure 17 and Figure 19; Attachment F Workload and Activity Projections.
c Describe the hospital's contingency plan for emergency services if the proposed shifts to the community (CTAS 4 & 5) do not materialize as planned.	The HSPs will establish targets and create operational and organizational plans to achieve them. Contingency plans will be addressed as part of ongoing planning.
d Two scenarios are provided for the Emergency Department (ED) workload (ES page xii/MP page 1.2-52), which scenario is consistent with Health Based Allocation Methodology (HBAM) projections?	Without seeing the HBAM projections, we cannot indicate consistency of the scenarios with the HBAM projections. However, the base projections (i.e., non-adjusted) provide a scenario that has consistent assumptions with MOHLTC Health Based Allocation Model (HBAM). In fact, if methodologies are using same base year of data and the same population projection release (from the Ministry of Finance), the drivers (per cent increases) will match.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
2 What proportion of ED visits occurred during the day versus evening/night, weekdays versus weekends? Demonstrate how access to emergency and urgent services will be improved (i.e., community alternatives to ED visits) in line with the hospital's proposal.	In fiscal year 2012/13, 67,422 ED visits (51.6 per cent) were during the day; 41,627 ED visits (31.8 per cent) were during the evening; and 21,733 (16.6 per cent) were overnight (based on registration time). In fiscal year 2012/13, 93,322 ED visits (71.4 per cent) were on Monday-Friday; and 37,460 ED visits (28.6 per cent) were on Saturday or Sunday (based on registration date).
3 It was noted in the proposal that "ideally triage 4 and 5 visits shifted to community based providers" (ES page xii) and that a reduction of 15,000 ED visits will be expected.	Section Redacted
a Provide more information on the processes that will be in place to action this goal. What specific strategies will be used to ensure that CTAS 4 and 5 visits would be shifted to community based providers?	Please see Stage 1A Report; Pages 1.2-65 to 1.2-74; [redacted] Attachment J; Attachment K. Ongoing multiprovider operational planning will occur through the ESC LHIN to achieve the changes.
b Across Canada, the emerging model of emergency care in communities for improved access is a collaborative team based approach that links primary and emergency/urgent care. Given proposed plans to redirect CTAS 4 and 5 to community based providers, could Windsor be served by such a model? What other innovative models from other jurisdictions were explored before arriving at the chosen models?	The inherent principles in the model were incorporated in the change table discussions. Other models are outlined in Stage 1A: [redacted] - Attachment D, Avoidable Admission Strategies, A Report Prepared for the ESC LHIN by the Hay Group and Agnew Peckham, July 2013. Section Redacted
4 The proposal states that there will be "an emergency department at the new hospital and one downtown" (ES page xii). What will the hours of operation, model of care, and staffing model be for the ED downtown? Clarify the organizational arrangement for the "ED downtown" (i.e., UCC, Walk-in Clinic, Nurse Practitioner (NP)-led clinic?).	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
5 The proposal estimated that a large proportion of ED visits will be shifted to the "Ambulatory Centre Downtown" and "Ambulatory Centre Adjacent to Acute Hospital" (p. 13, Stage 1A Planning Process).	
a Provide more information on these sites (i.e., hours of operation, model of care, staffing model, how patients will transfer between sites, etc.)	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
i Provide more information on the types of ED visits that are expected to be shifted to the new sites and how this sift will be facilitated and transitioned. What operational sequencing is planned?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
b A "nurse practitioner led family practice clinic" was proposed. Please clarify whether this clinic will be located in the "Ambulatory Centre Downtown" or elsewhere. What will be the hours of operation? When will this be phased in and/or built for operations in relation to the new acute care hospital?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
c Location of the new acute hospital:	
ii Provide a description of ED visits in FY2012/13 by the mode of arrival (i.e., by ambulance, 'walk-in'). How will the new location of the acute hospital affect access to the ED?	In fiscal year 2012/13, 100,268 ED visits (76.7 per cent) had no ambulance arrival; 30,510 ED visits (23.3 per cent) arrived by ground ambulance; and less than 5 ED visits had either air ambulance or combination of air/water/ground ambulance arrival.
iii How will ambulances relate to the new "ED sites" (i.e., will they all accept ambulances?)	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
iv What protocols will need to be established to ensure timely and appropriate patient transfers?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
v What formal agreements exist with other hospitals to support patient transfers?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
d Detail linkages (i.e., governance, administrative) to the acute care hospital and the ambulatory sites.	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
e How is the existing West Windsor UCC taken into account for the new acute hospital and ambulatory centres workload projections?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.
f What community paramedicine arrangement exist in or around Windsor?	Detailed operational and organizational planning will occur in Stage 1B and Stage 2 to address the questions.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
Mental Health	
1 MP page 1.2-56: the initiation of "one central coordinating body that will establish a road map of mental health and addiction services and be responsible for all mental health service delivery" - provide more details on this initiative.	Organizational and operational planning is underway and information will be provided when available.
2 For the outpatient Mental Health programs proposed for the downtown core, has consideration been given to other health service providers versus the hospital leading these programs?	Yes. Please see Stage 1A Report; Pages 1.2-82 to 1.2-91 including Figure 30.
3 What community consultation has been undertaken by the ESC LHIN around program changes for Mental Health?	Community consultations have occurred through numerous planning processes and will continue to occur during subsequent stages of planning.
4 Provide details about initiating a single information system. Have community providers been consulted? Identify any legislative and policy changes required to facilitate this initiative and assess the feasibility of these required changes in support of a single information system.	Organizational and operational planning is underway and information will be provided when available.
5 What programs have been considered regarding Mental Health that align with ministry priorities (i.e., Ontario's Comprehensive Mental Health and Addictions Strategy, "Open Minds, Healthy Minds", which was released in 2011, action plan for the Strategy) for 2014 onward?	All directions align with MOHLTC priorities. Please see Stage 1A Report: [redacted] Attachment J. Section Redacted Section Redacted
6 Outline any consultation that has been done with the Ministry of Child and Youth Services.	Consultations are ongoing and will continue to occur during the next stages of planning.
7 Provide the rationale for the strong focus on mental health and addictions in the submission as the population statistics do not necessarily indicate that there is a higher prevalence of these conditions in the area.	While there may not be a higher prevalence, the need for mental health and addictions service enhancements are well documented. Please refer to Stage 1A Report: Executive Summary page iii; Attachment B Discussion Document; Attachment C ESC LHIN Priorities page 60-61; Attachment J.

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Hotel Dieu Grace Healthcare and Windsor Regional Hospital
Response to Ministry of Health and Long-Term Care Stage 1 Proposal-Part A, Service Delivery Model Report Review

Ministry Comment *	Response/Page No.
Academic and Research (MP page 1.2-72-76)	
1 Provide any consultation and/or stakeholder engagement that has occurred with relevant partners and stakeholders that supports this vision for the Windsor/Essex region.	Pages 1.2-114 to 1.2-118 were developed in collaboration with the 8 key stakeholders listed in Attachment A, page 5.
a While the proposed vision as an Academic Health Science Centre (AHSC) references creating a "hub", clarify what specifically that means and how it would differ from the current role. Discuss whether the hospitals expect to increase, decrease, or maintain current teaching levels, or whether or not they would pursue any kind of "specialization" within their teaching mandate (i.e., Centre of Excellence in ...).	The information will be provided in Stage 1B.
b If the hospitals are contemplating a significant change to their role (or approach) to medical education and/or research, consultation with Western would be required; a more concrete proposal for consideration will need to be submitted.	Noted.
i Provide any details to support the viability of providing "hospital-based, full-time clinical academic physicians". The medical school and ministry will need to monitor trends here to assess viability and impact on recruitment/retention of teaching physicians.	Noted. The information will be developed through future operational planning.
2 Should the hospitals decide to put forward a request to be designated as an AHSC in the future, the ministry would consider it on its merits, in light of established criteria, its clear description of the outcomes/benefits for the community, region and province, and cost-benefit for the people of Ontario.	Noted.
Services Shifting to the Community	
1 Provide feedback on any consultation undertaken with Specialty Clinics regarding any up and coming initiatives to shift services to the community; i.e., cataracts? Has the Specialty Clinics Policy Guide been reviewed (www.ontario.ca/specialtyclinics)?	Please see Stage 1A Report; Figure 21 and Pages 1.2-98 to 1.2-103.
2 Will the community-capacity plan consider Specialty Clinics (i.e., cataracts and colonoscopies)?	Yes. In addition, further analysis will occur during Stage 1B.
3 What are the timelines for shifting procedures to the community/ambulatory centre? Is it possible to shift procedures out of the hospital (i.e., cataracts), prior to the building of the new acute centre?	The information will be determined in Stage 1B.
4 How will the appropriate delivery agent for services shifted out of hospital be determined? Will it be an open competition?	There will be an ESC LHIN led logical, fair and comprehensive process. The details will be developed during the next stages of planning
5 How will community-based services align with Health Links? Two Health Links have been mapped out for the Windsor region. Further detail should be provided around how this project will enable and/or work with their local health links.	Noted. The intent in service delivery planning is that there will be alignment among all service providers including the Health Links.
6 Provide more details around surgical procedures that could be moved to the community.	Please see Stage 1A Report; Pages 1.2-98 to 1.2-103 including Figure 32.

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Stage 1 Part A Submission Table of Contents

The following lists the MOHLTC/LHIN's checklist for Stage 1 Part A submissions and the pages where the information is provided.

i Executive Summary

Proposal Synopsis.....i-xxxvi
Key Facts.....i-xxxvi
Anticipated Outcomes.....xxxv

1.0 Service Delivery Model Report

1.1 Master Program

1.1.1 Present Service Delivery
1.1.1.1. Program Parameters
1.1.1.1.1 Model of Care.....1.1-10 to 1.1-12; 1.2-5 to 1.2-11, Fig 8, 9, 10, 11, 15, 16; 1.2-44 to 1.2-49; Att E
1.1.1.1.2 Organizational Structure.....1.2-11
1.1.1.1.3 Hours of Operation.....1.2-11
1.1.1.2 Scope of Services Provided.....1.2-37 to 1.2-49; 1.2-114 to 1.2-126; Fig 17, 18, 24, App F
1.1.1.3 Historical Workload for Each Service for the Past 3 Years.....Fig 17, 18, 24; Att F
1.1.1.4 Historical Service Volumes for the Past 3 Years.....Fig 18, 24; Att F
1.1.1.5 Historical Attendances for the Past 3 Years.....Fig 18, 24; Att F
1.1.1.6 Historical Beds for the Past 3 Years.....Fig 17; Att F

1.1.2 Future Service Delivery
1.1.2.1 Program Parameters
1.1.2.1.1 Model of Care.....1.2-31 to 1.2-43; Fig 9, 10, 11, 15, 16; 1.2-50 to 1.2-126
1.1.2.1.2 Organizational Structure.....1.2-11
1.1.2.1.3 Hours of Operation.....1.2-11
1.1.2.2 Scope of Services Provided.....1.2-31 to 1.2-43; 1.2-50 to 1.2-128
1.1.2.3 Projected Workload.....Fig 17, 18, 24; Att F

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1.1.2.4 Projected Service Volumes ..... Fig 18, 24; ..... Att F
1.1.2.5 Projected Attendances ..... Fig 18, 24; ..... Att F
1.1.2.6 Projected Beds ..... Fig 17; ..... Att F
1.1.2.7 Other Factors Affecting Space (e.g., Non-Clinical Staff) ..... 1.1-5 to 1.2-14; ..... 1.2-33 to 1.2-37; 1.2-106 to 1.2-128 ..... Att I, Att J; Att K

1.1.3 Options for Delivering Changes in Service Delivery
1.1.3.1 Model of Care Options ..... 1.2-50 to 1.2-126; ..... Att G; Att H
1.1.3.2 Operating Implications ..... 1.3-1 to 1.3.2; ..... 1.4-1 to 1.4-2; ..... Att I; Att L-1; Att L-1
1.1.3.3 Capital Implications ..... 1.1-12; ..... 1.2-6 to 1.2-8; ..... 1.2-36 to 1.2-37; ..... 1.2-127 to 1.2-128; ..... Att G; Att H; Att I

Human Resources [redacted] ..... Att L-1

Financial [redacted]

1.3.1 Changes in Model of Care ..... 1.2-50-1.2-126; ..... Att G
1.3.2 Operating Cost Estimate ..... 1.4-1-1.4-2; ..... Att L-2

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1.1 Background

Introduction

Following an extensive community engagement process and the recommendation of the Windsor Hospitals Study Task Force, the Boards of Directors of Hôtel Dieu Grace Healthcare (HDGH) and Windsor Regional Hospital (WRH) recently agreed on a proposed new vision for hospital care delivery in the Windsor/Essex region. The vision will realize a new, state-of-the-art single site acute care hospital, within the context of an integrated health system that continues to shift services located within the acute facilities to ambulatory settings, within the community, patients' homes and other provider settings. Both Boards believe that the community will benefit from the economies of scale and a more consistent and coordinated approach to service delivery resulting from the realignment of acute care services under one organization.

At this time, both hospitals have started planning for the development of hospital services and facilities consistent with this new vision. The organizations have engaged stakeholders to prepare this Stage 1A Proposal to the Ministry of Health and Long-Term Care (MOHLTC) for a new acute hospital and other capital redevelopment, to be developed within the context of an integrated health system that represents a network of service providers and structures working in a coordinated fashion. The Stage 1A Proposal focuses on future demand for services and programs (sizing and scoping), including options for service delivery and impacts on future workload/activity

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and other health service providers. Facility/building discussions will occur at later stages in the capital planning process.

A fundamental principle throughout the planning process was that the scope of services and volumes provided by Leamington District Memorial Hospital (LDMH) would continue in the future.

This document outlines preliminary planning parameters and assumptions for the new hospital and has been developed by the Windsor Hospital's Program Planning and Steering Committee in collaboration with

- Agnew Peckham, Health Care and Facility Planners
- HCM Group, Inc., Quantitative Data Experts
- The Hay Group, Strategic Advisor Service Delivery Models

Community Engagement

As part of the development of the Stage 1A Proposal, local health care experts and community members discussed questions such as the following that are critical to achieving a new and progressive Service Delivery Model for hospital services for the Windsor/Essex community:

Scope of Services

- What are the current services provided at HDGH and WRH?
- What services need to be added to address unmet community needs?
- What services make the most sense to be transferred/relocated from the Windsor hospitals to other providers/settings?

Service Delivery

- How will services be organized differently in the future?
- Where should services be located in the future to support the new vision?

Impact on Activity/Volume Projections

- What are the current utilization management improvement opportunities?
- What adjustments should be considered?

Impact on Other Health Service Providers

- How will the draft planning parameters/assumptions for the new acute hospital impact other providers?

The purpose of the consultation was to be creative about the future organization of hospital services in Windsor/Essex, and to stimulate fresh and innovative thinking about future service delivery models for programs and services, considering Ontario's health care transformation initiatives, local and regional health service providers' roles, emerging and leading practices from other jurisdictions, and contemporary planning guidelines. This created a shared understanding on which to base future facilities planning.

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The development of the Service Delivery Model was addressed in 3 stages:

- Stage 1 – Change Table Consultations
- Stage 2 – Community Capacity Planning
- Stage 3 – Response to MOHLTC Questions

Stage 1 – Change Table Consultations

As part of the development of the Stage 1 Proposal – Part A, over 150 local health care experts and community members were engaged in the following 12 Change Table meetings (11 clinical groups and 1 support services group) to discuss questions that were critical to achieving a new and progressive Service Delivery Model for hospital services for the Windsor/Essex community:

- Cancer
- Cardiac
- Critical Care
- Diagnostics
- Emergency
- Medicine
- Mental Health and Addictions
- Rehabilitation
- Renal
- Support Service
- Surgical Services
- Women and Children's

As part of this engagement process, participants

- Reviewed a Discussion Document to stimulate their thinking about the future and considered leading edge information from other similar health systems, particularly ambulatory care models
- Created the vision for innovative service delivery models and directions necessary to meet community needs that reflect forward thinking about the location of services that have traditionally been in hospital settings
- Considered creative options and ideas regarding the organization and delivery of services and location of services
- Determined the implications of the service directions and assumptions on health service providers particularly the post-acute and community health service sectors
- Developed assumptions regarding projected activity
- Reviewed drafts of the Service Delivery Model for the Stage 1 Proposal – Part A

Outcomes of the Change Table meetings were reviewed by the Program and Planning Steering Committee and shared with all meeting participants in a plenary-style workshop, in which each Change Table presented their clinical directions and there was an opportunity to pose and respond to questions.

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In addition, meetings were convened with

- Academic and research leaders from the University of Windsor and St. Clair College to discuss the future vision for education and research, and the implications for the new hospital
- The Medical Advisory Committee to discuss the Service Delivery Model
- Surgical representatives to review workload projections and assumptions

Privacy [redacted]

Proprietary [redacted]

Stage 2 – Community Capacity Planning

A Balance of Care

This component focused on answering the question: What services do patients need to remain at home and/or avoid admission to long term care and to reduce ALC in the acute care hospital? Dr. Paul Williams and his team from the University of Toronto conducted the study. The results of the study are essential to determine the "whole picture" of services required in the ESC LHIN. The process included data analysis, creation of "vignettes" tailored to the results from the local community, facilitation of Local Expert Panels, a high level strategy "Think Tank" session and a final report summarizing the process and results. The process was supported by a Project Advisory Panel, comprised of key local stakeholders.

This study will recommend new approaches to reduce ALC patient days in the acute hospital, prevent unnecessary hospitalizations and maintain people in their communities with the appropriate community supports.

B Service Delivery Model Change Table Implications

Step 1: Identify Service Delivery Model Shifts

Agnew Peckham Health Care and Facility Planners facilitated meetings in December 2013 with clinical and administrative leaders from the following programs/services where some services had been identified as possible to be located outside the hospital setting:

- Cancer
- Endoscopy/Cystoscopy
- Emergency
- Mental Health and Addictions
- Medicine
- Minor Procedures/Cataracts
- Renal

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The focus of these discussions was to determine:

1 What volumes/workload could be located in community settings?
2 In what types of settings could/should the services be located?
3 What are the volume/workload implications for other health service providers?

Step 2: Identify a High-Level Implementation Plan

Once the service shifts were identified, the Change Tables were reconvened as Community Change Tables with representation from the following organizations:

- Canadian Mental Health Association – Windsor/Essex Branch (CMHA-WEB)
- Community Care Access Centre – Windsor/Essex
- Hotel Dieu Grace Healthcare (HDGH)
- Leamington District Memorial Hospital (LDMH)

In preparation to develop an implementation plan, each organization identified their capacity to absorb the activity/volume, the potential service gap, and resource implications (e.g., staffing, space). With this initial information, the following Community Change Tables met in March 2014 to identify a high-level implementation plan and next steps to achieve the workload shifts:

- Cancer
- Critical Care[3]
- Emergency
- Medicine
- Mental Health and Addictions
- Renal
- Women and Children's

Provincial Planning Directions

The future scope of services and service delivery model is based on the needs of the community served within the framework established through the MOHLTC's priorities and directions, highlighted below. The ESC LHIN, health service providers and community used these priorities as a guide to develop innovative models to address local and regional needs.

Action Plan for the Health of Ontario

- Rebuilding Ontario's healthcare system to provide better access to the right care, at the right time, in the right place. The goal of the *Action Plan* is to create an "obsessively patient-centred" health care system by ensuring care is based on evidence, care is delivered in the right setting and care is

[3] Critical Care included the Program Director only as the only workload shift issue was related to long term ventilated services.

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coordinated so that patients move from one provider to another seamlessly.

The vision for Ontario health care is to make Ontario the healthiest place in North America to grow up and grow old and to provide better patient care through better value of public health dollars.

Health System Transformation

- ***Community Health Links***, which provides a model of health care delivery that is centred on patient care networks to integrate patients, and primary care and health service providers.
- ***Funding Reform*** to ensure that there is flexible funding and resources are focused where they can be used to deliver results. Hospital base budgets will be transitioned into a patient-centred funding model where the provider is rewarded for high-quality care and better use of resources. LHINs will work with hospital and community partners to transition procedures out of the high-cost hospital setting into non-profit community-based clinics.
- ***A new Seniors' Strategy that places renewed focus on keeping people from being unnecessarily admitted to hospital.***
  - improve patient transitions within and across the system and help to ensure patients are receiving more responsive care
  - improve the patient experience and deliver better value for our investment

ESC LHIN Strategic Priorities 2013-2016

Vision and Mission

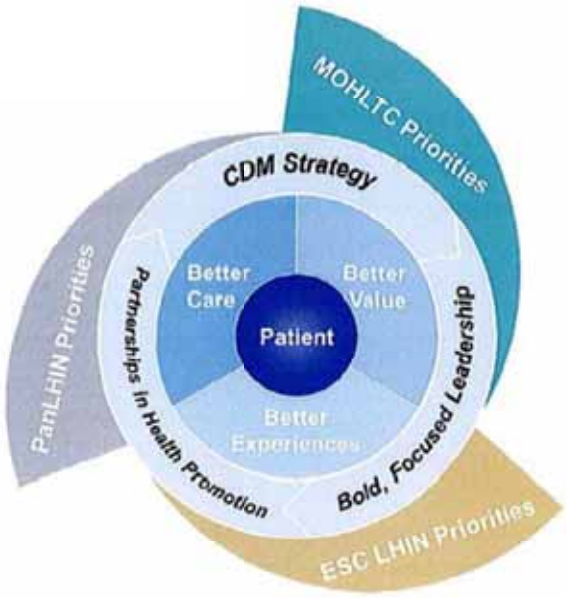
The ESC LHIN vision for the health care system is "Better Care, Better Experiences and Better Value", reflected in its mandate and mission to create a local health care system that

1 Generates better clinical and functional results especially for the most vulnerable, fragile patients.
2 Creates a more coordinated system that provides the right care, at the right place and the right time especially for the most vulnerable, fragile patients.
3 Boldly transforms the health care system, positioning it to become a highly efficient and effective performance leader.

The ESC LHIN Strategic Map is reflected in Figure 5.

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Figure 5: Strategic Map (MOHLTC, LHINs, ESC LHIN)



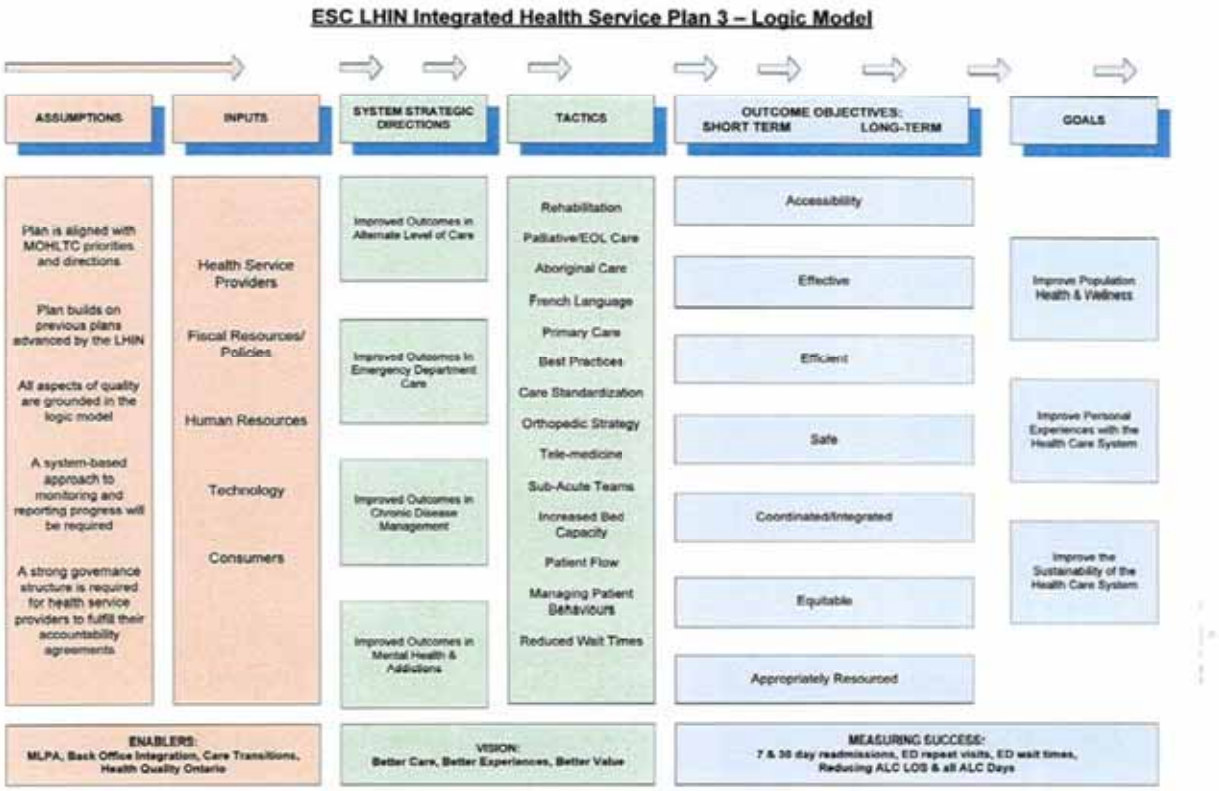
Source: ESC LHIN, Strategic Plan, 2013-2016.

The ESC LHIN continues to build on its previous successes and efforts underway to address its four key priorities outlined in Figure 6

1 Improved outcomes in alternate level of care.
2 Improved outcomes in the emergency department.
3 Improved outcomes in chronic disease management.
4 Improved outcomes in mental health and addictions.

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Figure 6: ESC LHIN Integrated Health Service Plan 2013-2016



Source: ESC LHIN IHSP, 2013-2016.

The populations targeted by these priorities, in alignment with provincial directions, are:

- High users of the health care system – focus on the 1 per cent of users who consume a significant proportion of all health care resources, as well as the next 5 per cent (those at risk of becoming high users).
- Seniors – focus on chronic disease management. Key diagnoses of concern are chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and complications from diabetes.
- Mental health clients – focus on: people with serious, persistent, mental health (SPMI), people with schizophrenia, transitional-age youth, homeless people with SPMI, youth with eating disorders, older adults with responsive behaviours associated with mental health, addictions, dementia, or other neurological conditions.
- Rehabilitation clients – focus on stroke, orthopaedic, and geriatric-frail population.

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To address these priority populations, the ESC LHIN is leading the development of the following strategic plans:

1 Adult Mental Health Services
- The vision for the service system is a full and integrated continuum of person-centred and accountable mental health services for adults with mental illness and their families.
- 67 opportunities have been identified and grouped into 9 strategic directions to be implemented over 2012-2016.

2 Chronic Disease Management
- 25 business cases are being developed to reduce ALOS and avoid unnecessary hospitalization
- The proposals address initiatives in
  - mobile services
  - clinics
  - prevention
  - support initiatives (i.e., telehomecare, electronic health records, etc.)

3 Rehabilitative Care
- The focus of this plan is development of business cases to address the needs of stroke, orthopaedic and frail medically complex older adults.
- The plan will include a bed-mapping component based on planning targets.
- There is a potential for additional rehabilitation beds and/or reclassification of beds.

While these initiatives are all in progress, all three present a significant opportunity to reduce acute hospital average length of stay (ALOS) and unnecessary hospitalizations. A summary of these initiatives is provided in Attachment I.

MOHLTC Planning Expectations

- Develop local program and service capacity based on interdisciplinary models of care which promote improved inter-sectoral access, quality and coordinated care
- Incorporate service delivery models based on best practice and strengthened service coordination building upon lessons of proven delivery models from other jurisdictions
- Maximize cost-effective community based service delivery
- Maximize use of electronic health technology solutions
- Streamline program and service delivery alternatives to maximize efficient use of service capacity and resources
- Planning and consultation with provincial agencies such as Cancer Care Ontario, Ontario Renal Network, Cardiac Care Network of Ontario, etc.

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- Use of population data to estimate growth in service needs and adjust for project specific considerations
- Promote the least capital intensive infrastructure options where facility-based care is deemed to the be the necessary option

The priorities and directions for the local health system are detailed in Attachment C.

History of Windsor/Essex Hospital Reconfiguration

The idea of consolidating hospital services is not new to the Windsor area. Prior to the 1990's, Windsor area hospitals included:

- Hotel Dieu of St. Joseph Hospital and Villa Maria
- The Salvation Army Grace Hospital
- Metropolitan General Hospital
- Independent Order of the Daughters of the Empire Hospital/Windsor Western Hospital Centre

The result of restructuring was an alliance effective April 1, 1994 between the Grace Hospital and Hôtel Dieu Hospital into Hôtel Dieu Grace Healthcare, operating under one governance and management structure, on one site on Ouellette Avenue in downtown Windsor, following closure of the Grace site.

Windsor Regional Hospital was formed on December 1, 1994 through the amalgamation of the Metropolitan General Hospital and Windsor Western Hospital Centre. The hospital-based programs and services are provided from two principal campuses, the Metropolitan (Met) Campus situated in the east end of Windsor and the Western Campus, now Prince Road Campus, situated in the west end of Windsor. The Windsor Regional Cancer Centre is located at the Met Campus.

New Hospital in Windsor/Essex

Planning for a new hospital in Windsor/Essex was initiated in April 2012 when the Honourable Dwight Duncan, Deputy Premier of Ontario and Member of Provincial Parliament for Windsor–Tecumseh proposed that consideration be given to a new, single site acute care hospital to serve the region's residents in the future. A Windsor Hospitals Study Task Force was established to lead discussion and seek input on the following three questions:

- Would a new, single site acute care hospital improve the delivery of acute care services in Windsor/Essex?
- Would a new single site acute care facility provide good value for money?
- If there is community support for a new hospital, what other consideration must be addressed during subsequent planning phases?

There is a common vision for the region to become a world class leader in research, education and the delivery of health services. The development of a new acute care hospital is viewed by the community as an opportunity to

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reconsider and effectively reorganize the delivery of the entire continuum of health care services in the region as well as to create economic growth through strategic alliances with the University of Windsor, St. Clair College and the local industry.

At the conclusion of its deliberations, the Task Force recommended that the Provincial Government, with community involvement, proceed immediately in approving the planning and construction of a new single site acute care hospital for the Windsor/Essex region.

On January 23, 2013 the Ministry of Health and Long-Term Care announced a capital grant to:

- Support preliminary planning on the program and service scope of a proposed new acute care hospital facility to serve Windsor/Essex.
- Assist ESC LHIN to lead work with WRH, HDGH and community health service providers.

The Minister of Health also announced the requirement to develop a new governance model and structure as a necessary step before approval would be given to start the capital planning process. The Boards of the two Windsor hospitals implemented the vision on October 1, 2013 with:

- WRH assuming responsibility for all acute services at the Metropolitan and Ouellette sites and the governance and management of the new hospital.
- HDGH operating and assuming the governance and management of chronic care, regional rehabilitation, specialized mental health and addictions, and children's mental health on the Prince Road site.

This is an exciting time for Windsor/Essex. The current governance and operational re-alignment provides a platform for Windsor/Essex to capitalize on the health system transformation opportunities presented by having one acute care and one post-acute care organization. These opportunities include but are not limited to

- Achieving clinical efficiencies to ensure the community has access to the right care, in the right place at the right time including: hospitals; community settings such as family health teams, health links and family physician offices, community health centres, community care access centres and outreach teams; urgent care centres; complex continuing care, long term care and rehabilitation centres; and public health
- Shifting where health care services are provided so that services are provided in the right setting; services that need to be provided in an acute hospital setting are supported and resourced; and, services required to care for patients in non-hospital settings are developed and implemented
- Infrastructure renewal to provide state-of-the-art facilities to support new models of service delivery, across the continuum of care

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These opportunities facilitate the way forward for improvement in the delivery of acute services and provide the needed special attention to post-acute programs and services, including community capacity.

Physical Facilities and Infrastructure

Master plan work at both WRH and HDGH has highlighted some of the challenges of focusing on existing locations and infrastructure to meet current and future health care needs. As a result, the development of a new, state-of-the-art single site acute care hospital is a sensible direction.

Windsor Regional Hospital

WRH in collaboration with Agnew Peckham and Stantec Architecture Ltd. completed a Master Program and Master Plan for the Metropolitan (Met) Campus in 2009 and analyzed 3 options for future redevelopment. The existing facilities are outdated, undersized and cannot accommodate current patient volumes or future service needs. Most areas within the existing building require redevelopment; the areas sustaining the most pressure are the emergency department, diagnostic imaging, inpatient units and surgical suite. In addition, there are inadequate facilities to support the needs of medical students.

The preferred option is for construction of a new facility on a greenfield site, based on shorter construction time, lower cost and because it has the lowest cost, can be completed faster, results in the most operationally efficient and modern building and will be the least disruptive for patients, visitors and neighbours.

Hôtel Dieu Grace Healthcare

A Master Plan was completed for ***HDGH*** by Parkin Architects Ltd. in June 2008. Beyond an approved capital project to create a cardiac care centre that would allow 24-7 emergency angioplasty and other necessary advancements, the plan calls for a significant rebuild of seven inpatient floors.

The current VFA Canada Corporation (VFA) document reports that the building elements, beyond the additions within the last 10 years, are assessed as in fair or poor condition. A progressive replacement strategy needs to be developed for Ouellette campus.

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Windsor Hospitals Study Task Force

In addition to the MOHLTC and the ESC LHIN's priorities, the Windsor Hospitals Study Task Force identified key themes for health system redesign for Windsor/Essex.

Patient Safety, Privacy and Dignity

All hospitals are required to ensure they have significant cleaning practices to reduce the likelihood of hospital-acquired infections. Infection control management can be more complicated in older facilities which feature much more shared accommodation of patients than is seen in newly constructed hospitals. New hospitals in Ontario are built to a standard which requires 80 per cent of rooms to be occupied by a single patient. Only 29 per cent of patient rooms at WRH's Met campus and only 16 per cent of rooms at HDGH are private.

In addition to a low number of private accommodations, neither WRH or HDGH, in general, have facilities which meet the modern specifications of newly constructed hospitals in Ontario, including but not limited to the size of corridors and hallways and the flow of patient traffic through a facility (i.e., a patient entering the emergency room, later going to an operating room or intensive care unit or other inpatient bed).

Financial

[redacted]

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Teaching

Students from St. Clair College, the University of Windsor and the Western University's Schulich School of Medicine and Dentistry significantly benefit from frontline "hands-on" training at Windsor's current community hospitals. Local training in our community based facilities is a tremendous source of pride for our aspiring health care professionals and a point of distinction for the Windsor/Essex region. Inter-professional training opportunities could be further improved at state-of-the-art facilities that allow further research and enhance capacity for clinical trials, and thus provide future health care practitioners a uniquely Windsor/Essex model for research and educational opportunities. Additionally, the development of a state-of-the-art facility with an academic health science centre modeled on a community based system would assist with the recruitment of physicians of various specialties from across the continent.

Air Ambulance Access

As a trauma centre, HDGH should be the recipient of delivery of patients transported by air ambulance. However, it was determined several years ago that helicopters could not safely land at this trauma centre. The buildings at HDGH were not constructed to withstand the weight of a helicopter landing, nor would they be safe in the event of a fire or wind impact on a landed helicopter. A new location could be built away from flight path concerns and constructed to safely accommodate the needs of air ambulance pilots and medical staff.

Human Resource Planning

Staff representatives at both hospitals spoke in favour of the concept of a new facility, including improved working conditions based on new, modern space configurations and design.

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1.2 Master Program

Present and Future Service Delivery

Service Delivery Transformation

Given the growth in demand for hospital services from the aging of the population, Windsor hospitals must investigate innovative approaches to reduce service demands and costs by shifting service to less expensive delivery models, clinical and operational efficiencies, better integration with community providers and achievement of high levels of productivity. The Stage 1A planning process addressed key transformation initiatives to shape future service delivery models including:

- Providing care in the right location, resulting in reduced number of patients who are in acute care beds who require alternate levels of care
- Strengthened service integration
- Improved access to primary care and community services including services at home
- Shared responsibility among providers for the full patient journey and coordinating care between multiple providers
- Electronic medical health records to share information among providers

Planning Parameters

The following parameters are proposed to guide the development of hospital services in Windsor/Essex, including the service profile and service delivery model for the acute hospital:

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- Ensure strategic alignment and accountability with Ministry of Health and Long-Term Care, Health System Transformation
- Address ESC LHIN strategic imperatives: improved outcomes in ALC, Emergency Department, Chronic Disease Management, Mental Health and Addictions
- Demonstrate quality and excellence through critical mass and clinical coherence
- Facilitate health equity and accessibility to meet identified needs
- Provide a safe environment for patients and staff
- Reflect innovation in service delivery, that supports leading practices and builds on best evidence in clinical practice, teaching and education
- Support efficiency of operations to optimize health and other benefits within the system, including sustainability
- Achieve service integration, collaboration and partnerships to ensure service quality enhancement, improve cohesiveness, optimal resource use, minimal duplication, and/or increased coordination

Community Profile

ESC LHIN is the southernmost LHIN in Ontario and comprises Essex County, the municipality of Chatham Kent and Lambton County. In 2011, ESC LHIN was home to approximately 643,400 people, 4.8 per cent of the Ontario population. Of the total population, 17.0 per cent live in Chatham-Kent, 62.5 per cent in Essex County and the remaining 20.5 per cent in Lambton County.

Demographics

Between 2006 and 2011, the ESC LHIN population declined by 1.6 per cent. At the county level, the population declined 4.2 per cent in Chatham Kent, 1.6 per cent in Lambton and 1.2 per cent in Essex. During that same time period, Ontario's population grew by 5.6 per cent.

Between 2012 and 2017 the population is expected to experience slow growth and increase by only 4,660 residents or 0.7 per cent. By 2022 the population is forecasted to increase by 1.8 per cent, compared to a projected increase of 13 per cent for Ontario overall. In total, between 2012 and 2032, the population is projected to increase by only 27,022 residents (i.e., 4.2 per cent).

Erie St. Clair has a growing population of seniors, and is aging faster than the province as a whole, while the younger population, those between 0 and 44 years, is decreasing. In 2012 almost 16 per cent of the population was seniors (aged 65+), an increase from 14 per cent in 2006. By 2017 seniors will account for 19 per cent of the Erie St. Clair population; by 2022 it will be 22 per cent; and by 2032 it will be 27.5 per cent.

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Figure 7: Population Projections for the ESC LHIN

Age Cohort	2012 Sum	2017 Sum	2017 Change From 2012	2022 Sum	2022 Change From 2012	2032 Sum	2032 Change From 2012
0-14	107,211	104,465	-2.6%	104,257	-2.8%	106,534	-0.6%
15-19	43,001	38,431	-10.6%	37,982	-11.7%	37,484	-12.8%
20-44	204,135	200,512	-1.8%	198,314	-2.9%	195,303	-4.3%
45-64	184,166	182,199	-1.1%	171,267	-7.0%	147,839	-19.7%
65-74	56,954	68,696	20.6%	79,420	39.4%	89,991	58.0%
75-84	34,180	37,242	9.0%	45,433	32.9%	66,009	93.1%
85+	14,436	17,198	19.1%	19,057	32.0%	27,945	93.6%
Total	644,083	648,743	0.7%	655,730	1.8%	671,105	4.2%

Source: Ministry of Finance Population Projections (Spring 2012 Release)
Source: HCM Group, Inc., June 2013

Population Characteristics

- In 2011, 45 per cent of the Erie St. Clair population lived in a large urban population center (100,000+ Windsor and Sarnia); an additional 25 per cent lived in a medium population centres (30,000 to 99,999), and the remainder lived in a rural area.
- In 2006
  - close to 80 per cent of the Erie St. Clair population reported English as their mother tongue, with only 3.3 per cent including French as their mother tongue
  - eighteen per cent of the population was immigrants in which 2.8 per cent were recent immigrants having arrived in Canada between 2001 and 2006
  - one in ten people living in Erie St. Clair were visible minorities, compared to just over a fifth of the population in Ontario
  - the proportion of those living in low-income was 12.2 per cent, lower than the provincial rate of 14.7 per cent
- In 2011, the Erie St. Clair region had the third highest unemployment rate of 8.9 per cent compared to Ontario of 7.8 per cent.

Health Status and Chronic Conditions

The residents of Erie St. Clair perceive that they are healthier than they actually are. Residents have a lower life expectancy, a higher age-standardized mortality rate, and a higher potential years-of-life-lost rate compared to rates for the province. Poor health practices correlate with an increased risk of

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chronic disease, mortality and disability. Relative to the rest of the province, residents in this area report higher rates of smoking and alcohol consumption, and obesity, and lower rates of physical activity and healthy eating. These factors place the residents of Erie St. Clair at a higher risk for developing chronic conditions, especially diabetes.

Chronic conditions (e.g., arthritis, hypertension, diabetes, asthma, heart disease, COPD, cancer, stroke) place a high burden on the health care system and reduce the quality of life for those who have one or more of these conditions. Forty one per cent of the residents aged 12 and over have a chronic condition and 17 per cent have multiple conditions. Chronic conditions account for 6 out of 10 deaths, 4 out of 10 hospital admissions, and 3 out of 10 acute hospital days for Erie St. Clair residents. The prevalence of chronic conditions increases dramatically with age as more than half the residents over 65 year have two or more chronic conditions. Arthritis and hypertension are the most common of the selected chronic conditions.

The population demographics and characteristics are summarized in Attachment D.

Future Patient Needs

The populations targeted by ESC LHIN priorities, in alignment with provincial directions, are:

- High users of the health care system – focus on the 1 per cent of users who consume a significant proportion of all health care resources, as well as the next 5 per cent (those at risk of becoming high users).
- Seniors – focus on chronic disease management. Key diagnoses of concern are chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), and complications from diabetes.
- Mental health clients – focus on: people with serious, persistent, mental health (SPMI), people with schizophrenia, transitional-age youth, homeless people with SPMI, youth with eating disorders, older adults with responsive behaviours associated with mental health, addictions, dementia, or other neurological conditions.
- Rehabilitation clients – focus on stroke, orthopaedic, and geriatric-frail population.

Implications for Service Planning

The key drivers of health care services planning and delivery in the ESC LHIN are:

- The large geography of the ESC LHIN and the rural nature of some of its communities pose challenges for some residents in the region to access health services.
- The demands of an increasingly elderly population will continue to place pressure on the health care system and could disproportionately increase the demand/need for hospital services.

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- The high prevalence of chronic conditions will continue to test the acute care hospital system and continued emphasis on existing and new strategies to avoid hospitalizations will be required to manage this pressure.
- The unemployment rate may have an adverse effect on select populations, increasing the need for mental health and addictions services beyond the current capacity.
- There will be increased pressures to contain the growth in healthcare costs while providing high quality and cost-effective care.

Description of Hospital Services

The organization of acute care hospitals in Windsor and Essex County is unique in Ontario with two large hospitals HDGH and WRH both providing a range of acute care services; neither of which is a fully affiliated teaching hospital (i.e., member of the Council of Academic Hospitals of Ontario).

Windsor Regional Hospital

Windsor Regional Hospital is a large multi-site health service organization providing acute medical and surgical services including emergency, family birthing centre, neonatal intensive care, paediatric services, critical care (ICU/CCU/telemetry) and regional cancer services at its Metropolitan campus. Under a local service realignment which took effect October 1st, 2013, WRH is now responsible for the Ouellette campus (formerly Hôtel Dieu Grace Hospital), a provider of advanced care in such areas as complex trauma, renal dialysis, cardiac care, stroke and neurosurgery, acute mental health and a broad range of medical and surgical services to support these specialized areas.

Details of WRH's Strategic Plan are provided in Attachment E.

Hôtel Dieu Grace Healthcare

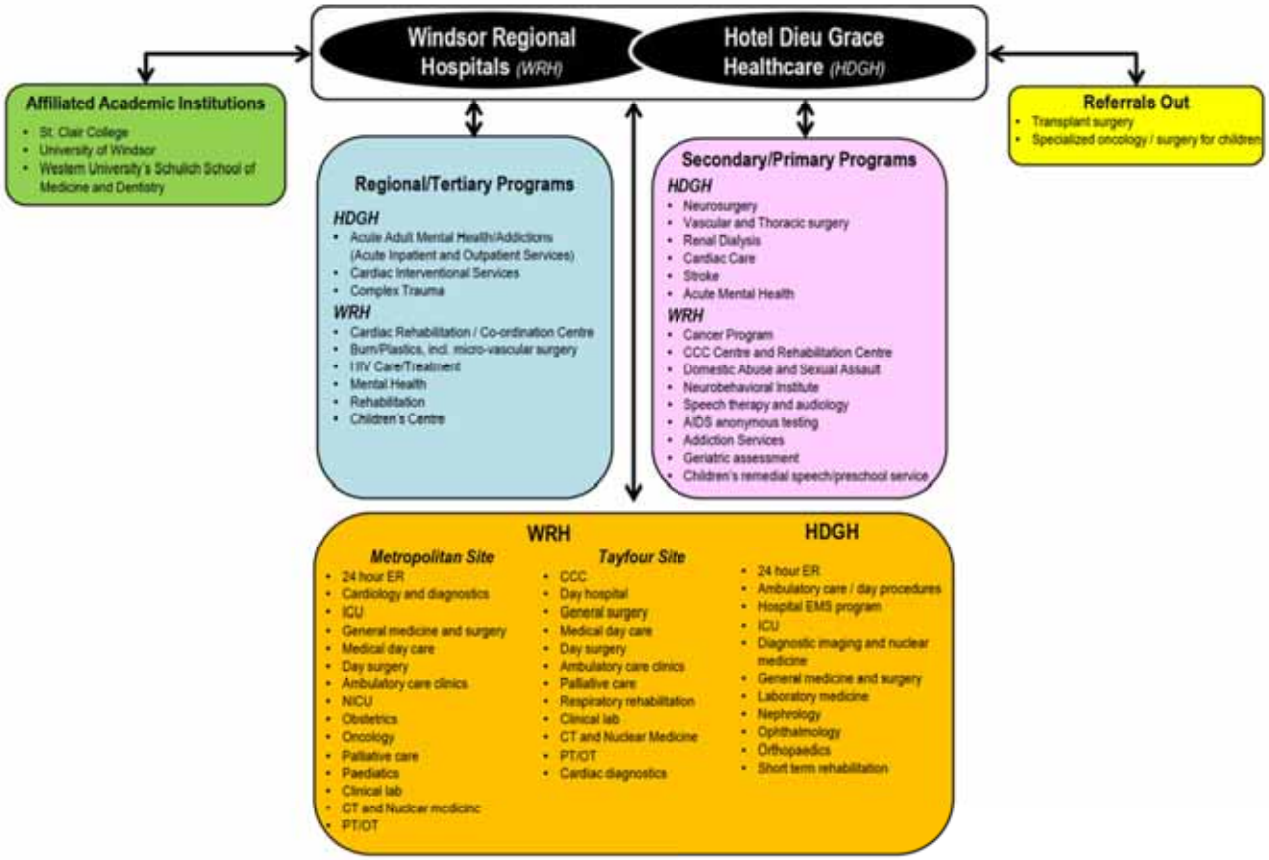
Hôtel Dieu Grace Healthcare is responsible for services at the Prince Road site (formerly the Tayfour site of WRH before the October 1st, 2013 service realignment and referred to in previous drafts of this document as the Tayfour site). HDGH specializes in healthy aging and mobility which includes rehabilitation services and complex continuing care. As well, HDGH is a provider of neuro-behavioural health, specializing in adult mental health, children's mental health and crisis intervention.

HDGH's vision for the future is provided in Attachment E.

The current organization of hospital services in Windsor/Essex is illustrated in Figure 8.

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Figure 8: Windsor/Essex Hospitals Current Service Delivery Model



Source: Agnew Peckham, September 2013

Economic and Physical Limitations of Existing Building

Windsor Regional Hospital

Since the original structure was constructed in 1927, the city of Windsor has grown from a population of approximately 16,000 people to 224,000. Additions to the Hospital have occurred in each decade, except one, since 1950. As a result, the buildings have grown out like "an onion" with layers added to the outside with some of the original buildings in the centre. Several of the key clinical areas have no room for expansion due to floor plate restrictions. Of note, are the inpatient units, the emergency department, diagnostic imaging and surgical suite.

WRH has undergone a number of patchwork remedies in the last 10 years to meet the demands of population growth and remedy aging facilities. HSRC directions in the 1990's included the emergency department, ambulatory care, surgical suite, public areas and some minor renovations to inpatient units. While the changes to the emergency department and inpatient units were meant to ensure continued service delivery, due to space limitations, they have not addressed all outstanding short comings related to patient privacy,

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infection control, space for families, increasing volumes and necessary building system upgrades.

The age and design of the building are not conducive to today's health care practices. For example

- Only 11 per cent of the medical/surgical inpatient rooms are single bed rooms. Airborne precaution facilities are seriously lacking, making infection control management extremely challenging and increasing patient and staff risk. There are no specific purpose built isolation rooms, but the private rooms can be used to separate patients.
- Most clinical departments are extremely undersized. Virtually none of the departmental space is able to support contemporary practices and systems, severely limiting the Hospital in accommodating current technology and implementing best practices.
- The physical building itself is nearing the end of its useful life – exterior windows and walls will require replacement and refinishing. Walls, floors and ceilings are aged, and deteriorated. The mechanical and electrical systems are also aged, and most will require replacement.
- There is minimal accessibility, particularly in the inpatient units and diagnostic imaging areas. Washrooms cannot accommodate wheelchairs, bedrooms are undersized and public areas do not support persons with disabilities.
- Storage space is minimal, creating clutter and congestion in circulation areas.

To meet current volumes and strategic priorities, provide care in an operationally efficient manner and invest public money prudently, the Hospital has chosen the preferred option of redeveloping on a Greenfield site.

Windsor Regional Cancer Centre at Windsor Regional Hospital

The WRCC was completed in 1999. It houses three radiation treatment rooms with space for a fourth, clinical space including chemotherapy and administrative support space on three floors. The facility is connected to WRH on two levels. The ground and first floor links are for outpatient, inpatient and hospital staff uses. The hospital emergency response team also uses these connections for immediate cancer patient crises.

WRH also supplies the centre with all necessary food, linen, materials management, maintenance, security, IPAC, IT services, etc.

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As well as connected to the main public and hospital circulation corridors at WRH, the cancer centre is connected by a mechanical tunnel to the main hospital physical plant for all of its HVAC requirements, power and emergency power. The physical plant is old (1927 and 1977 construction) and it is inefficient and sized to serve the entire existing hospital site; however; it was upgraded in 1998/99 to accommodate the new cancer centre. Any considerations for creating the cancer centre as a standalone facility would need to either retain the existing plant which is remote to the cancer centre and over capacity or create a new plant. The first option would mean that part of the WRH site would need to be retained as well due to the plant's location. The air handling units are in the cancer centre's own roof top penthouse. Services to this penthouse (steam, non potable water, hydro) are from the main powerhouse/campus.

Hôtel Dieu Grace Healthcare

Based on the 2008 Master Plan completed by Parkin Architects Limited, there are some significant challenges at Hôtel Dieu Grace Healthcare. Building stock on site ranges in age from 7 years to 70 years. Those dating from before 2001 are constructed of 10 and 11 foot floor to floor heights with plan arrangements that are hampered by building widths and structural bay spacing. Current renovations produce finish ceiling heights of only 7'-4" in corridors and other key locations.

While the 2001 Diagnostic and Treatment Addition is of modern floor-to-floor heights and larger floor plate dimensions, any capacity for vertical expansion was used in the 2001 addition of the ICU floor. The addition is seen as being "under-elevatored" and vertical transport does not have the clear separation of public vs. clinic circulation that a modern trauma facility should. The marrying of existing meets both in the older and newer wings, the third floor in the 1962 and 1938 wings remains isolated except by elevator. Disparate building forms and historic non-clinical uses also limit the current development options. The Hospital's VFA document, reports that the building elements beyond the additions within the last ten years are seen as at fair or poor condition. Additionally, there are significant challenges to the use of existing space for clinical purposes, as previously outlined. Other common limitations such as general site layout and floor-to-floor heights, have led to the position that a progressive replacement strategy needs be developed for the Ouellette campus.

Partnerships and Linkages with Providers in the ESC LHIN

Many partnerships and linkages were identified during the consultations. It is anticipated in the future that these will be maintained and grow to support achieving the vision for health transformation in the ESC LHIN, and the evolving scope of services. Some of these partnerships and linkages are listed below:

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Essex County

The organizations/providers in Essex County that collaborate to provide integrated, comprehensive, accessible, interdisciplinary, effective and high quality services for the residents of Windsor/Essex include:

- Allegro Corporation
- Alzheimer Society of Windsor and Essex County
- Amhersburg Community Services
- Association for Persons with Physical Disabilities of Windsor and Essex County
- Banwell Gardens
- Brouillette Manor (1230839 Ontario Ltd.)
- Bulimia Anorexia Nervosa Association
- Canadian Mental Health Association, Windsor-Essex County Branch
- Centres for Seniors Windsor
- Charity House (Windsor) (Brentwood Recovery Homes)
- Chateau Park Long Term Care Home
- Citizen Advocacy Windsor-Essex
- Corporation of the City of Windsor
- Corporation of the County of Essex Victoria Street Manor/Sun Parlor Home
- Essex Community Services
- Extendicare Southwood Lakes
- Extendicare Tecumesh
- Franklin Gardens Long Term Care Home
- Grosvenor Health Care Partnership (No. 4) 647013 Ontario Limited (General Partner)
- Hotel-Dieu Grace Hospital
- House of Sophrosyne
- Iler Lodge
- Lakeshore Community Services
- Leamington District Memorial Hospital
- Leamington United Mennonite Home & Apartments
- Mental Health Connections
- Mental Health Consumer/Survivors Employment Association of Essex County (Ten Friends Diner)
- Regency Park Long Term Care Home
- Riverside Place
- Royal Oak Long Term Care Centre
- S & R Nursing Homes Ltd.
- Sexual Assault Crisis Centre of Essex County Inc.
- South Essex Community Council Incorporated
- The Canadian Hearing Society – Windsor Region
- The Canadian National Institute for the Blind – Ont Div – Windsor District
- The Hospice of Windsor and Essex County Inc.

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- Versa-Care Windsor Place
- Windsor/Essex Community Health Centre
- Windsor Regional Hospital
- 1537480 Ontario Ltd.

Lambton and Kent Counties

The organizations/providers in Lambton and Kent with which the organizations in Essex collaborate include:

- Aamjiwnaang First Nations – Chippewas of Sarnia
- Alzheimer Society of Chatham-Kent
- Alzheimer Society of Sarnia-Lambton
- Blenheim & Community Senior Citizens Group (Meals on Wheels)
- Blenheim Community Village
- Bluewater Health
- Brain Injury Association of Chatham/Kent
- Canadian Mental Health Association, Chatham-Kent Branch
- Canadian Mental Health Association, Lambton County Branch
- Chatham-Kent Community Health Centres
- Chippewas of Kettle and Stony Point Home Support Program
- Copper Terrace
- Corporation of the County of Lambton-Senior Services
- Erie St. Clair Community Care Access Centre
- Family Service Kent
- Fiddick's Nursing Home Limited
- Grand Bend Area Community Health Centre
- Lambton Elderly Outreach Incorporated
- LaPointe – Fisher Nursing Home Ltd.
- Maple City Centre for Older Adults
- Meadow Park (Chatham) Inc.
- Meals on Wheels (Dresden) Inc.
- Meals on Wheels Ridgetown
- North Lambton Community Health Centre
- Rehabilitation Foundation for the Disabled (OMD) – Chatham Branch; Rehabilitation Foundation for the Disabled (OMD) – Sarnia Branch
- Riverview Gardens
- S & R Nursing Homes Ltd.
- St. Andrew's Residence, Chatham Inc.
- Sumac Lodge
- The Canadian Red Cross Society – Chatham-Kent Branch
- The Canadian Red Cross Society, Sarnia-Lambton Branch
- The Corporation of the County of Lambton – Lambton Meadowview Villa
- The Corporation of the County of Lambton – Marshall Gowland Manor
- The Corporation of the County of Lambton – North Lambton Lodge

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- The Public General Hospital Society of Chatham (CKHA)
- The Social Service Bureau of Sarnia-Lambton Incorporated (Family Counselling Centre)
- The Village, Ridgetown
- Tilbury Manor Nursing Home
- Victorian Order of Nurses for Canada – Ontario Branch
- Vision 74 Inc.
- Walpole Island First Nation
- Watford Quality Care Centre
- Westover Treatment Centre

Recognizing the added value of strategic partnerships and linkages to achieve the new vision, the Windsor hospitals will maintain and grow these relationships by participating in or leading activities in Windsor/Essex to

- Plan and provide for a more integrated system of care that better meets the needs of residents outside of the hospital and in their local communities
- Support a more coordinated and efficient use of health resources
- Advocate for additional funds and services on behalf of the community

Organizational Structure

The organizational structure includes two hospital corporations with

- WRH assuming responsibility for all acute services at the Metropolitan and Ouellette sites and the governance and management of the new hospital
- HDGH operating and assuming the governance and management of chronic care, regional rehabilitation, specialized mental health and addictions, and children's mental health (Prince Road site)

Operating Hours

The current and future operating hours for both WRH and HDGH are 24 hours, 7 days a week.

Utilization Management and Clinical Efficiency Studies

The Hay Group completed a Clinical Services Review (September 2012) and Modeling Reductions to Achieve Savings at HDGH (December 2012). Both of these studies identify strategies to achieve clinical and utilization management efficiencies and to position the hospital for its future clinical role and financial future. A key observation in the Clinical Services Review was there should be a comprehensive review of the opportunity to consolidate all of the acute care inpatient services in Windsor in a single centre.

In addition, Hay completed a Review of the Renal Dialysis Program in 2010 and recommended further planning to improve the delivery of renal services in the region.

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More recently The Hay Group completed an Ambulatory Care Review which recommended that Windsor Regional Hospital consider the development of an ambulatory surgery centre, ideally located on the hospital grounds.

Activity/Volume Projection Methodology

Overview

Preliminary volume projections were developed by HCM Group, Inc. with input from the Steering Committee and various stakeholders. The methodology incorporates population-based volume projections that are highly sensitive to age, sex and patient residence characteristics and hence reflects the hospitals' program/service catchment area and local demographics. Then, known or anticipated changes to overall role (e.g., new services, clinical efficiencies, clinical integration) are incorporated to adjust the projections. This methodology has used for many Ontario hospitals and has been reviewed with the MOHLTC and most LHINs.

Planning Horizon

Projections were developed for fiscal years 2017/18, 2022/23 and 2032/33. This was achieved by applying population-based per cent changes to the 2012/13 base year volumes.

Data Sources

Three main data sources are required for the population-based volume projections:

- Management Information System Trial Balance files from 2009/10 to 2012/13 were obtained from the hospitals. Management Information System statistics represent the planning units (e.g., inpatient days, separations, visits, attendance days and workload units) and have a consistent format across fiscal year, functional centre and secondary account for the relevant statistics.
- Patient-specific data for 2012/13 was also obtained from the hospitals (e.g., Discharge Abstract Database & National Ambulatory Care Reporting System records). Population-based drivers are developed from patient records, as these contain the detailed population characteristics (e.g., age, sex, municipality of residence) and utilization statistics (e.g., number of inpatient days, cases and visits).
- Population estimates and projections were obtained from the Ontario Ministry of Finance (2012 Spring release). Projected demographic changes at the five-year age cohort, sex and census division level are combined with utilization statistics for developing drivers for the projection methodology.

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Methodology

There are three major steps involved in the projection methodology:

1. Multiply Current Utilization by Population Projections
2. Apply Population Growth and Aging to Functional Centre Volumes
3. Apply Adjustments to Base Scenario Projections

Step 1.

Multiply Current Utilization by Population Projections

Population growth and aging "drivers" represent mathematical multipliers that capture the projected change in activity based on population demographics. To calculate the drivers, each patient record is projected into the future. The drivers are sensitive to five-year age-sex-geography level cohorts. For example, a separation for a 72 year-old male with 5 patient days in 2012/13 would project to 1.1 separations and 5.5 days in 2017/18 if there is projected growth of 10 per cent for the 70-74 male cohort for the geographic area (e.g., increase in population from 5,000 to 5,500).

Multiple drivers were developed to be sensitive to projecting activity by program/service. For example, numerous summations of projected patient records are used to calculate overall projected per cent change by program/service (e.g., calculate a cardiology driver based on cardiology patient records). In fact, the drivers can be as specific to unique data fields in the patient records.

Applying population projections assumes that demographic changes (e.g., total population and age & sex distribution) have significant influence on future health care demand. For example, demographic changes capture aging effects (i.e., influencing obstetrics vs. oncology activity) and geography effects (i.e., variable growth for high growth suburbs vs. retirement communities). Note that current hospital utilization rates are used to incorporate local determinants of health (e.g., builds in the local demographic & socio-economic factors that are contributing to the hospital's utilization rates). In summary, the population-based drivers are natural growth factors specific to each hospital program/service.

Although the Ministry of Finance projections indicate relatively low total population growth for Essex Census Division, the Figure below shows more significant growth among age cohorts that tend to have higher utilization rates:

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Figure 9: Population Projections for Essex Census Division

	2012	2017		2022		2032	
Age Cohort	Pop'n	Pop'n	% Change from 2012	Pop'n	% Change from 2012	Pop'n	% Change from 2012
0-14	68,880	66,267	-3.8%	65,497	-4.9%	67,803	-1.6%
15-19	27,640	24,706	-10.6%	24,531	-11.2%	23,627	-14.5%
20-44	134,348	131,723	-2.0%	130,031	-3.2%	130,122	-3.1%
45-64	111,899	112,817	0.8%	108,213	-3.3%	94,110	-15.9%
65-74	33,419	40,676	21.7%	47,013	40.7%	55,022	64.6%
75-84	19,709	21,846	10.8%	26,949	36.7%	39,385	99.8%
85+	8,272	9,896	19.6%	11,014	33.1%	16,521	99.7%
65+	61,400	72,418	17.9%	84,976	38.4%	110,928	80.7%
75+	27,981	31,742	13.4%	37,963	35.7%	55,906	99.8%
Total	404,167	407,931	0.9%	413,248	2.2%	426,590	5.5%
Source: Ministry of Finance Population Projections (Spring 2012 Release).							

The City of Windsor and the County of Essex also have population projections for their strategic planning activities. Consistent with the Ministry of Finance age cohort projections in the Figure above, the City of Windsor and County of Essex are also projecting that:

- Younger aged age groups, under 20 years of age, will gradually decrease as a proportion of the population as will the age group 20-44 years of age.
- Middle aged age groups, 45 to 64 will continue to grow through 2016 and then begin a gradual decline through the 2026 projection period. It is anticipated that there will be a noticeable increase in the 60-64 year age group due to the aging of the baby boom generation.
- Senior aged age groups, 65 years and older will exhibit the largest percentage and absolute change in age groups. This latter group will grow by 60 per cent between 2006 and 2026 and will represent close to half of all the population growth in the future.

Additional comments from the City of Windsor on Windsor-Essex population demographics:

- A review of data on natural increase between 1997 and 2004 has shown that natural increase is averaging about 1,500 persons annually while net migration has averaged around 3,700 persons annually.
- International migrants have become an important component of Windsor-Essex growth peaking at 4,000 persons annually in 2000-2001 and 2001-2002. Net inter-provincial (those moving in from other provinces minus those moving out to other provinces) and net intra-provincial migrants (those moving in from other parts of Ontario minus those moving out to other parts of Ontario) represent a smaller component of net migration.

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Figure 10 shows the population projections by age cohort for the City of Windsor:

Figure 10: Population Projections for The City of Windsor

	2011	2016		2021		2026	
Age Cohort	Pop'n	Pop'n	% Change from 2011	Pop'n	% Change from 2011	Pop'n	% Change from 2011
0-14	36,250	36,397	0.4%	37,473	3.4%	37,673	3.9%
15-19	13,865	13,540	-2.3%	13,976	0.8%	14,805	6.8%
20-44	69,535	66,640	-4.2%	67,523	-2.9%	68,981	-0.8%
45-64	57,935	67,198	16.0%	69,637	20.2%	70,546	21.8%
65-74	16,935	21,624	27.7%	24,779	46.3%	27,058	59.8%
75-84	11,590	11,164	-3.7%	12,218	5.4%	14,708	26.9%
85+	4,865	4,591	-5.6%	4,440	-8.7%	4,562	-6.2%
Total	210,975	221,154	4.8%	230,046	9.0%	238,331	13.0%

Notes:
2011 Figures are from the Statistics Canada Census.
2016 to 2026 projections are adapted from Lapointe Consulting for City of Windsor (2008).
Source: City of Windsor.

The Ministry of Finance and local (i.e., City of Windsor and County of Essex) projection methodologies also both assume that following a slower growth period (approximately 2006 to 2011), a gradual increase in higher levels of growth will occur until 2021 when the population growth is expected to decline again due to the aging of the population. However, the Figure below indicates how the City of Windsor and County of Essex population projection increases are considerably higher than the Ministry of Finance assumptions:

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Figure 11: Population Projections for Essex Census Division by Source

	2011	2016		2021		2026	
Source	Pop'n	Pop'n	% Change from 2011	Pop'n	% Change from 2011	Pop'n	% Change from 2011
City of Windsor	210,975	221,154	4.8%	230,046	9.0%	238,331	13.0%
Essex County	177,720	189,260	6.5%	198,470	11.7%	206,390	16.1%
Total for Essex Census Division	388,695	410,414	5.6%	428,516	10.2%	444,721	14.4%
Ministry of Finance for Essex Census Division	403,396	407,081	0.9%	412,041	2.1%	418,510	3.7%

Note: City of Windsor and Essex County figures are Census based (i.e., does not account for Census under-coverage; therefore, inappropriate to compare absolute population to Ministry of Finance figures).

Sources:
City of Windsor: Adapted from Lapointe Consulting for City of Windsor (2008).
Essex County: N. Barry Lyons Consulting for County of Essex (2011).
Ministry of Finance: Ministry of Finance Population Projections (Spring 2012 Release).

Figure 11 above shows that the combined local (i.e., City of Windsor and County of Essex) population projection sources indicate an approximately 40,000 population increase from 2011 to 2021. This is considerably higher than a less than 10,000 population increase according to Ministry of Finance projections.

Clearly, different assumptions and methodologies yield different results, which would have an impact on health care demand in the region (e.g., a difference of approximately 30,000 Essex census division residents in 2021 would be notable). However, population projections are not predictions; they can only illustrate what the population would be if a given set of assumptions were to prevail. Furthermore, with the advent of new technology, advances in treatment, changes in service delivery and illness prevention, utilization patterns will continue to change. And, although population size influences the need for health services, the extent, patterns and intensity of health care services and associated clinical efficiencies would also have significant effects.

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Step 2.
Apply Population Growth and Aging to Functional Centre Volumes
The population growth and aging drivers (i.e., per cent multipliers) are applied to the relevant MIS Trial Balance functional centre base year statistics. For example, if the overall driver for cardiology is +10 per cent (based on summation of all individual cardiology cases), +10 per cent is applied to cardiology related functional centre volumes. Drivers are applied to the functional centres and associated statistics (e.g., patient days, cases, visits, procedures, exams, attendance days, etc.) as this represents the structure and planning units for the projections.

This provides a base scenario in which demand is only affected by population growth and the changing age/sex structure of the population. This allows planners to see where the system may be headed, and to identify potential needs, problems and opportunities. This also provides a scenario that has consistent assumptions with components of the MOHLTC Health Based Allocation Model (HBAM).

Beds projections are calculated using occupancy rate targets. It is important to note that although patient days change directly with the drivers, the actual change in beds may appear different. For example, if current occupancy for a functional centre is at 95 per cent, applying a target occupancy of 90 per cent would add beds first to achieve 90 per cent occupancy, and then add new beds for growth. Conversely, if the current occupancy is at 80 per cent, applying a target occupancy of 90 per cent would fill beds first to reach 90 per cent before adding new beds. In fact, the methodology will subtract beds if it cannot achieve the target occupancy.

Diagnostic and therapeutic services are adjusted in line with relevant inpatient and ambulatory care services. The detail in the projection tables have specific line items within a diagnostic/therapeutic functional centre for procedures/ attendances and workload associated with acute, emergency and other outpatient clinics and specific dynamic drivers are associated with these. For example, if acute patient days increase/decrease by 10 per cent, the associated workload indicator in each diagnostic and therapeutic functional centre changes by the same percentage.

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Step 3.
Apply Adjustments to Base Scenario Projections

Adjustments allow for the planning process to be more sensitive to the local population. Adjustments are value added to the planning process and may be required for integrated system planning:

- Alternate care settings (providing right care, right time, right place)
- Emergency department capacity (improving access, wait times & reducing avoidable visits)
- Clinical program integration (improving overall system access, quality & efficiency)
- Community based health service capacity (care before/after hospital)
- Potential impacts of chronic diseases (including chronic disease prevention & management programs)
- Unique populations (e.g., Francophone, Mennonite & Aboriginal Health)
- Mental health and addictions (improving early detection, prevention & access)

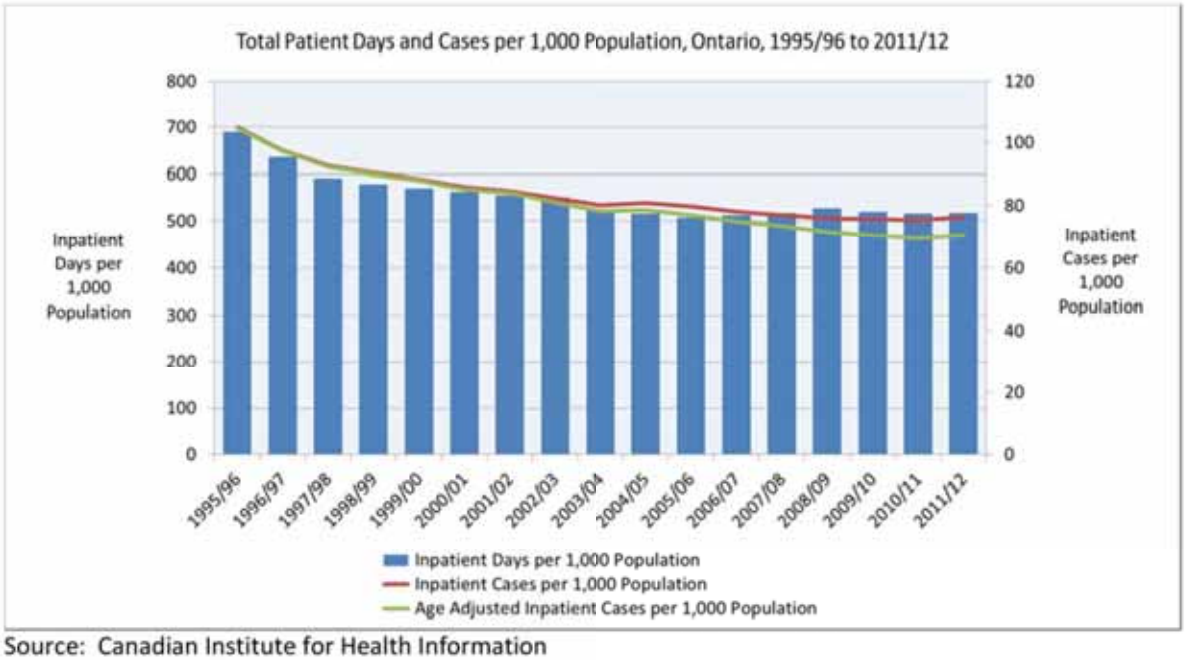
It is also important to recognize historical trends, clinical efficiencies and other factors that may continue to influence future utilization profiles. For example, the average annual change for total adult medical and surgical patient days in Ontario has decreased after adjusting for the growing and aging population. Reasons for lower inpatient utilization rates per population vary by geography and by organization, but may include factors such as:

- Utilization management initiatives (e.g., monitoring beds for efficient management and discharge planning; streamlining processes; improved pre- and post-surgery planning)
- Improving chronic disease management
- Converting procedures requiring inpatient admission to day surgery or outpatient modality
- Technology changing the type of treatment and care
- Increasing availability of community resources (e.g., long-term care beds; aging at home strategies)

Although there is a strong cross-sectional relationship between aging and health care utilization, it is still unclear what health care utilization of the future population will be. More specifically, if clinical efficiencies continue to mitigate the cross-sectional relationship, volumes projections that are based on current utilization will over-estimate. Figure 14 below shows that Ontario inpatient days and cases per population have decreased significantly in the late 1990s and have stabilized in the past few fiscal years. However, when adjusting for the aging population (i.e., accounting for Ontario's population getting older), the number of cases per population shows more of a decline.

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Figure 12: Total Patient Days and Cases per 1,000 Population, Ontario 1995/96 to 2011/12



Source: Canadian Institute for Health Information

The preliminary volume projections incorporated natural growth as described above, as well as a number of adjustments developed in consultation with the Steering Committee and various stakeholders, as outlined in Figure 13.

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Figure 13: Adjustments Applied

Adjustment	Rationale
Hospital Wide	
Incorporate occupancy rate targets for inpatient beds	• Adjusts for potential under/over utilization of last fiscal year (reduces year to year fluctuations) • Provides appropriate occupancy rates for planning (e.g., previous benchmark rates in MOHLTC Planning Decision Support Tool) • Need to review / confirm target occupancy rates applied • Note that occupancy rates were also applied to the base scenario projections so that the impact of clinical efficiencies are clear
Incorporate inpatient clinical efficiencies	• Important to recognize historical trends and clinical efficiencies that may continue to influence future health care utilization ○ Acute bed efficiencies incorporated from Hay Group's Windsor Hospitals Clinical Efficiencies Analysis Report ▪ Conversion from inpatient surgery to day surgery (1,400 cases and 2,000 days in 2011/12) ▪ ALOS reduction (13,000 target days saved in 2011/12) ▪ 50% ALC reduction (12,000 ALC days removed in 2011/12) ▪ Note that acute efficiencies are applied to base year, population growth and aging drivers follow • Note that clinical efficiencies and historical trending adjustments typically only slow down the growth (i.e., adjustments mitigate high percent increases dictated by population growth and aging alone) • Clinical efficiencies identified for child/adolescent mental health inpatient days were not applied
Oncology	
Double visits for Palliative Care visits then apply population growth and aging	• Currently serving 5% of need/population; an increase to 10% would be ideal as a projection target • Move 10% of chemotherapy activity to non-acute setting • For radiation treatment projections apply assumptions from Radiation Treatment Capacity Plan (Oct 2013)
Cardiac	
Adjust cath lab projections to 2,920 diagnostic and 900 interventional (for 2015/16)	• Process of enhancing catheterization lab hours of operation to 24/7 • Acquiring additional physician resources (increase from 2 interventionalists to 3 or 4)
Add ICD implant projections	• Addition of EP lab (assume 125 ICDs for 2017/18) and then grow as per population growth and aging

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Figure 13: Adjustments Applied (Cont'd)

Adjustment	Rationale
Emergency	
Incorporate emergency department efficiencies	• Important to recognize that a percentage of emergency department visits could be seen in alternative primary care settings • Assume 90,000 ED visits for acute hospital in 2017/18 (with CTAS distribution consistent with peer hospitals) • Divert 18,150 ED visits (8,000 pregnancy issues, 4,600 mental health disorders, 500 prescriptions, 300 surgical dressings & sutures, 200 alcohol & drug rehabilitation, 750 follow-up radiology, laboratory, examination, 400 superficial, 900 other chronic divertible, 2,500 cancer improved pain and symptom management) to other functional centres • Remainder of visits moved to urgent care centre setting (with CTAS distribution consistent with peer hospitals)
Renal	
Adjust projected stations to match recent planning work	• Adjusted dialysis projections to be consistent with Ontario Renal Network Preliminary Dialysis Capacity Assessment (November 2013 version) • Projections assume 40% home modalities by 2021/22 • Move outpatient dialysis and nephrology clinics to non-acute setting
Ambulatory Clinics	
Move clinic activity to non-acute setting	• Clinics moved to non-acute location include AIDS, chiropody, pre-admission (including bariatric clinic), anticoagulant, lupus, adult diabetes, paediatric diabetes, cardiac clinic, cardiac rehabilitation, rehabilitation clinics, paediatric audiology screening, primary care nurse practitioner, oncology treatment outreach (diagnostic assessment clinic), in-home visiting nursing, stroke strategy, infant hearing, and psychogeriatric assessment clinics • Move 10% of medical day care to non-acute setting
Surgery	
Use higher of 2011/12 vs. 2012/13 for base data	• Funding restrictions over past couple fiscal years have led to volumes that are less than population need; also significant wait lists exists for some surgical services
Mental Health	
Assume 59 + 6 growth specialized mental health beds for all years	• Transfer of mental health services into community hospital settings part of the St. Joseph's Healthcare Tier II Divestment • Note that base projections also reflect adjustment as 59 beds is the current complement in 2013/14 post transfer • Move outpatient mental health (e.g., acute day care, acute psychiatry, ACTT, psychogeriatric outreach) and move/maintain mental health other votes to non-acute setting • Assume 9 inpatient beds for child/adolescent mental health (based on previous HSRC directions; sited at Maryvale)

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Adjustment	Rationale
Rehabilitation	
Assume 90 rehab beds for 2017/18	• Assume 90 beds for 2017/18; population growth and aging for future years • Move rehab beds in acute hospital setting to non-acute setting • Move outpatient physiotherapy and occupational therapy to non-acute setting
Complex Cont. Care	
Assume 196 CCC beds for all years	• Recent planning initiatives indicate that beds should increase to 196 complex continuing care beds from the current baseline
Diagnostic Imaging	
Move % of exams to non-acute setting	• Move percentage of radiography and ultrasound exams to non-acute settings
Diag. Cardiology	
Move % of exams to non-acute setting	• Move percentage of outpatient (non-emergency) echocardiography, ambulatory monitoring, exercise stress tests and ECG exams to non-acute settings

Source: HCM Group, Inc., Hotel Dieu General Hospital and Windsor Regional Hospital.

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The bed adjustments are depicted in Figure 14.

Figure 14: Summary of Bed Adjustments

Functional Centre	Adjustment	Total Windsor - Acute 2010/11	2011/12	2012/13	Projected 2017/18	2022/23	2032/33
712100000 Medical Inpatient Services	Base population growth & aging	222	220	229	259	290	369
	Change occupancy from 98% to 95%				7	9	11
	Acute LOS Tgt. Days Saved				-21	-24	-31
	50% ALC Red'n				-28	-31	-39
	Add ED Equivalent Beds				14	15	20
	Final beds				231	259	330
712421000 Cardiac Mon Care - Medical (WRH telemetry beds in medical)	Base population growth & aging	29	26	26	30	34	45
	Acute LOS Tgt. Days Saved				-2	-2	-4
	Final beds				28	32	41
712200000 Surgical Inpatient Services	Base population growth & aging	122	123	130	144	160	195
	Change occupancy from 94% to 90%				7	7	10
	Days Saved via Day Surg				-7	-7	-10
	Acute LOS Tgt. Days Saved				-17	-19	-23
	50% ALC Red'n				-14	-15	-18
	Add ED Equivalent Beds				5	5	6
	Final beds				118	131	160
712403000 ICU - Combined Med/Surg	Base population growth & aging	34	34	34	39	43	54
	Change occupancy from 86% to 85%						1
	Final beds				39	43	55
712404400 ICU - Coronary Care (Med)	Base population growth & aging	14	14	14	17	19	25
	Change occupancy from 81% to 85%				-1	-1	-2
	Final beds				16	18	23
712509000 Obs - Labour, Del, Rec, PP	Base population growth & aging	38	35	34	35	36	35
	Change occupancy from 82% to 70%				6	6	6
	Acute LOS Tgt. Days Saved				-1	-1	-1
	Final beds				40	41	40
712700000 Paediatric	Base population growth & aging	23	20	20	19	19	19
	Change occupancy from 41% to 60%				-6	-6	-6
	Acute LOS Tgt. Days Saved				-1	-1	-1
	Final beds				12	12	12
712762500 Mental Health - Acute	Base population growth & aging	68	68	68	69	70	69
	Change occupancy from 89% to 90%				-1	-2	-1
	Final beds				68	68	68
712765000 Mental Health - Child/Adol (Tayfour - Maryvale - Adolescent MH)	Base population growth & aging	6	6	6	6	6	6
	Change occupancy from 86% to 80%				0	0	1
	Acute LOS Tgt. Days Saved				-1	-1	-2
	HSRC Directions				4	4	4
	Final beds				9	9	9
Total Acute Beds	**Final beds**	**555**	**547**	**561**	**561**	**613**	**738**

Source: HCM Group, Inc., Hotel Dieu General Hospital and Windsor Regional Hospital, August 2014.

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Referral Pattern Analysis

Health care organizations continue to undergo extensive shifts to accommodate demands for reform, financial constraints and changing population needs. As a result, health care organizations need to continually monitor the progress in the patterns of utilization. For example, comparisons of market share across programs may identify patterns that require further investigation such as investigating the degree of market overlap with neighbouring hospitals, and identifying where potential is greatest to increase (or decrease) volume activity.

Although proximity of a hospital to a patient's home is a key factor in market share and patient origin; there are many other factors including physician referral, patient perceptions (e.g., reputation, teaching centre), travel time, proximity to patient's place of work, religious affiliation, etc. In addition, market share analyses are dependent on the geographic borders, and not necessarily imply access to the closest services; nor access to the most appropriate services (e.g., tertiary care).

The following summary provides the degree of localized health services for Windsor/Essex residents by patient type, provider service and hospital.

Figure 15: Market Share for Inpatient Cases, Windsor/Essex Residents, 2012/13

Provider Service	Total Cases	WRH	HDGH	WRH + HDGH	LDMH	LHSC + SJHC	CKHA	All Other
Total	33,498	51.8%	28.8%	80.6%	8.1%	5.8%	2.3%	3.1%
Fam Prac /Gen Med	8,558	53.4%	27.6%	81.0%	15.9%	0.0%	2.2%	0.9%
Obs and Gyne	4,975	90.7%		90.7%	5.2%	2.2%	1.3%	0.5%
Internal Medicine	3,956	20.1%	55.8%	75.9%	19.5%	0.7%	2.4%	1.5%
General Surgery	2,873	36.0%	31.6%	67.6%	8.4%	6.6%	3.3%	14.2%
Ortho Surgery	2,572	30.6%	49.3%	80.0%		7.6%	8.0%	4.4%
Paeds	1,963	80.2%		80.2%		11.9%	3.1%	4.8%
Cardiology	1,454	28.0%	62.4%	90.4%		6.1%		3.5%
Urology	1,423	60.5%	26.8%	87.4%		9.3%	0.8%	2.5%
Respirology	829	97.6%		97.6%		1.7%		0.7%
Neurosurgery	798		89.7%	89.7%		6.1%		4.1%
All Other Providers	4,097	48.8%	21.8%	70.7%	1.9%	22.4%	1.5%	3.5%

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Figure 16: Market Share for Day Surgery Cases, Windsor/Essex Residents, 2012/13

Provider Service	Total Cases	WRH	HDGH	WRH + HDGH	LDMH	LHSC + SJHC	CKHA	All Other
Total	42,810	37.0%	48.0%	84.9%	8.2%	3.2%	2.3%	1.4%
Gastroenterologist	9,483	48.1%	48.1%	96.2%	0.0%	2.9%	0.0%	0.9%
General Surgeon	8,499	30.1%	41.5%	71.6%	24.0%	1.0%	2.3%	1.1%
Ophthalmologist	5,575	0.0%	93.4%	93.4%	0.0%	3.6%	2.0%	1.0%
Urologist	5,248	32.2%	60.8%	93.0%	0.0%	3.7%	1.4%	1.9%
Ortho Surgeon	2,911	16.1%	53.4%	69.5%	6.6%	4.9%	16.8%	2.2%
Obs/Gynaecologist	2,804	91.1%	0.0%	91.1%	5.3%	2.5%	0.5%	0.6%
Otolaryngologist	1,792	67.5%	26.3%	93.8%	0.0%	3.9%	1.5%	0.9%
Dental/Oral (Incl. Pds)	2,067	81.4%	6.4%	87.8%	11.2%	0.6%	0.3%	0.0%
Plastic Surgeon	1,436	55.2%	34.7%	89.9%	2.4%	5.2%	0.0%	2.4%
Internist	1,285	0.6%	54.2%	54.9%	40.2%	0.9%	3.1%	0.9%
All Other Providers	1,710	17.6%	40.7%	58.3%	20.5%	13.1%	1.4%	6.7%

The hospitals in Leamington, Sarnia and Chatham-Kent will continue to provide existing services.

No assumptions have been made about repatriation.

Historical and Projected Workload

Current and Future Beds

The historical and current configuration of beds is summarized in Figure 17.

Overall, the new acute care hospital bed requirements are projected to remain relatively constant over the immediate planning period with some growth in the next ten to twenty years. There were 561 approved acute beds in Windsor in 2012/13. In the future, bed requirements will decrease to 561 in 2017/18 and increase to 613 in 2022/23 and 738 in 2032/33. At the same time beds at the Prince Road site will increase.

A summary of current and projected activity for ambulatory care, clinical, diagnostic and therapeutic services is provided in Figure 18.

Detailed information is provided in Attachment F.

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Figure 17: Bed Summary, Windsor Hospitals [a]

	Ouelette			Metropolitan			Prince Road			Total Windsor	Projected (With Clin Eff/Adj'mts)		
	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2012/13	2017/18	2022/23	2032/33
Acute Care													
Medical Surgical													
• Medical	100	102	111	122	119	118				229	231	259	330
• Cardiac Monitoring	29	26	26	(telemetry incl. in medical)						26	28	32	41
• Surgical	81	81	84	41	42	46				130	118	131	160
Subtotal - Med/Surg	210	209	221	163	161	164				385	377	422	531
ICU													
• Combined Med/Surg	20	20	20	14	14	14				34	39	43	55
• Coronary Care	9	9	9	5	5	5				14	16	18	23
Subtotal - ICU	29	29	29	19	19	19				48	55	61	78
Maternal Child													
• Obstetrics LDRP				38	35	34				34	40	41	40
• Paediatric				23	20	20				20	12	12	12
Mental Health													
• Adult	68	68	68							68	68	68	68
• Child Adolescent							6	6	6	6	9	9	9
Subtotal Acute	**307**	**306**	**318**	**243**	**235**	**237**	**6**	**6**	**6**	**561**	**561**	**613**	**738**

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Figure 17: Bed Summary, Windsor Hospitals [a] (Cont'd)

	Ouelette			Metropolitan			Prince Road			Total Windsor	Projected (With Clin Eff/Adj'mts)		
	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2012/13	2017/18	2022/23	2032/33
Post Acute Care													
Mental Health													
• LT (combined)							--	9	48 [b]	48	65	65	65
Rehabilitation													
• Geriatric	4	15	15							15			
• Combined Rehab	4	4	3				50	51	52	55	90	102	133
Complex Continuing Care [c]							142	156	158	158	196	196	196
Subtotal Post Acute Beds	**8**	**19**	**18**	**0**	**0**	**0**	**192**	**216**	**258**	**276**	**351**	**363**	**394**
Total	315	325	336	243	235	237	198	222	264	837	912	976	1,132

[a] Beds available for admission; projections exclude 6 paediatric short stay places and 14 obstetric intrapartum spaces

[b] Still in process of transferring.

[c] Excludes 2 vented beds transferred to Satellite(s)/Other.

Source: HCM Group, Inc., Hotel Dieu General Hospital and Windsor Regional Hospital.

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Figure 18: Historical and Projected Workload – Hôtel Dieu Grace Healthcare and Windsor Regional Hospital

Program	Indicator	HDGH 2010/11	HDGH 2011/12	HDGH 2012/13	WRH-MET 2010/11	WRH-MET 2011/12	WRH-MET 2012/13	PRINCE ROAD 2010/11	PRINCE ROAD 2011/12	PRINCE ROAD 2012/13	TOTAL 2012/13	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2017/18	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2022/23	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2032/33
Ambulatory Care Services														
Cancer Program	*Visits*	*0*	*0*	*0*	*21,558*	*23,794*	*22,651*	*0*	*0*	*0*	*22,651*	*24,976*	*27,527*	*29,619*
Cardiac Rehabilitation	*Visits*	*3,486*	*3,328*	*3,546*	*6,683*	*6,165*	*6,029*	*23,984*	*23,580*	*25,566*	*35,141*	*29,796*	*32,235*	*40,170*
Chronic Kidney Disease	*Visits*	*22,088*	*25,620*	*40,754*	*0*	*0*	*0*	*0*	*0*	*0*	*40,754*	*39,268*	*42,496*	*45,636*
Continuing Care and Rehabilitation	*Visits*	*0*	*0*	*0*	*0*	*0*	*0*	*1,188*	*3,592*	*3,822*	*3,822*	*4,299*	*4,873*	*6,319*
Medical Day Care	*Visits*										*92,967*	*72,180*	*80,241*	*85,624*
Medical/Surgical Clinics	*Visits*	*60,854*	*59,602*	*58,359*	*51,836*	*53,532*	*52,340*	*9,618*	*14,310*	*14,468*	*125,167*	*140,402*	*152,941*	*175,485*
Mental Health	*Visits*	*4,737*	*4,454*	*4,475*	*169*	*211*	*163*	*2,347*	*2,539*	*2,240*	*6,878*	*6,896*	*6,870*	*6,795*
	• psychiatry	*4,737*	*4,454*	*4,475*				*2,347*	*2,539*	*2,240*	*6,715*	*6,728*	*6,697*	*6,609*
	• spousal battering (domestic violence program)				*169*	*211*	*163*				*163*	*168*	*173*	*186*
Sexual Assault and Domestic Abuse	*Visits (sexual assault & SAFEKIDS program)*	*0*	*0*	*0*	*186*	*176*	*198*	*0*	*0*	*0*	*198*	*204*	*210*	*226*
Women's and Children's Clinics	*Visits*	*0*	*0*	*0*	*34,919*	*37,473*	*37,385*	*0*	*0*	*0*	*37,385*	*37,842*	*39,033*	*38,208*
Clinical, Diagnostic and Therapeutic Services														
Allied Health	*Attendance Days*	*68,937*	*76,556*	*88,567*	*83,161*	*79,711*	*87,336*	*63,907*	*62,069*	*86,332*	*262,235*	*272,356*	*292,128*	*334,771*
Cardiorespiratory/Electrodiagnostics	*Exams*	*95,425*	*79,428*	*75,922*	*717,519*	*533,366*	*593,354*	*42,300*	*59,392*	*88,273*	*757,549*	*878,787*	*958,518*	*1,136,246*
Diagnostic Imaging	*Exams*	*N/A*	*N/A*	*138,688*	*N/A*	*N/A*	*147,748*	*N/A*	*N/A*	*914*	*293,264*	*313,238*	*335,884*	*377,250*
Cardiac Procedures	*Procedures*										*2,857*	*4,102*	*4,497*	*5,054*
Emergency *	*Visits*	*56,602*	*57,868*	*60,368*	*68,629*	*67,812*	*70,603*	*0*	*0*	*0*	*130,971*	*134,703*	*139,092*	*149,274*
Laboratory Services	*In-House Procedures*	*2,134,643*	*2,089,458*	*2,362,636*	*2,903,262*	*2,946,311*	*3,142,091*	*0*	*0*	*0*	*5,504,727*	*5,855,934*	*6,263,140*	*7,009,333*
Pharmacy	*Workload*	*3,719,683*	*3,691,565*	*3,681,112*	*4,544,279*	*4,556,727*	*4,581,627*	*1,514,759*	*1,518,909*	*1,527,208*	*9,789,947*	*9,634,262*	*10,524,013*	*12,583,937*
Spiritual Services	*Attendance Days*	*18,364*	*18,648*	*16,906*	*1,045*	*895*	*3,122*	*439*	*163*	*450*	*20,478*	*21,431*	*23,066*	*26,215*
Surgical Services	*Cases*	*16,912*	*17,215*	*16,918*	*14,524*	*14,738*	*13,436*	*0*	*0*	*0*	*30,354*	*34,708*	*36,885*	*40,899*
Community Clinics	*Visits*	*7,875*	*7,822*	*8,352*	*20,574*	*26,456*	*26,505*	*1,912*	*909*	*25,887*	*60,744*	*64,068*	*66,805*	*70,896*
Other Votes	*Visits*	*4,183*	*4,423*	*4,208*	*375*	*374*	*363*	*108,647*	*69,318*	*86,032*	*90,623*	*91,274*	*92,243*	*95,584*

* New Acute Hospital ED projections: 90,000 in 2017/18; 92,981 in 2022/23; 99,952 in 2032/33; with an adjusted CTAS level distribution consistent with peers
Urgent Care Centre projections: 26,324 in 2017/18; 29,885 in 2022/23; 28,181 in 2032/33; with an adjusted CTAS level distribution consistent with peers
18,150 ED visits (in 2012/13) will be diverted from the emergency department / urgent care centre
Source: HCM Group, Inc.

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Further Explanations and Responses to MOHLTC Questions

- ***Clarify how the ER bed numbers are projected and adjusted to arrive at final calculations for ER.***
  - Emergency department bed numbers are calculated by projecting the inpatient days reported in the emergency department functional centre. The inpatient days were allocated 75 per cent to medical units and 25 per cent to surgical units, and projected by their respective growth drivers.

- ***Explain why Obstetrics/Labour, Delivery (Del), Recovery, (Rec), PP is increasing when the population for this age cohort is clearly decreasing.***
  - Obstetrics/labour/delivery/recovery/post partum activity is driven by the Essex County population aged 0. Ministry of Finance aged 0 population projections are used so that the volume projections are consistent with Statistics Canada's assumptions for fertility, immigration and migration. Essex County population aged 0 continues to increase and peaks in year 2024, and then decreases. Bed projections are also calculated using occupancy rate targets. It is important to note that although patient days change directly with the drivers, the actual change in beds may appear different. For example, if current occupancy for a functional centre is a X%, applying a lower target occupancy would add beds first to achieve the target occupancy, and then add new beds for growth. The previous 10 escalation beds have been removed. The projected LDRP beds are now 5 less for each projection year.

- ***Confirm if the patient clinical efficiency targets proposed by the Hay Group (June 2013) have been met to date. Describe the patient clinical efficiency targets used for future beds.***
  - Opportunities to reduce use of inpatient days through shifting inpatient surgery to ambulatory surgery are based on the CIHI coding of inpatient cases as ambulatory surgery candidates, and comparisons of the per cent use of ambulatory surgery by CACS and patient age. "Best Practice" benchmarks for per cent use of ambulatory surgery by CACS and patient age combination are based on the peer hospital with at least 30 inpatient and day surgery cases in the combination, with the highest per cent use of day surgery.
  - "Best practice" benchmarks for acute length of stay are based on the shortest average acute (i.e., exclusive of ALC day) length of stay in each CMG/patient age/resource intensity level (RIL) combination of hospitals with at least 30 "typical" cases in the fiscal year. LOS benchmarks are based only on "typical" cases (as defined by CIHI) and the benchmarks are applied only to the typical cases in each hospital.

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Reduction of ALC days is very dependent on access to post-acute services. The analysis showed the differences across hospitals in per cent distribution of discharges by post-acute placement, but the ALC target for the Windsor hospitals is to reduce the use of ALC day by 50 per cent.

- Patient clinical efficiency targets used:
  - Conversion from inpatient surgery to day surgery (1,400 cases and 2,000 days in 2011/12)
  - ALOS reduction (13,000 target days saved in 2011/12)
  - 50 per cent ALC reduction (12,000 ALC days removed in 2011/12)
  - Note that acute efficiencies are applied to base year; population growth and aging drivers follow

- ***Of the proposed 78 intensive care unit (ICU) beds, are any of these step down? The proposed 78 ICU beds represent 11 per cent of the total acute beds (735).***
  - A percentage of the critical care beds would be step down beds; however, the specific alignment and distribution will be further detailed in following phases. The percentage of ICU beds (of total beds) increases for the projections. However, this is largely due to aggressive clinical efficiencies applied to medical and surgical beds (i.e., reduction in the denominator). The 8 per cent assumption is also based on a historical average, and the projected distribution of beds is purposely different than historic averages. Furthermore, small hospitals and teaching hospitals can be significantly different than the 8 per cent average (teaching hospitals typically having a higher percentage). By focusing on the ICU beds specifically (not CCU beds), the projections indicate 7 per cent (43 ICU beds excluding CCU/total of 610 acute beds) for 2022/23.

- ***Given that the acute care provider is proposing Transplant, Cardiac and Surgical Oncology, identify the proposed break down of surgical beds by subspecialty.***
  - Additional beds for new/enhanced services have not been incorporated in the projections. Appropriate processes may be pursued in the future when/if the need for the services have been confirmed as a priority.

- *Diagnostic Imaging*
  - A breakdown of diagnostic tests by inpatients and outpatients is provided in Figure 24.

- *Cardiorespiratory/Electrodiagnostics*
  - A breakdown of diagnostic tests by inpatients and outpatients is provided in Figure 24.

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- *Laboratory*
  - A breakdown of diagnostic tests by inpatients and outpatients is provided in Figure 24.

Future Service Delivery Model

The new acute care hospital will focus as a comprehensive community-based teaching hospital and continue to provide primary, secondary and tertiary acute care to its local and regional communities. It will continue to serve as a regional resource for provincial programs including cancer, cardiac and dialysis care.

At the core of the future Service Delivery Model is the acute hospital's mission to provide acute care services with strengthened coordination of care between multiple providers and local service integration with primary care and community services. Key elements of the Service Delivery Model will include:

- A continuum of acute care services at the new hospital and select ambulatory care off-site, including mental health and addictions, primary care and urgent care services in under-serviced communities.
- Almost all hospital-based services will continue to be provided locally with the exception of some surgical services and specialized services for children. The feasibility of new and expanded services will continue to be reviewed.
- Rehabilitation, mental health, and complex continuing care will continue to be provided at the Prince Road site. Mental health emergency services will be provided in the future at the Prince Road site.

The definition of an acute care and non acute care setting, as described in the Windsor Hospitals Study: A public conversation on the future of hospital services in Windsor-Essex, July 2012 is:

- Acute inpatient care provides necessary treatment for a disease or severe episode of illness for a short period of time, with the goal of discharging patients as soon as they are stable. Non-acute care would include services often referred to as extended care, chronic care or complex continuing care, serving people who may not be ready for discharge from hospital, but who no longer need acute care services. This type of hospital care provides ongoing professional services to a diverse population with complex health needs. (Source: Windsor Hospitals Study: A public conversation on the future of hospital services in Windsor-Essex, July 2012).

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Academic and Research

The components of the future vision include:

- Create a hub of education and research, which is as active, productive and high quality as other education centres.
- Attract and retain medical, nursing and health professional staff who are interested in teaching and research.
- Provide a collaborative Windsor/Essex physician recruitment strategy.
- Enhance partnerships with external stakeholders with respect to education, research, scholarship and practice (Faculty of Nursing, Strategic Plan, 2012).
- Create a culture of inclusion that engages clinical, academic and community stakeholders (hospitals) in the business of the faculty such as committees, working groups, research collaboration (Faculty of Nursing, Strategic Plan, 2012).
- Provide hospital based full time clinical academic physicians who will form the core of the department. Other medical staff will be adjunct professors and will have the opportunity to progress in a streamlined approach to assistant, associate and full professor if they desire.
- Create a research and scholarship culture that is as strong as in London.
- Ensure alignment between the number of students and number of faculty members; the number of students will likely remain constant.
- Focus on clinical research and not on basic (wet lab) research. It will be integrated with community and primary care sectors in such a way that it supports building/maintaining a continuum of care and otherwise creates additional capacity across the health care system.
- Create excitement for health-related careers that will result in increased applications from the best and brightest young Windsor/Essex residents – thus building a long-term approach to the issue of health professional recruitment and retainment.

Summary

The proposed model takes a strong system approach that adapts to emerging system trends. This is exemplified by:

- Focusing on chronic disease management and ambulatory care targeted at priority community needs
- Keeping people out of hospital
- Emphasizing and utilizing outreach, partnerships and collaboration to improve access and continuity
- Building capacity to improve the health of the community
- Implementing the model on several sites, each with a distinct focus, but combined to serve the community

The bed and service volumes for the Windsor Hospitals are presented in Figure 19.

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Figure 19: Windsor Bed and Service Volumes by Site

	Current 2012/13 [a]				Projected 2017/18				
Component	O	M	P	Total	New Acute Hospital	Urgent Care Centre	Prince Road	Satellite(s)/ Other	Total
Inpatient Beds									
Medical	137	118	--	255	259		--	--	259
Surgical	84	46	--	130	118		--	--	118
Paediatrics	--	20	--	20	12 [b]		--	--	12 [b]
Obstetrics	--	34	--	34	40		--	--	40
ICCU/CCU	29	19	--	48	55		--	--	55
Subtotal	250	237	--	487	484		--	--	484
Mental Health									
• acute - adult	68	--	--	68	8		60	--	68
• acute - paediatric	--	--	6	6	--		--	9	9
• specialized	--	--	48	48 [c]	--		65	--	65
Subtotal	68		54	122	8		125	9	142
CCC/Rehab					--				
• CCC		--	158	158			196	2	198
• Rehabilitation	18	--	52	70			90	--	90
Subtotal	18		210	228			286	2	288
Total	336	237	264	837	492		411	11	914
Surgery/Procedures Cases	16,916	13,436	--	30,354	34,708		--	--	34,708
Emergency Department Visits	--	--	--	130,899	90,000	26,324	--	18,379 [d]	116,324 [e]

[a] Beds available for admission.
[b] In addition, short stay and mental health crisis care areas will be required.
[c] In process of transferring.
[d] Dispersed.
[e] Excludes other volumes to be relocated/dispersed.
O = Ouellette M = Met P = Prince Road
Source: HCM Group, Inc.

Guiding Principles

The ***Guiding Principles*** underpinning the model of care and service delivery are as follows:

Patient and Family Centred Care

The health care providers are dedicated to:

- Respect for the individual's values, preferences and expressed needs
- The coordination and continuity of care in the best interests of the patient and family
- Clear communication and information flow to the patient, family and caregivers
- Emotional support and alleviation of fear and anxiety

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- Involvement of family and caregivers
- Smooth transitions between points of care.

Evidence-Based Care

Evidence based care includes:

- Leading practice models of care that promote equitable access to care, improve quality of care, and increase efficiency
- Clinical pathways which standardize evidence-based practices to reduce variations in care across health care settings and improve patient outcomes and experiences.

Integrated Care

Integrated care is the concept of bringing together the inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation, and health promotion. Integration is a means to improve services in relation to access, quality, user experience and efficiency. Integration, from the patient and family perspective, is the result of an interprofessional model of care and coordinated, seamless processes of care within the hospital, between sites and among all providers in the continuum.

Efficient Value-Added Processes

This refers to the processes and service design from the patient perspective using proven methodologies to minimize non value add steps in the process of addressing the patients' needs.

The role of the Windsor Hospitals in the Continuum of Care within the system is described below.

Health Promotion, Prevention and Education

The primary role in health promotion, prevention and education will be to identify and target high risk populations and provide secondary/tertiary prevention through lifestyle counseling to maintain health and prevent chronic disease or further events. The Hospitals will collaborate with others to educate targeted groups, enhance social supports and promote health.

Community and Post-Acute Care

The Hospitals' role in community and post-acute care will be to provide services that: enhance the transitions of care in our areas of focus; promote integrated care (e.g., shared care models); avoid hospital admission and emergency department visits; and/or facilitate safe early discharge. Services can be provided on-site (on an inpatient and outpatient basis), off-site or as outreach, in collaboration with other providers. Post-acute care (i.e., rehabilitation, complex continuing care, palliative care, mental health) will be located at the Prince Road site with satellite services at the satellite(s)/other (e.g., mental health and addictions).

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Acute Care

Acute care will be located at the new hospital site. It includes emergency (ED) services, all clinical supports to the ED and services that must be provided in a hospital setting due to safety, complexity, costly infrastructure and/or multi-specialty interdependencies. Core acute services primarily include: ED, acute inpatient care (med, surg, paediatrics, obstetrics, mental health, critical care), diagnostic services, emergent/elective surgery and outpatient clinics. The satellite(s)/other will include an urgent care centre and renal services.

Facility planning will

- Leverage the potential of a new Greenfield site, but balance the capital costs
- Incorporate state-of-the-art processes/systems and technology
- Maintain potential to expand/regenerate areas over time and/or to change use as new services and clinical practices emerg, and as technology changes
- Consider recent investments in capital at the Prince Road site and Bell Building
- Create an affordable project balancing reasonable expectations with longer term value and flexibility
- Support education and research in collaboration with the University of Windsor and St. Clair College

The new Service Delivery Model is reflected in Figure 20.

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Figure 20: Future Service Delivery Model

Proprietary



Siting Concepts

Objectives

Guided by the strategic goals and principles, in order to determine the various options for the new delivery model, in addition to the LHIN/MOHLTC priorities, the Hospitals identified key objectives that need to be achieved.

The first set of objectives applies to all health care capital projects:

- ***Quality and Safety:*** This includes the infrastructure necessary for quality safe outcomes for patients (e.g., the ability to attract and sustain an expert professional work force, critical mass for services, building to all safety standards and collocating specific services).

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- ***Access to Services:*** Access has two broad dimensions. The first revolves around community need and availability of services. Despite a sophisticated methodology developed by the MOHLTC, matching future need and availability is extremely difficult. There are multiple variables that influence the resulting volume projections, not the least of which are evolving community services and changes in practice. A case in point is the recent drastic reduction in rehabilitation beds required following knee replacement surgery. The second dimension revolves around how easily or quickly patients can receive services they need.

- ***Affordability:*** This includes capital costs, operating costs, value for money and the ability of the community to pay its share of the capital costs.

The second set of objectives reflect lenses that are key to the Windsor circumstances:

- ***Flexibility:*** Flexibility, critical to a project of this size and longevity, refers to remaining adaptable to the evolving nature of the health care system, new emerging delivery models for care and technology, changing clinical practice and ongoing changes in health system organization and directions to continually improve health care delivery.

- ***Community Support:*** Ongoing community support is critical to the success of the Windsor/Essex redevelopment to ensure the new facility meets the needs of the community and receives the financial support required to support the infrastructure renewal. This includes regular, transparent communications with stakeholders to engage them at key points in the capital planning process.

Scope of Services

Financial

The Prince Road site will continue to be used for post-acute care. The new site will be used for acute care. The satellite(s)/other will be used for services that are essential for high risk patients/clients (e.g., mental health). [redacted]

The service distribution options addressed five key objectives:

1 Optimizing the recent build at the Prince Road site
2 Optimizing use of the Greenfield site (cheaper build with greater flexibility)
3 Differentiating and limiting duplication on the sites to address the affordability objective (i.e., consolidating services)

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4 Maintaining flexibility for future adaption and change to the greatest extent possible
5 Ensuring required services are accessible for at risk patients/clients who live downtown and elsewhere in the county.

The current and projected scope of services is detailed below and in the report. Future recommendations have been based on the Windsor Hospitals Study Task Force for the "starting point" allocation of acute and non-acute services. The Task Force identified these services as:

- Acute inpatient care provides necessary treatment for a disease or severe episode of illness for a short period of time, with the goal of discharging patients as soon as they are stable.
- Non-acute care would include services often referred to as extended care, chronic care or complex continuing care, serving people who may not be ready for discharge from hospital, but who no longer need acute care services. This type of hospital care provides ongoing professional services to a diverse population with complex health needs.

The purpose of Figure 21 below is to identify the current (C) and projected (P) location of clinical services in Windsor/Essex by hospital site (i.e., Metropolitan site, Ouellette site, Prince Road site) including what services will be located at the future satellite(s)/other. The siting of clinical services is a major space driver and provides the framework for facility planning to be completed in Stage 1B.

Figure 21: Current and Projected (2017/18) Clinical Services by Site

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Inpatient Beds								
• Acute								
-- Med/Surg	●	●	--	●	--	--	--	--
-- ICU	●	●	--	●	--	--	--	--
-- Mat/Child	●	●	--	--	--	--	--	--
-- Mental Health	●	--	--	●	--	--	●	● (Maryvale)
• Post Acute								
-- Mental Health	--	--	--	●	--	●	●	--
-- Rehabilitation	--	--	--	●	--	●	●	--
-- CCC	--	--	--	--	--	●	●	--

[a] Further review of the optimal location will continue to occur as planning proceeds.
[b] Delivered by multiple providers with current spaces in the community.
[c] Primary Care/Specialist offices.
[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.
[e] Expand for additional transitional youth and psychogeriatric populations.
[f] Planning underway to relocate to Bell Building.
[g] New services/equipment to support best practices in the existing specialties will be added when business cases are developed and approved by the LHIN.

C = Current P = Projected Met = Metropolitan

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Figure 21: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Cancer								
• systemic therapy	●	●	--	--	--	--	--	●
• radiation therapy	●	●	--	--	--	--	--	--
• clinics	●	●	--	--	--	--	--	--
• supportive care	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--
• diagnostic assessment/screening	●	●	--	--	--	--	--	●[b,c]
• genetic counselling	●	●	--	--	--	--	--	--
Cardiac								
• cath/PCI	●	--	--	●	--	--	--	--
• pacemakers	●	●	--	●	--	--	--	--
• clinics	●	--	--	●	--	--	--	●
• diagnostic	●	●	--	●	--	--	--	--
• EPS services	●	--	--	--	--	--	--	--
• cardiac rehab	--	--	--	--	--	●	●	--
Critical Care								
• combined med/surg	●	●	--	●	--	--	--	●
• coronary care	●	--	--	●	--	--	--	--
Diagnostics								
• radiography/fluoroscopy	●	●	--	●	--	●	●	●
• interventional	●	●	--	●	--	--	--	--
• breast imaging	●	●	--	●	--	--	--	●[b]
• CT	●	●	--	●	--	--	●	--
• ultrasound	●	●	--	●	--	--	●	●
• nuclear med	●	●	--	●	--	--	--	--
• MRI	●	●	--	●	--	--	--	--
• bone density	●	●	--	●	--	--	--	--
• PET-CT	●	--	--	--	--	--	--	--
Emergency								
• emergency services	●	●	--	●	--	--	--	--
• urgent care service	●	●	--	●	--	--	--	●
• sexual assault/domestic violence	●	●	--	--	--	--	--	--
• mental health crisis	●[d]	●[d]	--	●	--	--	●	●
• disaster preparedness	●	●	--	●	--	--	--	--
• base hospital	●	●	--	●	--	--	--	--
• telemedicine for Pelee Island	●	●	--	●	--	--	--	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatric mental health patients along with crisis rooms in the paediatric inpatient unit.

[e] Expand for additional transitional youth and psychogeriatric populations.

[f] Planning underway to relocate to Bell Building.

[g] New services/equipment to support best practices in the existing specialties will be added when business cases are developed and approved by the LHIN.

C = Current P = Projected Met = Metropolitan

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Figure 21: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Medicine								
• medical day care	●	--	--	--	--	--	--	●
• internal medicine	●	--	--	●	--	--	--	--
• AIDS	--	[b]	--	--	--	--	--	●[b]
• enterostomal	●	--	--	●	--	--	--	--
• general	●	●	--	●	--	--	--	--
• anticoagulant	●	--	--	●	--	--	--	●[b]
• pain management	●	--	--	●	--	--	--	●[b]
• respirology	●	●	--	--	--	●	●	●[b]
• diabetes	--	--	--	●	--	--	--	●[b]
• neurology	●	--	--	●	--	--	--	--
• lupus	--	--	--	●	--	--	--	●[c]
• Primary care NP/wound management	--	--	--	●	--	--	--	●
• outreach RN	--	--	--	●	--	--	--	●[b]
• geriatric assessment	--	--	--	--	--	●	●	●[b]
• adult day care	--	--	--	--	--	●	●	●[b]
• stroke strategy	--	--	--	●	--	--	--	●
• bariatric	--	[b]	--	--	--	●	●	●[b]
Mental Health and Addictions								
• day program	--	--	--	●	--	--	--	●
• injection clinic	--	--	--	●	--	●	●	●
• psychosis clinic	--	--	--	--	--	●	●	--
• crisis intervention	--	--	--	●	--	--	--	●
• ACTT teams	--	--	--	--	--	--	--	●[e]
• concurrent disorder	--	--	--	--	--	●	●	--
• mood/anxiety	--	--	--	--	--	●	●	--
• psychogeriatric outreach	--	--	--	--	--	●	●	●
• geriatric assessment	--	--	--	--	--	●	●	●
• problem gambling (residential/outpatient)	--	--	--	--	--	●	●	●
• addiction services -outpatient	--	--	--	●	--	●	●	●
• addiction - residential treatment	--	--	--	--	--	--	--	●
• withdrawal management	--	--	--	--	--	●	●	--
• dialectical behaviour therapy	--	--	--	--	--	--	●	--
• ECT	--	--	--	●	--	●	●	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.

[e] Expand for additional transitional youth and psychogeriatric populations.

[f] Planning underway to relocate to Bell Building.

[g] New services/equipment to support best practices in the existing specialties will be added when business cases are developed and approved by the LHIN.

C = Current P = Projected Met = Metropolitan

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Figure 21: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met C	Met P	Ouellette C	Ouellette P	Prince Road C	Prince Road P	Satellite(s)/ Other [a]
Pathology/Laboratory								●
• chemistry	●	●	--	●	--	●	●	--
• haematology/coagulation	●	●	--	●	--	●	●	--
• transfusion/blood bank	●	●	--	●	--	--	--	--
• anatomic pathology/autopsy	●	●	--	●	--	--	--	--
• microbiology	●	--	--	●	--	--	--	--
• cytology	●	●	--	--	--	--	--	--
• histology	●	●	--	--	--	--	--	--
• toxicology	●	--	--	--	--	--	--	--
• molecular diagnostics/flow cytometry	●	--	--	--	--	--	--	--
• morgue	●	●	--	●	--	--	--	--
Rehabilitation								
• PT	●	--	--	●	--	●	●	●[b]
• OT	●	--	--	●	--	●	●	●[b]
• SLP	●	--	--	●	--	●	●	●[b]
• pulmonary rehab	--	●	--	--	--	●	●	●[b]
• audiology	--	--	--	--	--	--	--	●[b]
• chiropody	--	--	--	--	--	●	●	●[b]
• general rehab	--	--	--	--	--	●	●	--
• amputee rehab	--	--	--	--	--	●	●	--
• physiatry	--	--	--	--	--	●	●	--
• acute injuries/assessment	--	--	--	--	--	●	●	--
• head injury/ABI	--	--	--	--	--	●	●	--
Renal								
• inpatient treatment	●	--	--	●	--	--	●	--
• clinics	--	--	--	●	--	--	--	●[f]
• training	--	--	--	●	--	--	--	●[f]
• outpatient treatment	--	--	--	●	--	--	●	●[f]

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[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.

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Figure 21: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Surgical Services [g]								
Specialties								
• anaesthesia	●	●	--	●	--	--	--	--
• brachytherapy	●	●	--	--	--	--	--	--
• dental	●	●	--	●	--	--	--	--
• cardiovascular	●	--	--	●	--	--	--	--
• ECT	●	--	--	●	--	--	--	--
• endoscopy	●	●	--	●	--	--	--	●[e]
• ENT	●	●	--	●	--	--	--	--
• general	●	●	--	●	--	--	--	--
• gynaecology	●	●	--	--	--	--	--	--
• neurosurgery	●	--	--	●	--	--	--	--
• ophthalmology	●	--	--	●	--	--	--	●[e]
• oral/maxillofacial	●	●	--	●	--	--	--	--
• oncology	●	●	--	--	--	--	--	--
• orthopaedic	●	●	--	●	--	--	--	--
• paedodontist	●	●	--	--	--	--	--	--
• plastic	●	●	--	●	--	--	--	--
• thoracic	●	--	--	●	--	--	--	--
• urology	●	●	--	●	--	--	--	●[e]
Clinics [a]								
• general surgery	●	●	--	--	--	--	--	--
• minor surgery	●	●	--	●	--	--	--	--
• thoracic	●	--	--	●	--	--	--	--
• urology	●	●	--	--	--	--	--	--
• neurosurgery	●	--	--	●	--	--	--	--
• ophthalmology	●	--	--	●	--	--	--	--
• fracture	●	●	--	●	--	--	--	--
• burn	●	●	--	--	--	--	--	--
• hand	--	--	--	--	--	●	●	--
• preadmission	●	●	--	●	--	--	--	●

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[c] Primary Care/Specialist offices.

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Figure 21: Current and Projected (2017/18) Clinical Services by Site (Cont'd)

	New Acute Hospital	Met		Ouellette		Prince Road		Satellite(s)/ Other [a]
		C	P	C	P	C	P	
Women and Children's								
Maternal								
• family birthing centre	●	●	--	--	--	--	--	--
• labour, birth and recovery (LBR)	●	●	--	--	--	--	--	--
• labour, birthing, recovery and postpartum (LBRP)	●	●	--	--	--	--	--	--
• operative birthing (C-section)	●	●	--	--	--	--	--	--
• antenatal and postpartum inpatient	●	●	--	--	--	--	--	--
• women's health clinic	●	●	--	--	--	--	--	--
• maternal newborn clinic	●	●	--	--	--	--	--	--
• Rhogam clinic	●	●	--	--	--	--	--	--
• maternal fetal medicine clinic	●	●	--	--	--	--	--	--
• obstetrical clinic	●	●	--	--	--	--	--	--
• emergency triage	●	●	--	--	--	--	--	--
• mid wife program	●	●	--	--	--	--	--	--
Newborn								
• NICU Level 3	●	●	--	--	--	--	--	--
• NICU follow-up clinic	●	●	--	--	--	--	--	--
• neurodevelopment program	●	●	--	--	--	--	--	--
• RSV clinic	●	●	--	--	--	--	--	--
• ROP program	●	●	--	--	--	--	--	--
• infant hearing/screening	●	--	--	--	--	--	--	●
• clinical trials	●	●	--	--	--	--	--	--
Paediatric								
Inpatient Services								
• general medical/surgical	●	●	--	--	--	--	--	--
• oncology	●	●	--	--	--	--	--	--
• Level I/It nursery	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--
• mental health	●	●	--	--	--	--	--	●
Outpatient Services								
• emergency paediatric triage	●	●	--	--	--	--	--	--
• metabolic clinic (diabetes and endocrine)	●	--	--	--	--	--	--	●
• cardiology	●	●	--	--	--	--	--	--
• asthma	●	●	--	--	--	--	--	--
• allergy	●	●	--	--	--	--	--	--
• cystic fibrosis	●	●	--	--	--	--	--	--
• nephrology	●	●	--	--	--	--	--	--
• psychiatry	●	●	--	--	--	--	--	--
• medical day care	●	●	--	--	--	--	--	--
• endoscopy	●	●	--	--	--	--	--	--
• day surgery	●	●	--	--	--	--	--	--
• haemophilia	●	●	--	--	--	--	--	--
• clinical trials	●	●	--	--	--	--	--	--

[a] Further review of the optimal location will continue to occur as planning proceeds.

[b] Delivered by multiple providers with current spaces in the community.

[c] Primary Care/Specialist offices.

[d] Includes paediatrtic mental health patients along with crisis rooms in the paediatric inpatient unit.

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Current Services

A profile of current services by program is provided in this section.

Cancer

- Outpatient clinics (systemic, radiation, palliative)
- Radiation treatment – planning and delivery
- Chemotherapy/day care incl. blood transfusions
- Supportive care (social work/dieticians)
- Clinical trials
- Diagnostic assessment program (lung, prostate, colorectal) – virtual and regional
- Integrated Cancer Screening (OBSP, Ontario cervical screening and colon cancer check)
- Cancer prevention including smoking cessation
- Phlebotomy services
- Pharmacy (satellite and retail)
- Genetic counselling (breast and ovary)
- Telemedicine consultations
- Inpatient care (18 medical oncology beds)
- Navigation (for aboriginal patients)

Cardiac

- Beds:
  - 14 cardiac care beds across both sites
  - 40 beds with telemetry monitoring across both sites
- Cardiac program not yet designated as a regional cardiac centre: this is CCN supported and anticipated in the next 12 months
- Cardiac catheterization and primary PCI services including pre and post procedure care available 5 days/wk, 14 hours per day
- Pacemaker insertions
- Clinics:
  - arrhythmia device (i.e., implant and follow-up services) at HDGH
  - pre and post PCI clinic
  - urgent cardiac clinic
  - arrhythmia assessment clinic (quarterly outreach from LHSC)
  - complex cardiovascular rounds (every Tuesday)
- Diagnostics:
  - ECG, echo (2D, stress, contrast and TEE), stress testing, cardiac CT
  - holter in private clinics and LDMH
- Therapies/treatments: ventilated/BIPAP care, insertion and maintenance of intra-aortic balloon pump and IMPELLA, hypothermia protocol

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Critical Care

- Surveillance, monitoring and treatment of adults in an acute phase of their illness requiring intensive care service for maximum surveillance, monitoring and treatment of conditions with life threatening system impairment
  - neurosurgical services
  - trauma services
  - district stroke care
  - vascular surgery (cardiac surgery excluded)
  - thoracic
  - interventional radiology (post procedure care)
  - critical respiratory failure care (oscillation)
  - CRRT care (Continuous Renal Replacement Therapy)
  - organ and tissue procurement

Diagnostics

Diagnostic Imaging

- Diagnostic radiology, including:
  - radiography (digital and portable)
  - fluoroscopy
  - surgical imaging (C-arm)
  - interventional
- Breast imaging, including:
  - OBSP
  - mammography
  - interventional diagnostic procedures and treatments
  - ultrasound
  - MRI and MRI guided biopsies
- CT
- Ultrasound (general, obstetrical, interventional procedures)
- Nuclear medicine (general, cardiac, BMD)
- MRI
- Laboratory
  - specimen procurement
  - clinical chemistry
  - special chemistry
  - haematology/coagulation
  - transfusion medicine/blood bank
  - anatomic pathology/autopsy
  - morgue
  - microbiology
  - cytology
  - histology

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Emergency

- Trauma care
- Resuscitation and stabilization
- Examination and treatment
- Education and consultation
- Mental health psychiatric nurses
- Sexual assault/domestic violence and forensic assessment and treatment referral
- Care of admitted patients when beds are not available
- Nurse led outreach teams to nursing homes
- Geriatric emergency management
- Emergency/disaster preparedness
- Telemedicine/telehealth to Pelee Island
- Code blue and pink
- Injury prevention education
- Education of medical, clinical and allied health students including armed forces military training site
- Base hospital services including training and medical directions for paramedics
- Organ donation management
- Assessment of patients prior to commencing addiction treatment – detox program; prescriptions as need for detox stay
- Wound care investigation and management and follow-up referrals from dermatology, vascular surgery and surgical specialties

Medicine

- Inpatient care including a full range of specialties
- Medical day care
- AIDS clinic
- Chiropody
- Enterostomal therapy
- Diabetes education/clinic
- ER scheduled follow-up visits (wound, IV, removal of stitches)
- Stroke/TIA clinic
- General internal medicine clinic – rapid assessment, preop clearance
- Respirology incl. rapid lung cancer diagnostic clinic
- Anticoagulant clinic
- General neurology clinic incl. ER follow-up
- Bariatric clinic

Mental Health and Addictions

- Addictions: Adult Outpatient and Residential Withdrawal Management Services including Essex County Addictions Assessment Referral Service, Remedial Measures Program, Withdrawal Management Services; Problem Gambling Outpatient and Residential Services

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- Adult Outpatient and Outreach Specialized Mental Health Treatment Services
- Adult Specialized Mental Health Inpatient Treatment (65 beds)
- Adult Specialized Mental Health Residential Treatment Services
- Child and Adolescent Acute Mental Health (9 beds at Maryvale Campus)
- Specialty services: Wellness Psychosis (schizophrenia), Dual Diagnosis, Mood and Anxiety, concurrent disorders, geripsychiatry
- Geriatric Mental Health Outreach Team
- ECT Service
- ER crisis intervention, urgent assessment and community referral
- Acute Inpatient (68 beds)

Rehabilitation

- TCP & REACT
- CCAC supported therapies (PT, OT, Speech, Dietician) in the home
- Both HDGH and WRH acute sites provide:
  - rehabilitation assessment and therapies for acute inpatients including:
    - physiotherapy
    - occupational therapy
    - speech language pathology (swallowing assessments)
    - ambulation aids
- HDGH:
  - 14 "Assess and Restore" beds providing 14 day program for seniors with defined discharge location
  - 24 "virtual" rehabilitation beds: providing more intensive rehabilitation services (criteria-based) for patients in any acute bed
  - acute stroke rehabilitation initiated as early as possible
- Prince Road Site
  - 60 post-acute rehabilitation beds providing rehabilitation for: stroke, orthopaedic, geriatric/medically complex rehabilitation, amputation, ABI, spinal cord
- Outpatient PT, OT, SLP in a unidisciplinary model: staff coordinate appointments but coordinated/intensive follow-up service not available
- Cardiac rehabilitation
- Pulmonary rehabilitation
- ABI consultation team
- Geriatric Assessment Program for community-based seniors
- Adult Day Program – family respite, recreation and functional activities and social interaction for otherwise isolated people post-acute rehabilitation beds providing rehabilitation for: stroke, orthopaedic, geriatric/medically complex rehabilitation, amputation, ABI, spinal cord

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Renal

- All Renal services are delivered by HDGH
- Multi-site model:
  - HDGH site includes 22 outpatient treatment stations, apheresis treatment, 4 inpatient treatment stations, clinics, nephrologist offices and support
  - McDougall Street Satellite includes 15 treatment stations and home dialysis training
  - PD treatment provided at one LTC facility
  - Leamington satellite includes 6 treatment stations and home dialysis training
- Vascular access services at HDGH include interventional and surgical and an access clinic.

Surgical Services

- Ambulatory care clinics including minor procedures, preadmission, urology, pain management, general surgery, thoracic, urology, neurosurgery, ophthalmology, fracture, burn, hand
- Anaesthetic support for procedures in other hospital areas (e.g., imaging, obstetrics)
- Brachytherapy for Cancer Centre
- ECT for mental health patients
- Endoscopy procedures
- ENT
- General
- Gynaecology
- Neurosurgery
- Ophthalmology
- Oralmaxillofacial
- Orthopaedic
- Pain management procedures
- Paediatric and General Dental
- Plastic
- Thoracic
- Urology
- Vascular

Women and Children's

- Paediatrics
  - inpatient
    - general medical and surgical care
    - mental health (e.g., behaviour & eating disorders)
    - oncology
    - clinical teaching unit (CTU)

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    - supportive care (social worker, dieticians, chaplains)
    - clinical trials
    - PERT team
  - outpatient
    - emergency paediatric triage (EMP)
    - metabolic and diabetes clinic
    - paediatric clinics (medical day care, cystic fibrosis, psychiatry, allergy, asthma, cardiology, endoscopy, paediatric short stay)
    - paediatric oncology group Ontario (POGO)
    - audiology
    - SAFE Kids
    - day surgery
    - child life program
    - clinical trials
    - hemophilia clinic
- Women
  - family birthing centre
  - LBR
  - LBRP
  - operative birthing (c-section)
  - antenatal and postpartum inpatient
  - women's health clinic
  - maternal newborn clinic
  - Rhogam clinic
  - maternal fetal medicine clinic
  - obstetrical clinic
  - sexual assault and domestic violence
  - emergency OB triage
  - anesthetic support
  - mid-wife program
  - lactation consultants
  - supportive care (social workers, dietitians, chaplains, respiratory)
  - clinical trials
- Newborn
  - NICU (approx. 2/3 Level II and 1/3 Level III)
  - NICU follow up clinic
  - neurodevelopment program
  - Synagis program (RSV Clinic)
  - retinopathy of prematurity program (ROP)
  - infant hearing/screening
  - supportive care (social workers, dietitians, chaplains, RTT)
  - clinical trials
  - NICU dietician follow-up clinic
  - NICU nurse follow-up clinic

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Service Delivery Model Changes

Clinical Service Directions

The planning process explored the range of current and future services across all sites and focused on directions for the following services as the foundation for the future Service Delivery Model:

- Cancer
- Cardiac
- Critical Care
- Diagnostics
- Emergency
- Medicine
- Mental Health and Addictions
- Rehabilitation
- Renal
- Surgical Services
- Women and Children's

Changes to the Service Delivery Model include integration opportunities, program/service redesign and alternate service delivery models to ensure best practice, clinical efficiencies, and seamless care.

The specific areas that have been identified for change in service delivery for each clinical program and support services are detailed in the Report according to the following categories:

- ***Relocations*** – services that will be located elsewhere.
- ***Organizational changes*** – services that will be provided differently.
- ***New and expanded services*** – services that will be required to address access and/or quality issues.

Material provided in confidence

[redacted]

Universal Themes

Common to all programs are the following directions:

- Ensure 'right bed/place for patients' to facilitate the best care for patients.
- Create an Electronic Health Record (EHR) with all of the patient's information available to all health providers to facilitate shared care.
- Enhance telehomecare services as an alternative to monitor and support patients/families.
- Locate telehomecare satellite sites throughout the community, south east area of the County and in Leamington.
- Develop well defined end of life care plan for all patients.
- Enhance supports for end of life care in the home/community.
- Provide culturally sensitive and multilingual care.
- Advocate for a transportation system to support access.
- Provide more educational support for interprofessional provider teams.

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Relocations

The "Change Tables" identified services that could be moved to the community from acute and ambulatory care, provided the appropriate resource and infrastructure requirements for community service provision have been identified, resourced and put in place.

The services that will be relocated from the Hospitals are outlined in Figure 22. The purpose of this Figure is to identify the workload that will shift from the Hospital setting. The Figure identifies the specific clinical service/activity to be relocated and the future location for service delivery. The detailed workload projections are provided in the Report following Figure 22. Identifying the key clinical relocations is key to ongoing community capacity planning and identifying future capital requirements of health service providers in Windsor/ Essex.

New and Expanded Services

Health services will continue to improve to reflect clinical excellence and best practice. All new/enhanced services will require an ESC LHIN endorsed Business Case with confirmed support from applicable provincial agencies (e.g., Cancer Care Ontario, Cardiac Care Network, Ontario Renal Network, etc.). At a minimum, the Business Case will include the following:

a Confirmation of the provincial programs that presently exist in the region, including current workload and service volumes.
b Projected patient volumes.
c Where patients are currently being accommodated.
d A comprehensive acquisition plan for the necessary Human Resources.
e Operating impacts.
f How the operating impacts will be managed (in the context of Health System Funding Reform).
g How the proposed program fits within the regional and provincial strategies for the specific service.

The proposed new and expanded services, where there was consensus among the program representatives, are listed below in the program summaries.

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Figure 22: Service Relocation and Community Impact

Clinical Services	A Satellite(s)/Other	B Prince Road	C Leamington District Memorial Hospital	D CCAC	E LTC, Residential Homes, Home, CMHA
1 Cancer					
1.1 Infusions: transfer to community			●	●	
1.2 Chemotherapy: review opportunities to transfer treatments for low risk populations to the community	●		●	●	
2 Cardiac					
2.1 Clinics, CDM	●				
3 Critical Care					
3.1 Some long term ventilated services		●		●	
4 Diagnostics					
4.1 Some mammography testing [a]	●		●		
4.2 Encourage private diagnostic centres to provide portable imaging services (i.e., radiology, ultrasound) to minimize the need for patients to be transferred to the hospital from LTC, homes, etc. [b]	●				●
5 Emergency					
5.1 Triage 4 and 5 visits avoided and/or shifted to some community based providers (i.e., GP offices, FHT, urgent care centre, NP led family practice clinic, etc.) [b]	●				
6 Medicine					
6.1 Day/night care medical: 10 per cent of IV therapy	●		●	●	
6.2 Anticoagulant clinic	●				
6.3 Adult diabetes	●				
6.4 Primary care NP/wound management	●				
6.5 Outreach nursing program	●				
6.6 Stroke strategy (education component)	●				
6.7 Geriatric assessment program and adult day care	●[b]				
7 Mental Health and Addictions					
7.1 Outpatient counselling and support programs	●				
7.2 Partial hospitalization and day treatment programs	●				
7.3 Injection clinics	●		●		●
7.4 Residential problem gambling	●				
7.5 High supportive housing	●				
7.6 Crisis and urgent care	●				
7.7 Geriatric services	●				
8 Rehabilitation [c]					
9 Renal					
9.1 Increase percentage of patients dialyzing at home [d]					●
9.2 Move outpatient renal services outside of hospital setting to a centralized "renal campus" [e]	Bell Building	●[f]			
9.3 Augment pre-dialysis services on an outreach basis, enabled by telehomecare	●		●		●

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Figure 22: Service Relocation and Community Impact (Cont'd)

Clinical Services	A Satellite(s)/Other	B Prince Road	C Leamington District Memorial Hospital	D CCAC	E LTC, Residential Homes, Home, CMHA
10 Surgery					
10.1 Preadmission Clinic	●				
11 Women and Children's					
11.1 Infant/paediatric hearing screening	●				
11.2 Paediatric diabetes	●				

[a] Potential for mobile team development.
[b] Further opportunities to be explored with community capacity planning and/or other hospital programs.
[c] To be determined by the LHIN as part of the predictive modeling exercise scheduled to be completed by Fall 2014.
[d] PD and home haemodialysis with expanded CCAC supports and telemedicine enabled monitoring.
[e] Outpatient stations, training, clinics, supports; ideally collocated with a CDM centre of excellence, point of care lab, pharmacy, Kidney Foundation.
[f] Develop satellite to serve inpatients and potentially outpatients living in the immediate area.
Source: Community Change Tables, Agnew Peckham.

The clinical directions and service delivery model for each program now follow.

Cancer

Background

Change is constant and there will continue to be major changes in how cancer care is delivered. For example, there will be an increase in oral chemotherapy which will impact the CCAC; more nursing staff will be required to provide home care visits. However, it will not have a facility implication and therefore discussion focused on other changes that will have facility requirements. Nevertheless, we documented the ideas to ensure that they would continue to be discussed and the operational implications addressed as planning for improved health care delivery proceeds.

Program Directions

Unable to contact organization

Blood transfusion: The CCAC currently provides IV therapy in a clinic setting in Windsor for patients who are able to leave their homes. In the future, the scope of service could be enhanced to include blood transfusions if provincial legislations changed to support this change. [redacted]

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Unable to contact organization

Chemotherapy: The volumes will continue to increase regardless of an increase in oral chemotherapy because new IV chemotherapy and treatment options will result in an increase in chronic cancers that will require ongoing chemotherapy. High risk chemotherapy will continue to be provided in the hospital. [redacted]

Diagnostic Assessment Programs (i.e., Breast, Lung, Prostate and Colorectal): Comprehensive assessment programs could be located in the community. Some breast screening including biopsy and mammography procedures occurring in the Hospitals could be relocated to a community setting. The colorectal service would involve shifting screening endoscopy procedures from the hospitals. Prostate and lung programs would be new services although elements of the programs are currently delivered in the Hospitals. The scope of cervical screening is to be determined. This assumes that there will be Cancer Care Ontario (CCO) and MOHLTC funding for the model and specific quality standards can/will be met. The implications for diagnostic imaging in terms of facility and operational planning will be addressed during Stage 1B.

Unable to contact organization

Survivorship Program: There are currently 300 visits per month for all disease sites by patients who require a spectrum of well follow-up care. Some patients require that health professionals have specialized skill sets; others require screening for metastasis. The cancer program is working with the Family Health Team to develop a pilot study to improve care delivery. Some patients will continue to receive care from their primary care physician and some will continue to be followed at the Cancer Centre. Nevertheless, there is an opportunity to deliver a comprehensive service involving an interdisciplinary team of health professionals. The program could be offered in other communities [redacted] using standardized care delivery protocols. The program is under development and the exact implications on other providers cannot be determined. Nevertheless, some of the 300 visits per month will occur in community settings as part of an evolving health care system.

Lymphedema Clinic: This is a gap in services; a clinic does not currently exist and there is no space at the Cancer Centre for the clinic. It used to be at the Prince Road site where there were 10 visits per month involving education and assessment delivered by a physician with a specialty in this area; 100 per cent of lymphedema education could be shifted to the community.

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Pain and Symptom Management for patients in the post acute care/follow-up phase of care: There are approximately 5,000 annual visits in the emergency department by cancer patients. Many involve pain and symptom management and could be avoided through enhancements in continuity of care and coordination, which will have operational implications. In addition, palliative care and psychosocial care delivery in the Cancer Centre will need to be enhanced. Approximately 50 per cent of patients could be seen in an alternate setting.

Telemedicine: Telemedicine will be increasingly used to provide enhanced care of patients in Chatham, Sarnia and other communities. In addition, other communication technology and software (e.g., FaceTime) will be used for patients and health providers to communicate which will reduce the need for patients to see health practitioners in the Cancer Centre. Social media will be increasingly used to communicate and provide information to patients in a timely manner.

Unable to contact organization

Hostel Facilities: Currently, there are a few inpatients receiving radiation therapy for 6 weeks admitted to a hospital bed. Alternatively, they could be in a 'hostel' type setting near the hospital [redacted]

Relocations

Unable to contact organization

- CCAC Infusion Centre will focus on IV infusions (not blood transfusions)
  - [redacted]
  - patient type/needs: hydrations, first-time injections, electrolytes, antibiotics, antibodies, first time leukemic and immunoglobulin
- High risk populations will be served in the acute setting

Unable to contact organization

- Lower risk populations will be served in the community, including the [redacted]
- Some blood transfusions will be provided in ambulatory care adjacent to the acute hospital

The relocations are detailed in Figure 23.

Organizational Changes

- Home chemotherapy services
- Integrated interprofessional clinics
- Windsor Cancer Research Group working toward Research Institute – will impact academic and research role and potential for a research centre
- Palliative Care: vision is to have coordinated, seamless service in all settings where patients die. Enhance to 24/7
- Improve/enhance primary care practitioners' role in follow-up services
- More 'at home' care delivery supported by community nurses and easy access to oncology physicians

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- Direct access/24 hour response for active treatment patients especially for pain and symptom issues provided at the Cancer Centre (i.e., after hours service, enhance weekday capacity by adding nurses and physician resources; have optimized current model of care)
- Regional Comprehensive Men's Health Center including navigation throughout the journey – including testing/screening, diagnostics, treatment options, treatment, survivorship

New and Expanded Services

- Autolgous transplant program
- Testing for personalized medicine
- Designated lymphedema clinic
- Increase oral chemotherapy
- Local provision of post-operative breast reconstruction for breast cancer patients
- Enhanced psychosocial services including psychology, grief counselling, etc.
- Enhanced pain and symptom management (seamless; developing service now)
- Enhanced palliative care services
- Coordinated follow-up surveillance testing and psychosocial services for survivorship
- Increased access to PET CT
- Lodging for patients
- Enhanced survivorship follow-up
- Enhanced navigator role for all patients at all stages of their journey

Further Planning Required

- Lymphedema Clinic and Pain and Symptom management
  - further planning required to identify the service delivery model [redacted] to service
    - need to consider multidisciplinary model, including PTs and physicians
    - combined clinic would provide efficiencies and dictate nursing skill set requirements
- Survivorship Program
  - further planning required to identify a blended approach, including FHTs and Regional Cancer Centre

Unable to contact organization

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High Level Implications

Unable to contact organization

[redacted]

Diagnostic Assessment Programs will require purpose designed facilities in the community. The exact location (i.e., adjacent/connected to the Hospital versus elsewhere in the community) and the associated capital, operational and transitional costs will be determined during Stage 1B. The workload/activity projections for these programs are under development. A large portion of the activity currently exists in the Hospital (i.e., diagnostic imaging, endoscopy, urology, etc.) and will simply be organized and delivered in an interdisciplinary coordinated manner to optimize assessment and care delivery.

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Figure 23: Workload/Activity Shifts

CANCER

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'ments) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Comments
D/N Care - Oncology											
45028 OP (Oncology) - Visits		12,478	12,478		13,536	12,182				1,354	
Onc Clinic - Syst Pre & Post Trtmt											
56628 OP (Oncology) - Oncology Visits		15,259	15,259		16,553	16,553					
On Clinic - Rad Pre & Post Trtmt											
45028 OP (Oncology) - Visits		7,178	7,178		8,219	8,219					
COM Clinics/Prog - Onc Trtmt Outreach											
45028 OP (Oncology) - Visits		15,247	15,247		16,540	16,540					

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Cardiac

Background

As part of the CDM strategy, clinics could potentially be located "anywhere" providing electronic enablers (i.e., electronic health records) are in place to overcome fragmentation; close proximity to the acute site is preferred for clinician efficiency.

Relocations

- Clinics and CDM services could be provided in an ambulatory facility

Organizational Changes

- All acute services in one facility: diagnostics, interventions, and acute beds
- Patients with chronic diseases (e.g., renal, hypertension, cardiac, endocrine, etc.) will be more effectively supported with primary and secondary prevention services in a vascular health model. Outcomes will include
  - improved capacity for self-management
  - slower disease progression
  - lower rates of admission/re-admission

New and Expanded Services

- Electrophysiology program
- Enhanced PCI service to 24 hours
- Enhanced/formalized urgent chest pain service to provide responsive outpatient assessment for patients seen in emergency who require cardiology evaluation within 24 to 72 hours
- Introduce a multi-disciplinary Congestive Heart Failure clinic, integrated with community providers
- Consider the need to enhance the clinical nurse educator service now available at WRH to support inpatients and outpatients

Critical Care

Background

Surveillance, monitoring and treatment of adults in an acute phase of their illness requiring intensive care service for maximum surveillance, monitoring and treatment of conditions with life threatening system impairment. As critical care is provided in an acute hospital, discussion focused on strategies to improve operations and to relocate long-term (LT) ventilated services.

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Relocations

- Some long term ventilated services: 2 options are available for caring for LT ventilated patients in an alternate setting (i.e., not in the hospital)
  - complex continuing care (CCC)
  - home or community-based setting with support from CCAC or other health care provider
  - Option 1: CCC
    - the current demand exceeds the funded beds available therefore additional beds would be required to move this option forward
  - Option 2: home or community setting
    - requires
      - additional CCAC funding (also work directly with the ESC LHIN for funding)
      - appropriate support services in place within the individual's home

Organizational Changes

- In new acute hospital
  - Level 2 care area adjacent to ICU managed by critical care program (consolidated model)
  - step-down/up beds on medical/surgical units
  - enhance nurse practitioner coverage to 365 days
  - remote telemetry to support "right patient, right services, right place"
  - provide additional support in community for vented patients
  - bipap patients – could be managed on medical/surgical units
  - telemedicine outreach support to LTC
  - maintain separate coronary care unit

New and Expanded Services

- Weaning strategy for chronic vented patients; 3 tiers include
  - ICU
  - rehab/CCC
  - LTC/community
- Dialysis for chronic vented patients who could be on a medical or CCC unit, or LTC home
- Enhanced rehabilitation and other allied health services; currently very limited on week days and none on weekends
- Dedicated/enhanced pastoral care and bioethicist re: end of life

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Diagnostics

Background

The location of services will be aligned with the diagnostic assessment centre and location of ambulatory care services. Except for CT and MRI, most outpatient work could be done outside the hospital; however, there are operational issues related to maximizing the use of technology, staff expertise and other resources. Therefore, some outpatient services will continue to be provided. Services will be planned based on a 'hub and spoke' model with clear linkages and communication among providers (i.e., acute inpatient/ outpatient services in the hospital; diagnostic, CDM, non-acute services in various locations).

St. Clair College has initiated programs to support the human resources impact including credentialed sonographers. Portable imaging (e.g., for LTC facilities) will be provided by private companies.

The summary of diagnostic services is provided in Figure 24.

The current and projected number of DI modalities at the new hospital, downtown and Prince Road sites are listed in Figure 25.

Relocations

- Some mammography testing
- Encourage private diagnostic centres to provide portable imaging services (i.e., radiology, ultrasound) to minimize the need for patients to be transferred to the hospital from LTC, homes, etc.

Organizational Changes

- Provide connectivity links (i.e., information and communication systems) with
  - community based diagnostic service providers to avoid the need to duplicate tests/exams
  - hospital programs and community based health care providers to ensure required information is available in a timely manner
- Ensure consistent standards among all providers by creating a regional imaging group to oversee/lead/facilitate collaboration in establishing quality standards, maintaining competencies, etc.
- To minimize the need for patients to have specimens collected at the Hospital, arrangements with qualified laboratory services in the community may be possible.
- Provide point of care testing (e.g., satellite run by technologists in emerg.) where feasible.

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New and Expanded Services

- *Diagnostic Imaging*
  - enhance nuclear medicine services by adding PET CT or PET MR
- *Laboratory*
  - add toxicology and molecular diagnostics/flow cytometry

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Figure 24: Summary of Diagnostics – Hotel Dieu Grace Hospital and Windsor Regional Hospital

Indicator	HDGH			WRH-MET			WRH-PRINCE ROAD			TOTAL	TOTAL (EFFICIENCIES/ADJUSTMENTS)		
	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2012/13	2017/18	2022/23	2032/33
Diagnostic Exams - Total							*84,600*	*118,784*	*177,460*	*290,407*	*307,701*	*329,745*	*370,971*
• radiography	N/A	N/A	60,904	N/A	N/A	49,663			914	111,481	116,865	124,881	141,952
• mammography	N/A	N/A	3,226	N/A	N/A	10,692				13,918	15,251	15,683	14,777
• interventional angiography	N/A	N/A	3,557	N/A	N/A	5,901				9,458	10,044	10,943	12,711
• computed tomography	N/A	N/A	30,940	N/A	N/A	31,413				62,353	65,658	70,154	78,791
• ultrasound	N/A	N/A	19,285	N/A	N/A	33,055				52,340	55,235	59,405	66,773
• nuclear medicine	N/A	N/A	8,380	N/A	N/A	7,110				15,490	16,527	18,003	20,723
• diagnostic cardiac cath	2,253	2,401	2,280	N/A	N/A	N/A				2,280	3,040	3,330	3,730
• interventional cardiac cath	639	627	577	N/A	N/A	N/A				577	937	1,027	1,150
• Implantable cardioverter defibrillator (procedures)	N/A	N/A	N/A	N/A	N/A	N/A				0	125	140	174
• magnetic resonance imaging	N/A	N/A	12,596	N/A	N/A	9,914				22,510	24,019	26,179	30,190
Cardiorespiratory/Electrodiagnostics Exams - Total				*717,519*	*533,366*	*593,354*	*42,300*	*59,392*	*88,273*	*757,549*	*878,633*	*958,342*	*1,136,115*
• sleep studies	N/A	N/A	N/A	1,272	1,000	1,493				1,493	1,653	1,821	2,228
• echocardiography	3,339	3,567	3,298	4,946	5,328	5,082				8,380	11,666	12,780	14,313
• holter	N/A	N/A	N/A	556	848	458				458	638	699	782
• exercise stress test	2,485	2,249	1,898	6,459	6,486	5,947				7,845	10,921	11,963	13,399
• electrophysiology	N/A	N/A	N/A	79	86	60				60	84	91	102
• ECG	20,176	20,276	19,987	30,469	30,003	77,073				97,060	135,109	148,019	165,787
• respiratory	67,900	51,691	49,434	673,738	489,615	503,241	42,300	59,392	88,273	640,948	717,118	781,377	937,557
• EEG	1,525	1,645	1,305	N/A	N/A	N/A				1,305	1,444	1,592	1,947

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Figure 24: Summary of Diagnostics – Hotel Dieu Grace Hospital and Windsor Regional Hospital (Cont'd)

Indicator	HDGH 2010/11	HDGH 2011/12	HDGH 2012/13	WRH-MET 2010/11	WRH-MET 2011/12	WRH-MET 2012/13	WRH-PRINCE ROAD 2010/11	WRH-PRINCE ROAD 2011/12	WRH-PRINCE ROAD 2012/13	TOTAL 2012/13	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2017/18	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2022/23	TOTAL (EFFICIENCIES/ADJUSTMENTS) 2032/33
Laboratory Services Procedures													
In-House Procedures - Total	*2,134,643*	*2,089,458*	*2,362,636*	*2,903,262*	*2,946,311*	*3,142,091*	*0*	*0*	*0*	*5,504,727*	*5,855,934*	*6,263,140*	*7,009,333*
• lab pre/post	194,563	221,848	252,332	369,196	386,243	436,238				688,570	728,460	775,910	864,381
- non-service recipient workload units	38,826	50,170	51,578	37,766	35,230	29,380				80,958	86,061	91,862	102,615
• clinical chemistry	1,163,429	1,187,265	1,289,595	1,031,936	1,046,050	1,132,201				2,421,796	2,550,590	2,708,415	2,997,156
- non-service recipient workload units	264,918	294,460	345,259	111,871	122,445	168,381				513,640	541,482	577,873	644,484
• clinical hematology	273,757	274,975	286,534	252,874	259,297	274,631				561,165	591,926	631,808	705,613
- non-service recipient workload units	234,961	135,536	144,149	161,576	166,574	136,964				281,113	296,701	316,275	351,590
• transfusion medicine	87,855	100,793	104,324	133,773	176,439	230,361				334,685	355,543	381,750	432,835
- non-service recipient workload units	202,849	221,713	217,186	262,575	268,216	323,645				540,831	575,245	617,614	699,839
• pathology	80,545	63,522	189,900	1,115,483	1,078,282	1,068,660				1,258,560	1,372,952	1,487,248	1,690,756
- non-service recipient workload units	20,168	29,090	20,971	98,613	90,001	99,044				120,015	130,716	141,693	161,379
• cytopathology	94,243	38,791	33,726	N/A	N/A	N/A				33,726	36,569	39,656	44,929
- non-service recipient workload units	21,636	23,308	18,455	N/A	N/A	N/A				18,455	20,049	21,710	24,513
• clinical microbiology	240,251	202,264	206,225	N/A	N/A	N/A				206,225	219,894	238,353	273,663
- non-service recipient workload units	198,098	236,192	227,855	N/A	N/A	N/A				227,855	243,014	263,446	302,471
Contracted-Out Procedures - Total							*0*	*0*	*0*	*96,036*	*101,893*	*111,004*	*128,701*
• lab pre/post	8,878	9,181	11,059	N/A	N/A	N/A				11,059	11,657	12,623	14,397
• clinical chemistry	N/A	N/A	N/A	14,533	16,494	18,070				18,070	18,868	20,429	23,489
• clinical hematology	N/A	1	2,592	987	166	N/A				2,592	2,706	2,930	3,369
• transfusion medicine	2	1	N/A	N/A	N/A	N/A				0	0	0	0
• pathology	15,282	15,364	15,523	2,811	5,008	4,992				20,515	22,013	24,047	27,868
• cytopathology	72	N/A	N/A	N/A	N/A	N/A				0	0	0	0
• clinical microbiology	N/A	N/A	N/A	51,110	43,570	43,242				43,242	46,064	50,335	58,817
• immunology	N/A	N/A	N/A	993	727	558				558	585	640	761

Source: HCM Group, Inc.

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Figure 25: Current and Projected Number of DI Modalities by Site

MODALITY	CURRENT HOSPITALS	NEW HOSPITAL	ADJACENT OUTPATIENT FACILITY	SATELLITE(S)/ OTHER	PRINCE ROAD SITE
RADIOLOGY	8	3	4	1	1
FLUOROSCOPY	3	2	1	0	0
MAMMOGRAPHY	3	0	3	0	0
CT	3	3	0	0	1
INTERVENTIONAL	2	2	0	0	0
US	15	7	8	1	2
NM	11	3	6	0	0
MRI	2	3	0	0	0
BMD	2	0	1	0	0
PET	0	0	1	0	0

Source: Agnew Peckham, June 2014

Emergency

Background

There are two emergency departments in Windsor - one at the Ouellette site with approximately 60,365 annual visits and one at the Metropolitan site with approximately 70,534 visits in 2012/13. There is also an emergency department at the Leamington District Memorial Hospital; and there are 24 Walk-in Medical Clinics and Urgent Care Centres in Windsor/Essex including 13 in Windsor.

The breakdown of activity Canadian Triage and Acuity Score (CTAS) level is provided in Figure 26.

Figure 26: Historical Volumes by Triage Level

	HDGH			WRH-MET			TOTAL	
Indicator	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2012/13	%
Visits - Total	*56,602*	*57,874*	*60,365*	*68,611*	*67,909*	*70,534*	*130,899*	*100.0%*
• visits by triage level								
1 Resuscitation	342	368	386	361	332	318	704	0.5%
2 Emergent	18,292	18,727	19,376	15,731	16,116	16,480	35,856	27.4%
3 Urgent	23,604	23,441	24,508	33,461	32,525	31,449	55,957	42.7%
4 Semi-Urgent	10,488	11,298	11,885	16,875	16,450	19,501	31,386	24.0%
5 Non-Urgent	3,619	3,760	3,842	2,201	2,388	2,670	6,512	5.0%
9 Unknown	175	203	355		<5	8	363	0.3%
Blank	82	71	16			177	193	0.1%

Source: HCM Group, Inc., March 2014.

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In fiscal year 2012/13, 67,422 ED visits (51.6 per cent) were during the day; 41,627 ED visits (31.8 per cent) were during the evening; and 21,733 (16.6 per cent) were overnight (based on registration time). In fiscal year 2012/13, 93,322 ED visits (71.4 per cent) were on Monday-Friday; and 37,460 ED visits (28.6 per cent) were on Saturday or Sunday (based on registration date).

Essex County residents use the emergency departments to a lower extent than other Ontario regions except Ottawa-Carleton, Toronto, Waterloo, Halton, Peel and York. In addition, the percentage of Triage 4's and 5's in the Windsor Hospitals is lower than other hospitals in London, Kingston, and Mississauga and similar to Hamilton and North York.

There are some visits occurring in the emergency department because of system issues including:

- Limited hours of operation, lack of diagnostic services (e.g., radiography, laboratory) and/or limited scope of services (e.g., suturing) in physician offices, walk-in medical clinics and urgent care centres
- Reliance on the emergency department as the 'gateway' for rapid access to specialists and diagnostic services, due to an assumption that there will be a long wait for the services using a traditional referral system. In addition, the emergency department enables/reinforces the behaviour by conducting the work rather than making the required referrals.
- Lack of efficient mechanisms for accessing community based services (e.g., a single access point for mental health services)
- Lack of urgent and follow-up clinics for emergency patients who do not have a family physician; and specialist referral clinics
- Insufficient outreach services for LTC facilities (e.g., Nurse lead Outreach Team) and retirement homes and inconsistent GEM support (at present time the hours of work and coverage are different at each site)
- Funding and legislation barriers (e.g., EMS is required to take all patients including Triage 4's and 5's who could be supported in a walk-in/urgent care clinic, to an emergency department)
- Limited Cancer Centre hours of operation
- Need for enhanced injury prevention programs
- Insufficient community supports for patients (and their families) who are waiting for a long term care bed

At the same time, there are and will continue to be significant system enhancements and investments in new programs and services (i.e., mental health services, HealthLinks, chronic disease management) that will impact how and where patients receive services.

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Program Directions

The vision for delivering emergency services includes:

- Provide an emergency department with resources for paediatric mental health patient at the new hospital and a hospital operated urgent care centre downtown
- Provide an emergency mental health service at the Prince Road site to support the mental health program/resources at this site
- Develop a multidisciplinary wound management, urgent follow-up and specialist consultation clinics on the new hospital site
- Enhance geriatric services/resources in the emergency department and hospital, and outreach services to LTC/retirement homes
- Create a nurse practitioner (NP) led family practice clinic for patients in the downtown core who do not have a family physician
- Incorporate the necessary beds on the inpatient units for admitted patients who now receive care in the emergency department due to insufficient bed capacity

Relocations

- Triage 4 and 5 visits avoided and/or shifted to some community based providers (i.e., GP offices, FHT, urgent care centre, NP-led family practice clinic for patients without a family physician, etc.)

The relocations are illustrated in Figure 27.

Organizational Changes

- Create distinct flows, staff resources and appropriate facilities for paediatric, mental health, geriatric and end of life patients
- Provide dedicated imaging resources including general radiography, ultrasound and CT (2), and MRI
- Create capacity to provide more intensive intervention for admission avoidance
- Ensure pastoral care resource team resources are maintained
- Strengthen communication/collaboration with LTC homes, especially after hours
- Provide 'concierge/amenity' services to support patient/family centred care
- Review role of paramedics

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New and Expanded Services

- Urgent follow-up clinic
- Ambulatory wound management clinic
- Nurse practitioner led family practice clinic in downtown core for patients without access to family physician
- Rapid assessment, chronic disease prevention and management (CDM) and urgent care clinics
- Mental health emergency services at Prince Road site
- Enhanced paediatric services/resources in ER
- Enhanced geriatric services/resources in ER and rest of the system
- Improved addiction services/detox with either physician assistant/nurse practitioner to avoid emergency visit
- Improved health system navigation

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Figure 27: Workload/Activity Shifts

Secondary Statistic	HDGH 2012/13	WRH-MET 2012/13	Total Windsor - Acute 2012/13	WRH-Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Satellite(s)/ Other	Prince Road	Leamington District Memorial	CCAC Infusion Centre or Home	Comments
Emergency - General											
45021 OP (Emerg) - Visits	60,365	70,534	130,899		134,703	90,000 [a]	26,324 [b] 7,543 [d]	203 [c]			
Triage Level Detail (from NACRS)	60,368	70,603	130,971		134,703						
1 Resuscitation	386	318	704		766						
2 Emergent	19,376	16,480	35,856		37,425						
3 Urgent	24,508	31,449	55,957		57,574						
4 Semi-Urgent	11,885	19,501	31,386		16,551						
5 Non-Urgent	3,842	2,670	6,512		3,446						
9 Unknown	355	8	363		368						
X Blank	16	177	193		194						
% CTAS 4 or 5	26.1%	31.4%	28.9%		17.2%						

[a] In addition, 8,101 obstetric and 2,532 pain and sympton management visits will be managed within the obstetrics and pain and sympton management clinics, respectively.

[b] Urgent Care Centre visits.

[c] Includes alcohol and drug rehabilitation visits for medical clearance.

[d] Dispersed/avoided mental health visits (i.e. primary care). Includes 4,658 mental health visits.

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High Level Implications

All of the program directions affect hospital managed services. There are opportunities to prevent the number of visits through greater investments in community based services and hospital services in an ambulatory care setting (e.g., wound care, urgent follow-up, etc.). There may be operational implications but there will not be facility/capital cost implications for other providers. For example, enhancing community supports for patients (and their families) who are waiting for a long term care bed will be an important investment. Depending on the location of the new hospital, there may be operational implications for Emergency Medical Services (EMS); which may be mitigated by changes in the scope of paramedic services. As well, education of the community and family physicians regarding optimal mechanisms to access services is required.

Volume Implications

A conservative estimate is that the annual number of visits will be reduced by approximately 18,379 visits. These include:

1. Pregnancy issues (8,101 visits) – Patients are registered in the emergency but receive care in a clinic area and will continue to be located in the obstetrics clinic.
2. Mental health disorders (4,658 visits) – Assumes 55 to 68 per cent of psychiatric assessment nurse (PAN) visits. The visits will be diverted to satellite(s)/other sites adjacent to the urgent care centre or avoided through appropriate community resources.
3. Prescriptions (506 visits) – Assumes 50 per cent will be avoided through improved primary care.
4. Surgical dressings and sutures (304 visits) – Assumes 50 per cent could be addressed in the community.
5. Alcohol and drug rehabilitation (203 visits) – Assumes 50 per cent could be diverted to the Prince Road site or avoided.
6. Follow-up Radiology, Laboratory, Examination (759 visits) – Assumes 50 per cent of 'laboratory examinations' and 'follow-up after other treatment for other condition' visits.
7. Superficial injuries (405 visits) – Assumes 10 to 15 per cent.
8. Other chronic divertible (911 visits) – Assumes 10 to 15 per cent.
9. Cancer Centre (2,532 visits) – The cancer program has identified the opportunity to divert or avoid approximately 2,516 visits (i.e., 50 per cent) through improved pain and symptom management care delivery.

Future possible opportunities requiring further discussion and ongoing planning and community supports may include

- Diagnostic results (i.e., person consulting for explanation of investigation findings) – 1,463 visits
- Chemotherapy – 2,005 visits
- Follow-up radiology, laboratory, examination – 1,852 visits
- Superficial injuries – 2,909 visits

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- Other chronic/divertible – 6,241 visits

The contingency plan for emergency services if the proposed shifts to the community (CTAS 4 and 5) do not materialize as planned will be addressed as part of ongoing planning. The intent is to create plans that are implementable, effective and successful. However, in the event they do not materialize, tactics could include:

- Establishing an ambulatory clinic in the ambulatory care wing of the new hospital and/or satellite(s)/other
- Ensuring sufficient capacity for future flexibility in the programming and design of the emergency department at the new hospital and the urgent care centre at the satellite(s)/other
- Creating plans with several of the community based urgent care centres to redirect patients

The HBAM projections are not exactly aligned with the Stage 1A projections because the proposal is to change the model, from two emergency departments to an emergency department and an urgent care centre downtown. However, the base projections (i.e., non-adjusted) provide a scenario that has consistent assumptions with MOHLTC Health Based Allocation Model (HBAM). In fact, if methodologies are using same base year of data and the same population projection release (from the Ministry of Finance), the drivers (per cent increases) will match.

A number of innovative models from other jurisdictions were explored to determine the range of tactics that will be used to prevent, reduce and redirect emergency visits. They are outlined in Attachment B – Discussion Document and Attachment D – Avoidable Admission Strategies. In addition, the ESC LHIN's current planning initiatives were considered; community alternatives to ED visits which will include:

- ESC LHIN led primary care improvements
- Health Links
- CDM investments
- NLOT and GEM for elderly patients
- Nurse led inner city model for mental health patients

As well, data from 5 Ontario communities (i.e., 906,500 visits) with hospital operated emergency and urgent care centres are provided in Figure 28.

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Figure 28: Percentage Breakdown of Emergency/Urgent Care Visits [a]

		Emergency	Urgent Care	Total
1	Resuscitation	1.4	0.1	1.0
2	Emergent	23.2	4.9	18.3
3	Urgent	50.1	26.3	43.7
4	Semi Urgent	23.9	64.3	34.8
5	Non Urgent/Unknown	1.4	4.4	2.2
TOTAL		100.0	100.0	100.0

[a] Based on data from 5 communities with similar proposed model.

Source: HCM Group, Inc., March 2014.

It should be noted that the current percentage of Triage Level 4/5 visits is lower than the other communities (i.e., 29.2 per cent versus 37.0 per cent) and the Triage Level 2 visits is higher (i.e. 27.4 per cent versus 18.3 per cent). Nevertheless, all hospitals and health systems will be working to minimize the number of patients who receive Triage Level 4 and 5 care in hospitals.

The emergency and urgent care centre (UCC) will be governed and operated by WRH. The urgent care department will be open 14 to 15 hours per day, typically opening at 8:00 or 9:00 a.m. and closing at 10:00 or 11:00 p.m. Both the new and acute care hospital and satellite(s)/other will be staffed with emergency trained personnel.

The assumption is that the West Windsor UCC and other UCCs in the County will continue to offer current services. The visit avoidance and reduction outcomes will be primarily driven by new and improved services (e.g., Health Links, CDM, etc.), the initiatives outlined in the Mental Health and Rehabilitation strategic plans and program directions (e.g., mental health, obstetrics) and investments in proven services (e.g., NLOT, GEM).

Organizational and Operational Planning

Organizational and operational planning will occur in Stage 1B and Stage 2 including the specific details for elements including hours of operation, model of care, staffing model, policies and procedures for transferring between sites, etc. Other hospitals that have operated a similar model will be consulted to determine lessons learned and to enhance service delivery. [redacted]

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Together these hospitals see over 900,000 visits, with 27 per cent of visits occurring in hospital operated urgent care centres.

The detailed operational sequencing will be determined over the next 5 years working collaboratively with EMS, Health Links, the CHC, and other hospital and community programs. If it is determined that the satellite(s)/other will be a new site or a renovated existing site, the operational, human resources and facility planning will occur and be implemented at the same time. If the Ouellette site is the preferred option, and if renovation of the current facilities is required, full implementation will occur following the opening of the new acute hospital. Risk mitigation and contingency planning strategies will be determined and implemented as required.

The nurse practitioner led family practice clinic currently exists in Essex and has been extremely effective. A similar model has been approved by the ESC LHIN to support at risk mental health clients and will be implemented well in advance of the new hospital opening.

EMS Services

In fiscal year 2012/13, 100,268 ED visits (76.7 per cent) had no ambulance arrival; 30,510 ED visits (3.3 per cent) arrived by ground ambulance; and less than 5 ED visits had either air ambulance or combination of air/water/ground ambulance arrival. In addition, in fiscal year 2012/13, 3,769 ED visits came from Long Term Care facilities, of which 2,846 (75.5 per cent) were Triage Levels 3 to 5. As planning proceeds, this data will be important support for additional resources (e.g., NLOT, GEM, etc.) to reduce the impact of elderly who are transferred.

The location of the new acute hospital will not be known for many months and therefore it is not possible to comment on how the new location will affect access to the ED. However, what is known is:

- Ambulances will not take patients to the UCC
- Protocols will be established to ensure timely and appropriate transfers based on the experience in 5 other large Ontario communities where the model has been in place for many years
- There are and will continue to be agreements with the hospitals in [redacted] support patient transfers

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The emergency program currently provides the Base Hospital. It is anticipated that community paramedicine arrangements will evolve over the next few years as Ontario is supporting the expansion of community paramedicine programs to improve access to home care and community support services for seniors and other patients with chronic conditions. These programs could include:

- Providing home visits to seniors known to call emergency services frequently, to provide a range of services such as ensuring they are taking their medications as prescribed.
- Educating seniors in their homes about chronic disease management and helping to connect them to local supports, such as Diabetes Education Teams.
- Helping refer patients to their local Community Care Access Centre (CCAC) so that they can be provided with appropriate home care services.

The implications could include a reduction in the number of patients who are transferred by ambulance to the emergency department and in the number of preventable hospital admissions. The program will continue to play a leadership role in ensuring patients receive the right care, in the right location, at the right time.

Medicine

Background

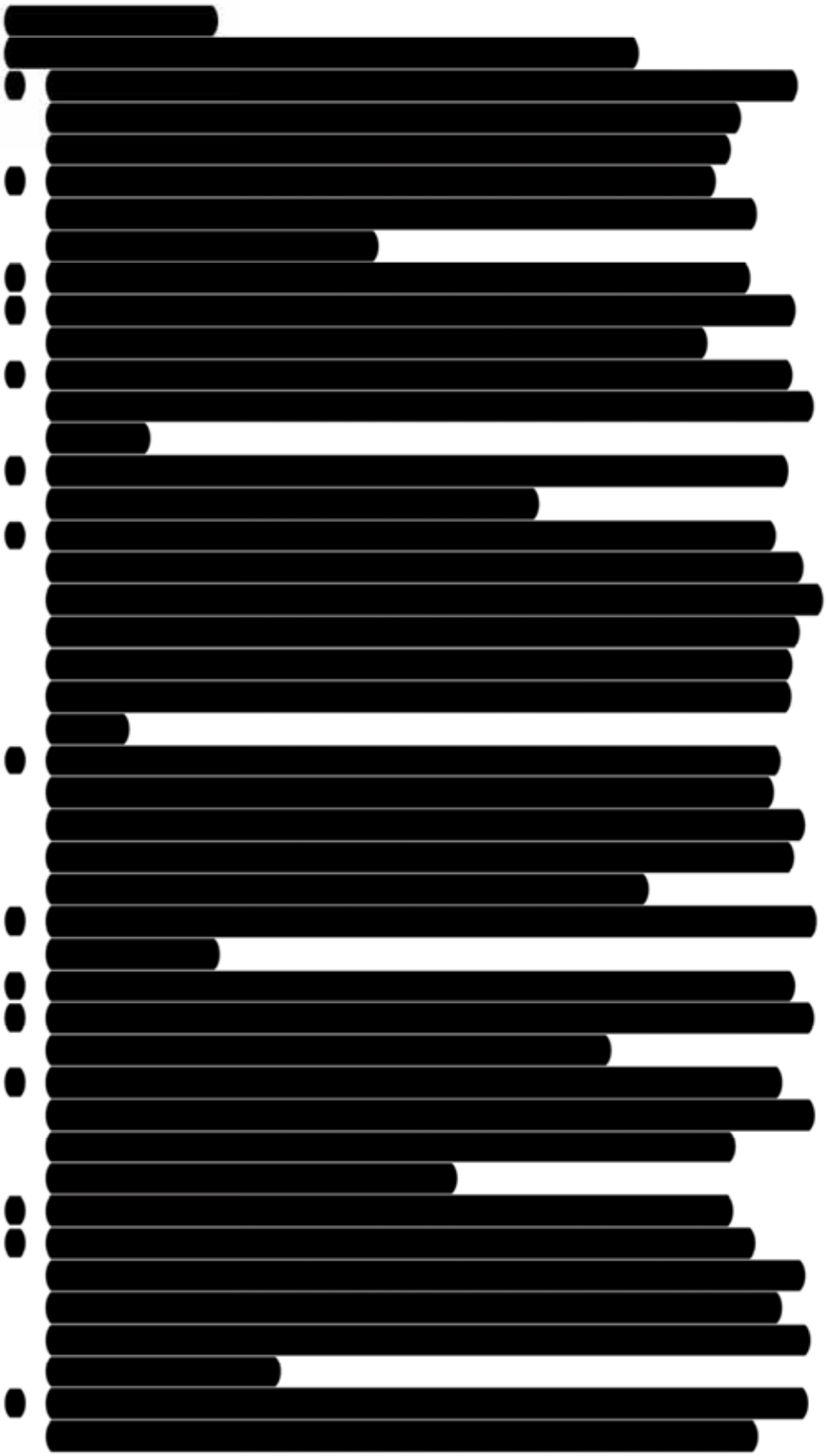
The possible location/facility options considered included:

1 Outpatient services in the Hospital.
2 Outpatient services in an ambulatory care facility connected to the Hospital.
3 Outpatient services in an ambulatory care facility in an off-site/satellite location.

In addition, the assumption is that there will be a centre that will consolidate services focused on chronic disease prevention and management (CDM). As well, there will be mobile teams who will provide services in satellite locations. In the future, there will be greater use of technology (e.g., telemedicine, FaceTime, email communication, etc.) which will allow patients to communicate with physicians and health practitioners and reduce the need for patients to go to a physical location to receive care and education.

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[redacted]

Relocations

Outpatient services in an ambulatory facility in an off-site/satellite location/ ESC LHIN CDM site may include

- day/night care medical (i.e., some IV therapy)
- anticoagulant clinic
- adult diabetes
- primary care nurse practitioner/wound management
- outreach nursing program
- stroke strategy (education component)
- geriatric assessment program and adult day care

The services at the Prince Road site, which was recently redeveloped and enhanced, would only be relocated if the space was required for other priority services.

The relocations are detailed in Figure 29.

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Organizational Changes

- Prepare seniors for transitions (precrisis services); support physicians to have conversation about aging, advance directives, end of life care
- Avoid ALC by focusing on frequently admitted patients; enhancing follow-up in the community, CDM, etc.
- Improve social services; safety net to avoid social admissions and visits to ER
- Outreach teams to LTC homes need to be more specialized to support GP's
- Timely access/response from community based services
- Consolidate inpatient stroke care; designated stroke unit
- Bring services to patients (e.g., disperse telemetry)
- Creative substitution of resources (CCAC needs streamlined access to specialized services in hospital to support their clients especially marginalized, vulnerable elderly)
- Acute medical services for specialized mental health clients to prevent overuse of ER
- Changes in high intensity funding to CCC, rehab, retirement homes and assisted living facilities to prevent the need for residents with financial challenges who require hemodialysis having to be admitted to LTC
- Provide TPN/TNA in ambulatory centre adjacent to acute hospital
- Changes in admission criteria for LTC. Currently, LTC will not accept patients with acting out behaviors/aggressive behavior. Non-acute patients are hospitalized in acute care settings throughout this process.

New and Expanded Services

- CDM clinics
- More direct service in the community especially for seniors with dementia; more collaboration among providers
- More geriatricians to inform best practices
- Extended hours for outreach services, clinics, etc.
- Enhanced services 7 days per week and extended hours (evening, night) for OT, PT, SLP, social work, discharge planning, CCAC, pharmacy consults
- Additional peritoneal dialysis services in rehab/CCC and support from CCAC
- Additional facilities in the community with lockdown capacity for patients with Alzheimer's and dementia, individuals who wander or are exit seeking
- Enhanced CCAC services (particularly PSWs) for the elderly population; these needs are mainly self-care deficits that can be managed by a PSW
- Enhance the hours for the Anticoagulant clinic or provide partial service – particularly during weekends, holidays and during OR shutdown

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High Level Implications

There are many services that could be relocated to an ambulatory care centre adjacent to the hospital, at the satellite(s)/other or in the community as well as in a CDM facility.

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Figure 29: Workload/Activity Shifts

MEDICINE

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Satellite(s)/ Other	Prince Road	Leamington District Memorial Hospital	CCAC Infusion Centre or Home	Comments
D/N Care - Medical											
51024 OP (Other) - Medical Visits		1,233	1,233		1,359	1223				136	
Med Clinic - General											
45000 Total All Visits	206		206		229	229					
45011 IP (Acute) - Visits	61		61		68	68					
45024 OP (Other) - Visits	145		145		161	161					
Med Clinic - AIDS											
51024 OP (Other) - Medical Visits		6,503	6,503		7,237		7,237				
Med Clinic - Chiropody											
45000 Total All Visits				2,652	2,951		2,951				
45016 IP (Chronic) - Visits				310	345		345				
51024 OP (Other) - Medical Visits				2,342	2,606		2,606				
Med Clinic - Enterostomal Therapy											
45000 Total All Visits	1,238		1,238		1,338	1,338					
45011 IP (Acute) - Visits	1,094		1,094		1,182	1,182					
45024 OP (Other) - Visits	144		144		156	156					
Combined Clinic - Gen Med/Surg											
45002 Total Outpatient Visits	9,813	16,295	26,108		28,385						
5102410 OP Clinic Visits - General Medical	3,672	962	4,634		5,141	5,141 [a]					
5102425 OP Clinic Visits - Anticoagulant	2,168		2,168		2,355		2,355 [a]				
5102475 OP Clinic Visits - Pain Management	1,390		1,390		1,542	1,542					
5102485 OP Clinic Visits - Respirology		2,698	2,698		3,065	3,065					
5152445 OP Clinic Visits		9,864	9,864		10,365		10,365 [b]				
5402420 OP Clinic Visits - Diabetes	87		87		102		102				
5612410 OP Clinic Visits - General Neurology	1,717		1,717		1,901	1,901					
5762445 OP Clinic Visits - Addiction	603		603		601			601			
5812410 OP Clinic Visits - General Rehabilitation		2,677	2,677		3,012			3,012			
5812424 OP Clinic Visits - Amputee Rehab		94	94		106			106			
5952460 OP Clinic Visits - Lupus	176		176		195		195 [d]				

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Figure 29: Workload/Activity Shifts (Cont'd)

MEDICINE

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Comments
Metabolic Clinic - Diabetes - Adult											
54024 OP (Other) - Metabolic Visits		3,496	3,496		4,105		4,105				
Cardiac Clinic											
45002 Total Outpatient Visits	3,546		3,546		3,994		3,994 [e]				
45024 OP (Other) - Visits	712		712		802		802				
54224 OP (Other) - Cardiac Visits	2,834		2,834		3,192		3,192				
Cardiac Clinic - Rehabilitation											
45024 OP (Other) - Visits				25,566	28,798			28,798			
Rehab Clinic - Physiatry											
Physician Visits (Not Reported to MIS TB)				2,771	3,117			3,117			
Rehab Clinic - Combined											
45024 OP (Other) - Visits				5,307 [f]							
Rehab Clinic - Head Injury/ABI											
45024 OP (Other) - Visits				1,051	1,182			1,182			
CCM Clinics/Prog - General Clinic (Primary Care NP)											
45021 OP (Emerg) - Visits	2,056		2,056		2,288		2,288 [g]				
CCM In-Home Hlth Care - Nursing - Visiting											
45260 OP (No Hlth Rec) - Serv Rec Interactions	4,226		4,226		4,861		4,861 [g]				
CCM Hlth Prom/Educ - Stroke Strat											
45024 OP (Other) - Visits	2,070		2,070		2,292		2,292 [h]				

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Figure 29: Workload/Activity Shifts (Cont'd)

MEDICINE

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Comments
OV Med Clinic - AIDS											
51024 OP (Other) - Medical Visits		383	383		426		426				
OV COM In-Home - Case Management (Geriatric Assessment Program)											
45080 CSS (Comm Supp Serv) - Visits				1,299	1,294			1,294 [a]			
45580 CSS (Comm Supp Serv) - Individuals Served by FC				5,608	5,587			5,587			
48380 CSS (Comm Supp Serv) - Attendance Days				1,299	1,294			1,294			
OV Com In-Home - Day Services (Adult Day Care)											
45080 CSS (Comm Supp Serv) - Visits				3,843	3,828 [a]			3,843 [a]			
45580 CSS (Comm Supp Serv) - Individuals Served by FC				5,495	5,474			5,494			
48380 CSS (Comm Supp Serv) - Attendance Days				3,843	3,843			3,843			

[a] Could be in an ambulatory facility in an off-site/satellite location.
[b] Some patients could be managed in an off-site/satellite location.
[c] Option of locating the visits in a CDM site requires further discussion.
[d] Provide in physician office.
[e] Assumes access to diagnostic services not required at the same time as the visit.
[f] No longer in operation.
[g] Service provided in nursing homes. Staff could be based in an adjacent or satellite ambulatory care centre.
[h] Assumes TIA clinic included in neurology visits.

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Mental Health and Addictions

Background

Mental health services are currently provided at the 2 hospital sites (i.e., Ouellette, Prince Road and Metropolitan). In addition, services are delivered by the Canadian Mental Health Association (CMHA) in several locations. The mental health program has an excellent partnership with the CMHA. The scope of this review excluded CMHA services, although mental health program representatives indicated that the current CMHA's downtown facilities are extremely undersized and will need to be enhanced.

An ESC LHIN led Mental Health Services Strategic Plan was developed in October 2012. The document outlines a vision statement with 9 strategic directions and

- Outlines the process which included extensive community consultation as well as consultation with various government Ministries and agencies.
- Describes the roles and responsibility of the health service providers including CMHA, CCAC and the hospitals.
- Proposes a future state with a coordinating body that could be responsible for all mental health and addiction services delivery.

Material Supplied in Confidence

[redacted] All directions align with MOHLTC and ESC LHIN priorities and support the high prevalence of mental health and addictions in Windsor-Essex.

The vision of the program is to have a central intake service which will facilitate patient access to the required services which may be provided by the mental health program or CMHA. This approach will result in fewer outpatient and emergency department visits. It will create additional capacity within the system to meet patient/client needs.

Program Directions

Acute Adult Beds: There will be 8 acute mental health beds at the acute care hospital, for patients with major medical comorbidities, and 60 at the Prince Road site. These beds are in addition to the 65 specialized mental health beds that will also be located at the Prince Road site. The 8 acute beds should be collocated with acute medical beds and staffed by a team experienced in both medical and mental health care delivery.

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ACTT: The two teams are currently located across the street from the Ouellette site and it is anticipated that they will continue to be located there. There is a long lease and the facilities are adequate. There is a need for an additional ACT team probably located in Essex County/Leamington as well as other supports for residents with complex mental illness to prevent hospital admission and reduce costs. There is also a need for community outreach teams such as ACTT specializing in transitional youth and psychogeriatric populations.

Addiction Services – Assessment and Referral and Remedial Measures: Addiction services will continue to be located at the Prince Road site. There are significant opportunities for improvement. Currently, patients must be 'medically cleared' prior to withdrawal management (WM) and this occurs in the emergency department. Expanding the existing model to include a medical WM component and adding a WM day program would allow the service to reach and support more addicted individuals. Also, clients remain in the program for 3 days and then must wait for treatment options to be available. There is room to accommodate some program changes in the current facilities. However, a change in operational funding (or at least a shift of resources) will be required for the additional staff. In addition, police would need to be educated regarding the change in care delivery.

The remedial measures service is a compulsory provincial educational program for individuals who lose their drivers' licences due to impaired driving. The service is located at the Prince Road site. It could be delivered in an accessible community location if cost-effective.

Child and Adolescent Services Mental Health Services: These services are delivered in a non-medical model at Maryvale, a community-based facility. There is capacity for additional beds (i.e., total of 9 beds) and enhanced ambulatory care services, although this will require additional operational funding. The intent is to accommodate 17 and 18 year olds in the future. The ESC LHIN has recently requested that the number of beds be increased from 6 to 9.

Concurrent Disorder Clinic: The clinic will continue to be located at the Prince Road site.

Crisis Intervention Visits: This currently occurs at the Ouellette site and will continue to be located in a downtown location associated with an urgent care clinic/service. With a single point of access system, patients will be able to be triaged and therefore the activity in this clinic may change.

Dual Diagnosis Clinics/Program: The program will continue to be located at the Prince Road site.

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Geriatric Assessment (GAP; Psychogeriatric Assessment): The service will be relocated from Prince Road to a satellite/other location. With a single point of access, it is anticipated that 20 to 30 per cent of the visits will occur in the home.

Long acting Injection and Clozapine Clinic: Services are provided in multiple locations throughout the community, including the Ouellette site, the Prince Road site, CMHA, some private locations and in Essex. The future model should facilitate client access and coordination with the patients' care team, providing there is sufficient critical mass at each location. A satellite(s)/other site should be developed as well as other sites such as in Leamington.

Mental Health Acute Day/Night Care: This service is provided at the Ouellette site as part of the continuum of acute mental health services. Patients are referred to the service as part of a graduated discharge strategy or as an alternative to admission if they have a stable living environment. The service delivery model assumes that this service will continue to be provided in a downtown location.

Mood and Anxiety Treatment Program: The program will continue to be located at the Prince Road site.

Other: Dialectical Behaviour Therapy (DBT) is a specialized approach for impulse control and emotional dysregulation disorders as well as other symptoms often associated with the borderline personality disorders group. There will likely be investments in this in the future and some staff are trained in the treatment modality.

Problem Gambling: The program, which includes residential beds and outpatient services focussed on education, has been off-site in a residential location but due to safety and staffing issues, it will relocate to the Prince Road site in the near future. There are benefits to the colocation with the addiction and mental health program at the Prince Road site, including opportunities for shared programming and resources and the requirement that it must be managed by a hospital. Continued location at the Prince Road site is assumed for planning purposes.

Psychogeriatric Outreach: The program sees patients in the Prince Road clinic setting as well as in their homes (including LTC homes, rest/retirement homes) and the focus is on assessment and stabilization. The specialized team also supports patients admitted to the psychogeriatric beds in the specialized mental health inpatient program at the Prince Road site. Continued colocation with the mental health and addictions program at the Prince Road site is proposed with effective community service coordination.

Residential Treatment Facility: This program will continue to be located in a community setting.

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Wellness Program for Extended Psychosis Clinic: This clinic includes long acting injection services and will continue to be located at the Prince Road site.

Withdrawal Management: This will continue to be located at the Prince Road site. The issues are described under Addiction Services above.

Relocations

- If a service can be safely and reasonably (efficiently) provided in the community it should be located there. Several outpatient services could be shifted to the satellites/other ambulatory facilities and possibly managed by community providers with support coming from the hospital, including:
  - outpatient counselling and support programs
  - partial hospitalization and day treatment programs
  - injection clinics
  - residential treatment and residential problem gambling
  - high supportive housing (may result in fewer beds in hospital)
  - crisis and urgent care services
  - geriatric services

Relocations are detailed in Figure 30.

Organizational Changes

- There should be one central coordinating body that oversees mental health and addiction services and is responsible for all mental health service delivery to ensure
  - enhanced coordination through inter-program service delivery with a focus on recovery
  - enhanced access to services by allowing the right service to be provided in the right place, at the right time (reduce delays which currently result in exacerbation of preventable negative outcomes)
  - reduced duplication of services without compromising access
  - reduced confidentiality issues related to the transfer of information across programs
  - enhanced opportunities to reduce client dependency on hospital based programs and transition them to community based programs
  - established system wide mental health and addiction priorities
  - established strategies to reduce/eliminate stigma associated with mental illness, across the board (i.e., within and beyond the health and community sectors)
  - client and family participation in the planning and delivery of mental health and addiction services
  - allowance for system wide program evaluation and the establishment of evidence based best practices

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New and Expanded Services

- Mental health emergency at Prince Road site[4]
- Expand existing withdrawal management program to include a community based withdrawal management service and a day program
- Central intake and assessment
- Services for dual diagnosis population
- High supportive housing beds and supports
- Community crisis beds and supports
- Shared care models with primary care/family practice programs
- Assessment and stabilization program
- Peer support programs (alumni programs)
- Mobile health bus
- Comprehensive geriatric mental health (spanning hospital and community)
- Enhanced child and adolescent services including transitional services
- Additional ACT teams
- Increased specialized addiction resources in the community
- Comprehensive program evaluation for the entire mental health system
- Enhanced prevention programs (incl. schools)

High Level Implications

There are numerous operational implications of the vision including for example:

- Educating clients, health care providers, police and others involved in mental health services regarding the service delivery model changes including the location of services, client flow, etc.
- Shifting operational resources and staffing to optimize client access

There is a need to enhance access in communities such as Leamington to minimize the need for residents to travel to Windsor. However, data regarding the number of residents from other communities is not available to allow comprehensive planning for satellite services to occur. In addition, the role/scope of services provided by staff in satellite locations could be reviewed. For example, could the mental health nurse in Leamington provide injections? There will be capital and operational implications of creating an ACTT in Essex County/Leamington and providing additional services.

There are numerous services that could be relocated from the Prince Road site to downtown locations. The possible options (e.g., current Ouellette facilities; new purpose built building, etc.) and associated capital, operational and transitional costs will be explored during Stage 1B. To enhance wellness and healing, the facilities should be designed in a nonmedical model and not reflect a 'traditional' hospital.

[4] The projected workload will be defined as planning continues.

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A safe operationally efficient residential setting for problem gambling treatment will need to be identified.

The feasibility of implementing a single information system will be reviewed and the necessary legislative and policy changes required to facilitate the initiative addressed. There will be a number of challenges in implementing the change. Nevertheless it will continue to be a priority to streamline and improve care delivery.

Transitional Stability Centre (Formerly referred to as Inner City)

Planning for emergency mental health services is ongoing. As of September 2014, the ESC LHIN has provided the following perspective on an initiative that will, over several months result in further detailed plans and assumptions regarding projected emergency mental health visits at the Prince Road site.

The Transitional Stability Centre will provide residential capacity for approximately 55 individuals at one time. The residential service will not provide withdrawal management or acute care treatment. Rather, the service is time limited stabilization and community placement with two year community outreach. The population consists of males and females who are high users of the ED, Police services with mental health / addiction conditions. The clients will be served by nurses, social workers, occupational therapists, addiction certified counselors and psychiatrists. This is a psycho-social model with a primary purpose of engaging a hard to serve population group with the goal of stabilizing and placement into a permanent housing model.

Specialized Mental Health Emergency Department

Specialized Mental Health Emergency Departments in Ontario typically are based at designated Schedule One Facilities capable of managing involuntary patients who can be held on a Form 1 application for 72 hours for psychiatric assessment. There are currently only 2 specialized MH ED sites in Ontario that have received MOHLTC designation [redacted]

Unable to contact organization

These two sites are exempt from reporting under the MOHLTC for repeat ED Mental Health and Substance Use visits. This means that patients seen in a specialty ED MH have a different length of stay. In addition, specialty mental health ED are physically and operationally distinct from general EDs however, they do have their own staffing, triage and registration (separate from a general ED). Specialty MH ED are considered appropriate when

- Psychiatric patients are not best served in the clamour and hectic environment of a general ED and they can also be disruptive to that environment. Hospitals with the ability to separate patients with psychiatric e emergencies from the general population should not be discouraged from this practice.

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- Hospitals and other health service providers should be encouraged to report consistently and accurately to improve the quality of all data being collected and analyzed in the province.
- Excluding the Emergency Mental Health Services functional centre from the calculation of ED LOS will not remove all patients with mental health issues from the calculation – patients who are treated in general ED in Schedule 1 facilities will still be included in the calculation.

Specialized Mental Health ED Functional Centre Definition:
Pertaining to the unit where services are provided, usually on a consultation basis for registered persons who have acute mental health problems requiring assessment, treatment and disposition. Mental health emergency departments have their own triage, registration and are completely separate from the general emergency department. Dedicated space or areas within the general department are not considered as a separate unit and are reported as part of the general ED functional centre.

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Figure 30: Workload/Activity Shifts

MENTAL HEALTH AND ADDICTION

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Future Location and Volumes: Other Ambulatory Facilities	Comments
Acute Beds												
Adult	68		68	48	133	8		60				
Child/Adolescent	--		--	6 [a]	9						9	
Specialized Beds												
Adult				48				65				
D/N Care - Mental Health Acute												
45025 OP (Mental Hlth) - Visits	2,264		2,264		2,255		2,255					
MH Clinic - Acute Psychiatry												
57625 OP (Mental Hlth) - Mental Health Visits	4,475		4,475		4,458		4,458				892	Assumes 20%
MH Clinic - Acute Psychiatry												
57625 OP (Mental Hlth) - Mental Health Visits				2,240	2,270			2,270				
OV COM Crisis Intervention - Mental Health												
45025 OP (Mental Hlth) - Visits	4,208		4,208		4,192		4,192					
COM Clinics/Prog - MH ACTT												
45025 OP (Mental Hlth) - Visits				25,028	24,932 [b]		24,932 [b]				[c]	
45525 OP (Mental Hlth) - Individuals Served by FC				102	102		102					
49165 Group Participants, MH Non-Registered				1,899	1,892		1,892					
COM Clinics/Prog - MH Concurrent Disorders												
45025 OP (Mental Hlth) - Visits				817	814			814				

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Figure 30: Workload/Activity Shifts (Cont'd)

MENTAL HEALTH AND ADDICTION

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Future Location and Volumes: Other Ambulatory Facilities	Comments
OV COM Clinics/Prog - MH Counselling & Treatment (Mood and Anxiety)												
45025 OP (Mental Hlth) - Visits				1,579	1573			1,573				
45525 OP (Mental Hlth) - Individuals Served by FC				245	244			244				
49165 Group Participants, MH Non-Registered				117	117			117				
49200 Number of Group Sessions				24	24			24				
OV COM Clinics/Prog - MH ACTT												
45025 OP (Mental Hlth) - Visits				46,429	46,252 [h]		46,252 [h]					
45525 OP (Mental Hlth) - Individuals Served by FC				178	177		177					
49165 Group Participants, MH Non-Registered				1,474	1,468		1,468					
49200 Number of Group Sessions				24	24		24					
OV COM Clinics/Prog - MH Dual Diagnosis												
45025 OP (Mental Hlth) - Visits				1,685	1,679			1,679				
45525 OP (Mental Hlth) - Individuals Served by FC				115	115			115				
OV COM Clinics/Prog - MH Psychogeriatric												
45025 OP (Mental Hlth) - Visits				2,074	2,353		2,353					
45525 OP (Mental Hlth) - Individuals Served by FC				328	372		372					
OV COM Clinics/Prog - Add Trtmt - Assessment Referral Remedial Measures												
45025 OP (Mental Hlth) - Visits				1,031	1,027			1,027				
45525 OP (Mental Hlth) - Individuals Served by FC				1,165	1,161			1,161				
49125 Group Participants, OP MH				2,121	2,113			2,113				
49200 Number of Group Sessions				261	260			260				
OV COM MH Home Care - Geriatric Psych Assess												
45080 CSS (Comm Supp Serv) - Visits				4,664	5,291		5,291					
45580 CSS (Comm Supp Serv) - Individuals Served by FC				1,545	1,753		1,753					

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Figure 30: Workload/Activity Shifts (Cont'd)

MENTAL HEALTH AND ADDICTION

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Satellite(s)/ Other	Prince Road	Leamington District Memorial Hospital	CCAC Infusion Centre or Home	Other Ambulatory Facilities	Comments
OV COM Res. MH - Support within Housing Residential Treatment												
40145 IP (MH Residential) - Inpatient Admissions				6	6 [a]						6	
40345 IP (MH Residential) - Inpatient Days				1,923	1,916 [a]						1,916	
41045 IP (MH Residential) - Discharges				<5	<5 [d]						3	
45545 Res (Mental Hlth) - Individuals Served by FC				14	14 [e]						14	
OV COM Res. Addiction - Problem Gambling Residential												
40145 IP (MH Residential) - Inpatient Admissions				76	76						76	
40345 IP (MH Residential) - Inpatient Days				1,436	1,431						1,431	
41045 IP (MH Residential) - Discharges				73	73						73	
45545 Res (Mental Hlth) - Individuals Served by FC				96	96						96	
OV COM Res. Addiction - Withdrawal Management Centre												
40145 IP (MH Residential) - Inpatient Admissions				1,655	1,649			1,649				
40345 IP (MH Residential) - Inpatient Days				4,838	4,820			4,820				
45045 OP (Residential MH) - Visits				19,380	19,306			19,306				
45545 Res (Mental Hlth) - Individuals Served by FC				1,163	1,159			1,159				
49145 Group Participants, Residential MH				1,040	1,036			1,036				
49200 Number of Group Sessions				223	222			222				
OV COM Hlth Pro/Educ - Addictions - Problem Gambling Awareness												
45525 OP (Mental Hlth) - Individuals Served by FC				2,178	2,170						2,170	
49125 Group Participants, OP MH				731	728						728	
49200 Number of Group Sessions				15	15						15	

[a] Beds at Maryvale in the community.
[b] Outreach teams for transitional youth and psychogeriatrics is a gap. Offices currently located downtown.
[c] ACTT required in Essex County/Leamington.
[d] Offsite.

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Rehabilitation

Background

The 2012 ESC LHIN Rehabilitation Strategic Plan is in Year-Two of implementation. A significant component of this three year plan involves facilitating appropriate utilization of inpatient rehabilitative care beds, through standardizing admission and discharge criteria, and ensuring adequate rehabilitative bed capacity in the system. A Rehabilitative System Capacity Working group is undertaking the development of predictive model for determination of rehabilitative care bed capacity needs for the ESC LHIN which will be completed in August 2014. The predictive model will allow comparisons with the historical utilization data of all beds in the rehabilitative care continuum (rehab, CCC, Assess-Restore and other transitional care program beds), with projected utilization according to best practice care pathways, population aging, and alternative care delivery scenarios, resulting in projected bed days and required bedded resources for the next five to ten years.. The bedded resource projections are aligned with the draft provincial Rehabilitative Care Alliance Definitions Framework for Bedded Rehabilitative Care settings.

While the ESC LHIN's plan prioritizes the experiences and clinical outcomes of the highest volume rehabilitation patient populations (i.e., patients with stroke, orthopaedic conditions, and geriatric/medically complex adults, accounting for up to 75-80% of service utilization) the predictive modeling projections will account for all populations. The Service Delivery Model for rehabilitation services directions should be reviewed within the context of the ESC LHIN's plan.

Relocations

These will need to be identified in collaboration with the ESC LHIN Rehabilitative Care bed modeling exercise, of which Phase 1 which will be completed in August 2014 (for priority populations of stroke and hip fracture) and Phase 2 (geriatric/medically complex adults) will be completed by October 2014. Development of standardized ESC LHIN-wide cross-continuum care pathways for stroke, hip fracture and frail seniors is occurring in parallel to this work.

Organizational Changes

- Rehabilitation assessment, care planning and 7 day service delivery *across all acute care services including the emergency department* to identify the earliest intervention opportunities (target stroke, orthopaedic and elderly populations first)
- Direct admissions to rehabilitation: evidence informed criteria based access; streamline the process for early identification and transition of patients to the most appropriate rehabilitative care environment for example home with outreach team and CCAC support, specialized inpatient rehabilitation, restorative care or day/ambulatory programs.

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- Case finding: "pull" patients to rehabilitation services
- Implement mechanisms to increase community supports to facilitate ED and acute admission avoidance through a Community Restorative Care Program (draft business case pending)
- Create more streamlined approaches to transition patients from acute care/inpatient and community settings to Convalescent Care
- Investigate ability to pre-book convalescent care beds in community for planned surgeries
- Implementation of CCAC Coordinated Access and Resource Matching and Referral (RM&R); CCAC managing waitlists for rehab and Complex Care
- Ensure increased funded rehabilitation provided along the continuum of care (e.g., outpatient and community rehabilitative care services: LTC/assisted living, retirement homes, community clinics, CCAC)
- Maximize the scope of practice of rehabilitative nursing to focus on function (in addition to patients' medical care needs) and prevent deconditioning
- Earlier, supported discharge for mild to moderate stroke patients
  - Coordinated, interdisciplinary intensive community / outpatient rehabilitation team as an alternative to rehabilitation admission and/or to enable earlier discharge (draft business case submitted to ESC LHIN)
- Focus on implementation of established best practices for priority populations (per ESC LHIN Rehabilitation Strategic Plan)
  - Stroke
  - Orthopaedic conditions – especially fractured hip
  - Geriatric patients
- Integrate the rehabilitative care delivery system
  - Enable patients to move more easily along the continuum: bi-directionally with shared accountability for patients between programs
  - Patient-specific, responsive services: tailor to patient needs rather than fit the patient into set, criteria-based services
  - Enhance direct admissions to rehabilitation from the community (bypass emergency and acute services)
- Align programs and services with emerging provincial directions
  - Rehabilitative Care Alliance Definitions Framework for Bedded Rehabilitative Care
  - Ontario Senior Strategy and MOHLTC Assess and Restore Policy

These will need to be confirmed and aligned with the ESC LHIN Rehabilitation System Capacity Plan to be completed in October 2014. Ongoing work in Year 3 will focus on standards of specialized geriatric and rehabilitative care expertise and system capacity for frail seniors/medically complex adults in community care settings, including self-management and fall prevention.

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Renal

Background

The program is in two locations in Windsor. Self care dialysis (in 15 stations) and home hemodialysis (HD) and peritoneal dialysis (PD) training and support are provided at a satellite location on McDougall Avenue. Haemodialysis treatment (22 outpatient stations and 4 inpatient stations) and the nephrology clinic are located at the Ouellette site. There is a plan to renovate the Bell building (an adjacent building) to accommodate all renal services:

- Phase 1 (which has been approved): relocate 22 hemodialysis stations with expanded capacity for 29 stations from the Ouellette site as part of a 20 year lease.
- Phase 2 (which has ***not*** been funded yet): relocate home HD and PD teaching, the nephrology clinic and the 15 stations at the McDougall site.

There are 6 treatment stations at the Leamington District Memorial Hospital (LDMH). There is discussion underway between WRH and HDGH to develop haemodialysis stations at the Prince Road site to serve CCC and rehabilitation inpatients and potentially outpatients living in the local area. The program is currently meeting the ORN target of 80 per cent access within 30 minutes travel time.

The CCAC has a case manager to support home dialysis patients by referral.

Program Directions

The program directions are:

1 Recognize the potential of portable treatment devices to reduce treatment stations and increase self management: This has been incorporated in the volume assumptions. [redacted]

Unable to contact organization

2 Move outpatient renal services out of the hospital setting to a centralized 'renal campus' to promote a culture of wellness: This has been incorporated in the planning for the Bell building renovation.

3 Provide an ambulatory facility to accommodate all outpatient stations, training, clinics, supports, point of care lab, pharmacy, Kidney Foundation, and apheresis services: For the most part, this has been incorporated in the Bell building renovation (i.e., excludes point of care lab). [redacted]

Unable to contact organization

4 Expand renal treatment services/supports to long term care homes, including peritoneal dialysis (PD) services/supports and possibly a satellite haemodialysis unit: Currently, long term care home patients are transferred to the Ouellette site for dialysis. Ideally, as part of the home dialysis program, they should be dialyzed in their long term care homes. This will require storage space for the supplies and enhanced CCAC home support.

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5 Provide re-dialysis services on an outreach basis, enabled by telemedicine, to patients in the southeast area of the County and in Leamington: This strategy would decrease the number of patients who would have to travel to Windsor for the nephrology clinic. Technology enabled education and care will be enhanced in the future.

6 Enhance home services to enable patients to be discharged to more appropriate settings: Patients who could be discharged to a convalescent/retirement home and require dialysis currently must be discharged to complex continuing care beds. [redacted]

Unable to contact organization

7 Including the Renal Program in the Chronic Disease Prevention and Management (CDM) centre: The ESC LHIN will be developing a CDM centre with satellite services. The renal program should be a component of the centre/services as patients typically have more than one chronic disease, and often it includes renal disease.

8 Plan for additional dialysis stations: [redacted] n addition, there is a need to determine the future requirements at the Prince Road site; 6 stations have been assumed on a provisional basis to treat inpatients and outpatients living in the area). In addition, inpatient dialysis stations/capacity will be required at the new acute hospital.

Unable to contact organization

Relocations

- Increase percentage of patients dialyzing at home (PD and home haemodialysis with expanded CCAC supports and telemedicine enabled monitoring)
- Move outpatient renal services outside of hospital setting to a centralized "renal campus" to promote a culture of wellness. All outpatient stations, training, clinics, supports; ideally collocated with a CDM centre of excellence, point of care lab, pharmacy, Kidney Foundation
- Augment pre-dialysis services on an outreach basis, enabled by telemedicine

The relocations are detailed in Figure 31.

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Organizational Changes

- Greater community based services/supports:
  - enhanced CCAC renal service role to support patients at the pre-dialysis stage with the goal of reducing/slowing progression to kidney failure
- Primary care physicians/providers will have increased competencies in managing patients with kidney disease and/or significant risk factors:
  - primary care mentorship through an ORN lead
  - Health Links initiative to effectively integrate the provider system
  - an integrated chronic disease management service/centre to support patients/families
  - there will be fewer crash starts for dialysis treatment
- Interventional nephrologist(s) will be recruited to enhance/supplement vascular access services

New and Expanded Services

- Paediatric nephrology clinic
- Prince Road site: 6 treatment stations for CCC and rehab, and potentially for local LTC residents
- LTC homes: PD services/supports
- Leamington: expanded satellite treatment unit (enhanced to address demand)

High Level Implications

The shift to increased home based services will have an impact on the operational funding for CCAC.

Capital funding will be required for Phase 2 of the Bell building redevelopment and the expansion to the facilities at LDMH and the Prince Road site as well as treatment stations for inpatients in the new hospital. In addition, storage space for supplies may be required at the convalescent/retirement homes.

Next steps include:

- Consult with the Ontario Renal Network regarding the proposed directions and volume projections.

Unable to contact organization [redacted]

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Figure 31: Workload/Activity Shifts

RENAL

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Satellite(s)/ Other	Bell Building	Prince Road	Leamington District Memorial Hospital	CCAC Infusion Centre or Home	Comments
D/N Care - Hemodialysis												
45000 Total All Visits	40,754		40,754		39,268							
45011 IP (Acute) - Visits	2,784		2,784		3,147	3,147						
45027 OP (Dialysis) - Visits	37,970		37,970		36,121			36,121	[a]	[b]		
D/N Care - Home HD (Teaching)												
45027 OP (Dialysis) - Visits	218		218		721			721				
N/A Care - Home PD (Teaching)												
45027 OP (Dialysis) - Visits	120		120		218			218				
Med Clinic - Nephrology												
45027 OP (Dialysis) - Visits	6,880		6,880		8,072			8,072				

[a] Volumes to be determined with ORN. For facility planning 6 treatment stations at 90 per cent utilization.
[b] Volumes to be determined with ORN. For facility planning assume additional 3 treatment stations at 90 per cent utilization.

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Surgical Services

Background

The funding system does not provide the necessary resources for specialists to develop facilities, employ staff, purchase equipment and supplies and provide required sedation. Therefore, it is unlikely that specialists will perform procedures in their offices in the future. The exception is non OHIP covered procedures. For example, one ophthalmologist has recently established laser cataract services in his office. Some plastic surgeons have opted out of OHIP and are performing procedures in their offices. However, the outcome is that the specialists are not available to provide hospital and emergency services.

Options Considered for the Location of Procedures and Clinic Visits

1 Ambulatory procedures unit (APU) in the hospital
2 Surgicentre adjacent/connected to the hospital
3 Surgicentre elsewhere in Windsor (e.g., satellite(s)/other)
4 Dispersed to specialist offices

Key Principles/Assumptions to Ensure the Continuing Success of the Program are:

- Designated facilities designed to support operational efficiency (i.e., patient, material, information flow, etc.).
- Designated experienced staff to support operational efficiency
- Ease of access from parking to support patient and family centred care
- Guaranteed funding and MOHLTC commitment
- All emergency and inpatient procedures, and procedures requiring anesthesia support will be provided in the hospital; low risk procedures will be provided in a surgicentre or specialist offices

Program Directions

All options are viable but Options 1 and 2 were deemed to be the best options for cataract and minor procedures because of the need to ensure that the specialists are readily available to see emergency patients and perform emergent/urgent procedures. In both Options 1 and 2, some of the design and operational considerations for the cataract procedures include:

- They would be performed in a procedure/OR suite that would be 'outside' of the main OR, but with access to the inpatient area in the rare situation a patient needs to be admitted post surgery; and from the emergency department for emergent/urgent cases
- Operational efficiency would be optimized similar to the current situation through efficient flow (i.e., patient, staff, materials, etc.), designated and knowledgeable staff, focus on patient and family centred care, etc.
- Assuming that all ophthalmology cases would be performed in the same operating room(s), a post anesthetic recovery room will be required for patients who have a general anesthetic (e.g., vitrectomy/retinal release)

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Financial [redacted]

The 'minor' procedures trial balance data may include bronchoscopy, thoracentesis, and other procedures that require more complex patient preparation and recovery, equipment and facilities. The facility implications will be addressed in Stage 1B.

Financial [redacted]

Cataracts: 4,981 procedures are performed in one procedure room in the surgical suite at HDGH with 2 RNs, 1 OR tech, 2 processing staff, 2 recovery staff and volunteers. It is the most efficient/productive service in the province.

Minor Procedures: They are performed at both Hospitals by a variety of specialists. The activity in 2012/13 reflects a reduction due to the outcomes of a Hay Group ambulatory care efficiency study which identified procedures that could/should be relocated to physicians' offices. In addition, the data reflects the fact that in order to provide the necessary coverage for emergency cases, and to optimize access by residents of Windsor/Essex, specialists perform required procedures in the clinic area.

Surgical Clinics: There are several surgical clinics that could be located in a surgicentre or in specialists' offices (i.e., clinics that do not require specialized staff, facilities, equipment and technology only available in a Hospital). Considerations include the need to ensure that specialists are accessible to provide emergency coverage; and that the time they spend in the hospital providing emergency coverage is optimized. In addition, the current funding system is a barrier to relocating services to physicians' offices and this is not anticipated to change in the near future. Further review of the following clinics and the optimal location will continue to occur:

- General surgery (1,328 visits)
- Minor surgery (6,122 visits)
- Thoracic (4,315 visits) - This includes procedures such as thoracentesis
- Urology (2,509 visits)

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- Neurosurgery (1,892 visits)
- Ophthalmology (1,876 visits) - This includes some minor procedures that require specialized equipment
- Fracture (21,857 visits)
- Burn (Plastic) (8,254 visits)
- Hand (Plastic) (4,679 visits)

The future location of these volumes adjacent to the new acute hospital is detailed in Figure 32.

Organizational Changes

- Create streamlined systems to reduce number of encounters patients have with the health system (e.g., rapid assessment clinics, early pregnancy assessment centre, patient tracking systems)
- Create patient centred flows
- Improve efficiency/throughput (e.g., grouping cases)
- Create focused centres. For example, in the neurosciences (neurology/ neurosurgery) program collocate beds and include a step down/up unit
- Increase efficiency and patient safety (and anesthesiologist recruitment) by incorporating anaesthesia assistants, specialist assistants, clinical nurse specialists, etc.
- Better integrate Cancer Centre brachytherapy services to ensure sufficient access to OR time
- Relocate pacemakers to the cardiac cath suite

New and Expanded Services

- Lithotripsy
- Hepatobiliary surgery

High Level Implications

The workload/volume table required by the MOHLTC will reflect that the activity will be performed in and/or adjacent to the new acute hospital. Another key assumption is that the workload will be managed by the Hospital and not be transferred to another provider.

Unless there is a significant 'guaranteed' change in government policy and physician funding, it is not realistic to assume that procedures will be dispersed to specialist offices. Surgicentre options (i.e., adjacent to vs. separate from the new hospital; using current renovated hospital facilities vs. creating new facilities) will be assessed during Stage 1B.

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Ministry Strategic Priorities

Information regarding community based clinics and the request for proposal associated with cataract procedures was released in February 2014. An ESC LHIN led review process has been initiated and WRH will consult with interested health service providers (HSPs). The Hospitals will continue to adapt and implement Ministry strategic priorities including quality based procedures.

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Figure 32: Workload/Activity Shifts

SURGICAL

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Prince Road	Leamington District Memorial Hospital	CCAC Infusion Centre or Home	Comments
Operating Rooms											
Outpatient Procedure Service (From NACRS)	13,258	10.015	23,273		27,582	27,582					
Anaesthesia	5	<5	6		6	6					
Cardiovascular	317		317		369	369					
Dental Surgery	38	474	512		513	513					Further review; depending on physician funding system
Endoscopy/Local Rooms	<5	<5	5		5	5					
General Surgery	1,010	1.188	2,198		2,557	2,557					
Gynecology		2.675	2,675		3,044	3,044					
Neurosurgery	263		263		287	287					
Oncology		18	18		21	21					
Ophthalmology	5,464		5,464		6,705	6,705					
Oral/Maxillofacial	110	899	1,009		1,241	1,241					
Orthopedics	1,589	486	2,075		2,519	2,519					
Otolaryngology	488	1.245	1,733		2,420	2,420					
Paedodontist		441	441		464	464					Further review; depending on physician funding system
Plastics	556	853	1,409		1,523	1,523					
Radiology			0		0						
Thoracic	167		167		184	184					
Urology	3,248	1.727	4,975		5,718	5,718					Further review; depending on physician funding system
Not Stated	<5	<5	6		6	6					
Surg Clinic - (Cysto/Urology Clinic)											
S1524 OP (Other) - Surgical Visits		2.847	2,847		3,559	3,559					Further review; depending on physician funding system
D/N Care - Endoscopy											
43700 Total All Surgical Cases	8,618	6.876	15,494		16,519	16,519					Further review; depending on physician funding system
43711 IP (Acute) - Surgical Cases	722	747	1,469		1,566	1,566					
43722 OP (D/N Surg) - Surgical Cases	7,896	6.129	14,025		14,953	14,953					

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Figure 32: Workload/Activity Shifts (Cont'd)

SURGICAL

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - Prince Road 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Future Location and Volumes: Satellite(s)/ Other	Future Location and Volumes: Prince Road	Future Location and Volumes: Leamington District Memorial Hospital	Future Location and Volumes: CCAC Infusion Centre or Home	Comments
Surg Clinic - Minor											
45000 Total All Visits	2,364		2,364		2,919	2,919					Further review; depending on physician funding system
45011 IP (Acute) - Visits	53		53		56	56					
45024 OP (Other) - Visits	2,311		2,311		2,863	2,863					
Surg Clinic - Pre-Admission (Tayfour) (Bariatric Clinic)											
45024 OP (Other) - Visits				4,366	4,813	4,813					
Combined Clinic - Gen Med/Surg											
45002 Total Outpatient Visits	26,525	47,844	74,369		80,001						
5152410 OP Clinic Visits - General Surgery	1,328		1,328		1,423	1,423					Further review; depending on physician funding
5152430 OP Clinic Visits - Minor Surgery		6,122	6,122		6,450	6,450					Further review; depending on physician funding
5152445 OP Clinic Visits - Surg Pre-Admission		9,864	9,864		10,365		10,365				
Gynecology Pre-Assessment		1,048	1,048		1,076		1,076				
All Other Surg Pre-Admission		8,816	8,816		9,289		9,289				
5152450 OP Clinic Visits - Thoracic	4,315		4,315		4,830	4,830					Further review; depending on physician funding
5152460 OP Clinic Visits - Urology		2,509	2,509		2,812	2,812					Further review; depending on physician funding
5612420 OP Clinic Visits - General Neurosurgery	1,892		1,892		2,024	2,024					Further review; depending on physician funding
5622410 OP Clinic Visits - General Ophthalmology	1,876		1,876		2,148	2,148					Further review; depending on physician funding
5622460 OP Clinic Visits - Ophth Laser	1,809		1,809		2,071	2,071					
5722420 OP Clinic Visits - Fracture	15,305	6,552	21,857		24,182	24,182					Further review; depending on physician funding
5752420 OP Clinic Visits - Burn (Plastic)		8,254	8,254		8,508	8,508					Further review; depending on physician funding
5752440 OP Clinic Visits - Hand (Plastic)		4,679	4,679		4,823			4,823			Further review; depending on physician funding

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Women and Children's

Background

Preference is to have a single centre with all services in one spot based on the following principles

- Specialized needs of paediatric population
- Continuity of the continuum of care
- Integration of diagnostic and laboratory services
- Availability of integrated EHR
- Transportation for patients and families

If these principles could be replicated, consideration could be given to locating some services in other areas to improve access.

Relocations

- Infant hearing (3,901 attendance days)
- Paediatric audiology (4,250 attendance days)
- Paediatric diabetes (2,533 visits)

Organizational Changes

- Capacity reconfigured to reflect
  - 6 short stay places
  - 14 intrapartum places
- Seamless transition to adult services (e.g., diabetes, oncology, mental and physically challenged kids)
- Dedicated lead for ultrasound testing per service
- Specialized paediatric clinics will be available through telehealth
- One-stop diagnostic services and care for maternal and paediatric patients

New and Expanded Services

- Neonatal/newborn surgical consultant and general surgery
- Gynae-oncology surgery
- Early pregnancy assessment
- Services for addicted newborns
- Interventional radiology support
- Specialized paediatric clinics via telehealth or on-site on an itinerant basis
- Level III NICU designation
- Fetal developmental clinic to include assessment of intra-utero fetal anomalies (e.g., fetal medicine, diagnostic imaging)
- Enhanced emergency paediatric services
- Enhanced mental health and crisis intervention for women and children

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Figure 33: Workload/Activity Shifts

WOMEN AND CHILDREN'S

Secondary Statistic	HDGH 2012/13	WRH - MET 2012/13	Total Windsor - Acute 2012/13	WRH - TAYFOUR 2012/13	Proj'd (Clin Eff & Adj'mts) 2017/18	Future Location and Volumes: New Acute Hospital/ Ambulatory Centre Adjacent to New Acute Hospital	Satellite(s)/ Other	Bell Building	Prince Road	Leamington District Memorial Hospital	CCAC Infusion Centre or Home	Comments
OV Audiology - Infant Hearing [a]												
48300 Total Attendance - Days			3,901		4,006		4,006					
48311 IP (Acute) - Days			2,498		2,565		2,565					
48324 OP (Other) - Days			1,403		1,441		1,441					
Audiology - Paediatric Audiology Screening [a]												
48300 Total Attendance Days			4,250		4,364		4,364					
48301 IP (Acute) - Days			--		--		--					
48302 OP (Other) - Days			4,250		4,364		4,364					
Metabolic Clinic - Paediatric Diabetes [a]												
45024 OP (Other) - Visits		2,533	2,533		2,975		2,975					
Paediatric Endocrinology Clinic		406	406		477		477					
Paediatric Metabolic Clinic		2,127	2,127		2,498		2,498					

[a] Option of locating the visits in a CDM site requires further discussion.

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Services Requiring Further Review and Future Proposals

The proposed services that require considerable review and/or where there was not full consensus include:

- Cancer
  - bone marrow transplant
  - POGO site
  - stereotactic radiotherapy
  - full lab capability including molecular and biogenetics
- Cardiac
  - designated Regional Cardiac Centre including cardiac surgery
- Emergency
  - hyperbaric chamber
- Rehabilitation
  - resources for rehabilitation beds and post-acute services
  - slow stream rehabilitation beds
- Renal
  - transplant service
- Surgical Services
  - lithotripsy
  - hepatobilitary surgery
  - bariatric surgery
  - breast reconstruction surgery
  - transplant surgery (liver, kidney, lung)
  - cochlear implants
  - neonatal surgery
  - feasibility of adding new technology (e.g., Gamma knife for neurosurgery, CO_2 laser for ENT and gynecology procedures, etc.)
- Women and Children's
  - enhanced scope of paediatric surgery

Material Supplied in Confidence

Additional ideas about the future generated by the "Change Tables" were generated by thinking about the future [redacted]

Impact on Other Hospital Programs

The Service Delivery Model will impact other hospital programs as detailed below and summarized in Figure 34.

Cancer

- Medicine
  - medical day care enhanced for blood transfusions
  - palliative end of life care delivered in medicine setting
- Surgical Services
  - review optimal location of brachytherapy services
  - enhanced interprofessional clinics

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  - change in treatment protocols for prostate cancer
  - CMHP and DaVinci – increase demands for OR time specific to treatment of prostate cancer
  - breast reconstruction OR time needs may increase
- Emergency
  - better palliative/pain and symptom management service may decrease impact on ED
  - enhanced access to oncologists may decrease impact on ED
- Women and Children's
  - improved coordination of services
  - increased demand for inpatient care

Cardiac

- Emergency
  - fewer ER visits and admissions (e.g., for chest pain and CHF) with more consistent ambulatory management strategy, effectively integrated with community resources, ESC LHIN CDM initiatives and Health Links

Critical Care

- Rehabilitation and other allied health
  - enhance services
- Renal
  - dialysis for chronic vented patients in other locations
- Medical/Surgical
  - enhanced access to remote telemetry will ensure patients can be in the 'right' bed

Diagnostics

- Support directions established by other Change Tables
- Cancer
  - increased access to PET CT and PET MR; review feasibility of developing potential future services including full lab capability including molecular and biogenetics; create new screening clinics
- Emergency
  - provide dedicated imaging resources and satellite lab services
- Rehabilitation/Complex Continuing Care
  - possibly add diagnostic services at Prince Road site for an increasingly sicker cohort of patients with more complex needs
- Women and Children's
  - one stop diagnostic services and care including lab and DI staff with specialized knowledge/expertise

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Emergency

- Medicine/Surgical Services/Critical Care
  - average of 17 admitted patients currently in the emergency will be accommodated on the medical/surgical and critical care units
- Mental Health and Addictions
  - enhanced emergency mental health services to better support mental health needs of children and adults
- Diagnostics
  - planning will incorporate necessary emergency support
- Cardiac
  - PCI services will be addressed by the cardiac program

Medicine

- Rehabilitation
  - possible relocation of some ALC beds to CCC/rehab; majority are LTC
  - enhanced rehab and allied health services to support 24/7 care

Mental Health and Addictions

- Medicine
  - enhanced consultation liaison services and improved mental health services would mean that patients could be transferred earlier
- Emergency
  - fewer mental health visits because patients would be seen elsewhere
- Women and Children's
  - increased staff training required for children with autism and mental health issues

Rehabilitation

- Medicine
  - potential for some length of stay reductions with capacity for earlier transfer to and management of medical instability/exacerbations at the Prince Road site.
- Rehabilitation and Allied Health Services
  - enhanced allied health services to address increased demand/need

Renal

- Medicine/Surgical Services
  - inpatient transfers reduced if all acute care is on one site
- Rehabilitation/Complex Continuing Care
  - patient flow optimized if dialysis services available on-site

Surgical Services

- Mental Health and Addictions
  - provide ECT for acute patients in the acute hospital

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- Women and Children's
  - provide improved early pregnancy services
- Cancer
  - improve brachytherapy access
- Other
  - improve chronic pain management services

Women and Children's

- Diagnostics
  - impact on interventional radiology support for paediatrics and NICU; enhance access (on-site and virtual) to results reporting
- Laboratory
  - potentially increase services for maternal and paediatric patients; enhance access (on site and virtual) to results reporting
- Pharmacy
  - operational impact of providing service 24 hours/day, 7 days/week
- ICT
  - enhanced access to updated data, real time information is critical, with enhanced access from the community
- Telemedicine
  - there is the potential for new Ministry funding to support linking to clinics in the community

[redacted] Proprietary

[redacted]

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Projected Impact on Other Health Service Providers

With the shift of services from the Hospitals to the community, there will be an overall greater need for improved communication and collaboration among health service providers (HSPs) to ensure the provision of consistent, high quality care.

The Service Delivery Model will impact other HSPs as detailed below.

Cancer

Unable to contact organization

- [redacted]
- Enhanced community based and home based services for screening, survivorship, pain and symptom management, etc.
- Enhanced role of primary care providers in follow-up care
- Enhanced transportation services
- Depending on outcomes of the current ESC LHIN CDM planning process, some services may be decentralized
- Survivorship program will require more partnering with Canadian Mental Health Association, Health Links, etc.
- Earlier and more advanced care planning to ensure patients receive the level of care they desire during end of life

Unable to contact organization

- [redacted]

Cardiac

Unable to contact organization

- [redacted]

Critical Care

- CCAC

Unable to contact organization

  - [redacted]
- CCC
  - if these patients are cared for in the CCC environment, additional beds would be required to move this option forward

Diagnostics

- LTC, etc.
  - reduced need to transport LTC patients to the hospital for diagnostic services
- Community based DI and lab services
  - greater need for coordinated standards and competencies

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Emergency

- EMS
  - activity will be affected by future location of the acute hospital and urgent care services; review future role of paramedics
- Primary care (FHTs, GP's, CHC, etc.)
  - activity will be affected by the ESC LHIN led CDM initiatives

Medicine

- Enhanced community services will be required to support reduced LOS and prevent admissions
- Relocation of some clinic visits to specialist offices
- Relocation of some outpatient services to CDM centres will take place as per the development/implementation of the ESC LHIN's CDM business cases

Mental Health and Addictions

- Primary Care Providers (FHT's, GPs, CHC, other)
  - increased support (e.g., integrated/shared care models, OTN) to manage more patients in the community
- Transitional Stability Centre
  - review opportunities for outreach
- Residential/LTC care
  - enhanced support to minimize need for transfers to hospital
- All Programs
  - 'Roadmap' will allow everyone to understand the scope of services, role of providers, etc.; central intake will allow easier access
- New South West Correctional Service in Windsor
  - will impact all providers
- CCAC/CMHA
  - require offices in the new hospital

Rehabilitation

- Other Health Service Providers of post-acute services
  - Increased need for post-acute services in order to move non-acute patients out of acute care when their need can be met with an alternate level of service. These include in home services, outpatient services and other post acute bedded programs including rehabilitation, complex continuing care, slow stream rehab (not currently available) and long term care. Shortfalls in these areas need to be addressed in parallel or before significant changes to acute care occur in order to support those changes and continue to meet patient needs. This will be addressed as part of the ESC LHIN-led initiative.

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Renal

- LTC homes
  - new/enhanced role in supporting residents with dialysis needs
- Primary care providers (FHTs, GPs, CHC, other)
  - increased support from the Renal Program through a potential Health Links strategy and the ORN mentorship initiative
- CCAC
  - increased role in educating and supporting patients earlier in the disease progression
  - increased home treatment will place added volume pressure on CCAC services and resources
- Leamington District Memorial Hospital
  - accommodate pre-dialysis outreach initiative and additional stations

Surgical Services

- Home First Services
  - increase patients receiving services.
- CCAC
  - increase coordination with CCAC (e.g., CCAC involvement in preadmission clinic) to improve patient/family involvement, knowledge and decision making, as well as seamless care

Women and Children's

- Enhance community services, capacity and linkages. i.e.,
  - paediatric patients requiring palliative care
  - paediatric patients dependent on technology
  - bridge between paediatric and adult service providers, including emergency
  - paediatric mental health needs

Material provided in confidence

[redacted]

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ESC LHIN CDM Strategy

For the past 4 months the focus of the ESC LHIN Chronic Disease Prevention and Management Team (along with its many community partners) has shifted to advancing 'community capacity' options that support care path enhancement and improved overall system patient flow and health care outcomes. The main population focus is on better managing the needs of the 1 per cent of high end users of the health care system and next 5 per cent of those at risk of becoming 1 per centers (mainly individuals with chronic diseases and co-morbid conditions). Utilizing a "standard ESC LHIN business case outline" the ESC LHIN has reviewed CDM community capacity business cases for ambulatory clinics (15), mobile teams (3), the acute hospital (1), assess and restore (1), prevention (6), and others (3). The initiatives listed in Attachment J will influence the ability of the community to absorb the workload shifts, and will be the focus of ongoing community capacity planning to be led by the ESC LHIN.

Balance of Care Study

Recommendations from the Balance of Care Study led by Dr. A. Paul Williams at the University of Toronto will be instrumental to transforming the Windsor/Essex healthcare system to support patients at home and/or avoid admission to long term care, and to reduce ALC in the acute care hospital.

The study recommends new approaches to reduce ALC, prevent hospital admission and maintain people in their communities with necessary services to support independent activities of daily living (IADLs). The recommendations if implemented will, in conjunction with other ESC LHIN initiatives, contribute to achieving ALC reductions for the Windsor/Essex hospitals.

The Study Report and recommendations are provided in Attachment K.

Health System Alignment

The Service Delivery Model

- Ensures strategic alignment and accountability with Ministry of Health and Long-Term Care's Health System Transformation agenda
- Addresses ESC LHIN strategic imperatives: improved outcomes in ALC, emergency department, chronic disease management, mental health and addictions
- Demonstrates quality and excellence through critical mass and clinical coherence
- Facilitates health equity and accessibility to meet identified needs
- Provides a safe environment for patients and staff
- Reflects innovation in service delivery, that supports leading practices and builds on best evidence
- Supports efficiency of operations to optimize health and other benefits within the system, including sustainability

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- Achieves service integration, collaboration and partnerships to ensure service quality enhancement, improve cohesiveness, optimal resource use, minimal duplication, and/or increase coordination

Academic and Research

Privacy

The following information was developed through interviews with representatives of the University of Windsor [redacted] and St. Clair College [redacted] They provided information in response to specific questions, reviewed the draft document and provided suggestions for amendment/improvement.

Role of the Hospitals in Education and Research

The Hospitals have strong collaborative relationships with the University of Windsor (U of Windsor), Western University and St. Clair College; all are essential partners. For example, faculty members in nursing are members of various hospital committees including ethics and provide consultant/advisory services to hospitals. The Schulich School of Medicine & Dentistry – Windsor Program's Associate Dean is an ex-officio member of the Windsor Regional Hospital Board of Directors. In addition, faculty and staff from the medical and nursing faculties work with hospital and medical staff to ensure best and up-to-date practices are being included in the educational programs. The creation and development of new programs and equipment selection occur in part as a result of the feedback and support of the Hospitals.

The Hospitals provide the resources to support medical students and residents, nursing and other health professional students (i.e., social work, psychology students) but this is not recognized in the funding model.

The Hospitals provide ***clinical education*** experiences for:

- 152 Schulich Medicine students (4 classes of 38 students each) a significant increase from just 24 students in 2008
- Annually, approximately three-four dozen students from medical schools from around the world undertake electives in Windsor/Essex. These so-called "visiting student electives" (VSE's) can be placed either in Windsor/Essex hospitals or community clinics. Between September 2012 – August 2013, there were 39 such VSE's of which roughly 56 per cent were hospital based.
- 376 medical residents including:
  - 233 family medicine residents who participated in 29 specialty rotations
  - 82 medicine program residents who participated in 4 specialty rotations
  - 10 anaesthesia residents
  - 13 CCFP-EM program residents who participated in 5 speciality rotations

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  - <5 nephrology program resident
  - 5 obstetric program residents
  - 10 MSK program residents
  - 2 oncology program residents
  - 2 maxillofacial program residents
  - 21 paediatric program residents
  - 1 plastic surgery program resident
  - 1 radiology resident
  - 2 general surgery program residents
  - 2 urology program residents
- Annually, approximately 12 to 24 visiting residents from other Canadian medical schools for various clinical training experiences (between July 2012 and June 2013 there were 18 such experiences)
- 1,000 + undergraduate and graduate nursing students including the University of Windsor collaborative college partners (St. Clair College – Windsor and Thames sites and Lambton College)
- 300 year four nursing student placements which include a preceptor experience (student works 1:1 with a registered nurse)
- Graduate students in the PHCNP and MSc/MN programs – approximately 30 students per year
- Other health professional students such as social work and psychology students
- Students in the School of Health Sciences, School of Nursing and School of Community Studies at St. Clair College. The programs and total number of students at the Windsor and Chatham campuses include:

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Figure 35: Programs and Total Number of Students at the Windsor and Chatham Campuses of St. Clair College

	Windsor	Chatham
Biomedical Engineering Technology (equipment and devices)	0 [a]	
Cardiovascular Technology	50	
Child and Youth Worker	189	34
Dental Assisting (Level I & II)	84	
Dental Hygiene	117	
Diagnostic Medical Sonography	65	
Medical Laboratory Science	110	
Medical Laboratory Technician	<5	
Collaborative Nursing	274	109
Occupational Therapist Assistant/Physiotherapy Assistant		68
Paramedic	50	47
Personal Support Worker	112	52
Pharmacy Technician	79	
Practical Nursing	290	214
Pre-Health Sciences	175	58
Pre-Health Sciences (Pre-Nursing)	302	
Respiratory Therapy	74	
Social Service Worker (Gerontology)	91	

[a] This program does not launch until Fall 2014.

The intent is to maintain the current level of teaching.

Research

Nursing faculty members (researchers) seek funding, conduct research and publish papers in partnership with colleagues at the Hospitals. As well, several medical staff conduct clinical research and publish papers. Between 1970 and 2013, there have been 539 publications. The productivity could be much higher if there was support to coordinate and write research grants. The Schulich School of Medicine & Dentistry and U of Windsor are creating incentives for researchers to have student assistants.

Vision for Health Related Education and Research in Windsor/Essex

The components of the future vision include:

- Create a hub of education and research, which is as active, productive and high quality as other education centres.
- Attract and retain medical, nursing and health professional staff who are interested in teaching and research.
- Provide a collaborative Windsor/Essex physician recruitment strategy.
- Enhance partnerships with external stakeholders with respect to education, research, scholarship and practice (Faculty of Nursing, Strategic Plan, 2012).

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- Create a culture of inclusion that engages clinical, academic and community stakeholders (hospitals) in the business of the faculty such as committees, working groups, research collaboration (Faculty of Nursing, Strategic Plan, 2012).
- Provide hospital based full time clinical academic physicians who will form the core of the department. Other medical staff will be adjunct professors and will have the opportunity to progress in a streamlined approach to assistant, associate and full professor if they desire.
- Create a research and scholarship culture that is as strong as in London.
- Ensure alignment between the number of students and number of faculty members; the number of students will likely remain constant.
- Focus on clinical research and not on basic (wet lab) research. It will be integrated with community and primary care sectors in such a way that it supports building/maintaining a continuum of care and otherwise creates additional capacity across the health care system.
- Create excitement for health-related careers that will result in increased applications from the best and brightest young Windsor/Essex residents – thus building a long-term approach to the issue of health professional recruitment and retainment.

Potential Implications for the New Hospital and Health Care Providers in Windsor/Essex

A strong inclusive and team approach to medical, nursing and other health professional education in partnership with hospital and health care providers will ensure quality driven outcomes for the patients, their families and the workplace. This will be supported by the following fundamental elements:

- The strong linkages between medical, nursing and other faculties and the hospitals as well as other providers will continue to evolve.
- Health professionals and students will be able to practice with cutting edge technology and knowledge, building on the foundation that has been established by other teaching centres.
- Everyone will 'rise to the occasion' and it will open up potential to attract funding for more services provided locally in Windsor/Essex.
- The number of full time clinical academic physicians based in the hospital will support a strong medical education program.
- The required staff and learner resources (e.g., conference/classrooms, library, workstations, on-call rooms, change rooms/lockers, etc.) will be incorporated in the facility design.

Challenges Facing Universities and Colleges

The Faculty of Nursing has expressed a concern that, given the size of the collaborative program, one acute hospital will reduce the number of clinical placements available to support the current enrolments.

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The concern regarding clinical placements was also expressed by St. Clair College, which is the number one educator of health care providers among all community colleges. Strategies that have been implemented to address the issue include:

- A Centre for Applied Health Sciences was recently developed on the campus which includes 6 simulation labs to supplement training that in the past would have occurred in a clinical setting
- The Henry Ford System in Michigan was approached but there are several legal barriers
- A Family Team Centre was added on campus and will be pursuing a pharmacy, other health services and increased research
- A long term care facility was added on the College property and the hope is that it will support increased placements, jobs and research
- Additional investment/staff to support development of new placement positions

A second main issue is finding good preceptors to support the placements.

The lack of sufficient placements and preceptors will challenge the ability to maintain accreditation and to supply the community with essential health professionals. The Hospitals are committed to continuing to work with the universities and colleges to achieve the necessary targets. As health delivery continues to shift to the community all stakeholders will need to be engaged in achieving the goals.

From the perspective of the Schulich Medicine – Windsor Program, there are similar challenges. For example, significant growth in a relatively short period of time has placed a great deal of pressure on a faculty cohort which is still trying to get established. While great strides have been made over the past year or so, the appointment and promotion process remains a very important work in progress. Funding models that differ between Windsor and London add to the complexity and challenge of this process.

Because of the significant growth in the number of medical learners over the past few years, there is significant crowding due to insufficient space within the hospitals: so much so the program expects to be criticized for it at the forthcoming accreditation process (2015). This is not a statement of blame, rather a problem that together needs to be addressed until such time as a new physical structure that incorporates the required needs can be constructed.

Creating a vibrant research culture within the Schulich Medicine – Windsor Program will also take time. No doubt the absence of a large group of clinician scientists means that there will need to be creative efforts to resolve this dilemma.

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Hospital Wide Systems and Support

The current ***support services*** include:

- Appointment booking, bed management, scheduling and registration
- Biomedical engineering
- Environmental services
- Food services
- Health records
- Information systems
- Logistics/supply chain management
- Maintenance and engineering
- Medication management and distribution
- Security
- Supply reprocessing
- Telecommunications

Changes will be required to hospital wide systems and services in order to support the future Service Delivery Model. As planning proceeds, some need to be investigated or explored further in order to fully determine the impact on service delivery and space requirements. These changes and directions are summarized in Figure 35 by department.

The Support Services Change Table identified the following key directions:

Organizational Changes

- Off-site clinical programs will be served as needed
- Continue to review contract service providers
- Support services need to be provided on-site
- Call center will create one-stop shop; users will call one number for any support services
- Integrated systems will report potential failures directly to support services; users may not need to ask for a repair
- Positive patient identification will reduce risks and track patients throughout their stay
- Central equipment holding depot

New and Expanded Services

- Call centre
- Fully integrated electronic medical record
- Consumer access portals (for access to scheduling, patient records, registration, etc.)
- Closed loop medication management system
- Enhanced ESC LHIN/corporate-wide, integrated systems
  - appointment booking
  - scheduling
  - health records
  - information systems
  - medication management (centralized manufacturing)

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- Enhanced connectivity/automation
  - devices will self-monitor and report status to biomedical engineering and facilities maintenance
  - health records and registration; barcoded wristbands and RFID tagging will provide positive patient identification and tracking

New Technologies

- Linen/waste chutes to remove soiled waste
- Automated guided vehicles to provide clean supplies
- 'Intelligent' system will self-diagnose and predict failures
- RFID to locate products, equipment, patients

All programs will benefit from the improved service models

- Information will be more readily available
- Integrated systems will improve decision making
- Automation will increase reliability and patient safety
- Proactive maintenance reporting will reduce down-time

Administrative Services

In addition, other services that require primarily offices/workstations (i.e., administration, finance, foundation, human resources, spiritual care and volunteers) will be addressed in Stage 1B. The health service providers in Windsor/Essex are committed to achieving efficient 'back office' service delivery models and this will continue to evolve through ESC LHIN led initiatives.

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model

Appointment Booking, Scheduling, Registration, Bed Management

- Fully integrated, real-time electronic medical record
- Centralized scheduling/booking
  - -- real-time, integrated system with ability to view all services (across multiple sites)
  - -- potential to arrange appointments for convenience of patients
- Centralized bed management system
  - -- web-based, accessible to users, real-time, linked to other services for room turn-over/terminal cleaning
- One central number/web-based application for internal and external calls
- Patient and provider portal: on-line appointment booking available to patients and physicians
- Kiosks for patient use (booking, registration); may also access from on-line
- Mix of central (primarily for new registrations) and decentralized registration (e.g., for repeat visits and convenient such as dialysis, mental health, diagnostic imaging, emergency, maternal new-born, etc.)
- Bar-coding on wristbands and RFID for positive patient identification and locating

Biomedical Engineering

- Standardized equipment (across programs, sites, partners)
- Robust systems in place to monitor quality and risk , including:
  - -- a full asset management system to ensure timely preventative maintenance, replacement and assessment of value
  - -- a single database and single asset tag/bar-code system to track all information on devices in use within Corporation
  - -- a proactive monitoring system that predicts problems and plans corrective action before the device fails
- Increased vendor collaboration
- Standard room set-ups (in clinical areas) to reduce risk of equipment misuse/failure - improved patient safety
- Wireless monitoring/communication between devices and Biomedical team; RFID for locating devices
- Integrated decision-making tool to record and analyze data and provide support for replacement of devices
- Web-based service requisitions (recorded, tracked, monitored)
- STAT and less urgent service requests/dispatch managed through central call centre (see Call Centre)
- Hub and spoke arrangement for multiple sites and/or community-based providers
- Collaboration with Information Systems and Facilities Maintenance to improve quality/eliminate duplication
- Better engagement of Biomedical team in procurement of all devices (and scheduling their testing and deployment)

Call Centre for Support Services (extension of switchboard/call answering services)

- One number to call: single, one-stop shop for all requests. Integrated with all other services to connect requester with service provider
- A web-based/telecomm accessible system that provides a single point of contact for support services, including:
  - -- biomedical services
  - -- equipment (delivery, cleaning, pick-ups after use)
  - -- facilities maintenance
  - -- food services
  - -- material management (for STAT supplies)
  - -- patient transport; scheduling of internal and external

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model (Cont'd)

- -- portering requests
- -- room booking for meetings/conferences (includes integrated scheduling, room set-up, A/V and clean-up)
- -- environmental services
- -- security
- -- telephone systems
- -- transportation (between sites)
- -- parking
- Automated systems for scheduling, staff assignments and sign-in across all support services

Environmental Services

- Waste management: powered chute systems
  - -- decentralized collection and holding areas
  - -- handles garbage except medical waste, mixed recyclables, soiled linen
- Distributed team model (assigned to specific areas)
  - -- on-unit staff handle all calls/requests
  - -- duties include room turn-over/terminal cleaning after patient discharge
  - -- may be supplemented by other teams
- Leverage on-stage/off-stage service-delivery model to expedite access and servicing (without impacting clinical activity)
- Centralized equipment holding areas (for some devices)
- Zone closets (housekeeping and maintenance) strategically located to accommodate on-unit needs, including carts, supplies, etc.
  - -- closets will be re-stocked by dedicated team (on-unit environmental services staff will not leave the unit to re-stock)
  - -- closets will be equipped with water supply, chemical dispensing and power
- Automated cleaning equipment (e.g., ride-on floor scrubbers).
- 'Green' cleaning equipment/systems (chemicals will be compatible with room finishes)
- Refer to Call centre for other features.
- Terminal room cleaning/sanitation system (e.g., plasma, ozone, ultra-violet light)
- Automated bed management/discharge system, for expedited room turn-over (linked to patient registration, discharge)
  - -- patient bedrooms and washrooms equipped for ultra-violet treatment (built-in occupancy lights to protect staff/patients)
- Clinical areas will utilize alternatives to drapery/curtains in patient areas to avoid high costs of laundering cubicle curtains
- Central management of portering services with some decentralization of staff to key areas on peak shifts

Clinical Equipment

- Distributed patient equipment
  - -- held, cleaned close to points of use
  - -- maintained close to point of use or centrally depending on requirements
- Central equipment management for selected items - supported with RFID. Deploy to point of use on demand (e.g., infusion pumps, bariatric stretchers, etc.)
- Linked to RFID system to reduce time spent searching for equipment

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model (Cont'd)

Food Services

- Spoken Menu concept with bed-side ordering *or* room service system (currently in place at WRH)
- Patient may use web-based system or 'TV/entertainment' device for meal selection; for delivery within set times
- Dining room style service may be offered for non-acute services (would still be room service style tray)
- Lean processes and cell assembly for meal assembly
- Meal production
  - -- short-order style cooing with combination of rethermable products
  - -- significant in-house production, supplemented by procured, pre-prepared foods, associated with higher patient satisfaction
- Retail/Staff Cafeteria - All Outsourced
  - -- Cafeteria service retail model with limited branded kiosks
  - -- Multiple retail venues located throughout hospital facilities
  - -- Catering (integrated with meeting room booking system through call centre)
  - -- Plan Classrooms/Auditorium near cafeteria to leverage access to retail food services
- Focus on safe food handling procedures (e.g. appropriate climate controlled holding areas for received product)

Health Records

- Regional electronic health record (SPIRE) in development through the Consolidated Health Information Systems (CHIS) shared service organization (SSO) will be available in the new facility
- The SPIRE system will be a fully integrated, real-time EHR including
  - -- compatible systems for cancer centre and hospitals
  - -- patient portals for access to records
  - -- LHIN-wide data repository for integration of all records
  - -- capacity for community-based providers (e.g., physicians) for access to records, results, etc.
  - -- integrated health information analysis and reporting for decision support and MOHLTC reports
- Potential for off-site users to access patient information (patients and community-based providers)
- Central program direction and planning and management (organization-wide)
- Coding, abstracting and transcription functions mainly delivered remotely
- Electronic signature (authentication) for chart completion from authorized networked computing devices (throughout the facilities and remotely)
- Access, charting and chart completion will be supported by a Bring Your Own Device (BYOD) program
- Building infrastructure will be in place to support enterprise-wide systems

Information Systems

- Health Information Services (CHIS) shared service organization serving ESC LHIN hospitals
- Regional delivery of IM/IT services
- Consolidated/consistent systems across the organization and the broader ESC LHIN provider group (e.g., diagnostics, pharmacy, lab, surgical, human resources, scheduling, utilization, etc.)
- Regional EDIS
- Information available to authorized users, including support for a Bring Your Own Device (BYOD) program
- Portal to serve both practitioners and patients
- Fully integrated electronic environment with multiple solutions (wired and wireless)

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model (Cont'd)

- Integrated information, communication and automation technology
  - -- Facilities management system
  - -- Hospital information systems (call centre, staffing, finance, etc.)
  - -- Building automation system
  - -- Communication systems (fire, nurse call, wayfinding, etc.)

Logistics/Supply Chain Management

- PROcure regional supply chain model serves ESC LHIN hospitals (and others)
  - -- group purchasing (standardized products)
  - -- off-site location for all centralized activities (e.g. purchasing)
  - -- virtual warehouse
- "Just-in Time" distribution
- Green vendor initiatives
  - -- back-hauling pallets
  - -- paper and corrugated cardboard recycling
- On-site receiving, inventory control and supply distribution
  - -- bar coding and scanning for re-order
  - -- totes to "top-up" stock in clinical areas - supplies to top-up carts: 2 times per week
  - -- tracking, reporting, accounting capability
- Other on-site activities include:
  - -- storage of specialized shared equipment
  - -- large purchases (e.g. copiers)
  - -- receiving, breakout and unpacking of direct orders
  - -- JIT cart holding/marshalling
  - -- Hazmat/CBRN materials
- Automated guided delivery and tracking solutions
  - -- food
  - -- materials
  - -- medications
- Outsourced linen system
  - -- bar coding/scanning for re-order
  - -- linen delivered to each clinical area
  - -- soiled linen pick-up (by vendor)
- Off-site storage for:
  - -- pandemic supplies (non-medication items) through a regional management strategy
  - -- inactive files (provide managed short term transitional capacity on-site)
- Receiving area to include secure, climate controlled storage (for food, medications, etc.)
- Alternate route/exit for morgue

Maintenance and Engineering

- Central management, with site specific supervision of staff
- Wireless monitoring/communication between all building system components and FM team to alert for servicing
- Integrated decision-making tool to record and analyze data and provide support for replacement of parts

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model (Cont'd)

- Web-based service requisitions (recorded, tracked, monitored)
- STAT and less urgent service requests/dispatch managed through central call centre (see Call Centre)
- All building system alarms and FM service requests sent to hand-held devices of FM team for immediate action
- Hub and spoke arrangement for multiple sites and/or community-based providers
- Robust systems in place to monitor quality and risk , including:
  - -- a full asset management system to ensure timely preventative maintenance, replacement and assessment of value
  - -- a single database and single asset tag/bar-code system to track all information on devices in use within Corporation
  - -- a proactive monitoring system that predicts problems and plans corrective action before the device fails
- Wireless monitoring/communication and integrated decision-making tool to record and analyze data and provide Life-cycle reporting
- Collaboration with Information Systems and Biomedical Engineering to improve quality/eliminate duplication
- Fully automated plant with computerized systems for the new site/facility; including energy management systems; linked to clinical services/occupancy requirements
- Building Automation System (BAS) to integrate all building systems, including fire/safety systems, mechanical/electrical systems, lab/pharmacy monitors, etc., with capacity for remote access
- Supported by call centre (see Call Centre)
- Electronic workflow management software
- Leverage on-stage/off-stage service-delivery model to expedite access and servicing (without impacting clinical activity)
- Differentiation of responsibilities (and potentially space) with ProjectCo for AFP projects
- Leadership in environmentally-friendly technologies (e.g., solar, wind, co-generation, etc.)

Medication Management and Distribution

- CPOE, EMAR, closed loop narcotic automation system
- Procurement through SSO with standardized products across ESC LHIN
- Tighter formulary controls (e.g., procurement specialist for
- Automated prescription order filling (e.g., automated vertical carousel)
- Automated packaging/manufacturing for unit dose system
- Robotic picking devices for speed, quality control and reduced human resources
- Automated Dispensing Units linked to information systems; all requisitions tracked and reported for quality control
- ADU cabinets also provided in Surgical Suite
- Wireless mobile carts to distribute medications directly to the patient (linked to positive patient identification system)
- Integrated software to manage all transactions; priorize and track requisitions (including order tracking for clinical users)
- "Just-in-Time"/daily distribution
- On-line ordering and viewing of orders
- Bar-coded wristband production and printing for patients; wristbands. Links to HR for staff wristbands.
- 24 hour pharmacist coverage with on-site pharmacists
- Comprehensive clinical pharmacy system with distributed clinical pharmacists (as part of inter-professional care team)
- Use of advanced automated systems to improve efficiency and reduce errors/risks (e.g. Smart Pump technology)
- Compliant USP 797 clean room systems
- Retail/Outpatient pharmacy for ambulatory care, ED patients and staff

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Figure 36: Major Systems and Services: Key Features of Future Service Delivery Model (Cont'd)

Security

- Contract service model
- Surveillance and centralized on-site monitoring centre - 24/7 monitoring and dispatching of staff
- Web-based monitoring CCTV systems (camera can be accessed from any location)
- Screening and access control role and visible presence at main entrance
- Calls initiated at Call Centre; forwarded as a priority to Security desk; triaged and dispatched according to threat
- Integrated Daily Activity Reporting (initiated by Call Centre system)
- Personal alarms for staff in high risk areas
- Responsibility for key/access control
- Support to hospital staff in transportation of valuables (e.g. cash, medication, etc.)
- Site and program-specific service levels

Supply Reprocessing

- Central processing, sterilization including scope processing and scope management
- Limited flash sterilization
- 3rd party vendor partnerships for scope maintenance/repair
- Increased automation: washers and sterilizers. Links to vendors to monitor performance and take corrective action
- 4-zone system for layout of area (with direct links to OR's for distribution and collection)
- Instrument management system for surgical services, using barcoding
- Inventory management system
- Planning/layout strategies to improve staff efficiencies and reduce walking (e.g. high-density mobile shelving)
- Case cart system
- Use of automation and other technologies to assist with safety and quality (e.g. metal detectors, magnets, bar-coding, etc.)
- Redundancy to accommodate equipment servicing and for back-up to other centres

Telecommunications

- Single IP based telephony solution for all ESC LHIN hospitals (per CHIS strategic plan)
- For WRH, central 'contact centre' for all sites
- Wireless phones with access throughout the facilities, effectively integrated with other systems such as patient monitoring and nurse call
- Enhanced video conferencing capacity shall be available to extend the use of telemedicine for patient care and education purposes
- "Quiet Hospital" practices

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Facility Planning Principles

The Service Delivery Model must be supported by physical facilities with capacity to accommodate the approved scope of services, volumes/workload, care delivery principles, best practices and facility planning standards.

Facility planning will be guided by the following principles to be reviewed at future capital planning stages:

- Be ***patient and family focused*** to
  - maintain the privacy and dignity of individuals
  - support the diverse needs of the population
  - ensure patient safety and infection prevention and control
  - satisfy patient convenience (e.g., be user friendly and meet patient needs)
  - be sensitive to all developmental stages of life (e.g., elder friendly)
  - provide a natural, therapeutic environment for patient and family comfort in both internal and external space
  - provide space to support family involvement in care delivery
  - in partnership with others, be a source of reliable health information and innovative strategies for consumer awareness and education

- Incorporate ***state-of-the-art processes/systems and technology,*** which means planning will
  - include efficient patient, staff and materials flow
  - include contemporary information systems and technology
  - be designed to current and anticipated facility standards (e.g., barrier-free design)
  - be environmentally friendly (e.g., LEEDS compliant)
  - provide contemporary, efficient and effective operational systems (e.g., self-registration)
  - reflect optimal location solutions

- Foster a ***positive work life*** by
  - providing supportive and safe environments for staff, physicians, volunteers and students
  - considering amenities such as an exercise room, child care, etc.

- Provide ***flexibility*** for new and enhanced clinical services, technology and education. This will include having the
  - potential to enhance/regenerate areas over time
  - ability to change use as new services and clinical practices emerge
  - facilities to play an active role in the education of students in the health professions and other related professions and leveraging the opportunity for application in community settings

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- Reflect ***collaborative and integrative planning*** to
  - create opportunities to support other health service providers
  - optimize opportunities for community connections

- Foster collaboration and partnerships with ***colleges and universities,*** to develop innovative and new teaching opportunities for application in all clinical settings across the continuum of care and for a wide spectrum of providers including caregivers

- Ensure ***value*** by incorporating
  - leading practices and emerging/anticipated trends and directions
  - processes that are operationally sustainable within expected resources
  - spaces that are flexible and adaptable over time
  - benchmarking against contemporary guidelines and standards

- Create an ***affordable*** project balancing reasonable expectations with longer term value and flexibility.

Resources required to use and re-purpose existing infrastructure or to decommission and demolish existing facilities will be identified, costed and included as part of the total project cost, in subsequent stages of the capital planning process.

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Human Resources [redacted]

[redacted]

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Human Resources

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Financial [redacted]

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