Small Community Hospital Emergency Department Study

Final Report

Submitted to
Erie St. Clair
Local Health Integration Network

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1.0 Introduction

Emergency services are a critical component of our health care system.

In describing the purpose of this study the Erie St. Clair Local Health Integration Network (ESC LHIN) has said:

"Emergency services are a critical component of our health care system. This vital resource has seen challenges across Ontario, including the small community hospitals' Emergency Departments of the Erie St. Clair LHIN.

The purpose of the study is to review the operating context of the local small Emergency Departments so as to establish a baseline understanding that can be used by the ESC LHIN for planning emergency services on a proactive basis. In order to plan for quality, sustainable and timely services, it is essential that the ESC LHIN understand the baseline operations of the system."

Develop a baseline contextual description of the three small community hospital Emergency Departments in the ESC LHIN

The ESC LHIN requested that Hay Group Health Care Consulting develop a baseline contextual description of the three small community hospital Emergency Departments (EDs) in the ESC LHIN on which to base the planning for the future organization of services. The three Emergency Departments are:

- Leamington District Memorial Hospital,
- Charlotte Eleanor Englehart Hospital in Petrolia, a site of Bluewater Health, and
- Sydenham campus in Wallaceburg, a site of the Chatham-Kent Health Alliance (CKHA)

The study is intended as a proactive initiative to identify options for addressing sustainability challenges.

The review indicated that some or all of the three sites are facing the following issues:

- difficulty in recruiting and retaining emergency physicians
- challenges in connectivity to other services
- having to use operating dollars to pay service fees to MedEmerg, an emergency physician placement service
- the cost-efficiency and cost-effectiveness of operating low-volume Emergency Departments
- the challenges inherent in maintaining viable low volume Emergency Departments when access to larger, better equipped,

24 hour per day emergency facilities are available within a short distance

The ESC LHIN has committed itself to finding the best possible solution to ensure the availability of high quality emergent and urgent care for patients living in all communities in the ESC LHIN. Consideration can and will be given to innovative models for the deployment, organization and staffing of emergency services.

Specifically, Hay Group Health Care Consulting was asked to assess:

- the essentials needed for a sustainable Emergency Department or, alternatively, the factors which would mitigate against the sustainability of an Emergency Department
- if a department was deemed to be unsustainable, what changes would be required in the deployment, organization and management of emergency services in the ESC LHIN to ensure that patients and families could continue to get timely access to high-quality emergency care

The process for conducting this review included reviews of data and documents, interviews and site visits.

The data review included, but was not limited to, reviews of visit volumes by acuity levels, discharge disposition from the ED, hospital patient transfer volumes, complaint rates, and physician staffing models.

Document reviews included, reviews of strategic planning documents, previously conducted external reviews, reviews of hospital policies, procedures and protocols, medical staff bylaws, credentialing processes, and, where appropriate, minutes of meetings which pertained to Emergency Department activity.

Interviewees included, but were not limited to, Emergency Department providers (both physicians and nurses) at each site, physical plant reviews, and interviews with hospital administrative staff and Board representatives.

The report which follows, details our findings and recommendations. Readers are reminded that the rationale for the recommendations in this report, while informed by data and statistics, are, in fact, based on many other factors. They reflect not only visit volumes and acuity, but also the current and projected availability of medical and nursing staff and diagnostic supports, consultant support, an evaluation of the physical plant and a variety

of other factors. This report has been written to provide an evaluation of all of these factors for each of the sites reviewed.

We take this opportunity to thank those involved with the review for their support, and particularly for the time and energy which they spent in arranging and coordinating our on-site activity.

2.0 Canadian Triage and Acuity Scale

It is important that readers of this document understand the Canadian Triage and Acuity Scale (CTAS) model of measuring Emergency Department visit acuity.

2.1 Canadian Triage and Acuity Scale

The Canadian Triage and Acuity Scale is a 5 level scale designed to allow care providers to assign a relative priority of care to all incoming patients. It has also been adapted for other functions, such as workload measurement and to create guidelines for the timeliness of care, but its origins are to define the priority of treatment.

CTAS level 1 patients are those with potentially life threatening illness or injury

CTAS level 1 patients are the highest priority and represent those with potentially life threatening illness or injury, such as a cardiac arrest (a stoppage of the heart's beating), multiple trauma or coma. This category of patients represent, on average (across all Ontario Emergency Departments), 0.5% (1 in 200) of all ED visits. Of note, the "ideal" time to treatment for these patients is not always "immediate". For trauma patients, for instance, there is a "golden hour" in which patients should receive care. Those with no vital signs at the scene of the accident have virtually no chance of recovery, so transit times to an ED will have no impact on outcomes.

It is equally true that, in Ontario, virtually no one survives an out of hospital cardiac arrest. Those who do survive are dependant on the prompt delivery of cardiopulmonary resuscitation (CPR) and defibrillation, delivered by a bystander, and a prompt response by Emergency Medical Service (EMS) personnel (ambulance attendants) with advance level training.

CTAS level 2 patients are those requiring emergent care

CTAS level 2 patients are defined as those requiring emergent care. They may include, for instance, patients suffering from seizures, myocardial infarctions (heart attacks), certain drug overdoses, or life-threatening infections. On average, they make up 8.0% of the total Ontario ED visit volume. Many of these patients require care in a short time, but can have their emergent needs met by well trained paramedics working under the direction of base hospital physicians. In many constituencies, for instance, the electrocardiogram is performed "in the field" by paramedics, transmitted to a base hospital, and treatment delivered in the field by the paramedics with supervision provided by the emergency physician located in the ED.

CTAS level 3 patients are in need of urgent care

CTAS level 3 patients are in need of urgent care. This category includes patients suffering from abdominal pain or headaches which are severe, compound (open) fractures, moderately severe congestive heart failure or asthma. They comprise, on average, 35% of all ED visits in Ontario.

CTAS level 4 patients have non-urgent problems

CTAS level 4 patients have non-urgent problems. These may include, for instance, lacerations (cuts) or sprains, conjunctivitis (pink eye), or upper respiratory tract infections. They make up approximately 43% of ED visits in Ontario.

CTAS level 5 patients are not in need of urgent care

CTAS level 5 patients are not in need of urgent care. They may present for suture removal, dressing changes or prescription renewals. They comprise, on a provincial basis, 14% of ED users.

2.2 Emergency Department versus Urgent Care Facilities

Throughout this report, readers will find the terms 'Emergency Department', 'Urgent Care Facility', and 'Urgent Care Centre'. It is important that readers understand the distinction between such facilities.

CTAS level 1 or 2 patient being transported by ambulance should automatically be routed to an Emergency Department

An Emergency Department is, by definition, a 24 hour per day, 7 days a week service which operates in a hospital. It must be provided with all the appropriate infrastructure (including not only human resources, but also the technology, such as laboratory and X-ray) necessary for the assessment, resuscitation, stabilization, and, where appropriate, either admission or transfer, of emergently ill or injured patients. The department should have a chief, who serves on the hospital's Medical Advisory Committee (MAC). It should be expected to have a quality assurance program, the content of which is also communicated to the hospital's quality committee and Board.

Urgent Care Facilities include a variety of facilities that offer non-emergent care

After hours and urgent care may also be delivered in a variety of formats and venues. In Ontario these include facilities such as Urgent Care Centres, Prompt Care Centres, Community Health Centres, Health Service Organizations and comprehensive primary care centres.

Urgent Care Centres focus on the delivery of care to patients suffering from CTAS level 3, 4 and 5 problems

The main distinguishing feature of an Urgent Care Centre is that it is not designated as a receiving centre for ambulance bound patients. Thus, any CTAS level 1 or 2 patient being transported by ambulance will automatically be routed to an Emergency Department. However, it is recognized that Urgent Care Centres may be the destination chosen by patients suffering from what ultimately evolves into an immediate life or limb threatening clinical problem. Thus, Urgent Care Centres must have the necessary skills and

equipment to assess and resuscitate patients presenting with a complete range of medical problems.

Ideally, in order to minimize the risk of patients presenting with a life-threatening problem to Urgent Care Centres, the facility, should conduct a public information campaign in order to ensure that EMS providers and the population served are aware of the limitations of the facility. Urgent Care Centres typically, although not necessarily, operate for a reduced number of hours (generally 14 to 16) per day. They also, in general, provide service 7 days per week. In addition they offer on site laboratory testing and some X-ray services, which may vary from plain radiography to more complex imaging procedures such as ultrasound.

Urgent Care Centres may be located in a variety of venues. Some (e.g. St. Joseph's Healthcare in Hamilton, Women's College Hospital), are located in a hospital facility. Others (for instance, one that is operating in Dartmouth Nova Scotia) operate as a stand-alone Urgent Care Centres, and are not attached to an inpatient care facility.

Still other urgent care facilities operate as part of a primary care facility, either in a Community Health Centre (CHC), multi-disciplinary clinic, or a primary care facility, such as a doctor's office, or a "comprehensive" primary care facility.

Conceptually, these facilities focus on the delivery of care to patients suffering from CTAS level 3, 4 and 5 problems. Ideally, they are designed to provide services which need not necessarily be delivered in a hospital, but address the vast majority of the urgent care needs of the patients served either by the primary care group, or the community. They will typically be capable of diagnosing and managing problems such as respiratory tract infections, soft tissue injuries, minor fractures, abdominal pain, etc. Such facilities should have on site or immediate access to basic laboratory evaluation and X-rays.

3.0 The Leamington District Memorial Hospital

3.1 Corporate Status

The Leamington District Memorial Hospital (LDMH) is located in the town of Leamington and is an independent organization. The hospital has no administrative links to other hospitals in the area, but does look to Hôtel-Dieu Grace Hospital in Windsor as the designated trauma centre in the region and to the Windsor Regional Hospital as the designated cancer centre for clinical support in these selected areas. The hospitals in Windsor/Essex are engaged in a process of seeking opportunities to maximize cooperation and collaboration between and among them, but no specific commitments or decisions have been made at this time.

3.2 ED Visit Volumes

The hospital has approximately 27,000 patient visits annually to its ED. Of these, in 2006/07, only a small number of patients (63 or 0.2%) were CTAS level 1, and only 755 (2.8%) were CTAS level 2. Eighteen (18) % of visits are CTAS level 3. The vast majority of patients (approximately 21,500 or 79%) are CTAS level 4 and 5. Details of the visit volume, broken down by CTAS level with peer comparators are found in the table on the following page.

Distribution of ED Visits by CTAS Level for Leamington District Memorial and Peer Hospitals

Hospital Site	CTAS Level 1	CTAS Level 2	CTAS Level 3	CTAS Level 4	CTAS Level 5	Missing CTAS Level	Total ED Visits	Driving Time (minutes)
Grey Bruce Health Services-Wiarton Site	22	449	2,685	8,528	1,728	35	13,447	34
Deep River And District Hospital	11	166	1,288	5,039	7,459	7	13,970	45
Charlotte Eleanor Englehart Site	11	41	1,741	12,092	1,137	16	15,038	35
Kemptville District Hospital	24	553	4,114	8,409	2,281		15,381	30
Alexandra Marine And General Hospital	33	174	2,788	10,324	2,164		15,483	80
Grey Bruce Health Services-Markdale Site	32	466	2,297	11,874	2,048	46	16,763	39
Winchester District Memorial Hospital	24	293	3,536	13,359	1,669	46	18,927	49
Haldimand War Memorial Hospital	20	306	3,671	13,058	2,395	28	19,478	36
Campbellford Memorial Hospital	33	527	3,958	13,623	2,547		20,688	53
Sydenham Campus - CKHA	34	813	4,076	14,755	1,418		21,096	32
West Nipissing General Hospital	18	289	3,302	9,705	7,783		21,097	35
Perth & Smiths Falls Dist-Smiths Falls	46	612	4,458	16,079	573	6	21,774	52
Carleton Place And District Mem Hospital	32	435	2,996	16,152	2,386		22,001	34
Glengarry Memorial Hospital	29	614	2,520	15,239	5,138	56	23,596	46
Strathroy Middlesex General Hospital	38	714	7,014	17,393	1,215	5	26,379	42
Leamington District Memorial Hospital	**63**	**755**	**4,906**	**12,947**	**8,674**		**27,345**	**46**
Renfrew Victoria Hospital	42	464	3,225	13,808	9,847	40	27,426	49
Stevenson Memorial Hospital Alliston	64	1,461	7,731	18,983	4,326		32,565	38

Source: Canadian Institute of Health Information (CIHI) National Ambulatory Care Reporting System (NACRS) Fiscal Year 2006-07. Note: Driving time and distance calculated by MapQuest assuming driving at posted speed limit for door to door travel

While the hospital is only 42 km from Windsor Regional Hospital in Windsor, owing to the fact that the highway is two lane and referral centres in Windsor are located in the city, but not on the outskirts, driving time is estimated to be 46 minutes. This is corroborated by local providers, who frequently experience ambulance transfer times, even for urgent and emergent problems, in excess of 45 minutes. Thus, despite the relatively low absolute numbers of CTAS level 1 and 2 patients (818 in total), given that the time required to transport patients from the community to the next closest 24 hour Emergency Department, and particularly from areas east of Leamington, approximates an hour, there is a strong argument to maintain a 24 hour 7 days a week Emergency Department at the hospital.

The local population includes a unique demographic, in that there are approximately 5,000 migrant farm industry workers who reside in the community for up to six to eight months per year, and have no access to primary care. Thus, they rely on the Emergency Department for the provision of primary care services. This may be a major factor in the high numbers of CTAS level 4 and 5 patient visits.

5,000 migrant farm industry workers rely on the Emergency Department for the provision of primary care services

While, ideally, the hospital and the ESC LHIN, in cooperation with the local family practice community, can and should develop a more optimal care delivery model focused on the needs of this population, in the absence of such a plan the Emergency Department provides an essential service to this population. Furthermore, industrial accidents are not uncommon in this group, and there is a need for an Emergency Department to provide care for injured workers.

In the current model, patients returning for follow-up evaluation come to the Emergency Department and become part of the Emergency Department census. Many of these patients could be equally well served in primary care sites in the community or by Community Care Access Centre (CCAC) providers. Patients requiring, for instance, dressing changes, intravenous antibiotics, etc. do not need the specialized resources of an Emergency Department.

The Departments of Family Medicine and Emergency Medicine at LDMH, and the CCAC in conjunction with the ESC LHIN, should explore models for the provision of primary care services outside of the Emergency Department.

In addition to serving the population of Leamington, the hospital serves Kingsville, Essex, Harrow, and part of Tilbury, with a total service population of approximately 70,000 people.

It will be important for the hospital to track visit volumes in the future to determine the impact of the strategies such as chronic disease management and primary care reform on the Emergency Department visit volume. As the hospital and or region recruit more family physicians, and the strategies mentioned above gain greater penetration, it is possible that the number of Emergency Department visits will decrease significantly. This may occur either as a consequence of the more aggressive management of disease entities such as heart failure, asthma, and depression, resulting in a lower number of acute episodes of care or as a consequence of a decreased number of long term complications. The enhanced penetration of primary care reform will contribute not only to the implementation of chronic disease management strategies, but may also decrease, as noted above, the volume of CTAS level 4 and 5 visits.

3.3 ED Physical Plant

A new physical plant was built in 2002, and has many positive features. It would, however, benefit considerably from better sightlines of the patient cubicles from the nursing station. There is also currently no computerized tracking board available, and given

the relatively small number of nursing staff, and the need to better measure, report, and manage issues such as consultant response time, lab turnaround time and diagnostic imaging turnaround time, the purchase of an electronic tracking board is seen as necessary.

The department should also modify its information technology system to ensure the provision of order entry for diagnostic imaging, rather than relying on paper requisitions.

3.4 Staffing

3.4.1 Emergency Physicians

Historically, the hospital has experienced difficulty in recruiting and retaining emergency physicians. However, the hospital recently appointed a full-time director, who is seen as bringing a great deal of stability to the department. In addition to bringing stability to the physician resource, he is also seen as having spearheaded the department's focus on improving standards of care, the planned introduction of medical directives, and new technologies.

ED is staffed by 4 full-time emergency physicians, augmented by the participation of local family physicians

The department is staffed by four full-time emergency physicians, assisted by some local family physicians. For the past year there has been no reliance on HealthForceOntario or MedEmerg to supplement shifts. Occasionally, coverage is provided by Windsor based emergency physicians, but there is no formal arrangement in place which ensures coverage by Windsor physicians should there be a real or perceived threat of difficulty in staffing a shift. The connections to the Windsor emergency group are forged by word-of-mouth, and the personal relationship of the Emergency Department director with Windsor hospitals.

Currently, some emergency physicians are undertaking responsibility for a significant number of hours of service per month (approximately 140), with skewing, in one case, to a disproportionate number of night shifts by a physician who provides 180 to 220 hours of service per month. The full-time emergency physicians cover approximately 90% of the nights and 90% of the weekends.

While individuals who are willing to take this level of responsibility are often welcomed in departments, the department will need to consider the long-term implications of such a staffing model. The literature on Emergency Physician stress and burnout confirms that such individuals experience high rates of stress and burnout, and subsequently leave the Emergency Department. We recommend a staffing model which limits an individual’s hours of service to

approximately 1300 to 1400 hrs per year (or 110 to 120 hours per month), with a proportionate distribution of day, evening, night and weekend shifts. This is in keeping with national and international standards, and will ensure provider longevity and minimize stress and burnout.

ED is single covered 24 hours per day

The department is single covered 24 hours per day, and is supported by an Alternative Fee Arrangement (AFA). There is a second call roster, supported not only by the emergency physicians but local family physicians. The department chief experiences little difficulty recruiting individuals to serve as a second call physician, but does express concern that occasionally the emergency physician is reluctant to call the second call physician at times at which it may be appropriate.

3.4.2 Emergency Nursing

There have been no difficulties recruiting or retaining nursing staff, and the department has recently recruited four new graduates. These graduates are well mentored by more senior and experienced Emergency Department nurses. All of the nursing staff are ACLS certified.

In addition, the department has been supported by two nurse practitioners (NPs). Although one has recently left the department, a replacement has been recruited and will commence work in January 2009. The nurse practitioners are also well integrated into the care model and are seen as providing a valuable service.

Staffing on the day and evening shift may be insufficient

However, the number of staff on the day and evening shift may be insufficient. There are only three RN's from 2100 to 0900 and four nurses from 0900 to 2100. Given the small number of nursing staff and the logistics of ensuring availability of nurses for triage and supervision and treatment of patients as well as providing meal and break coverage, augmenting the staff with a "multitasker" will greatly improve efficiency in the department. These individuals may, for instance, be vested with responsibility for tasks such as portering, catheterization, application of plaster casts, and assisting with feeding and clothing patients in need of such assistance. Such an individual should be provided to the department on the day and evening shift.

3.4.3 Consulting Staff

The hospital currently had, at the time the review was conducted, 2.5 full-time equivalent (FTE) general surgeons, four internists, four GP anaesthetists and one obstetrician on staff. There is no paediatrician

in the community, but a CKHA based paediatrician conducts a clinic in the hospital once a week. One general surgeon who performed some minor orthopaedic procedures has left the hospital since the time interviews were conducted, reducing the number of FTE general surgeons to 1.5. A potential replacement general surgeon has been identified. The hospital is further staffed by a visiting orthopaedic surgeon who conducts a clinic once per month and performs surgical procedures at the hospital. The emergency care providers describe the coverage provided as excellent.

Patients are transferred to Windsor urologists, ophthalmologists, plastic surgeons, otolaryngologists and orthopaedic surgeons.

The community is short of family physicians, but has recently recruited four. According to their human resource plan, they will need to recruit a further five family physicians in order to ensure adequate primary care to serve the community's needs. Because of the shortage of family physicians and the withdrawal of family physicians from hospital based practice, inpatient care is provided largely by hospitalists (defined, for purposes of this report, as a physician who spends more that 35% of their professional time attending to the needs of hospitalized patients). One full-time hospitalist is supported by a number of community-based family physicians who provide coverage on weekends and during the hospitalist's holiday periods.

In the current model, the emergency physician decides, based on his or her evaluation of the patient, whether or not referred patients should be transferred to the care of the hospitalist or a hospital-based specialist. At times, one or the other will suggest that they are not the appropriate care provider for a particular patient. As a consequence, the emergency physician is left with responsibility for contacting either the hospitalist or the specialist, and asking them to take responsibility for the inpatient management.

This model of care places a very large burden of responsibility on the emergency physician, whose primary responsibility is for the evaluation, resuscitation stabilization and ongoing management of patients presenting to the ED. It is suggested that the hospital create a protocol which obliges the service which is first consulted, to take responsibility for the patient, or, alternatively, to contact another physician or service in order to ensure that they are willing to accept this responsibility. It is inappropriate for the emergency physician to have this burden placed on him or her. In order to minimize confusion, the hospitalist and consulting groups may wish to collaborate in the development of protocols or clinical profiles

which will provide more clarity on which patients should be managed by which service.

3.5 Medical Education

The hospital has undertaken a teaching commitment in affiliation with the satellite medical school located in Windsor, and has a full-time site coordinator for educational activity. Currently, family medicine residents complete part of their family medicine training in the community. The presence of trainees is not seen as causing any operational issues.

3.6 Diagnostic and Support Services

Diagnostic services are provided on site until 2300. After this time, laboratory tests are conducted on a point-of-care machine located in the Emergency Department, which is seen as providing virtually all testing necessary overnight. Should it be necessary, lab techs are available on a call-back basis.

Diagnostic imaging is also available until 2300, with a call-back system in place. It is felt that there is a need to improve access to CT scan and ultrasound for patients discharged from the ED, as access to these services may often be delayed for up to six days after discharge. The departments of diagnostic imaging and emergency medicine should collaboratively develop protocols which ensure that discharged patients access diagnostic testing in an appropriate time frame.

3.7 Quality Assurance

All physicians working in the department are ACLS trained.

The department has made several innovations, including best practice approaches in the fracture clinic, for wound care, and for geriatric patients (by the use of geriatric nurses to provide community service).

High % of ED patients leave without being seen

Local personnel feel that the departmental quality assurance program is excellent. Issues such as left without being seen rates are regularly reviewed by the hospital's quality assurance team. However, it should be noted that the left without being seen rate runs between 7 and 8%, which is significantly in excess of the suggested standard of 3%. It is felt that this rate is a consequence of the relatively low staffing in the department, and the frequent presence of admitted patients in the ED, which negatively impacts patient flow.

The left without being seen population is a high risk group, and the department should develop policies and procedures to ensure that high risk patients in this group (such as young children, patients over the age of 65, those with fever, or those presenting with chest pain) are followed up by Emergency Department staff in less than 24 hours of leaving the ED.

There are department specific case reviews triggered by adverse outcomes or the request of staff. There are also hospital wide monthly "random" death reviews, but there is no comprehensive, multi-disciplinary intradepartmental approach to quality assurance and quality management. For instance, there are no educational events to which all providers are invited (such as journal clubs or rounds), peer audits, or 360 degree physician performance appraisals. It is suggested that the department's chief be vested with responsibility for developing such a department specific comprehensive quality assurance program.

3.8 Challenges

There are challenges faced by the department. These include:

- a need to enhance cooperation and collaboration with the CCAC in order to minimize the number of department visits for the administration of intravenous antibiotics, tube feedings, etc.
- difficulty augmenting nursing when Emergency Department nurses are required to accompany transfers to other centres
- the lack of a CCAC case manager specifically assigned to the Emergency Department
- while there is a videoconference link with Chatham for crisis care for psychiatric patients, this service could be improved with enhanced timeliness. An annual conjointly conducted review of the service would be beneficial
- there is a lack of translation services for the large migrant worker population
- a significant number of inpatient beds are occupied by patients who would be more appropriately cared for in a non- acute care hospital environment or Alternative Level of Care (ALC) patients, which interferes with access to inpatient beds from the Emergency Department
- there are occasional delays associated with specialist referrals and consult times, although in general the internal medicine support is felt to be good

- the local pre-hospital care providers have no Advance Life Support (ALS) training, and it is felt that emergent and secondary transfers could, perhaps, be better managed should these providers receive advanced training
- the emergency physicians encounter considerable difficulties transferring patients to Windsor plastic surgeons and urologists for emergent and urgent care. It is essential that the Windsor area hospitals recognize and accept their role as regional providers of service, and that policies procedures and protocols be put in place to ensure timely transfer of patients in need of services only available in the Windsor hospitals. It is suggested that the ESC LHIN take responsibility for ensuring that such protocols and policies are developed and implemented
- the departmental Quality Assurance program needs to be enhanced

3.9 Summary and Directions for Change

The LDMH Emergency Department should continue to operate as a full-service Emergency Department. The Emergency Department is seen both by Board representatives and the senior management team as core to the hospital's strategic plan. A significant percentage of the hospital's admissions arise in the ED.

Were the Emergency Department to close, and/or be substituted with an Urgent Care Centre, it would necessitate that the Windsor hospitals (and, perhaps, Chatham-Kent Health Alliance) undertake responsibility for the provision of much of the inpatient care for the local population. This is seen as an extremely undesirable option because of the current overcrowding in the Windsor hospitals, the distance necessary to travel, and the degree of family disruption which would occur as a consequence of having large numbers of patients from the Leamington area hospitalized in Windsor.

The following provide directions for change and suggestions for the future development of Emergency services at LDMH:

- The LDMH Emergency Department should continue to operate as a full-service Emergency Department. However, it is possible that with changes in the primary care system, such as chronic disease management, primary care reform, and the recruitment of more family physicians to the community, the number of Emergency Department visits may decline and make the department less viable in the future. For the foreseeable future (5 years at a minimum) the department should continue to operate as it does currently.

- The Departments of Family Medicine and Emergency Medicine at Leamington District Memorial, and the CCAC in conjunction with the ESC LHIN, should explore models for the provision of primary care services outside of the Emergency Department
- The hospital consultants and hospitalists should collaborate in the development of specific protocols which delineate which patients should be referred from the ED for hospitalist or specialist management during their inpatient stay
- The department should further develop its quality assurance program, including managing and reporting on patients who leave without being seen, continuing professional development, and the development of medical and nursing directives
- With the support of the ESC LHIN, specific protocols to ensure the timely transfer of patients needing specialty care in Windsor should be developed
- Physical plant renovations should be considered, most important of which are relocating the nursing desk and the purchase of an electronic tracking board
- Staffing should be augmented with a multitask provider 16 hours per day, 7 days per week
- The hospital and the CCAC should explore opportunities to further enhance CCAC support of ED to minimize ambulatory visits and maximize opportunities to facilitate ED discharge
- Further emergency physician recruitment should occur in order to develop a staffing model which minimizes the risk of emergency physician stress and burnout

4.0 Bluewater Health/Charlotte Eleanor Englehart Hospital Site

4.1 Corporate Status

Bluewater Health has recently undergone an evaluation of its management and operations

Bluewater Health evolved as a consequence of the Health Services Restructuring Commission's support for the plan of the Lambton Hospitals Group to form an alliance with St. Joseph's Hospital in Sarnia and the Charlotte Eleanor Englehart Hospital (CEEH) in Petrolia under integrated management. Eventually, St. Joseph's withdrew from the arrangement and Sarnia General and CEEH merged to form Bluewater Health. There has been an administrative merger with the senior administrative offices located in Sarnia. Site leaders are appointed at CEEH for a variety of clinical and administrative functions. A community liaison group continues to provide strong advocacy and support for the CEEH site.

Bluewater Health has recently undergone an evaluation of its management and operations by an investigator and subsequently a monitor was appointed. Following the report of the monitor and the establishment of the new Board and senior management team, the organization has initiated a strategic planning exercise. This process is currently in the data gathering/consultation phase, and there is no prior strategic plan that is functioning. The strategic planning exercise will include discussions about the role of the Charlotte Eleanor Englehart Hospital site.

The senior management team have expressed strong support for the Emergency Department in Petrolia, and a desire to continue its current role. It is currently perceived as functioning well, operating within its budget, and well supported by the community.

There remains a strongly entrenched sense of community ownership of CEEH and a continued resentment of what is still perceived as the "forced" merger with the Sarnia hospitals directed by the Health Services Restructuring Commission.

4.2 ED Visit Volumes

The visit volume, broken down by CTAS level, can be seen in the table on the following page.

Distribution of ED Visits by CTAS Level for Charlotte Eleanor Englehart Site and Peer Hospitals

Hospital Site	CTAS Level 1	CTAS Level 2	CTAS Level 3	CTAS Level 4	CTAS Level 5	Missing CTAS Level	Total ED Visits	Driving Time (minutes)
Grey Bruce Health Services-Wiarton Site	22	449	2,685	8,528	1,728	35	13,447	34
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Strathroy Middlesex General Hospital	38	714	7,014	17,393	1,215	5	26,379	42
Leamington District Memorial Hospital	63	755	4,906	12,947	8,674		27,345	46
Renfrew Victoria Hospital	42	464	3,225	13,808	9,847	40	27,426	49
Stevenson Memorial Hospital Alliston	64	1,461	7,731	18,983	4,326		32,565	38

Source: Canadian Institute of Health Information (CIHI) National Ambulatory Care Reporting System (NACRS) Fiscal Year 2006-07.

The Emergency Department has a "very small" visit volume

Review of the CTAS level profile of the patients using the facility reveals a total visit volume of approximately 15,000, placing it in the "very small" category as designated by the Joint Policy and Planning Committee (JPPC). An extremely small number (11 or .08%), of patients required CTAS level 1 care, and only 41 patients (0.3%) were triaged as CTAS level 2. Only 1,741 patients (11.6%) were categorized as CTAS level 3. The vast majority of patient visits (approximately 13,200 or 88 %) are in the CTAS levels 4 and 5.

While the recorded number of visits is 15,000 per year, up to 6,000 additional "scheduled visits" (i.e. visits arranged or facilitated by the physician and NOT urgent or emergent in nature) are not being reported by the facility in the hospitals NACRS data as "scheduled" ED visits and thus are not included in the reported ED visit volume. While it is true that the absence of a family physician from his or her office may impose a barrier to access for primary care services, it is inappropriate for these patients to be seen in the Emergency Department.

Historically family physicians have seen office patients in the Emergency Department

It was reported that in the past, one family physician would arrange to see up to 20 office patients per day in the Emergency Department on week days. In order to limit such practices, currently there is a "rule" which limits the number of patients a family physician may see to five. However, many patients choose to self triage to the Emergency Department if they know that their family physician is

on duty, particularly if they are experiencing difficulty obtaining an appointment in what they view as an appropriate timeframe.

Physicians are concerned about not being able to see their patients in the ED. Because of the relative shortage of family physicians in the community, absenting one's self from one's office for an entire day when providing care in the Emergency Department is seen as limiting the family physicians' patients' access to care from his or her practice. Also, physicians are concerned about needing to support the overhead cost of their offices while they are working in the ED.

The hospital is located only approximately 15 to 20 minutes from Sarnia Hospital by ambulance. People in Petrolia feel that the CEEH ED is not a high priority for Bluewater Health, and that the CEEH ED is providing a service that is well understood and supported by the local community.

Functionally, the Emergency Department is functioning as an Urgent Care Centre rather than an ED

By most measures, the Emergency Department is operating as an Urgent Care Centre rather than an ED. The door to the ED is locked in the evenings at approximately 2300 hours, as there is no security available. In general, a physician is not on site but takes call from home. A nurse is designated as the nurse "responsible" for the department, and will respond to the doorbell when it rings, but is not continuously present in the department after 2300 hours. Should the ambulance service be en route with a patient bound for the Emergency Department, prior notification will be received by the nurse assigned to the ED.

If the nurse needs additional resources, he or she will call a designated backup nurse for further assistance. Owing to the low overnight visit volume, and, with the support of medical directives, nurses may evaluate patients and determine that the patient does not need immediate physician treatment. In such circumstances, patients may be directed to return to the Emergency Department in the morning, at which time the emergency physician will return and see all such patients, or to their family physician the following day.

This model of care is not seen as inappropriate. It does, however, raise the question of the "necessity" of maintaining a 24 hour per day Emergency Department in CEEH.

4.3 Physical Plant

The size of the physical plant is adequate, and the array of equipment satisfactory.

A major renovation of the physical plant is required

However, the configuration and flow do not meet the expected standard. Currently, patients register at the switchboard before triage occurs. The triage nurse, owing to staffing limitations, is not always at the triage desk, and the only way to ensure triage prior to registration would be to add further staff. Furthermore, the current triage desk provides no ability to monitor the waiting area, and would require a renovation in order to meet current standards.

A major renovation would be required to enable the department to meet the standard of care.

4.4 Staffing

4.4.1 Emergency Physicians

The department is staffed primarily by local family physicians

The Emergency Department is supported by eight local family physicians (of a total of ten located in the community) who are, in the majority, organized in a Family Health Network. Staffing is supplemented by family physicians from surrounding smaller communities. Most of the family physicians cover three to five 24 hour shifts per month, although occasionally the shifts are split into two 12 hour stints. At night, these individuals take call from home, and can provide an on site response within 15 minutes. There is one full-time emergency physician who works six 24 hour emergency shifts per month. While the Alternate Funding Arrangement (AFA) in force at the hospital allows family physicians, in theory, to take call from their office, the volume of Emergency Department visits is sufficient to necessitate in-house coverage from 14 to 16 hours per day, 7 days per week.

This staffing model is seen as sustainable by the group because of the extremely low visit volume on nights. It is acknowledged by the physician group that the relatively low night visit volume, combined with the relatively high income for the night shift coverage provides "compensation" for the busy day work.

Currently, there are two family physicians in the community who are contemplating decreasing their workload.

It is acknowledged that the current staffing model will be non-viable in the near future

The family physicians frequently work a diminished number of office hours on the day after their emergency shift in recognition of the fatigue which results from a combination of working a 24 hour shift in the Emergency Department, and the sleep disruption which may occur overnight. This combination of factors has led the medical community to acknowledge that while historically there have been no problems covering the Emergency Department, it will be necessary to recruit either part-time or full-time emergency

physicians in order to assist with coverage. Ideally, they would like to recruit an individual who would be willing to commit to six 24 hour shifts.

One physician serves as a department chief, and another serves as the administrator of the AFA, and performs the scheduling function. The schedule is described as relatively easy to fill and is done, in large measure, by self scheduling.

The ability to staff the department is seen as being limited by the fact that the ministry has defined the quota of family physicians for Petrolia as nine, but this number is seen by the Family Physicians as insufficient to provide the volume of primary care service necessary in the community. Sarnia, a short distance away, requires approximately 20 more family physicians. As a consequence, many patients in Sarnia are alleged to seek primary care in the Emergency Department at the Sarnia hospital. However, because of long wait times in the Sarnia ED, many patients apparently choose to drive to the Petrolia hospital Emergency Department seeking care.

The community of Petrolia has historically been very successful in recruiting family physicians, owing to the town's proximity to secondary and tertiary centres, and the ability to offer those family medicine graduates who wish to do so the opportunity to provide a "full-service" family practice.

The current work schedule, largely based on 24 hour per day shifts, has been proven to increase the rate of physician stress and burnout, particularly in the middle aged physician population

There are, however, a number of concerns regarding the ongoing viability of the current service pattern in the Petrolia ED. It is the experience of most rural centres that the ability to recruit family physicians is diminishing, particularly because, in general, of the lack of willingness of a family medicine graduates to undertake responsibility for acute care or hospital-based services, including emergency care. Furthermore, the current work schedule, largely based on 24 hour per day shifts, has been proven to increase the rate of physician stress and burnout, particularly in the middle aged physician population. Thus, given the limited number of physicians currently practicing in Petrolia, and the fact that many of them are planning on decreasing their workload, the ability of the hospital to maintain a fully staffed Emergency Department is a concern.

Importantly, should the hospital in the community be successful in recruiting more family physicians to the community, both to replace the retirees and to diminish the workload currently experienced by the family physicians, then the volume of visits to the Emergency Department likely will drop further, as more and more patients' primary care needs are met in family physicians' offices.

Additionally, the hospital in Sarnia is focusing on addressing the timeliness of care in its Emergency Department, and, once this issue has been addressed, this too should cause the visit volume in the Petrolia ED to decrease.

4.4.2 Emergency Nursing

All the nurses in the ED are Advanced Cardiac Life Support (ACLS) trained. The department is staffed by three nurses on the day shift, and there is a backup nurse available in the operating room on the days when elective scoping is occurring. Despite the low visit volume, four, rather than three nurses are needed to staff the department if it is to meet accepted standards of nursing care, particularly if a triage nurse is to be present at the triage station at all times. From 1500 to 2300, only two RN's staff the department. The evening staffing is insufficient as three RN's are required. As noted elsewhere, there is one nurse staffing the night shift.

It will be necessary to add additional nursing staff

Thus, if the department is to continue operating as a full-service Emergency Department, it will be necessary to add one staff position to both the daytime and evening shifts, which will require the recruitment of approximately ten full time equivalent (FTE) nurses, and an additional operating expense approximating $800,000 per year.

The quality of nursing care is seen as excellent, and there is, reportedly, an excellent relationship between the family physicians and the nursing staff. Retaining and recruiting nursing staff is seen as "a challenge", particularly as nurses require cross training to work in other areas. Furthermore, asking new graduates to work alone at night, notwithstanding the availability of backup from other nursing staff at nights, is seen as a potential risk. Therefore, new graduates, currently, only work days and evenings. The viability of the nursing model is also threatened by the fact that many nurses work straight nights, and when these individuals are on holiday or on sick leave, arranging coverage can be problematic. Furthermore, when the nurse assigned to the Emergency Department needs support on the night shift, there is a shortage of staff in the organization. When those nurses currently working on the night shift retire it is acknowledged that providing nursing staff to the ED will be a major challenge.

4.4.3 Consulting Staff

There are no consultant physicians resident in the community

There are no consultant physicians practicing or resident in the community. Inpatient care is provided solely by family physicians. There has been no obstetric activity at the centre for seven years.

There are no internists, paediatricians or surgeons on staff, with the exception of visiting specialists who perform outpatient scoping procedures. A cataract centre will be opening in January of 2009.

Sarnia is seen as the focus of first referral, although patients with significant trauma, major head injuries, or those in need of cardiothoracic or haematology and oncology services are most often referred to London.

Transfers are not seen as occurring quickly, either to Sarnia or London. The physicians at Sarnia are seen as receptive to accepting transfers, although verbal comments seen as insulting towards the Petrolia hospital and staff expressed by the nurses in the Sarnia Emergency Departments have been reported.

Currently Sarnia residents are being transferred by ambulance to Petrolia

Practitioners report that a significant number of ambulance bound patients are transferred from Sarnia to Petrolia owing to the frequency with which the Sarnia ED is on bypass. Infrastructure, other than ambulance services, to support patient transfers to the Sarnia Emergency Department is lacking owing to the absence of a municipal bus service and the lack of a taxi service in the community. The physicians in Petrolia believe that Sarnia could not possibly accommodate the increased demand should the Charlotte Eleanor Englehart Hospital cease to exist as a full-service Emergency Department. Serious concern was expressed regarding Sarnia's recent management issues, and its capacity to serve as a resource for the Petrolia community.

Conversely, the relationships with consulting staff in Sarnia have historically been good. The hospital provides outpatient facilities for consultants visiting from Sarnia in a variety of disciplines including, but not limited to, otolaryngology, urology, orthopaedics, neurology, dermatology, rheumatology, allergy, obstetrics, general surgery and general medicine.

4.5 Medical Education

Two family physicians in the community are occasional teachers, and take responsibility for teaching family medicine to both undergraduate and postgraduates, with approximately three to four teaching months per year occurring in the community.

4.6 Diagnostic and Support Services

Availability of diagnostic and support services is limited

The hospital currently operates 23 acute care beds. The Emergency Department is supported by laboratory services which are available

from approximately 0800 to 2300 hrs Monday to Friday and 0830 to 1630 or 1700 on Saturday and Sunday and then on an on-call basis.

X-ray is available from 0800 till 1630 or 1700 on site, after which the technicians are on call. The technician may be as much as 45 minutes away when on-call. Ultrasound services are available only during the day during the week, and there is no nuclear or CT scan service provided.

4.7 Quality Assurance

The medical staff who live in the community conduct a Morbidity and Mortality review 10 months out of 12, and report the results to the Bluewater Health Quality Assurance Committee. However, the department does not have a comprehensive, interdisciplinary quality assurance program which meets the standard expected of Emergency Departments. The department has no formal continuing education requirements. Physician appointees are required to have up-to-date Advance Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS) certification, which is a minimum standard expected in all Emergency Departments.

4.8 Challenges

There are challenges faced by the department. These include:

- The current physical plant, while of adequate size, is inappropriately configured, and will require significant renovations in order to meet an appropriate standard of care.
- The long-standing contribution of the family medicine community to the provision of emergency and after-hours services to the community of Petrolia is recognized and applauded. Their historic willingness to commit to the provision of 24 hour per day emergency services is exemplary.
- The physician group also acknowledges that they are feeling stressed by the hours of service, and that a number of physicians will, in the near future, decrease the number of hours of service they provide to the Emergency Department. The model of 24 hour shifts is not sustainable in the long term, and will inevitably enhance or hasten physician stress and burnout.

The hospital is, or will shortly, be facing a serious challenge staffing the Emergency Department with physicians

- It is recognized that the hospital is, or will shortly, be facing a serious challenge staffing the Emergency Department. A number of family physicians are planning on decreasing their workload, and discussion of the recruitment of more significant part-time or full-time emergency physicians has already begun.

- The lack of consultant availability on site means that all acutely ill patients require transfer.

- Laboratory services are not available on site on night shifts and Diagnostic Imaging techs are not on site on the evening or night shifts. Delays in care and considerable cost are engendered in call-backs.

- The family physicians currently do not have the quality assurance/continuing education program necessary to maintain or enhance the standard of care in the future. It also does not meet the standard expected of an Emergency Department. Expecting them to develop such a program, in light of their multiple other commitments to nursing home, office and other care is unrealistic.

- The current pattern of nurse staffing requires, at a minimum, one additional nurse on the day shift, and possibly a second a full-time nurse on the evening shift. These will result in increased to operating costs of close to $800,000 per year with, admittedly, only a limited improvement in the measured quality of care. However, the expenditure is seen as necessary to meet the defined standards (such as the availability of a triage nurse during times of high visit volumes) of care.

Highlighting the safety concern

Furthermore, nurse staffing is seen as being at risk, with anticipated problems recruiting a sufficient number of nurses willing to work on the night shift. The hospital must ensure the safety of the nurse who serves as a first responder. While, admittedly, the door is locked, there is, nonetheless, the potential for the nurse to be a victim when he or she operates alone in the ED with patients who may be unknown.

4.9 Summary and Directions for Change

The hospital should no longer operate an Emergency Department, but should, with the participation of the Family Physicians, develop a model which ensures the continuing provision of urgent care. The

extremely low visit volume at the Petrolia hospital, particularly of patients requiring CTAS level 1 or 2 care, leads us to the conclusion that a model of ensuring the availability of urgent care, rather than an Emergency Department, is a more appropriate model for the hospital. Currently, the very small number of patients requiring CTAS level 1 or 2 care require transfer to Sarnia, which is only 15 to 20 minutes away.

The current model of physician staffing is not sustainable in the long term, and concern has already been expressed regarding the need to augment the staffing with significant part-time or full-time physicians, who may be difficult to recruit to the community. Certainly, the current model is seen as non-sustainable by the existing cohort of family physicians in Petrolia.

Furthermore, the continued ability to recruit and retain nursing staff, particularly given the work circumstances outlined above, makes us believe that the long-term sustainability of an ED questionable. Additionally, there will be significant operating expenses in order to bring the standard of nursing care to an acceptable level will be necessary if the facility continues to operate an Emergency Department.

The physical plant is in need of major renovation.

In order to achieve this transition, it is recognized that a number of changes will be necessary. These will include the need to ensure an adequate public information campaign to ensure that the residents of the community are aware of the limitations in hours and scope of service. It will also be necessary to ensure that Emergency Medical Services have the capacity to transfer all patients currently treated at the Petrolia site to Sarnia.

Whatever model of urgent care is chosen, it should operate for 12 to 16 hours per day, 7 days a week. Family physicians should staff the facility. It is acknowledged that in the current environment, an AFA, or other financial model specifically focused on Urgent Care Centres does not exist. The ESC LHIN, in cooperation with the family physicians working in Petrolia, will need to approach the Ministry of Health and/or the Ontario Medical Association (OMA) in order to ensure that such a model is in place.

Currently the family physicians work either solo or in small group practices. The hospital Board, community, physicians and ESC LHIN may wish to consider a model in which all family physicians would be co-located, supported by an on site laboratory and diagnostic imaging facility. There are a number of possible options

to consider. Given the existing facilities in the hospital, creating a comprehensive primary care clinic in the hospital would allow for proximity of the physicians to in-patients and capitalize on the existing infrastructure (lab and X-ray facilities).

If of sufficient size and proximity to the hospital, the use of the recently completed family physician's office built by the hospital foundation might be considered as a venue for the clinic.

A third option would be to construct an entirely new facility, but if this option were pursued, duplication of existing lab and DI resources would decrease the need for hospital-based services, but not eliminate the need for them entirely.

The outpatient clinics currently conducted by visiting specialists from Sarnia could be integrated into this facility, allowing it to become a model Family Health Team facility.

The following are directions for change and suggestions for the future development of Emergency Department/Urgent Care Centre services at CEEH:

- The Petrolia ED should eventually be re-designated and operated as an Urgent Care Centre.
- The ESC LHIN should ensure that the Sarnia hospital Emergency Department has the necessary infrastructure in place to accommodate an increased visit volume (this is a pre-requisite to the re-designation of the Petrolia ED as an Urgent Care Centre)
- After the changes to Sarnia Hospital have been completed (anticipated to occur in July of 2010) the Urgent Care Centre should commence operation for 12 to 16 hours per day, seven days a week
- Prior to the re-designation of the Petrolia Emergency Department, the ESC LHIN and EMS should ensure that a plan is in place for the triage and transfer of patients to the Sarnia hospital ED
- The ESC LHIN and the family physicians practicing in Petrolia should commence planning a financial model to support an Urgent Care Centre
- The ESC LHIN and the family physicians in Petrolia should explore the options for the development of a comprehensive primary care facility in which an array of services, including an Urgent Care Centre, may be provided

5.0 Chatham-Kent Health Alliance Sydenham Campus Emergency Department

5.1 Corporate Status

Formed in 1998, the Chatham-Kent Health Alliance (CKHA) is a 300 bed community hospital, created as a partnership of three hospital corporations. These include the Public General and St. Joseph's hospitals in Chatham, and the Sydenham District Hospital in Wallaceburg.

Wallaceburg is a rural community located in close proximity to Chatham (28 kilometres door to door from the Sydenham Campus to the Chatham Hospital). Formerly the community had a full-service hospital. However, the population has been diminishing, and its economic base steadily eroding. There remain 20 beds for acute inpatient medical care, and the hospital focuses on the provision of ambulatory services.

There is a desire on the part of the community to retain a hospital and the ongoing presence of an Emergency Department is seen as necessary to this notion.

5.2 Visit Volumes

The ED currently has approximately 21,100 visits per year, with only 34 CTAS level 1 patients (0.2% of all ED visits) and slightly in excess of 800 CTAS level 2 visits (3.9% of all ED visits). 4,076 visits (19%) were coded as CTAS level 3. The majority (over 16,000 or 76.7%) of visits are CTAS level 4 and 5 patients. Many patients seek primary care in the ED owing to the lack of family physicians in the community, contributing to the high numbers of CTAS level 4 and 5 patients. The lack of family physicians in the community results in long wait times for appointments at family physicians' offices. As a consequence, some ED visits are initiated by patients, physicians, or physician's office staff so that patients can see their family physician when he or she is known to be "on duty".

Details of the visit volume by CTAS level are in the table on the following page.

Distribution of ED Visits by CTAS Level for Sydenham Campus (CKHA) and Peer Hospitals

Hospital Site	CTAS Level 1	CTAS Level 2	CTAS Level 3	CTAS Level 4	CTAS Level 5	Missing CTAS Level	Total ED Visits	Driving Time (minutes)
Grey Bruce Health Services-Wiarton Site	22	449	2,685	8,528	1,728	35	13,447	34
Deep River And District Hospital	11	166	1,288	5,039	7,459	7	13,970	45
Charlotte Eleanor Englehart Site	11	41	1,741	12,092	1,137	16	15,038	35
Kemptville District Hospital	24	553	4,114	8,409	2,281		15,381	30
Alexandra Marine And General Hospital	33	174	2,788	10,324	2,164		15,483	80
Grey Bruce Health Services-Markdale Site	32	466	2,297	11,874	2,048	46	16,763	39
Winchester District Memorial Hospital	24	293	3,536	13,359	1,669	46	18,927	49
Haldimand War Memorial Hospital	20	306	3,671	13,058	2,395	28	19,478	36
Campbellford Memorial Hospital	33	527	3,958	13,623	2,547		20,688	53
Sydenham Campus - CKHA	**34**	**813**	**4,076**	**14,755**	**1,418**		**21,096**	**32**
West Nipissing General Hospital	18	289	3,302	9,705	7,783		21,097	35
Perth & Smiths Falls Dist-Smiths Falls	46	612	4,458	16,079	573	6	21,774	52
Carleton Place And District Mem Hospital	32	435	2,996	16,152	2,386		22,001	34
Glengarry Memorial Hospital	29	614	2,520	15,239	5,138	56	23,596	46
Strathroy Middlesex General Hospital	38	714	7,014	17,393	1,215	5	26,379	42
Leamington District Memorial Hospital	63	755	4,906	12,947	8,674		27,345	46
Renfrew Victoria Hospital	42	464	3,225	13,808	9,847	40	27,426	49
Stevenson Memorial Hospital Alliston	64	1,461	7,731	18,983	4,326		32,565	38

Source: Canadian Institute of Health Information (CIHI) National Ambulatory Care Reporting System (NACRS) Fiscal Year 2006-07.

5.3 Physical Plant

The physical plant is inadequate by current standards. There is no visual surveillance of the waiting room from the triage area. When more than a few patients are waiting, the "overflow" patients are placed in the main lobby, where vigilance is non-existent. This is a significant risk issue. The examining rooms have closing doors, which interfere with appropriate patient supervision by the nursing staff. CKHA is undertaking a master planning/programming role review, in collaboration with its regional partners, to document existing building deficiencies and identify future plans which include the Sydenham campus.

5.4 Staffing

The senior management team of CKHA has initiated its own review of Emergency Department services, focusing on the challenges which exist at both sites regarding sustainability and utilization. For the Sydenham Campus, the review was triggered by a number of events, most significantly the physician staffing challenges (and the costs associated with ensuring staffing) and the AFA income disparity between the Wallaceburg and Chatham sites. The review is ongoing and further review is anticipated.

5.4.1 Emergency Physicians

The centre in Chatham frequently faces severe staffing challenges, with as many as 60 shifts per year deemed vulnerable

Local family physicians, assisted by other physicians, currently staff the Emergency Department in Wallaceburg. There is an emergency medical director for CKHA who has been "acting" for two years, owing to the institution's inability to recruit a permanent full-time individual. The Emergency Department in Chatham frequently faces severe staffing challenges, with as many as 60 shifts per year deemed vulnerable. Up to 50 % of shifts in Sydenham and 35 % of shifts in Chatham are covered by non-CKHA physicians (locums, MedEmerg or HealthForceOntario).

There are currently six family physicians in practice in Wallaceburg, only two of whom work in the ED. Some physicians are considering diminishing their office workload. Recruiting to the community is seen as extremely difficult. This is attributable to a variety of reasons including, but not limited to, a hospital which provides only limited inpatient services. However, many new graduates in Family Medicine prefer to confine their activity to office based practice and to avoid providing care outside the office setting.

The department relies on a mix of the two local family physicians, "regular" visiting physicians, and a physician who travels from Toronto to work weekends in order to maintain the schedule. MedEmerg covers between two and four 12 to 14 hour shifts per week. There is a considerable operating expense associated with the use of MedEmerg which is being paid for by the hospital's annual budget.

There is a separate Alternate Fee Arrangement (AFA) at each site, resulting in income differences between the sites. It is perceived that the physicians working in Wallaceburg receive disproportionately higher income for the time spent. While this difference in income has been noted, with the exception of one physician, it has not resulted in Chatham physicians seeking to work in the Wallaceburg ED.

Technically, the department is required by the AFA agreement to have a second call physician, but it is acknowledged that there is no guarantee that a second call physician will be available.

5.4.2 Emergency Nursing

The nursing staff are felt by the physicians to be excellent, possessed of good attitudes, and are reported to work well in a team. Most have completed ACLS training. While past challenges in recruiting nurses have been encountered, the staffing complement is now full.

There have been no vacancies for greater than a year. There is a significant amount of sick call and arranging coverage has been reported as difficult.

There are many well-written comprehensive medical and nursing directives and protocols to support nursing staff.

5.4.3 Consulting Staff

There is a surgeon who lives and works in Wallaceburg, but no longer conducts a full surgical practice and is approaching retirement. No other consultant confines their practice to the community, but a number of Chatham based consultants, including ophthalmologists, paediatricians and internists, conduct clinics in the hospital on a visiting basis.

The hospital in Chatham is seen, in general, as providing good backup and access to consulting services, particularly when requested on an urgent or emergent basis.

Though Chatham is seen as the focus of first referral, those in need of trauma, neurosurgical, cardiothoracic, haematologic, or oncologic services are generally referred to London.

5.5 Medical Education

One family Physician teaches undergraduate and postgraduate learners in Family Medicine approximately three to four months per year.

5.6 Diagnostic and Support Services

The physicians are supported by X-ray and lab services. Diagnostic Imaging is open and staffed from 0800 to 2100 and then provides service on an “on call” basis between 2100 and 0800, 7 days per week. The laboratory is staffed from 0700 to 2300 and on call from 2300 to 0700, 7 days per week.

5.7 Quality Assurance

While a "site chief" of emergency medicine has been designated, the department does not operate as a fully functional department. There is no formal physician committee that performs the quality assurance function. There are no site specific chart reviews, morbidity and mortality reviews, rounds, or other quality assurance functions. Individual cases that are identified as “high risk” are reviewed

formally, and any recommendations that are made are acted upon accordingly.

The physicians report that there is no requirement for physician appointees to complete any continuing professional development in emergency medicine. Their perception is that the volume of activity at the Sydenham Campus is "sufficient" to allow them to maintain their skills. This perspective is not supported, and most Emergency Departments have minimum standards for continuing education for appointees. Physicians are required to have ACLS training.

Concern was expressed about the quality of care offered to First Nations residents of Walpole Island at the Sydenham Campus. Apparently, most individuals in that community prefer to seek care elsewhere owing to attitudinal issues which have arisen. CKHA has begun to meet with Walpole Island leadership to address this issue.

5.8 Challenges

The department faces many significant challenges, including:

- the lack of a sufficient local population of physicians to staff the department
- the reliance on "visiting" emergency physicians, particularly the use of agency physicians with attendant significant operating cost implications
- a lack of a corporate leader of the ED
- the lack of a quality assurance program which meets the standard expected of an Emergency Department
- the nurse staffing complement may be difficult to maintain
- a lack of on site comprehensive diagnostic and consultant support
- the absence of any inpatient capacity
- very low visit volumes which, particularly in light of the low volume of CTAS level 1 and 2 visits and the proximity of a full service site in Chatham, make the viability of the Wallaceburg site questionable
- the need for a major redevelopment not only of the ED, but the entire physical plant
- the uncertain nature of the Emergency Department staffing at the Chatham site, which requires that the corporation's time and energies should focus on the rejuvenation of that site as its highest priority

- the need for a viable ED in Chatham before any change to the Wallaceburg ED can be accomplished

5.9 Summary and Directions for Change

The Emergency Department at the Wallaceburg site should cease to operate as a full service ED. The CKHA and the ESC LHIN should plan the development of a facility in Wallaceburg, which will provide urgent care 12 to 16 hours per day, 7 days a week.

The combination of low visit volumes, difficulties with recruiting and retaining medical staff, and the reliance on physicians from agencies and/or other communities to staff the ED, in combination with a physical plant which does not meet standards, and the lack of on-site access to consulting services make this Emergency Department nonviable. The current situation will, almost certainly, only deteriorate in the near future, with increasing difficulties anticipated in the ability to recruit and retain medical and nursing staff.

There are acknowledged difficulties staffing and maintaining the ED in Chatham, which is the logical alternative to the service currently provided in Wallaceburg. It will be essential for the ESC LHIN, in collaboration with the Board and senior management team of the CKHA, to develop a plan for the Emergency Department in Chatham in order to ensure that patients living in Wallaceburg can be assured of timely access to emergency care.

There are two alternatives which may be considered for the Wallaceburg community:

1. Closure of the ED and the redirection of all patients to Chatham. This, however, would pose an undue burden on providers in Chatham and the population of Wallaceburg, which relies on the Sydenham ED for the provision of some services. Considerable concern was expressed regarding the wisdom of shifting the Emergency Department to Chatham. Many physicians cited the difficulties encountered in Chatham with staffing, perceived problems with physician-administration conflict, and historical ill feelings between sites in Chatham and Wallaceburg. As suggested above, these concerns must be addressed.

2. Consideration should be given to the creation of a comprehensive primary care facility in Wallaceburg. This may be done either within the confines of the existing hospital, or as a new construction project. In addition to urgent care services, the facility should provide a comprehensive array of primary care

services (including family medicine, ambulatory consultation with visiting specialists, and other health services, such as psychology, social work, or others deemed necessary). The facility can and should have diagnostic services available on site, including both laboratory and X-ray. Such a facility would assist greatly in facilitating recruitment of family physicians to the community, and would provide the residents of Wallaceburg, with the exception of those requiring true resuscitative and emergent care, with a venue in which the vast majority of emergency services could be provided.

The facility should provide urgent care services for CTAS level 3, 4, and 5 patients 12 to 16 hours a day, 7 days a week, with staffing provided by community family physicians. Nursing staff may be transferred from the current emergency facility. Income support for the physicians will need to be negotiated with the OMA and the Ministry of Health, but an AFA model is seen as ideal.

In keeping with current practice, it should offer an array of chronic disease management programs. The facility could, and should, focus on the provision of services to the residents of Walpole Island, and programs for First Nations Health.

The following are directions for change and suggestions for the future development of Emergency Department/urgent care services at the Sydenham Campus:

- The Emergency Department at the Wallaceburg site should cease to operate as a full service ED
- Prior to the closure, the CKHA should develop a comprehensive plan to ensure a viable Emergency Department at the Chatham site which will provide service to residents of Wallaceburg and Walpole Island
- The CKHA and the ESC LHIN should plan the development of a comprehensive primary care facility in Wallaceburg, which will include a facility for the provision of urgent care 12 to 16 hours per day, 7 days a week

Appendix A: Interviewees

Bluewater Health

- Sue Denomy, CEO
- Patty Chapman, VP Clinical Services
- Jim Elliott, Board Chair
- Spencer Dickson, Chief Nursing Officer, overseeing Quality Improvement/Risk Management
- Nursing Staff
- Dr. Martin Lees, Chief of Staff
- Dr. Frank Riedl, Medical Director of Rural Health
- Dr. John Butler, Administrator of AFA
- Connie Courtney, Site Director
- Denise Hart, Rural Health Manager

Chatham-Kent Health Alliance

- Linda McGivern, Manager Clinical Utilization
- Paul Heinrich, VP & CFO
- Nurses at Sydenham Campus
- Ken Tremblay, CEO
- Board Chairs
- Dorothy Letarte, Clinical Manager of Emergency Services
- Katherine Hewitt, Program Director ER/ICU/PCU/Community Health
- Dr. Bob Mayo, Physician lead of Sydenham Emergency Department and responsible for AFA
- Dr. Dale Pepper, Sydenham Emergency Department Physician Group
- Dr. Dennis Atoe, Sydenham Emergency Department Physician Group
- Dr. Farhang Eshagian, Sydenham Emergency Department Physician Group
- Dr. Sheri Roszell - Acting Medical Director of ED/Ambulatory Care & Community Health Program
- Dr. Gary Tithecott - Chief of Staff

Leamington District Memorial Hospital

- Warren Chant, President and CEO
- John Newland, Board Chair
- Barb Tiessen, VP Patient Services and Chief Nursing Executive
- Dr. Ejaz Ghumman, Chief of Staff
- Dr. Donald Levy, Director of Emergency
- Janice Dawson, Program Director-ER/Ambulatory & Specialty Services
- Kris Voycey, Clinical ER/Ambulatory Care
- Dr. Sheila Horen, Hospitalist
- Dr. Rachel Park, President of Medical Staff
- Dr. Enrique Guerra, Chief of Medicine
- ED Nursing Staff

Appendix B: Background Documents

1. Strategic Review of the Charlotte Eleanor Englehart (CEE) Hospital of Bluewater Health - Rural Health Findings and Recommendations
2. CKHA Emergency Program Plan 2007/2009 - Emergency Department / Ambulatory Care / Community Heath
3. Report of the Investigation of Bluewater Health – Rural Health
4. "Rural Health Care Works" A Strategic Directions Proposal for the Appropriate Growth of Programs for Charlotte Eleanor Englehart Hospital of Bluewater Health. A Rural Health Facility

Appendix C: Hospital Data

Bluewater Health

- Blank Physicians and Nursing Charts
  - Consultation Form
  - Emergency Nurse's Assessment Record
  - Emergency Record
  - Home Medications
  - Physician Orders
  - Emergency Department Procedural Sedation Record
  - Progress Notes
  - Complaints
  - Notes of Complaint and Letters of Response
  - Response Letter and Complaint Letter
- Medical Directives
  - Adult Fever Management
  - Ankle and Foot X-rays
  - Chest Pain
  - Hypoglycemia
  - Instillation of Topical Anesthetic for Eye Discomfort
  - Pediatric Fever Management
  - Tetanus-Diphtheria-Pertussis Immunization
  - Unwitnessed Cardiac Arrest
  - Wrist X-rays
- Organizational Charts
  - Structure Chart
  - Reporting Structure Chart
- Alternative Funding Agreement for Emergency Services (24 hour model)
- Alternative Funding Agreement for Emergency Services (24 hour model) Premium Payments Amendment No. 1
- Annual Report to Department of Rural Health – Report of EOR and Ambulatory Care Sub Committee
- Revised By-Law #1 – June 2006
- ED meeting June 2008 Minutes
- ED meeting May 2008 Minutes
- Job Description - Medical Director-Chief
- Preliminary Accreditation Report
- Rural Health October 2007 Minutes

Chatham – Kent

- Complaint and Safety Reports
  - Acute Care Report (ER)
  - WER Complaints for April 2007-March 2008
  - WER Complaints for April 2008-Sept 2008
  - WER Safety Report for April 2008 - Sept 2008
  - WER Safety Report for April 2007-March 2008
- Emergency Nursing Practice Guidelines
  - # 9600 Cardiovascular Disorders
  - # 9601 Respiratory Disorders
  - # 9602 Gastrointestinal Disorders
  - # 9603 Genitourinary Disorders
  - # 9604 Cerebrovascular Disorders
  - # 9605 Musculoskeletal Disorders
  - # 9606 Obstetrical-Gynecological Disorders
  - # 9607 Integumentary Disorders
  - # 9608 Metabolic-Endocrine Disorders
  - # 9609 Psychological Disorders
  - # 9610 Neurological Trauma
  - # 9612 Clinical Record (Nursing Assessment)
  - # 9612 Triage Form (Pre-Hospital Info)
  - # 9613 Thoracic Trauma
  - # 9614 Abdominal Trauma
  - # 9615 Facial Trauma Form
  - # 9616 Ocular Disorders Form
  - # 9617 Near Drowning
  - # 9618 Allergic Reaction – Anaphylaxis
  - # 9619 Hypothermia
  - # 9620 Electrical Injuries
  - # 9621 Substance Abuse
  - # 9622 Poison Control Centre - Record of Toxicology
  - # 9623 Epistaxis
  - # 9686 Neurological Observation Record
  - # 9720 Clinical Group Score Record for Paediatric Admission
  - # 9901 Vascular Disorders
- Order Sets
  - Deep Venous Thrombosis (DVT) Risk Assessment
  - Alcohol Withdrawal Prophylaxis & Treatment
  - Adult Empiric Treatment of Bacillus Anthracis and Yersinia Pestis Order Set

  - Suspected or Confirmed Clostridium Difficile-associated Diarrhea
  - Congestive Heart Failure (C.H.F.)
  - Adult Inpatient Therapy – Community Acquired Pneumonia
  - Adult Outpatient Therapy – Community Acquired Pneumonia
  - Fractured Hip Care Pathway-Emergency/Pre Op Phase
  - Symptomatic Hypocalcemia
  - Hypomagnesmia Protocol
  - Treatment of Hypophosphatemia
  - Mechanically Ventilated Patient
  - Nicotine Replacement Therapy
  - Routine Coronary Care
  - Stroke Admission Orders – Initial Investigations
  - Alteplase (t-PA) for Acute Ischemic Stroke
- Alternative Funding Agreement for Emergency Services (24 hour model)
- Credentialing and Mid-Term Revocation Policy – Medical Staff and other Professional Staff
- Duties of Chief of Department as per By-Law #1, June 2007
- Responsibilities of Medical Program Director
- Medical Advisory Committee Minutes Re: Emergency Department. Sept 06 – Sept 08
- Emergency Department Medical Directives and Advanced Triage Protocols for Diagnostic X-rays, Diagnostic Laboratory Studies, Medical Administration, Urinary Catheterization, Immunization
- Functional Organization Chart
- Turn Around Time for samplings of ER requested Lab tests for the Wallaceburg Sydenham campus
- Turn around time for patients at SC-ED for Diagnostic Testing

Appendix D: Glossary of Terms

a cu'i ty le vel (Page 2)
Pronunciation: uh-kyoo-i-tee **lev**-*uh*l
Definition: groups of patients requiring similar intensity of care

AFA - Alternate Funding Arrangement (Page 11) - is a model of physician payment not based on fee for service

ALC - Alternative Level of Care (Page 14) –patients' whose care is best undertaken outside of an acute hospital

ACLS - Advanced Cardiac Life Support (Page 11) – Pre-packaged learning program focused on Acute Cardiac Emergencies

ALS - Advanced Life Support (Page 15) – Advanced skills taught to Paramedics

car·dio·tho·rac·ic (Page 23)
Pronunciation: kär'dē-ō-thə-rās'ĭk
Definition**:** relating to the heart and chest

Chronic Disease Management (Page 9) - is a systematic approach to improving health care for people with chronic disease (e.g. diabetes)

Comprehensive Primary Care Facility (Page 27)
Definition: healthcare facility with the potential to attend to all of the patients' physical and emotional needs and not requiring the resources of a hospital

con tex'tu al (Page 1)
Pronunciation: k*uh* n-**teks**-choo-*uh*l
Definition: of, pertaining to, or depending on the context. The whole situation background, or environment relevant to a particular event

CPR - Cardio-Pulmonary Resuscitation (Page 4) - is an emergency medical procedure for a victim of cardiac arrest or, in some circumstances, respiratory arrest. CPR is performed in hospitals or in the community by laypersons or by emergency response professionals

CTAS - Canadian Triage Acuity Scale (Page 4) - The Canadian Triage and Acuity Scale is a 5 level scale designed to allow care providers to assign a relative priority of care to all incoming patients. It has also been adapted for other functions, such as

workload measurement and to create guidelines for the timeliness of care, but its origins are to define the priority of treatment

CT Scan - Computer Tomography Scan (Page 13) – a specialized diagnostic imaging technique

de·fib'ril·la'tion (Page 4)
Pronunciation: dē-fĭb'rə-lā'shən
Definition: the application of electrical energy to reverse uncontrolled twitching of the heart muscle

der·ma·tol·o·gy (Page 23)
Pronunciation: dur-muh-**tol**-uh-jee
Definition: The branch of medicine that deals with the diagnosis and treatment of skin diseases

dis·pro·por·tion·ate (Page 30)
Pronunciation: dis-pr*uh*-**pawr**-sh*uh*-nit
Definition**:** being out of proportion as in size or number

ED - Emergency Department (Page 1) - sometimes termed the emergency room (ER) is a hospital or primary care department that provides initial treatment to patients with a broad spectrum of illnesses and injuries, some of which may be life-threatening and requiring immediate attention

HealthForceOntario (Page 10) is the province's strategy to ensure that Ontarians have access to the right number and mix of qualified healthcare providers. HealthForceOntario, which includes the HealthForceOntario Marketing and Recruitment Agency (HFO MRA), involves the Ministry of Health and Long-Term Care (MOHLTC) and the Ministry of Training, Colleges and Universities (MTCU).

hae·ma·tol·o·gy (Page 23)
Pronunciation: hee-m*uh*-**tol**-*uh*-jee
Definition: a medical science that deals with the blood and blood-forming organs

hos-pi-tal-ist (Page 12)
Pronunciation: hŏs'pĭt-l-ĭst
Definition: a physician who specializes in treating hospitalized patients

in tra·de'part·men'tal (Page 14)
Pronunciation: in-**tra**-di-**pahrt**-m*uh*nt-al
Definition: within a department

JPPC Joint Policy and Planning Committee (Page 18) - was a partnership between the Ontario Ministry of Health and Long-Term Care (MOHLTC) and Ontario's hospitals through the Ontario Hospital Association (OHA).

MedEmerg (Page 1) - Established in 1983 as an emergency department staffing agency, MedEmerg provides a wide variety of healthcare services, including consulting, to all levels of government, hospitals, private clinics and laboratories throughout the country.

mit'i gate (Page 2)
Pronunciation: **mit**-i-geyt
Definition: to make (a person, one's state of mind, etc.) milder or more gentle; appease

mor·bid·i·ty (Page 24)
Pronunciation: mawr-**bid**-i-tee
Definition: suffering from or under treatment for a disease

neu rol o gy (Page 23)
Pronunciation: noo-rol-uh-jee
Definition: The branch of medicine devoted to the study and care of the nervous system

NP - Nurse Practitioner (Page 11) - is a registered nurse who has completed specific advanced nursing education (generally a master's degree) and training in the diagnosis and management of common as well as complex medical conditions. Nurse Practitioners provide a broad range of health care services

ob·stet·ric (Page 23)
Pronunciation: *uh*b-**ste**-tri-k*uh*
Definition: relating to, or associated with childbirth

OMA - Ontario Medical Association (Page 26) - represents the political, clinical and economic interests of the Province's medical profession. Practicing physicians, residents, and students enrolled in any of the five Ontario faculties of medicine are eligible for OMA membership

on·col·o·gy (Page 23)
Pronunciation: ong-**kol**-*uh*-jee
Definition: the study of malignant or cancerous diseases

or·tho·pae·dics (Page 12)
Pronunciation: awr-th*uh*-**pee**-diks
Definition: the medical specialty concerned with correction of deformities, diseases and injuries of the bones, joints, muscles, etc.

oto·lar·yn·gol·o·gy (Page 12)
Pronunciation: oh-toh-lar-ing-**gol**-*uh*-jee
Definition**:** a medical specialty dealing with disorders of the ear, nose, and throat

Point-of-Care Machines (Page 13) – a laboratory machine that is used to conduct blood tests at or near the patient's bedside

postgraduate (Page 23) – A person continuing to study in a field after having successfully completed a degree course

req·ui·si·tion (Page 10)
Pronunciation: rĕk'wĭ-zĭsh'ən
Definition: A formal written request for something needed

re·sus'ci·ta'tion (Page 4)
Pronunciation: rĭ-sŭs'ĭ-tā'shən
Definition: an effort to correct serious or life-threatening illness or injury

rheu·ma·tol·o·gy (Page 23)
Pronunciation: roo-m*uh*-**tol**-*uh*-jee
Definition: the study and treatment of rheumatic (joint and muscle) diseases

Scheduled ED Visit (Page 18) - means a planned visit to the Emergency Department

sus·tain a·bil'i·ty (Page 1)
Pronunciation: s*uh*-**steyn-a-bil-ity**
Definition: the ability to maintain or prolong

ter·tia·ry (Page 21)
Pronunciation: **tur**-shee-er-ee
Definition: a highly specialized service

Tracking Board (Page 9) – A whiteboard used in the Emergency Department for nurses to track patients. Through various icons, a nurse is able to determine the status of a patient in emergency, including the diagnosis and whether the patient needs to be admitted. There is even a column that indicates whether a patient has checked out or whether he or she is still waiting for a ride home

undergraduate (Page 23) - a university student who has not yet received a first degree

u·rol'o·gist (Page 12)
Pronunciation: y*oo*-**rol**-*uh*-jist
Definition: a physician who specializes in the urinary tract (kidney or bladder)

Appendix E: Consultant Biographies

Amy Brans

Toronto, Canada

Consultant
Hay Group Health Care Consulting

Areas of Expertise

Amy Brans is a consultant with Hay Group Health Care Consulting based in Toronto. Her consulting focuses on population-based and clinical service analyses in support of health system planning. Amy also provides consulting assistance in the areas of strategic planning and business development.

Past Experience

Prior to joining Hay Group, Amy was an Associate Consultant at Bain & Company, a strategic consulting firm. At Bain Amy worked on consulting projects in areas such as strategic planning, growth strategy, cost reduction and operational effectiveness.

Education and Affiliations

Amy has a Bachelor of Applied Science in Industrial Engineering from the University Of Toronto. She has a certification in ProcessModel introductory skills. Amy is a member of the Canadian College of Health Services Executives.

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Isser Dubinsky

Toronto, Canada

Associate Director
Hay Group Health Care Consulting

Areas of Expertise

Dr. Isser Dubinsky is an Associate Director of Hay Group Health Care Consulting. He joined Hay Group from Miltom Consulting Inc. where he was Vice President. Dr. Dubinsky's academic and consulting focus includes improving the effectiveness and efficiency of healthcare services, human resource planning, physician compensation, conflict resolution, evaluation and assessment of new technologies and physical plant development and redevelopment.

Past Experience

Prior to entering consulting, Dr. Dubinsky was Chief of the Department of Emergency Medicine at University Health Network. Prior to this he was Chief of Emergency Medicine at North York General Hospital, one of Canada's busiest emergency departments.

He was member of the Medical Advisory Committee of both North York General Hospital and the University Health Network, a member of the Board of North York General Hospital, Program Director of the Emergency Medicine program at North York General Hospital, and a member of the Hospital Executive at both the Toronto Western and North York General Hospitals.

Prior to NYGH, Dr. Dubinsky was Chief of Anaesthesia at Memorial Hospital in Bowmanville. Following graduation from medical school he had a range of experiences from performing mission work in rural hospitals in Africa to working in small community hospitals in Canada.

Education and Affiliations

Dr. Dubinsky is an honours graduate from U of T's medical program (1975).

Dr. Dubinsky is currently an Associate Professor in both the Department of Family and Community Medicine and the School of Health Policy Management and Evaluation at University of Toronto. He has published more than thirty articles in scientific literature, served as an editor of two textbooks on emergency medicine, lectured around the world and has served as a visiting professor in the United States, Malaysia, Israel, and Japan. He is the past winner of many awards for excellence in teaching, including the prestigious PAIRO award.

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Adam R. Topp

Toronto, Canada

Senior Associate Consultant
Hay Group Health Care Consulting

Areas of Expertise

Adam Topp is a Senior Associate Consultant with Hay Group Health Care Consulting focusing on health care policy developments, health services planning and hospital operations and management.

Past Experience

Prior to joining HayGroup Adam was most recently Vice President Clinical Operations at Sunnybrook & Women's College Health Sciences Centre where he also previously held the position of Vice President Corporate Performance & Chief Financial Officer. He has served on and advised several Ontario Joint Policy and Planning Committee subcommittees on hospital funding.

Education and Affiliations

Adam is a PhD candidate in the Department of Health Policy Management and Evaluation at the University of Toronto. Adam's thesis is looking at trends in private delivery of health care services in the hospital sector. He holds an MBA and a BA&Sc from McMaster University.

Adam currently serves as Past-Chair of the Board of Directors of the Healthcare Insurance Reciprocal of Canada, is a member of the Board of the Anne Johnston Health Station (CHC) and is a member of the Board of Closing The Gap Healthcare Group. He has previously been a Board member for several health related groups including the East York Access Centre for Community Services, the Ontario Association of Community Care Access Centres, SD Laboratories, Shair International, Healthlink Finance and Booth Centennial Healthcare Linen Services.

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