Emergency Care Task Force

Report to
the Honourable David Chomiak,
Minister of Health, Province of Manitoba

July 28, 2004

Winnipeg Regional Health Authority
Caring for Health

Office régional de la santé de Winnipeg
À l'écoute de notre santé

Executive Summary

As a result of concerns raised by the public regarding Emergency Department services in Winnipeg hospitals, the Minister of Health for the Province of Manitoba appointed the Emergency Care Task Force in January 2004. As well, he appealed to the head of the National Health Council to place the status of Emergency Departments across the country on the national agenda.

The Emergency Care Task Force has met nine times since its inception. Task Force members have heard from patients and staff, visited Winnipeg Regional Health Authority (WRHA) Emergency Departments and done an extensive literature review. Following this work, several themes were evident:

- Emergency Departments throughout Canada and indeed the rest of the world, are facing similar problems, although there are some challenges unique to Winnipeg;
- Problems in the Emergency Department can not be considered in isolation from the rest of the system because what happens in an Emergency Department is intertwined and connected to what happens in other parts of the hospital and to what is happening in the health care system as a whole;
- The situation we are faced with today has developed over a number of years as changes in health care have evolved – often in response to some new problem such as a shortage of family doctors, but just as often to address new innovations;
- Challenges being faced in Emergency Departments are very much the product of routines and processes; attitudes and beliefs built-up over time in the health care system and that are now entrenched.
- There will be no quick fix for the problems facing Winnipeg's or any other cities' Emergency Departments. To address these issues it would be necessary to prioritize Emergency Department patients above others in the healthcare system.

The Task Force developed the following set of principles to guide its work. The Task Force recommends that these principles be endorsed and adopted by facilities and programs in the Winnipeg Regional Health Authority:

> *Every patient is entitled to, and will receive, timely access to care in any Emergency Department within the Winnipeg Regional Health Authority.*
>
> *Every patient who accesses healthcare through a Winnipeg Regional Health Authority Emergency Department is entitled to, and shall be, treated as an individual with personal dignity, concern and respect. In addition it is recognized that every Emergency Department visit is, for the patient, an unplanned, unwanted and stressful disruption in their lives.*
>
> *The Winnipeg Regional Health Authority – at all levels and in every facility and program – is committed to the implementation of the Emergency Care Task Force recommendations as well as to continuing to find new, improved and innovative ways to improve the quality of care received by patients in all Emergency Departments.*

Finally, in bringing forward this report, the Task Force members want to recognize the quality work performed by emergency healthcare personnel, particularly in the face of identified structural, procedural and resource limitations and impediments. The Task Force believes that the wide range of recommendations listed on the next three pages, and outlined more comprehensively elsewhere in this report, will result in significant improvements in Emergency Departments in the Winnipeg Regional Health Authority.

The Task Force recognizes that it is neither feasible nor prudent to implement all the recommendations immediately. Some changes have been undertaken already and others have been identified to proceed in the near future. However, it is important to thoughtfully evaluate the impact of these first changes before implementing others. Therefore, it will be necessary to continue to review, revise and prioritize recommendations in the future. It is also recognized that throughout this process resource allocation will be an issue.

It is important to note the situation being faced now is the result of an evolving healthcare system. The system will continue to change long after these recommendations are implemented and there will be new challenges for the system to face in the future. However, the Task Force believes implementing these recommendations will position the Emergency Departments to respond effectively within the evolving healthcare system.

Summary of Recommendations

Implementation is Ongoing
Abstracting of Emergency Department Charts The Medical Records Department at Misericordia should continue to abstract all Emergency Patient visits.
Acute Coronary Syndrome Care Map The WRHA will implement the Acute Coronary Syndrome Care Map in all Emergency Departments.
Education for Emergency Department Nurses The Emergency Program will develop and deliver educational programs to support the clinical practice of ED staff. A Regional Emergency Department Educator will be hired to ensure standardized education is delivered regionally.
Geriatric Program Assessment Team (GPATs) - Processes with Home Care The Winnipeg Regional Health Authority (WRHA) Rehab/Geriatric Program will work with the WRHA Home Care Programs to develop a process to allow the Geriatric Program Assessment Team (GPATs) to work directly with Home Care Resource Coordinators to provide improved care for patients in the Community.
Geriatric Program Assessment Team (GPATs) - Standardizing The WRHA Rehab/Geriatric Program will review processes being used at sites by Geriatric Program Assessment Teams (GPATs) to ensure that there is a standardized approach to the assessment process in EDs throughout the Region. The GPATs will prioritize Emergency Department patients within their caseload.
Guiding Principles for Emergency Department Care The Emergency Care Task force recommends that the Winnipeg health care system adopt a series of guiding principles for Emergency Department care.
Nurse Initiated Procedures/Treatment The WRHA Emergency Program to develop and implement standardized processes for nurse initiated procedures.
Public Education: Health Services The WRHA should continue providing general information for the public and develop specific strategies for defined populations about the spectrum of services available and the appropriate use of those services.
Reassessment Role The WRHA Emergency Program should introduce a new role to Emergency Rooms at tertiary, community and Misericordia Urgent Care to ensure patients waiting to be seen are waiting safely by having them reassessed. This nurse, in partnership with the Triage Nurse, will act as an advocate for the patient and family.
Review of Acute Care Bed Base The WRHA should undertake a review of the current acute care bed base relative to other regions in Canada.
Space in Emergency Departments Redevelop the Emergency Departments at Health Sciences, Victoria General Hospital, Seven Oaks Hospital, Concordia Hospital, Misericordia Urgent Care and St. Boniface Hospital.
Specialty Sites The Winnipeg Regional Health Authority should continue to designate sites that specialize in certain health care services. This can focus providing services to high volume or high-risk categories of patients to ensure expertise.
Surgery Beds Reserved for Emergencies Providing timely access to surgical beds for Emergency Department patients, will be facilitated by "reserving" beds above and beyond what is required to manage the elective surgical slate at each site for emergency surgery cases.
Temporary Acute Care Beds The WRHA continue to facilitate processes that enable sites to open "Temporary Beds" as a response to a high number of patients in Emergency Departments that require admission to an inpatient unit.
Training regarding Atypical Cardiac Symptoms Training will be provided to all Winnipeg Regional Health Authority (WRHA) Emergency Department staff on patients with atypical presentation of cardiac problems.
Transfer of Admitted Patients Winnipeg Regional Health Authority will develop a process to facilitate transfer of Emergency Department patients who need to be admitted, from a site that does not have capacity to admit, to a site that does.
Utilization Management Tool Purchase and implement a commercial Utilization Management Tool (off-the-shelf appropriateness of admission and stay software) for the six acute care facilities within the Winnipeg Regional Health Authority.

To Be Implemented Immediately
Computerized Triage System (e-triage) Funding be provided for an additional e-triage computer station at each of the Emergency Departments, including HSC Children's.
Diagnostic Imaging Readers The Emergency Departments at Concordia, Health Sciences Centre, St. Boniface and Seven Oaks should be provided with Computerized Diagnostic Imaging Readers to view X-Rays and CT Scans.
Discharge Facilitators A Discharge Facilitator, Medicine Program position be implemented at St. Boniface General Hospital, Grace General Hospital and Victoria General Hospital, where the Medicine Program has responsibility for in-patient beds. In addition, the Winnipeg Regional Health Authority Family Medicine Program will examine the need for similar positions at Concordia and Seven Oaks Hospitals.
Fast Track The Winnipeg Regional Health Authority Emergency Program should institute a minor treatment system, "fast-track", at each Emergency Department, to reduce wait times for less urgent patients.
'Left not Seen' - Follow Up Using the expertise of staff and systems within HealthLinks, the Winnipeg Regional Health Authority will develop a system where HealthLinks staff make telephone contact with patients who leave Emergency Departments before being treated to ensure they are receiving an appropriate response for their condition.
Mental Health- Improving Access to Urgent Emergent Services WRHA Mental Health Team will implement process changes to improve access to emergent and urgent services for individuals requiring mental health services.
Mental Health - Reducing Length of Stay in Emergency Departments WRHA Mental Health Team will implement process changes to reduce length of stay in the Emergency Department for individuals requiring mental health services.
Miscarriage - Early Pregnancy Loss Winnipeg Regional Health Authority (WRHA) will develop and implement strategies to improve the quality of care provided to patients presenting to an Emergency Department with early pregnancy loss (miscarriage).
Orthopedic Trauma Surgery Slates During Daytime Hours The Winnipeg Regional Health Authority (WRHA) Surgery Program will create day Orthopedic Trauma slates.
Project Management Approach The Winnipeg Regional Health Authority (WRHA) should apply project management principles to implement specific recommendations made by the Emergency Care Task Force.
Resuscitation Room Staffing Dedicated staffing be funded for the Resuscitation Room at Health Sciences Centre Adult Emergency to support their Regional role in Trauma and Neurosurgery. In addition, a pre-hospital protocol will be developed which will divert all major trauma patients to Health Sciences Centre Emergency Department.
Waiting Room Enhancements The WRHA Emergency Program and sites will ensure that projects to redevelop Emergency Departments include provisions for waiting room enhancements to promote patient comfort. In sites where no redevelopment is planned, sites should assess the Emergency waiting room environment to identify opportunities to improve patient comfort.

To Be Implemented As Soon As Possible
Business Processes Review The Winnipeg Regional Health Authority should undertake a detailed review of current processes in Emergency Departments. This review should be conducted by a team of experts including, but not limited to, industrial engineers, business process consultants and health care professionals.
Diagnostic Service Enhancements Increase diagnostic imaging services after hours.
Inter-Facility Transport Augment the existing Winnipeg Regional Health Authority Inter-Facility Transport Team by adding an additional transport unit, 24 hours/day, 7 days per week.
Intoxicated Persons Management The WRHA should continue working with the City of Winnipeg to expand the options in the community for managing intoxicated people as alternatives to care in the Emergency Department.
Lab Results Diagnostic Services of Manitoba (DSM) will decrease turnaround times for laboratory tests for Emergency Department patients and enable plans at all sites to meet these goals.
Pan Am Clinic Urgent Care An Urgent Care Centre focused on musculo-skeletal injuries should be established at the Pan Am Clinic
PCH Residents Care A set of guidelines should be developed outlining the process to send PCH residents to an Emergency Department as well as the process for them to return to their PCH. A Nurse Practitioner will be hired to provide augmented primary care services for PCH residents.
Physician Supply Increase the number of training positions in the Canadian College of Family Physicians Emergency Medicine (CCFP-EM) residency program and the Royal College Emergency Medicine Program at the University of Manitoba.
Quality Review Process Winnipeg Regional Health Authority (WRHA) will develop and implement a process to measure the quality of patient experiences in Emergency Departments.
Scheduled Visits Facilities in the Winnipeg Regional Health Authority will develop plans to eliminate scheduled visits in Emergency Departments.
Social Work Enhancements Social Work resources should be improved in Emergency Departments.
Support Staffing The Winnipeg Regional Health Authority (WRHA) Emergency Program should review support staffing at all sites.
Tracking System An electronic patient tracking system should be purchased and installed in all Winnipeg Emergency Departments.
Treat - No Transfer The Winnipeg Regional Health Authority (WRHA)/Winnipeg Fire Paramedic Service (WFPS) Joint Operations Committee be requested to review the feasibility of increasing the use of "Treat-No Transfer" protocols (also known as Treat and Release protocols) in the pre-hospital environment.

Long Term Implementation
Health Information System Project Manitoba Health should continue to support the Health Information System Project (HISP) at St. Boniface Hospital and facilitate implementation of this system at facilities throughout the Winnipeg Regional Health Authority.
Mental Health Alternatives to Emergency Departments The Winnipeg Regional Health Authority Mental Health Team will develop a comprehensive Crisis Response Centre that would function as the main point of access to the health care system for patients with mental health issues.
Physician Staffing Model The Winnipeg Regional Health Authority Emergency Program will determine the feasibility of a model for on-call Emergency Department physician coverage at all sites.

APPENDICES:

Appendix A: Public Input about Emergency Departments: Final Report
Appendix B: Recent and ongoing perception measures of health care and emergency services
Appendix C: Update to WRHA staff re: Emergency Room Care
Appendix D: Staff Input (received by mail or phone) about Emergency Departments: Final Results
Appendix E: Emergency Care Task Force – Meetings with Emergency Department Staff Summary
Appendix F: Potential & Actual Pregnancy Loss Focus Group Findings
Appendix G: Literature Review – Emergency Crowding & Throughput
Appendix H: Emergency Department Wait Times and Length of Stay Audit: Preliminary Summary
Appendix I: Summary of Emergency Department Patient Tracking System Presentation

Background

On September 25, 2003, 74-year-old Dorothy Madden died in a Winnipeg Emergency Department (ED) after waiting six hours without being seen by a physician, and without being reassessed from the time of her initial triage. She had gone into cardiac arrest as a result of a heart attack she had suffered three days earlier. The Chief Medical Examiner (Dr. Balachandra), who considered calling an inquest into the death, had serious concerns about the length of time she had waited. Members of the Winnipeg Regional Health Authority (WRHA) Emergency Program met with Dr. Balachandra and provided him with the changes in processes and procedures it had been working on aimed at improving ED service.

On January 7, 2004, 20-year-old Melissa O'Keefe suffered a miscarriage in a Winnipeg ED, after waiting almost four hours without seeing a doctor and again without being reassessed following her initial triage. Within days, many more women came forward publicly to share their stories of waiting hours without being seen by medical staff and then miscarrying. Again the issue of ED wait times was front and centre with the public.

Something needed to be done to address these concerns however, it was apparent this issue would not be solved easily or with a single strategy. With six adult Emergency Departments, one pediatric Emergency Department and one Urgent Care Centre in the region, each open 24 hours a day, 7 days a week, 365 days a year, Winnipeg's EDs receive over one quarter million visits a year.

The problems being raised in the press were not unique to Winnipeg medical facilities; that same week in January 2004 as the Melissa O'Keefe incident the following headlines ran across the country:

> *Montreal: "LeDevoir's Jean-Robert Sansfacon laments the dramatic increase in the number of ER patients who have to wait more than 48 hours in a hospital ER."*
>
> *Halifax: "Emergency room nurses at Nova Scotia's largest hospital say patient gridlock remains grave and more beds are desperately needed to help manage what they say is a crisis."*

In January 2004, Manitoba's Health Minister appointed the Emergency Care Task Force. As well, he successfully appealed to the head of the National Health Council to place the status of EDs across the country on the national agenda.

Within days of its formation the Emergency Care Task Force developed a list of four recommendations to be implemented as soon as possible:

- Add a nurse reassessment role in each ED. Under this new role, a designated nurse would be responsible for monitoring and communicating with patients and their families after they have been triaged while they are in the waiting area. These nurses would also ensure that patients are being monitored while in the examining room until seen by a physician, that any change in status is communicated to the rest of the ED team and that reassessments are done in a timely manner.
- Pilot a Nurse Practitioner minor treatment stream (fast track) at Health Sciences Centre's (HSC) ED to provide an alternative to less-urgent patients and free existing staff to focus on the more urgent cases.

- Formalize the process to open Temporary Beds at each hospital as needed so patients who need admission can move more quickly out of the ED to inpatient beds. Temporary beds are inpatient beds that are not normally used by facilities to provide care. The ability of facilities to open these beds is dependent on a number of factors including space and the availability of staff.
- Enhance training for ED staff, including a new course for ED nurses and ongoing training in the recognition of atypical cardiac symptoms.

Those changes are currently being implemented and are the starting point of improvements to the ED. The work of the Task Force is ongoing. What follows is a report outlining recommendations of the Task Force to the Minister of Health.

Because there are many factors that contribute to ED wait-times and the care patients receive while in EDs, the recommendations of the Task Force are in the following categories:

Input: What happens before someone arrives at an ED;
Throughput: What happens once someone is in an ED; and
Output: What happens that allows, and prevents, someone leaving an ED.

As stated in a recent publication by an American healthcare consulting firm, Emergency Departments can be considered as the front door to the health care system. For many patients, this is the initial point of contact. The public's perception of the health care system may be formed on the basis of the level of compassion, efficiency and professionalism and customer service experienced during a visit to the Emergency Department. In addition, Emergency Departments are an integral part of a complex system. They are intimately related to many other programs in the healthcare system and as such are profoundly affected by any changes. For example, a change in delivery of primary care or specialists services can have a significant impact on the number and type of visits to an Emergency Department. Therefore, it follows that there is no one solution to improve Emergency care. The factors that impact patient care and wait times are complex and numerous. Efforts to address this problem must include an integrated plan that attempts to take into account all known factors and address them as a group.

Mandate of the Emergency Care Task Force

The Emergency Care Task Force, appointed by The Honorable David Chomiak, Minister of Health for the Province of Manitoba, has been tasked with three main objectives:

1. Listen to patients and families who have concerns about their emergency care experiences:
   - to ensure that there is appropriate review and investigation of individual cases; and
   - to ensure that patients and families have access to appropriate supports and resources.

2. Work with emergency department staff, hospitals and the Office of the Chief Medical Examiner to develop further improvements to emergency care in Winnipeg. Issues to be examined include:

   - Emergency Department staffing levels.
   - Expanding urgent care to reduce pressures on EDs.
   - Expanding the role of other health care professionals – such as nurse practitioners, in improving emergency care.
   - Capital improvements – such as fast track options- that reduce wait times in Emergency Departments.
   - Developing and meeting target wait times for ED patients to be seen by doctors.

3. Oversee implementation of improvements to emergency care in Winnipeg hospitals, including the current Winnipeg Regional Health Authority (WRHA) Action Plan for Emergency Department Care and Waiting Times and long-term improvements that the Task Force identifies.

Members of the Emergency Care Task Force

Jan Currie, Chair	Vice President and Chief Nursing Officer, WRHA
Harold Buchwald	Winnipeg resident
Shirley Delaquis	Registered Nurse, WRHA Board Member
Neil Duboff	Winnipeg resident
Pat Hosang	Executive Director, Urban Regional Support Services, Manitoba Health
Lori Motluk	Program Director, Emergency Program, WRHA
Sandi Mowat	Registered Nurse, Former Emergency Room nurse, Winnipeg resident
Dr. Wes Palatnick	Medical Director, Emergency Program, WRHA
Dr. Rob Robson	ED Physician and Director of Patient Safety, WRHA
*Johanna Abbot	Office of the Chief Medical Examiner

*Following the first meeting of the Task Force, correspondence was received from the Office of the Chief Medical Examiner, indicating that it was respectfully declining the invitation to send a representative to this group.

How the Committee Conducted its Work

Public / Staff Input

Feedback from the public, health care staff and physicians:

The public was asked, through the media, to call the WRHA with their stories and comments about emergency room care. Despite this public appeal, only approximately one hundred people called the WRHA in response.

Approximately 70% of the callers (those who could be reached / left contact information) received a reply from a WRHA Quality Department staff member and each was asked if she/he would like their case reviewed. This is the normal process followed by WRHA in response to any patient complaint. Those who said yes had their information forwarded to the appropriate site to conduct the follow-up (Appendix A). Women who had experienced a miscarriage in the ED were asked if they would be interested in participating in a focus group.

As indicated earlier, more than 250,000 visits are made each year to access Emergency services in facilities in the WRHA. Therefore, this limited response could not be seen as representative of the public's experiences with Emergency Care in Winnipeg. In an effort to gain more insight into the public's perceptions of ED Care, the Task Force received a summary of various surveys previously done regarding patient satisfaction (Appendix B). As a rule, these surveys were focused on evaluating the system as a whole and therefore, did not provide any further insight into ED specific issues.

Emergency Staff Input

A letter was sent to all health care staff and physicians requesting their comments (Appendix C). The request was repeated in February. A summary of staff suggestions was provided to the Task Force (Appendix D). Information received from staff was taken into consideration when recommendations were formulated.

Shortly after the Task Force was struck, The Chair of the Task Force met with the Emergency Medicine Council, made up of ED managers, directors and medical directors from the seven sites across Winnipeg to discuss the mandate of the Emergency Care Task Force. A subsequent meeting was held between members of the Task Force and the Council. At this meeting, sites provided a review of factors affecting patient care at their particular site. Issues raised at this meeting were shared at the next meeting of the Task Force.

Meetings were held between Task Force members and staff in all adult EDs from sites across the Region. All staff were invited to attend these sessions to provide information to the Task Force for consideration. A summary of information provided to the Task Force by staff is found in Appendix E.

Triage Working Group

A working group was formed by the WRHA Emergency Program to review the role of the Triage Nurse and to determine the best way to integrate the Reassessment Nurse role in Emergency Departments. This group's work included conducting a literature review. Lori Motluk, WRHA Program Director, Emergency Program presented the working group's findings to the Task Force.

Focus groups

Focus groups were held with patients and families who received emergency care for early pregnancy loss (miscarriage). A number of potential solutions to address concerns regarding this issue were developed by a working group composed of members from the Emergency Program, Women's Program, Pastoral Care and Community Care. Following this work, focus groups were conducted to hear patients' and families' concerns and obtain their feedback on the proposed solutions. Recommendations related to care for families that present to EDs for pregnancy loss were made on the basis of comments and responses obtained in these focus groups. A summary of these focus groups can be found in Appendix F.

Data Collection / Research

Environmental Scan / Literature Review

The environmental scan included a review of information gathered from across Canada and around the world from a variety of sources. It also included a review of published literature from around the world. The results were summarized and presented to the Task Force by Louise Wayland, WRHA Director Planning and Policy (Appendix G).

Current Practice Audit

An audit was undertaken to attempt to determine current practice in Winnipeg in relation to:

- The time from presentation to triage;
- Nursing and physician assessment guidelines related to recommended Canadian standards;
- Responsiveness for specialist consults;
- The time required for diagnostic imaging and lab results related to physician assessment times;
- Reassessment times related to recommended Canadian standards; and
- The time from the decision to admit the patient to a Hospital bed until the admission occurs.

The preliminary results were summarized and the draft report distributed to the committee. (Appendix H contains a preliminary summary from the draft report. This report will be finalized in the near future.)

ED visits

Members of the Task Force visited four EDs across the City, to gain first-hand experience in EDs. Observations from these visits were shared with Task Force members at meetings.

Audioconference

Task Force members were invited to participate in a 90-minute audioconference presented by an American company, Barres. The audioconference was entitled: Practical Approaches to ED overcrowding: Solutions you can implement now. Information from this audioconference was shared with Task Force members at meetings.

ED Tracking System Presentation

Randy Martens, WRHA Administrative Director, Emergency and Critical Care Programs made a presentation regarding computerized ED tracking systems to the Task Force (Appendix I).

Review of previous health system improvements

A report summarizing previous health system improvements that advanced Emergency Department care was provided to the Task Force for information.

Key Findings

Overview

Within the Winnipeg Regional Health Authority (WRHA), there are six (6) adult Emergency Departments (EDs) and one Urgent Care Centre. Of the EDs, two are located in tertiary care centers, Health Sciences Centre and St. Boniface General Hospital, and four are in community facilities, Concordia Hospital, Seven Oaks General Hospital, Grace General Hospital and the Victoria General Hospital. Misericordia Health Centre houses the Urgent Care Centre. A pediatric ED is located at Health Sciences Children's Hospital. Currently, this department reports through the WRHA Child Health Program. All of these facilities are open 24 hours a day, 7 days a week. During the period of April 1, 2003 to March 31, 2004, there were 282,081 visits to all Emergency Departments in the WRHA (including Health Sciences Centre Children's Hospital).

The results of the environmental scan and literature review indicate issues regarding waiting times are being faced by EDs all over the world. Although various strategies have been developed in an attempt to address these issues, there does not appear to be a single strategy that has been totally successful in any jurisdiction.

Lack of Data/Information Systems in Emergency Departments (EDs)

One of the first issues to become evident to the Task Force was the lack of data and information systems to provide information on indicators of emergency care in the WRHA Emergency Departments.

Currently, the only Emergency Department charts abstracted for this type of information are those from Urgent Care at Misericordia Health Centre. Abstracting refers to the systematic review of patients' records by Health Records staff following discharge. Prescribed data from the chart is manually entered into a database by Health Records staff. Once in a database, the data can be analyzed and used to assist in decision-making and problem solving. Because most Emergency charts do not undergo this abstracting, it was not possible to provide the Task Force with meaningful information about key factors regarding emergency care such as wait times.

As beneficial as abstracting ED charts would be, this process only provides retrospective data, weeks after the patient leaves the ED. It does not provide any assistance to clinicians in managing the flow of patients while they are actually in an ED. The only system that could provide this kind of information is a computerized Patient Tracking System. Such systems are now becoming available and are being implemented across Canada but are not currently being used in the WRHA.

An electronic triage tool (E-triage) was implemented in all EDs as of April 1, 2004. The E-triage tool is a software package that fosters consistent assignment of triage levels to patients and will be a source of data in the future on entrance complaints and triage interventions and levels. However, this system was not available to provide information to the Task Force. After triage, there is no other electronic collection of data about processes in EDs in Winnipeg.

In order to provide the Task Force with data related to emergency department care, the WRHA undertook a manual chart audit of indicators of practices in emergency rooms. This audit was time consuming, costly and, because of manual records, is incomplete.

Preliminary results from this audit revealed, for all triage categories (see Appendix H):

- Median time to first post-triage nursing assessment in the examination room was 43 minutes (Range 3 minutes – 84 minutes)
- 32% of patients had one or more nursing reassessments while waiting to see a physician
- Median time to first ED physician assessment was 81 minutes (Range 1 minute to 114 minutes)
- 78% of patients were discharged home after treatment, 1% were monitored in an observation unit or in the ED prior to being discharged home and 16% of patients were admitted to an inpatient bed
- 25% of audited patients made 3 or more visits per year to a WRHA ED

This audit appeared to substantiate much of what was being heard from patients regarding waiting times in EDs in Winnipeg. However, it is important to note that missing or incomplete data in patient charts, with respect to times of events needed to answer the audit questions, affected the analysis of most indicators.

Systems Approach to ED care

In both the environmental scan conducted for the Task Force, and in meetings with staff, managers and physicians, the flow of patients through EDs was described using a systems theory approach. This approach describes three stages to ED care: input- what happens before someone arrives in ED; throughput- what happens once someone is in the ED; and output – what happens that allows someone to leave the ED. A number of factors affect each of these stages.

Input Stage

The input stage was commonly described as a funnel with a large volume of persons entering the system at once and limited ability to move through it. Patients arrive at the ED for a number of reasons, all of which are urgent to them. This was described by one ED physician as an unlimited, unpredictable demand for ED services. Patients not only access the ED for reasons commonly associated with emergency care such as accidents and sudden illnesses, but also for a number of other reasons, most on a non-emergent basis, including:

- residents from Personal Care Homes who have become ill and where physicians are not readily accessible;
- persons who cannot access other Primary Care;
- referrals from primary care physicians for more rapid access to treatments, diagnostic tests or specialist services;
- post operative care such as dressing changes and in some cases preoperative assessments
- examination and treatment by specialists; and
- treatments such as IV anti-infective therapy, wound care and blood transfusions.

Thus, there are many reasons patients come to the ED, a significant number related to inability to access health care services elsewhere.

Throughput Stage

The throughput stage is what happens in the ED once a patient arrives in the department. It begins with the assessment by the triage nurse. This stage is profoundly affected by the number and type of patients presenting to the ED for care and the number of patients leaving the department.

Once patients present to the Emergency Department they undergo an initial assessment of their condition, known as "triage", which is a relatively quick assessment to determine urgency by senior emergency nurses who undergo specialized training. The goals of triage are to:

- rapidly identify patients with urgent, life-threatening conditions;
- provide information to patients and family regarding services, expected care and waiting times;
- determine appropriate treatment areas; and
- decrease congestion in the ED.

All WRHA EDs have used the five-level Canadian Triage and Acuity Scale (CTAS) since 2000. This scale was developed by the Canadian Association of Emergency Physicians (CAEP), The National Emergency Nurses Affiliation of Canada (NENA) and the L'association des medecin d'urgence de Quebec (AMUQ).

This five-level scale categorizes patients as follows:
Triage Level 1: Resuscitation (e.g. cardiac arrest)
Triage Level 2: Emergent (e.g. heart attack)
Triage Level 3: Urgent (e.g. appendicitis)
Triage Level 4: Less Urgent (e.g. broken leg)
Triage Level 5: Non Urgent (e.g. prescription request)

CTAS also has developed suggested time goals and admission rates as presented below:

Objective	**TRIAGE LEVEL**				
	1	2	3	4	5
Time to Nursing Assessment	Immediate	Immediate	30 min	60 min	120 min
Time to Physician Assessment	Immediate	15 min	30 min	60 min	120 min
Time Between Reassessments	Continuous	15 min	30 min	60 min	120 min
Fractile Response Rate (recommended percentage of patients who should be examined within the CTAS response time)	98%	95%	90%	85%	80%
Admission Rate	70-90%	70%	40%	20%	10%

Since the reports first appeared in the media regarding the incidents in ED, these response times have been frequently reported to the public. As the Task Force learned, however, these times were formulated based on a "consensus" of opinions about optimal treatment times among the parties developing the tool. They have not been developed based on evidence of best practice. As a result of the public attention these goals have been receiving nationally, they are currently being reviewed.

It was also evident to the Task Force that for the patient, of most concern is the period of time between assessment by the triage nurse and being moved into an examination room in the ED for treatment. Patients who are critically and/or acutely ill, require and receive treatment urgently. Those who are less ill are required to wait, in some cases for long periods of time, before treatment is received. During this time, stresses that develop due to the physical environment of the waiting room combined with the lack of contact with staff often invokes anxiety, as patients may perceive that their condition is worsening and staff do not appear to care. Often this anxiety lessens when patients are taken into the treatment room/area. The Task Force recognizes that once treatment is initiated, the care provided by staff working in WRHA facilities is of high quality.

The Task Force learned that, according to "queuing" theory, the waiting time for services traditionally provided in a single queuing system can be minimized by serving the client whose expected service is the shortest, in a separate process. This theory is commonly used in other industries such as banking and food services but has had limited application in healthcare. At the present time, all patients presenting to EDs enter one line or stream. For the most part in WRHA facilities, aside from those requiring immediate attention, patients are seen on a first come first served basis within a triage level system that is based on the degree of severity of the patient's condition, as treatment space becomes available within the department. Patients must be taken to an appropriate treatment area in the ED- usually an examination room - to be evaluated before treatment can begin. If a number of acutely ill patients present to the ED, patients at a lower triage level may have to wait unacceptably long periods before being treated. Designating a specific process to deal with patients requiring "minor" treatment quickly is thought to improve patient flow in the ED. This process is commonly referred to as "fast track" and has been used successfully at HSC Children's Hospital ED for a number of years.

The Task Force raised concerns regarding the effect of Emergency Department physician remuneration on patient flow. Currently, Emergency Department physicians in Community hospitals (Concordia, Grace, Misericordia, Seven Oaks and Victoria) are paid on a contract basis. Questions were raised regarding the feasibility of changing this system of remuneration to a Fee for Service model where physician income could more closely be linked to patient flow through. A review of this issue was completed by Dr. Wes Palatnick, Medical Director, WRHA Emergency Program. During this review, a number of issues were highlighted.

- Fee for service works best when there is high volume, low acuity with a large number of uncomplicated patients. Unfortunately this is not the patient mix in the WRHA Emergency Departments. Another concern is that a physician can only bill once per 24-hour period and the result is a large amount of work that is not compensated. Hospitals in which there is a successful Fee for Service arrangement have good consultant backup as well as timely hand off of patients who require admission. At the present, this is not available at the Community hospitals.

- The average fee per patient is based on general office practice rates and does not recognize acuity as well as the need for multiple reassessments. If one multiplies the average billing rate by the volume of patients at these sites, the result would be significantly less than the Emergency Department physician's present income.

- Low volume shifts, such as nights, will be very undesirable unless there is some form of guaranteed rate. If there is no volume at night, the physicians will not want to work as it would not make financial sense and this would further exacerbate the problems of finding night physician coverage.

- A low physician income as a result of a change to Fee for Service would result in a significant barrier to recruitment as well as retention and there is concern that there would be an even greater physician shortage than there is at present.

- The two teaching hospitals, Health Sciences Centre and St. Boniface Hospital, are on a Fee for Service plus "top up" arrangement and Fee for Service at their present volumes and the present average patient billing would not support the physician groups adequately. In the past, this has led to a significant exodus of physicians from the Health Sciences Centre site.

- A significant number of jurisdictions in Canada are opting for some kind of alternate payment plan as the Fee for Service arrangement has not been sustainable unless there is a high volume, low acuity patient population.

- Fee for service promotes quantity rather than quality as one is paid per patient and there is no relationship to how good a job one does.

- Payment for coverage of in-house emergencies i.e. Code Blue (medical emergency), would have to be negotiated as the expectation would be that the Emergency physician would not leave the department.

- The Community Emergency Department physicians are under a collective agreement that would need to be renegotiated. There is presently a benefit package in this agreement that would have to be costed out and included in their income mix.

The Task Force considered this information and concluded that adoption of a Fee for Service model, while having some positive aspects, could further worsen the physician shortage and that the current remuneration plan for Emergency Department physicians should remain in place. This will be reassessed overt time.

Within the ED, other factors were identified that impeded patient flow-through. These factors included turn around times for laboratory tests and diagnostic procedures and response time for consulting physicians and/or specialists.

Output stage

As stated earlier, the ability of ED staff to facilitate movement of patients out of the ED, either home or to an inpatient bed has a dramatic impact on the flow through the ED. One of the most significant factors cited by staff as affecting care in the ED was the large number of patients whose condition warranted admission to hospital, but who were unable to leave the emergency area because there was no available bed in the inpatient unit of the hospital. Occupancy rates for inpatient beds in WRHA facilities normally exceed 100% because units sometimes use temporary beds. As a result, the system has a limited capacity to absorb emergency patients requiring admission to inpatient beds. Length of stay and barriers to discharge for patients in hospital beds influences the availability of beds for ED patients. Therefore, admitted patients are forced to stay in the ED until a bed becomes available, and during this time care is provided by the ED staff reducing their ability to care for patients still within the emergency assessment process. The effect of these patients remaining in the ED is that there is limited space for staff to allow new patients to enter the department, unless they are acutely ill, and they are forced to wait,

either in the waiting room or in hallways and treatment rooms. In April 2004, an average of 63 patients per day (range 44-76 per day) were in EDs across Winnipeg waiting to be moved to beds in inpatient medical units. Smaller numbers of patients access other inpatient beds such as surgery and mental health through EDs. Although these numbers vary seasonally and between facilities, ED staff strongly believe that decreasing the number of admitted patients waiting in the department would have a dramatic effect on improving patient flow-through and thus decrease waiting times.

Another factor identified by ED staff, particularly in tertiary care centres as a serious impediment to smooth patient flow, has been the reluctance of specialist services to admit patients to their inpatient units, until a definitive diagnosis was made. This reluctance to admit was evident even in cases where it was clear that the patient would eventually need to be admitted, regardless of diagnosis. As a result, patients are staying longer in the ED waiting for results of diagnostic tests to confirm their diagnosis prior to their admission. The net effect of this practice is essentially the same as the backlog of admitted patients in EDs, longer waits for patients to be examined, treated and discharged.

Using the systems theory model, the Task Force formulated recommendations to address issues in each of the identified stages.

Progress Report on Recommendations to Date

Following the initial meeting of the Emergency Care Task Force on January 22, 2004, the following initiatives were identified as recommendations for immediate implementation:

Hiring additional nursing staff in all Winnipeg EDs

These staff will be responsible for monitoring, communicating with and advocating for patients after they have been triaged. They will show the patients in the waiting rooms enduring long waits that someone in the system cares about them, a perception frequently not present because of overbusy staff. They will act on any changes in patients' conditions and will ensure patient reassessments are done in a timely manner. As well, these nurses will assist with triage duties to ensure there is always a triage nurse available during staff breaks.

Current Status: A working group was established to further define this role and to develop a plan for implementation. Once this was completed, facilities were asked to begin the hiring process to fill these positions as soon as they were able. A summary of hiring of Reassessment/Triage Nurses by site is presented below:

Health Sciences Centre, St. Boniface Hospital and Misericordia Health Centre – staff have been hired and the role is in place.

Community Hospitals – Concordia, Grace, Victoria and Seven Oaks. Due to the number of nursing vacancies in the Emergency Departments at these sites and the need to restructure nurses work schedules, the posting/hiring dates are being reviewed. These sites will implement the role at the earliest possible date.

Although the addition of this role is very recent, staff at HSC and St. Boniface report improved quality of care and patient flow since its inception.

Establishment of a "Fast Track/Minor Treatment" service at Health Sciences Centre ED.

This treatment process will use a Nurse Practitioner model to provide an alternative treatment stream for patients requiring minor treatment. This is anticipated to reduce the wait time for patients with less severe illnesses and injuries and will allow other ED staff to focus on the care of more urgent patients.

Current Status: At HSC, a committee has been formed to:

- Recommend and draft a role statement for the Emergency Nurse Practitioner
- Develop a delegated function agreement in line with legislation requirements to enable this role to commence in July 2004. Until the College of Registered Nurses of Manitoba finalizes the Extended Practice Regulations and a process is developed for registration of Nurse Practitioners, a delegation of function agreement must be developed to facilitate their ability to practice in this environment
- Develop interaction and team processes with Emergency staff, physicians and consultants
- Document the planning and implementation process, including evaluation, to guide future programs
- Identify an appropriate environment to house the program, with the necessary equipment and support.

A significant factor in the ability of the Emergency Program to fully implement this program will be the ability to find qualified individuals to fill these roles. Positions will be posted to provide 7 day a week service. The first Nurse Practitioner will be in place in July 2004 and the role will develop over the coming year as the individual(s) grow in their expertise in the ED environment.

As of May 2004, Misericordia Health Centre has implemented a Minor Treatment Stream "fast track" within the Urgent Care Centre. This program has been developed by utilizing the current staffing complement.

Opening temporary, or "over census" beds so that patients who require admission can move more quickly out of the ED.

When EDs become overwhelmed due to a backlog of admitted patients, facilities make every effort to address the situation. This includes discharging patients, adjusting planned admissions and other processes. One mechanism sometimes used is admitting patients to beds that are temporarily opened. Opening these beds means the facility has a patient complement that is over their funded allotment. Care for patients is provided by unit staff, either by increasing the workload or by providing extra staff. Facilities incur costs every time these beds are used. The ability of facilities to open such beds is limited because of the availability of space, equipment and staff to provide appropriate care. Once patient care demands have diminished, these beds are no longer used for patient care.

Current Status: The use of temporary beds will continue in the Region as patient care demands indicate and staff and space are available.

Enhanced training for ED staff, including a skills program for experienced ED nurses

Current Status: A pilot of the Nursing Specialty- Adult Emergency Program is currently underway with 7 students enrolled. This program will end in November 2004 and evaluation of the program will take place following course completion.

Currently, each facility employs educators who are often responsible for other areas in addition to the Emergency Department. The WRHA is hiring a Regional Educator to work with these staff to implement education plans that improve ED care and ensure consistent care across the Region. The position should be filled by August 2004.

Nursing and Physician Vacancies

Another issue that has affected EDs is nursing and physician vacancies. These numbers continue to shift with normal attrition. According to the WRHA Nursing Vacancy Report (March 2004), there were 22 vacant nursing positions (12.4 Equivalent Full Time positions) of the 354 nursing positions (254.7 EFT) in the Emergency program. Presently, in the WRHA Emergency Program (excluding HSC Children's ED) 8.3 EFT of the 68.2 EFTs are vacant for ED physicians. This is expected to decrease to 3.5 EFT in September 2004 but, as with all workforce predictions, these may change unexpectedly.

Response to the Dorothy Madden Case
In response to the Dorothy Madden case, the Emergency Program identified a number of actions that it has taken to address concerns raised:

Training for ED staff on patients with atypical presentation of cardiac problems.
Staff throughout the Region have received training on treating patients who have atypical presentation of cardiac problems. This program was developed by the St. Boniface Emergency Team and has been distributed to EDs regionally. In addition, the Acute Coronary Syndrome (ACS) Care map has been approved and will be fully implemented regionally by October 2004. This will standardize the care of patients with this condition and is based on best practice standards.

Review of the role of the triage nurse and development of reassessment nurse role.
A working group was established to review the role of the triage nurse and to develop the role of the reassessment nurse. This group has completed its review and presented findings to the Emergency Care Task Force. As a result of this work, vital signs are being taken as part of the triage assessment at all sites. Previously, the process for assessing vital signs was at the discretion of each nurse.

Changes to the protocol at St. Boniface General Hospital for patients presenting with chest pain.
The protocol dealing with the initiation of diagnostic procedures and treatment of patients presenting with chest pain has been reviewed and eligibility for an EKG has been expanded to include patients with a broader set of symptoms and triage categories.

Implement an electronic triage system (E-triage)
This system has been implemented at all EDs in WRHA.

Recommendations

The following recommendations were developed on the basis of information received by the Task Force; by members of the Emergency Program team; and by facilities and other WRHA program teams.

The Task Force recommendations have been organized according to implementation time as follows:

Implementation is Ongoing
Proposed changes have been/are in the process of being implemented.

For Immediate Implementation
The recommended change requires some further development/planning. Implementation of this change should begin in the near future (within 3 months).

To Be Implemented As Soon As Possible
The recommended changes require further development and an implementation plan needs to be developed. This change should be implemented once these steps are completed.

Long Term Implementation
Proposed changes will be implemented/completed in the future (>2 years).

In addition, recommendations have been categorized as follows:

Input
Recommendations that affect care before the ED and/or the decision to go to an ED.

Throughput
Recommendations that affect patient care within the ED

Output
Recommendations that affect the process for discharge from the ED

The following recommendations are presented for consideration by the Minister of Health. Further prioritization of recommendations will be done after the Task Force has considered all of the financial information related to the recommendations. Once prioritized, an implementation plan will be developed.

Implementation is Ongoing

Abstracting of Emergency Department Charts **THROUGHPUT**

> *The Medical Records Department at Misericordia Health Centre should continue to abstract all Emergency Patient visits.*

RATIONALE:

Abstracting of Emergency Department charts is currently done only at the Misericordia Urgent Care. Abstracting refers to the systematic review of each patient's chart by Medical Records staff once the patient is discharged. Prescribed data (defined by the Canadian Institute of Health Information's National Ambulatory Care Reporting System – "NACRS") is manually entered from the chart into an abstracting database.

The resulting data can then be used to do the following:

- To monitor Emergency Department practices in terms of resource utilization and outcomes, to some extent.
- To monitor Emergency Department practices in terms of practice guidelines and care maps.
- To monitor and assess the impact of some quality improvement initiatives.
- To monitor and analyze the impact of other program changes/consolidations.

However, unlike a computerized Emergency Department tracking system, an abstracting system only provides retrospective data weeks after the patient has left the hospital. As such, it provides no assistance to clinicians in terms of managing the flow of patients while they are actually in the ED. As well, an abstracting system does not identify the length of time between clinical events during the course of each patient's ED care.

PROPOSED CHANGE:

Funding has been secured which will allow the Misericordia to continue abstracting patient charts with the new ICD-10 compatible software under the Provincial ICD-10 Project. Because a comprehensive ED Patient Tracking System would capture the same information as an abstracting system and provide other valuable real time information in the clinical area, the Winnipeg Regional Health Authority Emergency Program would prioritize a tracking system above an abstracting system for all other Emergency Departments.

COST:

No new funding is required at Misericordia. All other sites should implement a Patient Tracking System.

Implementation is Ongoing

Acute Coronary Syndrome Care Map **THROUGHPUT**

> *The Winnipeg Regional Health Authority (WRHA) will implement the Acute Coronary Syndrome Care Map in all Emergency Departments.*

RATIONALE:

Care maps standardize clinical practice based on established best practices.

A Suspect Acute Coronary Syndrome (ACS) care map was in place at one Emergency Department in the Winnipeg Regional Health Authority. This Care Map has been reviewed, revised and approved for Regional application. Revisions included identification and treatment of patients who present with atypical symptoms of cardiac problems.

PROPOSED CHANGE:

The Acute Coronary Syndrome Care Map was completed and approved in June 2004. Implementation has begun and will be completed in all WRHA Emergency Departments by October 1, 2004.

COST:

Within existing resources

Implementation is Ongoing

Education for Emergency Department Nurses **THROUGHPUT**

> *The Winnipeg Regional Health Authority Emergency Program will develop and deliver educational programs to support the clinical practice of Emergency Department staff. A Regional Emergency Department Educator will be hired to ensure standardized education is delivered regionally.*

RATIONALE:

The Emergency Department is an area of clinical practice that requires specialized training for nurses. Currently, this training is provided mainly through orientation programs, clinical learning opportunities and sporadic continuing education sessions. Clinical Educators at the sites are largely responsible for providing education for Emergency Department staff. In some cases, especially at the community hospitals, these educators are responsible for more than one area of the hospital. As a result, educational opportunities and program content vary from site to site within the Region. Unlike other specialty areas - Critical Care and Dialysis - there is currently no formalized education process to provide Emergency nurses with the advanced skills they need. Such education is advantageous in not only ensuring safe patient care, but is also a recruitment and retention tool for nursing staff.

PROPOSED CHANGE:

Changes to the way Emergency Department nurses are educated need to take place to provide experienced Emergency Department nurses with the advanced skills that are required to effectively meet the needs of patients and to serve as role models for other staff. These nurses need to be expert in a wide variety of medical conditions from pediatrics to geriatrics as well as versed in social and community resources. In addition, changes in treatment regimes often involve prescription of advanced technologies and medical treatments far earlier in the patient's care and frequently when they are still in the Emergency Department. Many of these technologies and medical treatments require assessment and monitoring skills previously required only in a Critical Care setting. Nurses must be able to apply these skills in the fast paced, complex high tech Emergency Department environment.

A pilot of the Nursing Specialty- Adult Emergency Course is currently underway and has 7 students enrolled. The pilot program will be finished in November 2004. This program will be formally evaluated once the pilot is complete.

A Regional Educator will be hired for the Emergency Program to develop content for educational programs and ensure a more standardized approach to Emergency Department education. This will include training for the triage and reassessment nurse roles.

Emergency Departments that are well staffed with highly trained nurses will provide quality and timely, care for patients. This will also enable staff to fulfill the Guiding Principles for Emergency Department Care.

COST:

Pilot program costs funded for 7 students	$402,000
Regional Clinical Educator- Emergency	$82,331/year
Ongoing education costs	$300,000 one time start up $300,000/year

Implementation is Ongoing

Geriatric Program Assessment Team (GPATs) – Processes with Home Care **INPUT**

> *The Winnipeg Regional Health Authority (WRHA) Rehab/Geriatric Program will work with the WRHA Home Care Program to develop a process to allow the Geriatric Program Assessment Team (GPATs) to work directly with Home Care Resource Coordinators to provide improved care for patients in the Community*

RATIONALE:

Currently, the GPATs complete an assessment and make recommendations that are shared with the Home Care Intake Coordinator or the Case Coordinator. The usual intake process is then begun and a second assessment by Home Care is completed to confirm and/or complement the GPAT recommendations. There have been delays in assigning the Case Coordinator when the GPAT patient is not known to Home Care. This delay compounds the delay in initiation of Home Care services.

PROPOSED CHANGE:
The GPAT members should work directly with Home Care Resource Coordinators to provide timely access and/or changes to Home Care services for patients in the Community. This process change should provide improved service, enable patients to remain in the Community and prevent some patients from presenting to Emergency.

COST:
Within existing resources

Implementation is Ongoing

Geriatric Program Assessment Team (GPATs) - Standardizing **OUTPUT**

> *The Winnipeg Regional Health Authority (WRHA) Rehab/Geriatric Program will review processes being used at sites by Geriatric Program Assessment Teams (GPATs) to ensure that there is a standardized approach to the assessment process in Emergency Departments throughout the Region in order to improve care to elderly patients in Emergency. The GPATs will prioritize Emergency Department patients within their caseload.*

RATIONALE:

The Geriatric Program Assessment Teams (GPATs) were established in 1999 to provide consultation and assessment to geriatric patients in Emergency Departments. In addition they conduct home assessments on patients discharged home. Through these consultations and assessments, geriatric patients in Emergency Departments receive more timely direct access to Rehab/Geriatric Beds.

Information received by the Task Force during site visits and data recently collected by the Rehab/Geriatric Program suggest that not all Emergency Departments are accessing the GPATs in the same way. The data collected by the Rehab/Geriatric program shows that some sites are utilizing GPATs more effectively than others.

PROPOSED CHANGE:
The WRHA Rehab/Geriatric Program will develop a standardized process, based on the model currently being used at Health Sciences Centre, for GPATs. This process will provide geriatric patients in Emergency Departments more timely access to Rehab/Geriatric Beds and/or more effective planning for timely discharge home.

COST:
Within existing resources

Implementation is Ongoing

Guiding Principles for Emergency Department Care

> *The Emergency Care Task force recommends that the Winnipeg health care system adopt a series of guiding principles for Emergency Department care.*

Guiding Principles:

Every patient is entitled to, and will receive, timely access to care in any Emergency Department within the Winnipeg Regional Health Authority.

Every patient who accesses health care through a Winnipeg Regional Health Authority Emergency Department is entitled to, and shall be, treated as an individual with personal dignity, concern and respect. In addition, it is recognized that every Emergency Department visit is, for the patient, an unplanned, unwanted and stressful disruption in their lives.

The Winnipeg Regional Health Authority – at all levels and in every facility and program – is committed to the implementation of the Emergency Care Task Force recommendations as well as to continuing to find new, improved and innovative ways to improve the quality of care received by patients in all Emergency Departments.

To that end:

- Health care personnel will work in a manner that reflects the values of trust, compassion, and excellence of service.
- Health care personnel will commit to continually reviewing processes and exploring new, innovative/alternative approaches to providing care and customer service in order to improve patient access and satisfaction, consistent with these principles.
- Every hospital will submit to the Winnipeg Regional Health Authority its plans to prioritize access to quality Emergency Department care and to respond to Emergency Department overcrowding in an effective way.
- Every facility and program will submit to the Winnipeg Regional Health Authority plans to reduce waits in the Emergency Department by addressing issues that impede flow through the Emergency Department.
- The Winnipeg Regional Health Authority will develop, in consultation with each facility, department and program which provides services to patients in the Emergency Department, a dispute resolution mechanism for those questions which cannot be easily resolved through discussion, in order to improve the quality of care provided and decrease wait times.

Implementation is Ongoing

Nurse Initiated Procedures/Treatment **THROUGHPUT**

> *The Winnipeg Regional Health Authority Emergency Program will develop and implement standardized processes for nurse initiated procedures/treatments.*

RATIONALE:

In some instances, for example injuries to limbs, nurses are able to begin procedures and treatments, such as x-rays, prior to the patient seeing the Emergency Department physician. This enables the patient to have these procedures done during the time they would normally spend waiting to get into the Emergency treatment area. Once they are in the treatment area, the physician will be able to view x-rays or lab tests when the patient is seen and begin the appropriate treatments faster.

PROPOSED CHANGE:

Currently, nurses are able to initiate some procedures and treatments at some sites for some patient populations. There is a need to formalize and standardize practice across sites in the Region. This change should be implemented using a Project Management approach.

This process change will influence waiting times for all patients by decreasing the treatment time for a specific group of patients.

COST:

Within existing resources plus Project Management costs.

Implementation is Ongoing

Public Education: Health Services **INPUT**

> *The Winnipeg Regional Health Authority should continue providing general information for the public and develop specific strategies for defined populations about the spectrum of services available and the appropriate use of those services.*

RATIONALE:

- Manitoba Health runs a Provincial campaign twice a year during peak activity times (December and June) re: alternatives to Emergency Department.
- The 2004 MTS white pages contains a new 32-page health services guide, with a listing of alternatives to emergency care and an Emergency Department user guide.
- The WRHA circulates emergency care brochures with similar messages that are available at the sites and used for public education/promotion.
- The WRHA Aspire! newsletter (distribution 15,000 4 x per year) provides the public with practical health information on wellness and better ways to deal with the health system.
- As new/expanded services such as HealthLinks and ACCESS River East are introduced they are supported with media coverage and, where required, paid advertising.

PROPOSED CHANGE:

The WRHA will continue to provide the public with information regarding accessing appropriate health care in the Region. In addition, as data becomes available regarding the use of Emergency Departments, the WRHA should develop education materials specific for sub-populations who would be better served in alternative settings. The long-term impact of these messages is to direct people appropriately to the service they require. The impact can be measured through public surveys to assess knowledge and recall or through long term monitoring of visits to the Emergency Departments through the tracking system.

COST:

No additional costs

Implementation is Ongoing

Reassessment Role **THROUGHPUT**

> *The WRHA Emergency Program should introduce a new role to Emergency Departments at tertiary, community and Misericordia Urgent Care to ensure patients waiting to be seen are waiting safely by having them reassessed. The staff in the new role will also be responsible for communicating with patients and families as well as for providing comfort measures as required i.e. relief from pain. This nurse, in partnership with the Triage Nurse, will act as an advocate for the patient and family.*

RATIONALE:

One of the major issues that led to the creation of the Emergency Care Task Force was the amount of time a significant number of patients waited in Emergency Departments following triage without being reassessed by a nurse. Waiting hours without any contact with medical personnel contributes to, and accentuates patient anxiety.

Although patients are directed to report to the triage nurse if their condition changes, they may not realize the significance of the changes they are experiencing or be reluctant to approach staff. In several cases, this resulted in significant consequences re: patient outcomes. There is also the issue of patients who, fed up with long waits, leave the Emergency Room without being seen by a physician, which may also lead to negative patient outcomes. Both of these issues would be addressed by regular reassessments.

Currently, reassessment of patients waiting to be seen is one of many responsibilities of the triage nurse. However, conditions in Emergency Departments frequently prevent him/her from fulfilling that role, resulting in prolonged periods of time during which numerous patients have no contact with a nurse or other health professional. The Emergency Program Team has developed the role description for the Reassessment Nurse. Health Sciences Centre, St. Boniface Hospital and Misericordia Health Centre have implemented this role. Other sites are in the process of filling these positions.

To ensure a standardization of this role throughout the Region, a Project Management approach will be used for all future implementation and to develop evaluation criteria.

PROPOSED CHANGE:

The reassessment nurse role will be introduced at all Emergency Departments in the Winnipeg Regional Health Authority. The Reassessment Nurse role is envisioned to:

- Provide comfort measures, physical and emotional.
- Ensure patients are reassessed in a timely manner.
- Enhance flow from the triage area to the main treatment area of the department.
- Improve communication between the Emergency Room staff and patients and their families, while patients wait.

Although the addition of this role is very recent, staff at Health Sciences Centre and St. Boniface Hospital report improved quality of care and patient flow since its inception.

COST:

Annual operating costs- $1,450,000

Implementation is Ongoing

Review of Acute Care Bed Base **OUTPUT**

> *The Winnipeg Regional Health Authority (WRHA)should undertake a review of the current acute care bed base relative to other regions in Canada.*

RATIONALE:

The most frequently cited factor by Emergency Department staff affecting overcrowding and waiting times was the large number of admitted patients. Emergency Departments in the Winnipeg Regional Health Authority care for a large number of patients in the Emergency Department who require admission to an inpatient bed, but are unable to leave the department because there are no beds available on the inpatient units. Efforts are currently underway through a number of initiatives, to address length of stay and barriers to discharge in an effort to improve patient flow on the inpatient units and the Emergency Department. However, another factor, which may be contributing to this problem, is the adequacy of the current bed base in the Winnipeg Regional Health Authority.

A review of the acute care bed base in 2000 revealed that the Winnipeg Regional Health Authority had a higher number of inpatient beds relative to other Regions in Canada. This review took into account some of the unique features of this Region's population including age and Aboriginal population. However, since this review was completed some areas in Canada have, or are in the process of, increasing their bed base. It is believed that these changes are related to increases in population.

PROPOSED CHANGE:

A review of the current acute care bed base in the Winnipeg Regional Health Authority relative to other regions in Canada should be undertaken.

COST:

Within existing resources unless benchmarking reveals a need for additional bed capacity.

Implementation is Ongoing

Space in Emergency Departments **THROUGHPUT**

> *Funding should be provided to redevelop the Emergency Departments at Health Sciences, Victoria General Hospital, Seven Oaks Hospital, Concordia Hospital, Misericordia Urgent Care and St. Boniface Hospital.*

RATIONALE:

Lack of adequate space in the Emergency Department can impact patient care and satisfaction. Physical space issues were identified as a contributing factor to long waits for patients by Emergency Department staff. In many cases, EDs were not constructed to deal with either the kinds of severely ill patients or the increasing number of patients that are now routinely being seen. Efforts to redesign existing Emergency Departments have resulted in too few treatment spaces, treatment spaces that are too small, located at some distance from staff and lack privacy. Many departments also have concerns about the ability to provide adequate infection control measures in light of concerns raised by SARS and pandemic influenza. Finally, redevelopment is needed to allow staff to see into the waiting areas.

PROPOSED CHANGE:

The Adult and Children's Emergency Rooms at Health Sciences Centre are currently under construction as part of the Critical Services Redevelopment Project, expected to be complete in September 2006.

At Victoria General Hospital, plans are underway for the ED redevelopment as part of a larger building project. If possible, the ED portion should be completed as the first priority.

Plans are currently being developed for changes needed to the waiting room, triage area and treatment rooms at Misericordia Urgent Care.

At Seven Oaks, plans have been submitted to Manitoba Health. Once approved, design will begin.

At Concordia, renovations are required to support their role as a designated primary treatment site for Severe Respiratory Infections (e.g. SARS). Improvements are needed to the triage area, waiting room and Trauma / Resuscitation room.

At St. Boniface, capital funds to support redevelopment of space within and adjacent to the Emergency Department to address significant issues with the triage area and waiting room as well as the need for more treatment spaces to support Fast Track services.

COST:

Victoria General Hospital	Part of a $12 million development project
Misericordia Urgent Care	$1 million
Seven Oaks General Hospital	$4.8 million
Concordia Hospital	$225,000
St. Boniface	To Be Determined

Implementation is Ongoing

Specialty Sites **THROUGHPUT**

> *The Winnipeg Regional Health Authority should continue to designate sites that specialize in certain health care services. This can focus providing services to high volume or high-risk categories of patients to ensure expertise.*

RATIONALE:

In order to ensure high quality patient care delivery for certain groups of patients, sites within the Winnipeg Regional Health Authority have been designated to specialize for specific conditions. As a result of this process, not all patient care Programs provide services at all sites.

To date, specialized health services have been designated as follows:

- Health Sciences Centre provides trauma, neurosurgical, burn treatment and the bulk of child health services.
- St. Boniface Hospital has been designated as the site for cardiac sciences services.
- Obstetrical services are currently provided at three sites: HSC, St. Boniface and Victoria.
- The Renal Program has three sites for service delivery: HSC, St. Boniface and Seven Oaks.
- Ophthalmology services are centralized at the Misericordia Health Centre.

PROPOSED CHANGE:

The Winnipeg Regional Health Authority should continue to designate sites to provide specialized health services that can focus on care that is high in volume or high in risk to ensure expertise.

In addition, the Winnipeg Regional Health Authority should provide education to the public regarding the location of specialized health services within the Region. This education should include information regarding the need to transfer patients to other sites if their condition warrants and the service is not provided at the site where they present.

COST:

Within existing resources

Implementation is Ongoing

Surgery Beds Reserved for Emergencies **OUTPUT**

> *Providing timely access to surgical beds for Emergency Department patients, will be facilitated by "reserving" beds above and beyond what is required to manage the elective surgical slate at each site for emergency surgery cases.*

RATIONALE:

Over the past few years, emergency surgery cases account for approximately 30% of all surgical care delivered to Manitobans. It is the Surgery Program's expectation that timely access to care is delivered to both elective and emergency patients. At the present time, rural Manitoba patients sometimes have difficulty gaining access to surgical care in Winnipeg, especially for Orthopedic services due to bed availability.

PROPOSED CHANGE:

The proposed change will require sites to identify beds that will remain unoccupied until required by Emergency Department patients requiring emergency surgery. "Reserving" surgical beds in this manner will ensure that Emergency Department patients have timely access to surgical inpatient beds.

COST:

Within existing resources

Implementation is Ongoing

Temporary Acute Care Beds **OUTPUT**

> *The Winnipeg Regional Health Authority (WRHA) continue to facilitate processes that enable sites to open "Temporary Beds" as a response to a high number of patients in Emergency Departments that require admission to an inpatient unit.*

RATIONALE:
Since 1999, hospitals in the Winnipeg Regional Health Authority identified temporary beds that can be opened and closed as patient activity demands, as a means to cope with seasonal fluctuations in admission rates. Each hospital has set a trigger number of admitted patients in the Emergency Department. When this trigger number is exceeded, they activate their response plan.

First, the hospital attempts to discharge as many patients as possible. Use of the Utilization Management Tool recommended in this report will facilitate these discharges. If this is still not effective in addressing the Emergency Department overcrowding situation then the facility will attempt to open temporary beds. Although facilities make every effort to accommodate the need to open temporary beds they are often limited in their ability to do so due to by resource issues such as space and equipment and human resource issues such as the availability of nursing staff to care for these patients. When facilities are able to open these beds, it means they are providing care for more patients than they are funded to care for on the inpatient unit, although care for these patients is being provided and charged to the Emergency Department. Hospitals track these costs and frequency of Temporary Beds use and then submit this to WRHA Finance as part of their budget variance explanation.

PROPOSED CHANGE:
The Winnipeg Regional Health Authority will continue to facilitate hospitals using temporary beds to address Emergency Department overcrowding. It is recognized that facilities are limited in their ability to open such beds by resource issues, namely space, equipment and staff.

COST:
Dependent on volume.

Implementation is Ongoing

Training regarding Atypical Cardiac Symptoms **THROUGHPUT**

> *Training will be provided to all Winnipeg Regional Health Authority (WRHA) Emergency Department staff regarding patients with atypical presentation of cardiac problems.*

RATIONALE:

Following the Dorothy Madden case at St. Boniface General Hospital, a training program was developed by the Emergency Team at that site to reinforce information regarding recognition and treatment for patients with atypical presentation of cardiac symptoms.

PROPOSED CHANGE:

This training program was distributed throughout the Winnipeg Regional Health Authority through the Emergency Program Team. Training in all sites has been completed.

COST:

Within existing resources.

Implementation is Ongoing

Transfer of Admitted Patients **OUTPUT**

> *Winnipeg Regional Health Authority will develop a process to facilitate transfer of Emergency Department patients who need to be admitted, from a site that does not have capacity to admit, to a site that does.*

RATIONALE:

Before a patient can be admitted to a hospital bed, they must have a physician who has agreed to care for them. Many patients who present to Emergency Departments are unaffiliated with a primary care physician and these patients require a mechanism to be assigned to an attending physician if they require admission to hospital. In the past, the process for this has been that within the traditional call roster of family physicians who admit to hospital, the primary on call physician agrees to provide coverage to their own patients who require admission as well as to the unaffiliated patients. This system is usually referred to as "Doc of the Day". As the numbers of patients who present to the Emergency Department and do not have a family physician with admitting privileges has increased, the numbers of patients that fall under the care of the Doc of the Day have also increased.

From time to time there is variation in the availability of beds between hospitals. In order to facilitate patient movement out of the Emergency Department, especially when they are experiencing overcrowding, it is desirable to be able to access an in-patient bed at any acute site within the WRHA. However, in an attempt to control their workload, the Doc of the Day physicians have become reluctant to accept unaffiliated patients from other hospitals.

PROPOSED CHANGE:

A proposed solution to this issue is to work with Regional program teams and physician call groups to review job descriptions and payment schemes for hospital coverage. The WRHA Medicine Program team has developed a model of coverage which is now being implemented at the Victoria Hospital, Grace Hospital, Health Sciences Centre, and St. Boniface Hospital. The Winnipeg Regional Health Authority will work with the Family Medicine program to ensure that similar provisions to ensure acceptance of patients at Seven Oaks Hospital and Concordia Hospital are being developed. Thus, it is expected that physician barriers to patient movement between facilities in the Region will diminish over the next year.

Public education will be an important component of this change. It will be necessary to educate the public regarding the need for patients to receive care in the most appropriate setting and this may mean they are admitted in a different hospital from the one they originally presented.

This change should contribute to more expedient admission for patients, thereby reducing the backlog in the Emergency Department.

COST:

Within existing resources.

Implementation is Ongoing

Utilization Management Tool **OUTPUT**

> *A commercial Utilization Management tool (off-the-shelf appropriateness of admission and stay software) should be purchased and implemented for each of the six acute care facilities within the Winnipeg Regional Health Authority.*

RATIONALE:

In Winnipeg, there is very little data available to help health care providers understand the movement of patients through the health system. Utilization patterns within and between hospitals vary as health care providers make the best decisions they can with the information available to them. As a result, between sites and even between units in the same site, there can be considerable variations in care and length of stay between patients with similar symptoms.

Across Canada, Utilization Management (UM) Solutions are being used in regional health authorities and facilities in British Columbia, New Brunswick, Newfoundland, Alberta, Saskatchewan, Ontario, and Quebec.

UM tools capture utilization practices and trends that can then be analyzed to determine what factors contribute to unnecessary delays to a patient's treatment and ultimately, length of stay. Those factors can then be addressed, reducing length of stay and resulting in more efficient use of hospital resources, specifically - beds. It will also result in better patient care by ensuring timely and appropriate care in the appropriate setting.

PROPOSED CHANGE:

The Utilization Management tool is a key project of the Length of Stay (LOS) Initiative, one of eight such projects that are part of the Achieving Benchmarks through Collaboration (ABC) Project. In addition, there is a need to standardize reporting mechanisms and job descriptions of the Utilization Managers/Discharge Facilitators throughout the Region. This should be addressed as part of the development and implementation of the Utilization Management framework within this project.

The purpose of the LOS Initiative is to streamline admission and discharge, improve length of stay, and ensure appropriate settings of care are available to meet patients' needs. Improved utilization of inpatient beds, achieved as a result of these initiatives will result in more timely access to inpatient beds for Emergency Department patients and will contribute to improved waiting times for Emergency Department Care.

COST:

Already funded for 2004/05. Funding will be needed in subsequent years to expand to all units within the Winnipeg Regional Health Authority.

To Be Implemented Immediately

Computerized Triage System (e-triage) **THROUGHPUT**

> *Funding should be provided for an additional e-triage computer terminal in each of the Emergency Departments, including HSC Children's.*

RATIONALE:

The e-triage system was implemented in the Winnipeg Regional Health Authority in April 2004 to provide more consistent triaging in Emergency Departments throughout the Region. Since this implementation, the Reassessment Nurse role has also been established. Although the primary purpose of the reassessment nurse is to ensure that patients receive communication and reassessment while they are waiting for treatment, they can also assist in triage duties when there are a large number of patients waiting to be triaged. However due to lack of a computer terminal, this is not possible at the present time.

PROPOSED CHANGE:

Additional e-triage terminals are required at sites to enable triaging by two nurses when there is a large number of patients waiting to be triaged.

COST:

Costs are estimated at $90,000. This includes installation of wireless technology in each Emergency Department. Wireless technology is required due to insufficient space at triage desks for an additional terminal.

To Be Implemented Immediately

Diagnostic Imaging Readers **THROUGHPUT**

> *The Emergency Departments at Concordia, Health Sciences Centre, St. Boniface and Seven Oaks should be provided with Computerized Diagnostic Imaging Readers to view X-Rays and CT Scans.*

RATIONALE:

Currently, the Diagnostic Imaging (DI) Departments at these sites have computerized readers within their own department, but do not have sufficient capital equipment funding to install them in high use patient care areas such as the Emergency Department. Having computerized images available to the Emergency Physician instead of the current film-based images would have the following advantages:

- Faster turnaround time since the film doesn't have to physically move from the DI Department to the Emergency Department
- Films can not be misplaced
- Once Picture Archiving Computer System (PACS) is installed at these sites over the next 2 years, the Emergency Department physicians will have access to past images done for patients anywhere within the Emergency Department's respective site.

The Grace and Victoria General Hospitals currently have computerized Diagnostic Imaging viewers purchased by Diagnostic Imaging as part of their PACS funding.

PROPOSED CHANGE:

Computerized Diagnostic Imaging Readers should be installed in the Emergency Departments at Concordia, Health Sciences, St. Boniface and Seven Oaks Hospitals. This will enhance the diagnostic information available to the Emergency Physician and in some cases can result in better and faster diagnosis.

COST:

One-time capital cost would be approximately $50,000 including installation for all sites.

To Be Implemented Immediately

Discharge Facilitators **OUTPUT**

> *Discharge Facilitator, Medicine Program positions should be implemented at St. Boniface General Hospital, Grace General Hospital and Victoria General Hospital, where the Medicine Program has responsibility for in-patient beds. In addition, the Winnipeg Regional Health Authority Family Medicine Program will examine the need for similar positions at Concordia and Seven Oaks Hospitals.*

RATIONALE:

Within the Winnipeg Regional Health Authority, medicine patients fall under two programs:

- Medicine at Grace Hospital, Health Sciences Centre, St. Boniface Hospital and the Victoria Hospital; and
- Family Medicine at Concordia Hospital, Seven Oaks Hospital and one unit at St. Boniface Hospital and Victoria Hospital.

The primary difference between these two programs is that Medicine program patients are under the care of Internal Medicine physicians while Family Medicine patients are under the care of Family Medicine physicians.

Emergency Departments and Inpatient Units are facing increasing pressure as the result of an aging population, increased patient acuity and new technologies. The Discharge Facilitator, Medicine Program case manages complex patient discharges to facilitate more effective bed utilization within the Medicine Program. This position has been in place and operating successfully at Health Sciences Centre for approximately three years. On April 30, 2004, a six month pilot project of a Discharge Facilitator-Medicine Program position on the 24-bed Non-Teaching Unit at St. Boniface General Hospital was completed. The preliminary results of this project indicated this position is key to the timely discharge of complex, medical patients.

PROPOSED CHANGE:

The discharge of Medicine Program patients is essential to ensuring that beds are available to admit patients who are ready for transfer from Critical Care and those awaiting admission from the Emergency Department. It is proposed that Discharge Facilitator positions be created at sites where the Medicine Program has responsibility for inpatient beds. The Discharge Facilitator will work with facility Medical Directors across the region to ensure the appropriate placement of all admitted medicine patients in Emergency Departments. In addition, it is recommended that the Family Medicine program examine the need for similar positions at Concordia and Seven Oaks Hospitals.

COST:

Each of the sites would require 1.0 EFT of a discharge facilitator position who would work Monday to Friday days paid the equivalent of a nurse IV position. No relief costs are included.

Total required for Medicine Program $86,346 x 3 = $259,000/year
Total required for Family Medicine Program $79,365 x 2 = $166,692/year
Total $432,000

To Be Implemented Immediately

Fast Track **THROUGHPUT**

> *The Winnipeg Regional Health Authority Emergency Program should institute a minor treatment system, "fast-track", at each Emergency Department, to reduce wait times for less urgent patients.*

RATIONALE:

According to queuing theory, serving the client whose expected service is the shortest in a separate process can minimize the waiting time for services traditionally provided in a single stream. This theory has been used extensively by industries with large customer volume such as banking and retail services but is just now being applied to healthcare. At the present time, all patients presenting to Emergency Departments enter one line or stream. Designating a specific process to deal with patients requiring "minor" treatment quickly has been shown to improve patient flow in the Emergency Department. This process is commonly called "fast track" and has been used successfully at Health Sciences Centre Children's Hospital for a number of years.

Although the same number of patients will be seen in the Emergency Department, removing those patients who need only minor treatments (i.e. prescription refills, ear and throat exams) from the general queue and diverting them into a separate dedicated stream, will allow those requiring more extensive treatment to be seen more quickly.

PROPOSED CHANGE:

It is proposed that the Winnipeg Regional Health Authority (WRHA) Emergency Program implement a minor treatment stream process –"fast track" for adult Emergency Departments in Winnipeg.

At the Health Sciences Centre Adult Emergency, a pilot project to implement a minor treatment process/fast track using a Nurse Practitioner model will begin in July 2004. In this model, the Nurse Practitioner provides the bulk of the care for patients requiring minor treatment. This project includes providing minor treatment/fast track services 7 days a week, 12 hours a day. This model will be evaluated to determine effectiveness in providing care, reducing waiting times and to determine applicability to other Emergency Departments in WRHA. Early work on this model has suggested that additional Emergency Department physician resources will be needed in the short term to assist with training for the Nurse Practitioners.

Misericordia Urgent Care has initiated a pilot minor treatment/fast track process by restructuring their current staffing model. In this model, the Emergency Department physician will still provide medical care, but patients requiring minor treatment will be taken to a specific area in the department to be seen more quickly. The effectiveness of this process in providing quality care and reducing waiting times will be evaluated and if successful, it is proposed that this model be implemented at community hospitals.

The physical location of minor treatment areas/fast track will also be an important consideration in future development in WRHA. Co-location of the fast track, either in the Emergency Department, or in an area adjacent to the Emergency Department allows for sharing of triage, registration and ancillary services. It also facilitates rapid transfer of patients to the Emergency Department if their condition changes. The WRHA Emergency Program will need to consider recommendations for location for minor treatment/fast track areas in its evaluation of the present projects.

COST:

Fast Track at Health Sciences Centre using Nurse Practitioner Model	Currently funded
Fast Track at Misericordia Urgent Care	Currently funded
Fast Track at Health Sciences Centre Children's Hospital	Currently funded
Fast Track at Community Hospitals	To be established within existing resources
Fast Track at St. Boniface Hospital *	To be established within current resources
0.4 EFT Emergency Department Physician for training in sites with Nurse Practitioner model	$82,000/year

*Use of Nurse Practitioner model to be considered after completion of the Health Sciences Centre pilot project. If this model is deemed to be successful at Health Sciences Centre, costs to support the salary gap created by the Nurse Practitioner would need to be provided to St. Boniface. This gap is approximately $61,000 /year for 12 hour a day coverage, 7 days a week.

To Be Implemented Immediately

Left not Seen - Follow-up **OUTPUT**

> *Using the expertise of staff and systems within HealthLinks, the Winnipeg Regional Health Authority will develop a system where HealthLinks staff make telephone contact with patients who leave Emergency Departments before being treated to ensure they are receiving an appropriate response for their condition.*

RATIONALE:

There were approximately 282,00 visits to Emergency Departments in the WRHA during the period of April 1, 2003 to March 31, 2004. However, approximately 6% of patients left the Emergency Department before being seen by a physician. While this is consistent with most cities across North America, these patients present particular risks both for their personal health and safety and for the health system.

PROPOSED CHANGE:

An electronic file can be created from the Emergency Department or Urgent Care Centre and sent to the HealthLinks Call Centre, identifying patients who have left without being seen and their contact phone number. A HealthLinks staff person will call to determine whether there are continuing medical symptoms. If required, symptom assessment and triage will be provided.

This change has a number of benefits:

- Will improve care for the patient whose condition requires follow-up.
- Will help to mitigate risk to the patient.
- Will indicate a system response to people who may have left feeling that their needs were not met.
- Will increase traffic to Health Links as more people see its practical application as a viable alternative to Emergency Departments.
- Will provide information to each site about reasons for patients leaving before being seen by a physician.
- The Emergency Program will be able to collect information for the first time about why people choose to leave without being seen. This information may prompt responses within the Emergency Department that can reduce the instance of this occurrence in the future.

It is recognized that some patients who leave the Emergency Department without being seen by a physician will not be able to be contacted by phone however, this method of follow-up will address the needs of the majority of patients.

COST:

Program Development: $31,000
Annual operating costs: $55,000
Costs associated with programming and integration of electronic information are not included.

To Be Implemented Immediately

Mental Health – Improving Access to Urgent and Emergent Services **INPUT**

> *Winnipeg Regional Health Authority Mental Health Team will implement process changes to improve access to emergent and urgent services for individuals requiring mental health services.*

RATIONALE:
Individuals with mental health issues come to Emergency Departments to access emergent and urgent mental health services. Although there are some alternative crisis response services such as telephone crisis services, mobile crisis services and crisis stabilization units, there are currently no alternative sites to the Emergency Department where individuals can present to access these services. The Regional Mental Health Team anticipates the development of alternatives to Emergency Department as a point of access will be a substantial improvement in care delivery and will be supported by those with mental illness and their families.

PROPOSED CHANGE:
The Regional Mental Health Team has developed a comprehensive Crisis Response Service System Plan to create alternatives to the Emergency Department as an access point for emergent and urgent services for those with mental illness. The plan has been developed in two phases. Phase 1 is outlined below. Phase 2 can be found in the Long Term Implementation section of the Recommendations.

Phase 1 – Realignment of community mental health crisis response services. This phase is currently being implemented and includes:

- The transition of the Mobile Crisis Service from the Salvation Army to Regional operations which occurred in October 2003. These services are available 24 hours a day, 7 days a week.

- Enhancement of the Psychiatry component of community crisis services including the creation of a Medical Director for Crisis Response. This process has begun with the hiring of a 0.1EFT (equivalent full-time) Medical Director.

- A Coordinating Committee for Crisis Response Services is in place to coordinate and implement more effective responses for crisis services, including the development of a common assessment process.

- Implementation of a Brief Treatment Team to provide immediate short term follow-up counseling in conjunction with the Mobile Crisis Service in 2004.

The Mental Health Team is also working on several other initiatives that will impact Emergency Care. The WRHA Mental Health team believes that these improvements will provide more timely and effective treatment for Mental Health patients.

The Mental Health Team is in the process of creating a community psychiatrist on-call system to support the Community Mental Health services and is recruiting psychiatrists to be on-call 24 hours a day, seven days a week to respond to community based issues. This support will be in place by September 2004.

The community on-call psychiatrist will facilitate access to psychiatry for the crisis response services. Currently these services have limited access or no access to Psychiatry.

At the Victoria Hospital, which currently does not have Psychiatric Emergency Nurses (PENs) on site, a pilot project is currently being developed. This project will evaluate the effectiveness of the Mobile Crisis Service in attending to individuals with mental health issues waiting in the ED. This service would be available 24 hours a day, 7 days a week.

Shared Care was implemented in November 2003 in six Community Primary Care Clinics in five geographic areas. The Shared Care model is a team approach between a family physician, a mental health counselor on site and a consulting psychiatrist. This model has been very effective in other jurisdictions in preventing crises that may result in ED visits.

Outpatient and Community Mental Health staff and all psychiatrists in the Region will be reminded that clients should be directed to utilize the mobile crisis service after regular hours, rather than presenting at the ED if emergency/urgent needs arise.

The Mental Health Team will review and reinforce with all psychiatrists in the Region that they are expected to see patients in crisis in their office rather than suggesting that they present to the ED.

COST:
Support for establishment of the Brief Treatment team in Phase 1: $50,000/year

To Be Implemented Immediately

Mental Health – Reducing Length of Stay in Emergency Departments **OUTPUT**

> *Winnipeg Regional Health Authority Mental Health Team will implement process changes to reduce length of stay in the Emergency Department for individuals requiring mental health services.*

RATIONALE:
Preliminary data on wait times collected at one site (Health Sciences Centre), indicates that the average total time for the visit for a mental health patient, who does not require assessment by a psychiatrist, but who is seen by a Psychiatric Emergency Nurse (PEN) and Emergency Department physician is approximately 3-4 hours. At the two teaching hospitals, approximately two-thirds of the mental health patients who present to Emergency Department are in this category. If psychiatric assessment but no admission is required, the average total time in the Emergency Department is 6-7 hours. If an admission is required, the time in the Emergency Department can be substantially longer, especially if there is no bed available in the Region (8-18 hours).

PROPOSED CHANGE:
The Winnipeg Regional Health Authority Mental Health team will:

- Reinforce in the teaching sites that the on-call psychiatrist must provide assistance to the resident when there are multiple patients waiting in the Emergency Department – including the Children's Emergency Department.

- Review and clarify processes followed on nights and weekends within the Emergency Departments at all hospitals to ensure expeditious movement of patients from the Emergency Department to available beds, 24 hours a day, 7 days a week.

- Provide education for all Emergency Department staff regarding mental health issues and community services.

- Create, as a short term intervention, four Regional Mental Health observation beds in one location that would be utilized only when required to address overcrowding in all Emergency Departments across the Region. These beds would be available 24 hours a day, 7 days a week.

COST:
Additional nursing staff, to supplement existing staff, and provide coverage for the Regional Observation beds (1 Nurse II, day and evening shifts, 7 days a week) - $250,000/year

To Be Implemented Immediately

Miscarriage - Early Pregnancy Loss **THROUGHPUT**

> *Winnipeg Regional Health Authority (WRHA) will develop and implement strategies to improve the quality of care provided to patients presenting to an Emergency Department with early pregnancy loss (miscarriage).*

RATIONALE:

One of the main impetuses for establishing the Emergency Care Task Force was that a number of women spoke publicly about having experienced a miscarriage in a Winnipeg Emergency Department after waiting hours to be seen. To address the issues that were raised, the WRHA Emergency and Women's Health Programs formed a working group, which was tasked to do three things:

- To develop better ways to deal with pregnancy losses in Emergency Departments.
- To review and develop educational information for staff and patients.
- To identify follow up needs for women and families experiencing pregnancy loss.

The solutions proposed by this working group were validated by focus groups composed of patients and family members who accessed care in an Emergency Department because of miscarriage.

PROPOSED CHANGE:

The WRHA will implement the following strategies for patients presenting to Emergency Departments with potential or actual pregnancy loss:

- Patients and their families will be placed in a private area, except when their safety is at risk and/or space is constrained beyond normal capacity.
- Additional areas for examination of women who are medically stable will be identified.
- A standardized care process (algorithm) for women with actual or potential pregnancy loss will be developed. This standardized care process will be implemented region wide and will begin at triage and extend through to their return home. Community supports will be included in this care process.
- Education and training programs for staff and physicians will be developed to ensure that the care process is being followed. This program will be adapted to and maintained to reflect any changes to the care process that are made in the future.
- Discharge instruction sheets will be provided to women and families and will include the number for Health Links. Health Links will provide access to 24-hour support and advice should patients feel their condition has changed or if they have questions when they go home.
- Informational packages will be developed for women with early pregnancy loss including a list of available supportive services.
- The Keepsake program at Health Sciences Centre will be expanded and implemented at all Women's Health Program sites in WRHA.
- A standardized process for following-up with a patient who has experienced a miscarriage in an Emergency Department will be developed.

These strategies are aimed at improving the quality of care for families coming to Emergency Departments with early pregnancy loss.

COST:

Within current resources

To Be Implemented Immediately

Orthopedic Trauma Surgery Slates During Daytime Hours **OUTPUT**

> *The Winnipeg Regional Health Authority (WRHA) Surgery Program will provide operating room time for Orthopedic Trauma slates during daytime hours.*

RATIONALE:

A large number of patients who arrive through Emergency Departments requiring surgery are Orthopedic patients (fractures in particular). Currently surgery for emergency orthopedic procedures takes place after the day Operating Room slate is completed. This leads to delays in patient care and in some cases, affects timely discharge. The ability to do emergency Orthopedic procedures during the daytime hours will increase the throughput of patients and will contribute to more effective surgical bed utilization.

PROPOSED CHANGE:

Orthopedic Trauma slates during daytime hours will be established at sites that do emergency Orthopedic cases. This change will facilitate care for Emergency Department patients who require Orthopedic surgery.

COST:

Within existing resources

To Be Implemented Immediately

Project Management Approach **THROUGHPUT**

> *The Winnipeg Regional Health Authority (WRHA) should apply project management principles to implement specific recommendations made by the Emergency Care Task Force.*

RATIONALE:

Successfully implementing projects across numerous sites requires considerable coordination and management. This is most efficiently accomplished through a project management approach, where a project manager is identified to assume overall responsibility for the completion and coordination of the project.

The project manager works with clinical experts to ensure that projects deliver the intended outcomes on time and within their scope. This team approach ensures that projects are implemented consistently throughout the Region.

A number of recommendations arising from the Emergency Care Task Force will need to be implemented in the near future. Resources are not available within the Emergency Program to accomplish all these projects within a reasonable timeframe. The project management approach will allow program team members to actively participate in the process without having to assume responsibility for project organization and coordination.

PROPOSED CHANGE:

Project management will be used to implement the following recommendations:

- Reassessment Nurse Role
- Nurse Initiated Diagnostics
- Fast Track
- Emergency Business Process Review
- IV anti-infective services outside Emergency Departments (Scheduled Procedures)

COST:

$150,000 one time costs (Project Manager, Analyst, Admin Support, etc)

To Be Implemented Immediately

Resuscitation Room Staffing **THROUGHPUT**

> *Dedicated staffing should be funded for the Resuscitation Room at Health Sciences Centre Adult Emergency to support their Regional role in Trauma and Neurosurgery. In addition, a pre-hospital protocol will be developed by the Winnipeg Regional Health Authority Emergency Program which will divert all major trauma patients to Health Sciences Centre Emergency Department.*

RATIONALE:

The Health Sciences Adult Emergency Department supports Trauma, Neuro-trauma and Neurosurgery patients. The patients served by programs are often critically ill and require intensive medical and nursing resources which are provided in the resuscitation rooms. Dedicated staffing for the resuscitation rooms is not currently provided in the Emergency Department at Health Sciences. As a result, when the resuscitation rooms are in use, staff from other areas in the Emergency Department must assist in providing care. Consequently, there are fewer staff available to provide care to the patients in other areas of the department.

PROPOSED CHANGE:

Implementation of dedicated staffing for the resuscitation rooms at Health Sciences Centre would allow patient care activities to continue at a more normal pace when the resuscitation rooms were in use.

This staffing change would also benefit other Emergency Departments in the Region by enabling the WRHA Emergency Program to implement a pre-hospital protocol. This protocol would allow all major trauma patients to come exclusively to Health Sciences Centre where the tertiary care resources (surgeons, Diagnostic Imagining, ICU) are available to manage the multiple trauma patient. Not only would this protocol divert trauma patients from other centres, lessening the demand on their resuscitation room resources, studies indicate that trauma patient outcomes are improved if the patient can get to a Trauma Centre within 1 hour.

COST:

Health Sciences Centre:	
1 RN and 1 RT to provide 24-hour coverage, 7 days a week	$724,000/year

To Be Implemented Immediately

Waiting Room Enhancements **THROUGHPUT**

> *The WRHA Emergency Program and facilities will ensure that projects to redevelop Emergency Departments include provisions for waiting room enhancements that promote patient comfort. In facilities where no redevelopment is planned, the Emergency waiting room environment should be assessed to identify opportunities to improve patient comfort.*

RATIONALE:

Patients are frequently asked to wait for extended periods of time, in the emergency waiting room. Most of these areas were planned to provide space for families and significant others to wait while patients receive treatment. Patients, however, require a more comfortable environment in which to wait. At a minimum, this should include the ability to recline, rest and elevate limbs.

Emergency Department waiting areas have not been designed for patient comfort. The lack of these facilities enhances patients' feelings of anxiety and dissatisfaction and contributes to frequent complaints. Patient surveys or focus groups could provide guidance to the improvements most required at each site.

PROPOSED CHANGE:

Future plans for improvements to Emergency Departments must incorporate the need for comfortable waiting room environments. In addition, facilities where no improvements are planned should prioritize changes to the waiting room to promote patient comfort and lessen anxiety.

COST:

Capital costs for improved furnishings, blanket warmers, telephones etc –	$133,000.
Ongoing costs telephones, laundry etc .	$ 71,000

To Be Implemented As Soon As Possible

Business Processes Review **THROUGHPUT**

> *The Winnipeg Regional Health Authority should undertake a detailed review of current processes in Emergency Departments. This review should be conducted by a team of experts including, but not limited, to industrial engineers, business process consultants and health care professionals.*

RATIONALE:

Generally, processes in WRHA Emergency Departments do not differ significantly from Emergency Departments in other jurisdictions, but other jurisdictions in Canada are facing similar issues.

Business process reviews are most commonly done when a change in technology is introduced into a workplace to ensure that efficiencies are maximized as a result of the change. Such a review has not been done in Winnipeg Emergency Departments despite the introduction of many changes, including new technologies and enhanced computerization such as e-triage.

This recommendation should be implemented using a project management approach and by a team of experts, working with the Emergency Department teams.

PROPOSED CHANGE:

A review of processes in all the WRHA Emergency Departments, especially in light of the many changes that have taken place in these environments, will highlight process changes that can improve workflow and increase efficiency. One of the processes to be reviewed is the ability of Emergency Department Physicians to be able to admit patients to the inpatient units by writing "holding orders".

These changes will allow staff to perform more effectively and improve patient flow.

COST:

To be determined. This recommendation will be implemented using a Project Management Approach.

To Be Implemented As Soon As Possible

Diagnostic Service Enhancements **THROUGHPUT**

Increase diagnostic imaging services after hours.

RATIONALE:

Demand for emergency and after hours diagnostic imaging has increased significantly over the past few years. While after hours service is generally available on an on-call basis, Emergency Departments now demand more timely on-site service to ensure prompt diagnosis and effective bed utilization.

Radiology

Full on-site services for routine radiology are provided at all acute care hospitals and the Misericordia Health Centre during the day and evening shifts, seven days a week. Grace Hospital, Health Sciences Centre, St. Boniface General Hospital and Victoria Hospital have on-site radiology at night (VGH 5 nights per week). Concordia Hospital, Seven Oaks Hospital and Misericordia provide on-call night service only.

Computed Tomography (CT)

The Diagnostic Imaging Program has attempted to improve CT services to community hospitals by cross-training general duty technologists to perform uninfused CT of the brain. This has significantly reduced the number of inter-hospital transfers for CT procedures. At both Health Sciences Centre and St. Boniface, night coverage is currently provided on an on-call basis only. On-site CT services at night would ensure that the two teaching hospitals provide timely service to emergency rooms and inpatients throughout the region, 24 hours per day, seven days per week.

PROPOSED CHANGE:

Enhancements to diagnostic imaging services would improve services available to patients in WRHA including those in Emergency Departments. These enhancements, listed in order of priority, include:
All acute care sites should have on-site radiology services 24 hours per day, seven days per week.
On-site CT services at night at Health Sciences Centre
On-site CT services at night at St. Boniface Hospital

COST:

Night Shift coverage at all community hospitals (Radiology)	$182,000
Night Shift at Health Sciences Centre CT	$ 45,000
On-site Weekend Evening Shift at St. Boniface CT	$ 30,000
On-site Night Shift at St. Boniface CT	$ 56,000
Total	**$313,000**

To Be Implemented As Soon As Possible

Inter-Facility Transport **OUTPUT**

> *Augment the existing Winnipeg Regional Health Authority Inter-facility Transport Team by adding an additional transport unit, 24 hours/day, 7 days per week.*

RATIONALE

When patients need to be transferred from one facility to another, they frequently need to be accompanied by a health care professional, often a nurse. The Winnipeg Regional Health Authority created the Inter-facility Transport Team to address this issue and decrease the need for nurses to leave Critical Care and Emergency to accompany patients being transferred.

In 2003, there were 4711 inter-facility transfers (one-way) from all areas of all hospitals done by ambulance i.e. Winnipeg Fire & Paramedic Service (WFPS). However, the existing WRHA Inter-facility Transport Service only accompanied 2682 of these one-way transports.

The excess of demand over supply has anecdotally resulted in delays. Some of these delays have been in transferring patients out of Emergency Department to other sites. They have also resulted in Emergency Department staff having to accompany the patient when the transport team is occupied with other transfers. While Emergency Department staff are accompanying patients on inter-facility transports, the Emergency Departments are short staffed which contributes to backlogs and increased patient wait time.

PROPOSED CHANGE:

The existing Inter-facility Transport Team should be augmented by adding an additional transport unit, 24 hours a day, 7 days a week. These increased resources will be able to address some of the delays currently being experienced and will reduce the need for Emergency Department nurses to accompany patients who need to be transferred. The Transport Team staff, when not performing transport duties, are assigned to work in the Health Sciences Centre Adult Emergency Department.

COST:

Incremental cost over existing funding is $464,000 per year for staff

Equipment $60,000.

To Be Implemented As Soon As Possible

Intoxicated Persons Management **INPUT**

> *The WRHA should continue working with the City of Winnipeg to expand the options in the community for managing intoxicated people as alternatives to care in the Emergency Department.*

RATIONALE:

When people who are, or appear to be intoxicated go to an Emergency Department, they must remain under observation until their blood alcohol level is low enough to ensure an accurate assessment and ensure there are no other illnesses or injuries. This happens most often at Health Sciences Centre due to its location in the core area and the presence of an addictions unit.

Identification, care and management of intoxicated people is a responsibility shared by the City of Winnipeg (Emergency Medical Services and Winnipeg Police Force), Main Street Project where the Intoxicated Persons Detention Area is located, and the health care system for physical and mental health assessment.

Over the years, a number of strategies have tried to address this issue. Police response to intoxicated persons is a relatively low priority. Emergency Medical System protocol is to transport intoxicated persons to an Emergency Department for assessment and there is evidence that ambulances are used too often in this regard. But, there is no other process to help intoxicated people on the street, as they do need to be taken to a safe environment.

In the past year, WRHA has been working with Main Street Project to help their clientele avoid Emergency Department usage by attending regular clinics and working with community mental health workers at Main Street Project. This work is ongoing and will contribute to some redirection from Emergency Departments.

PROPOSED CHANGE:

The larger issue of managing intoxicated persons requires leadership from all parties to resolve longstanding issues. Planning together will be accomplished through committee work, but changes at the street level will not be seen for an extended period of time. Options to be explored include additional personnel at Main Street Project, such as security/peace officers and health care professionals. These would have significant funding and policy implications to ensure quality and safety concerns are met.

COST:

To be determined

To Be Implemented As Soon As Possible

Lab Results **THROUGHPUT**

> *Diagnostic Services of Manitoba (DSM) will reduce turnaround times for laboratory tests for Emergency Department patients.*

RATIONALE:

The speed at which an Emergency Department patient gets needed diagnostic testing done and the physician gets the test results back is key to ensuring prompt treatment and quick disposition of cases. That means shorter wait times. There is anecdotal evidence that delays in getting tests done and the results back are causing long waits in our Emergency Departments.

At the present time, Diagnostic Services of Manitoba (DSM) have no way of tracking information related to lab turnaround times for Emergency Department patients. In addition, because there are no information systems in place in Emergency Departments, information is not available regarding the length of time between when a test is ordered to when the test is done and results reported to the Emergency Department physician. This kind of information would be available through a Computerized Emergency Department Tracking System.

There is an outdated Lab Information System (LIS) at the Health Sciences Centre, which is being updated. The new system will allow hospitals to communicate with each other, and collect limited data – such as the time the sample arrived at the lab to the time the final report was printed.

There is some work already being undertaken to streamline diagnostic processes and speed up the turn-around time on the tests. It includes:

1. Diagnostic Services of Manitoba (DSM) is undertaking to examine the process at all Winnipeg hospitals related to diagnostic lab work over the next year. DSM is considering employing the assistance of a process consultant in this project.

2. Part of the Hospital Information System project (HISP) at St. Boniface General Hospital includes a much more physician-friendly ordering process as well as electronic results reporting – both of which DSM believes will speed turn-around time on test results as well as improve the accuracy of the information provided to the lab and facilitate standardized testing protocols, all of which will improve patient care.

PROPOSED CHANGE:

DSM will reduce turnaround times for lab tests for Emergency Department patients. Turnaround times for DSM services to Emergency Department patients will meet best practice standards in Canada. DSM will benchmark turnaround times within facilities in the Winnipeg Regional Health Authority to ensure that all sites are meeting their goals.

It is recognized that the lack of information systems available in labs and Emergency Departments will affect the ability of DSM to achieve and monitor the effectiveness of this change.

To Be Implemented As Soon As Possible

Pan Am Clinic Urgent Care **INPUT**

> *An Urgent Care Centre focused on musculo-skeletal injuries should be established at the Pan Am Clinic.*

RATIONALE:

The Pan Am Clinic is currently undergoing a major expansion. When that is finished it will house 10 full-time orthopedic surgeons, have four state of the art operating rooms as well as a Sports Medicine primary care area. A MRI has been approved for the clinic and construction will start shortly to house it. Plans are currently being developed to further expand the building to house five full-time plastic surgeons.

The addition of an Urgent Care Program complements the existing and proposed programs and goals of Pan Am. Establishing Urgent Care at the Pan Am Clinic would accomplish a number of things:

- Alleviate some of the overcrowding in the hospital Emergency Departments by providing urgent patients with an alternative to an Emergency Department.
- Increase throughput at hospital Emergency Departments since Emergency Department physicians would have the ability to perform emergency care (i.e. bandage a severe cut) and then refer the patient to the Pan Am for a scheduled procedure the following day (i.e. for surgery to repair tendons and other similar procedures) instead of admitting them to a hospital bed while waiting for emergency surgery.
- An Urgent Care Program at Pan Am that involves plastic surgery will alleviate the present situation at HSC emergency caused by patients who are referred there daily from other facilities for plastics procedures.

PROPOSED CHANGE:

The physical space at the clinic could easily house a Bone and Joint/Minor Trauma Urgent Care. It includes a large waiting room, adequate reception, good parking, public washrooms, examination rooms, treatment rooms, x-ray, cast room and therapy services.

The one resource Pan Am Clinic does not currently have that will be required for this model to succeed is an Information Technology system of communication between the clinic and all of the Emergency Departments in the Region.

COST:

Start-up/Capital costs		$ 56,000
Salaries		$1,120,166
Medical Remuneration		$ 738,000
Supplies (estimated)		$ 89,994
Operating:	Overhead	$ 33,660
	Office	$ 25,000
	Medical records	$ 23,920
Information Technology		TBD
Casting		TBD
Misc.		TBD

To Be Implemented As Soon As Possible

PCH residents care **INPUT**

> *A set of guidelines should be developed outlining the process to send Personal Care Home(PCH) residents to an Emergency Department as well as the process for them to return to their Personal Care Home. In addition, funding should be provided for a Nurse Practitioner position to provide augmented primary care for PCH residents.*

RATIONALE:

Personal Care Homes (PCHs) provide personal care for residents who are no longer able to live on their own. However, they have a limited capacity to deal with acute illnesses. All have some physician services but as a rule they do not have access to diagnostic and treatment services for their residents. That means many residents who become ill may be transferred to a hospital – often accessing service through an Emergency Department.

A number of issues have been raised with regard to this:

1. PCH residents often are sent to Emergency Departments to access Primary Care services.
2. There is a lack of understanding by hospital staff regarding the PCH's capacity to care for acutely ill patients.
3. Returning a stable resident to the PCH in a timely manner is also sometimes difficult due to resource issues at the PCH. This results in a prolonged stay for the PCH resident in the Emergency Department and contributes to overcrowding.
4. The perception held by some that the elderly are a drain on resources, instead of citizens with a right to access the health care system, a stereotype often reinforced by inappropriate and demeaning language.

A number of steps have been taken to address these issues:

- Education and standardization of region-wide care policies to ensure more consistent services are provided in PCHs.
- Specialty resources such as clinical nurse specialist positions and palliative care and home IV services have been introduced and have increased the PCHs ability to look after their residents who are ill.
- Advanced care plans, which clearly outline end-of-life treatment decisions agreed to by residents and their families, have been implemented in PCHs. The Advanced Care Plan will also help ensure residents are appropriately sent to an Emergency Department if their condition deteriorates and that is the resident's or family's wish and will guide their care in the Emergency Department.
- A project was undertaken to evaluate the role of nurse practitioners in providing Primary Care services in the PCH setting. The evaluation examined the Nurse Practitioner's role in reducing the number of transfers to Emergency Departments/Acute Care and was highlighted through case examples. However, due to the retrospective nature of the project and small sample size, accurate cost savings were not able to be determined.

To build on these changes, further improvements are required to facilitate timely access to care for PCH patients and reduce the impact on Emergency Departments.

PROPOSED CHANGE:

The Winnipeg Regional Health Authority PCH and Emergency Program will work together to develop guidelines to address these concerns and help ensure an elder friendly approach in Emergency Departments through the following initiatives:

- The role of Nurse Practitioner should be implemented in the PCH setting. As a first step, a 1.0 EFT Nurse Practitioner should be hired to augment primary care services to PCH residents. Based on results of a pilot study, the Nurse Practitioner should be able to provide service to approximately 400 PCH residents. Further evaluation of the impact of the Nurse Practitioner role on Emergency Department transfers will be done. As funding becomes available, further Nurse Practitioner positions should be created in the Winnipeg Regional Health Authority to cover all PCH beds.
- Delineate what medical and resident care services can and should be provided in a PCH.
- Develop criteria and communication strategies for sending a resident to an Emergency Department.
- Outline criteria and communication strategies to facilitate the return of a stable resident to her/his PCH in a timely manner so that they are not subjected to a prolonged stay in the Emergency Department and do not adversely impact patient throughput in Emergency Department.
- Outline alternatives for specialty consultations, including tests and treatments outside an Emergency Department.
- Outline ways to improve coordination and access to geriatric psychiatry services to reduce visits to Emergency Departments and manage PCH clients in the home they reside in.

Improving access to emergency services along with creating a more respectful environment for older adults is a key goal of this effort.

COST:

Nurse Practitioner (1.0 EFT) $96,000/year

To Be Implemented As Soon As Possible

Physician Supply **THROUGHPUT**

> *Formally increase the number of training positions in the Canadian College of Family Physicians Emergency Medicine (CCFP-EM) residency program and the Royal College Emergency Medicine Program at the University of Manitoba.*

RATIONALE:

There has been an ongoing and recurrent shortage of Emergency Physicians in the Winnipeg Region, especially at the community hospitals. The number of vacant Equivalent Full Time positions (EFTs) has been as high as 8 out of 36 at the community hospitals. While this shortage will improve in July, there will again be a significant shortage at one site, the Victoria Hospital, this fall. Despite significant recruitment efforts, the number of Emergency Department physicians attracted from other parts of Canada has been disappointing and not enough to address the shortages.

The most effective way to increase the pool of Emergency Physicians is to train University of Manitoba graduates. These graduates are more likely to stay and practice in the Winnipeg community hospitals. Currently, there are two residency training programs for Emergency physicians in Manitoba, the Canadian College of Family Physicians Emergency Medicine (CCFP-EM)and the Royal College Emergency Medicine Program.

The University of Manitoba has the smallest CCFP-EM training program in Canada. The CCFP-EM residency program is a third year program that trains graduates of the Family Medicine residency program in Emergency Medicine. When they graduate they have "special competency" in Emergency Medicine. Presently, there is only one guaranteed training position. Two more positions have been obtained in the last two years. However, they are not guaranteed and one has a "return of service" obligation in rural Manitoba. Lack of guaranteed positions makes recruitment of Manitoba graduates difficult. The three residents graduating in June 2004 are all from Manitoba and all will be working at Winnipeg Emergency Departments. This has been a major reason that the shortages will improve in the summer.

The Royal College Emergency Medicine Program is a 5-year training program in Emergency Medicine. Graduates from this program usually work in tertiary care facilities. Currently in Winnipeg, there is an alternating schedule of resident positions in this program with one position some years and two positions other years.

PROPOSED CHANGE:

The number of training positions in the CCFP-EM residency program at the University of Manitoba should be increased from one (1) to three (3). The number of training positions in the Royal College Emergency Medicine Program should increase to 2 each year. These changes will ensure a more reliable supply of Emergency Physicians for Winnipeg and Manitoba.

Resident positions are determined by the Postgraduate Dean of the University of Manitoba and are finite and this may impact positions in other specialties.

COST:

The training infrastructure already exists. Three residents have been trained for the last two years. The major increase in costs for CCFP-EM will be salaries for two residents positions at the PGY3 level as well as the cost of some special training courses if they have not already been done by the resident (e.g. Advanced Trauma Life Support, Pediatric Advanced Life Support, etc). These costs total $116,000.

Costs for the Royal College Emergency Medicine Program will include resident salaries and mandatory courses. These costs total $143,000.

To Be Implemented As Soon As Possible

Quality review process **THROUGHPUT**

> *Winnipeg Regional Health Authority (WRHA) will develop and implement a process to measure the quality of patient experiences in Emergency Departments.*

RATIONALE:

Ensuring that patients are satisfied with Emergency Department care is important to the health care system as a whole. The Emergency Department should be considered as the front door to the hospital; the place where many patients experience their initial contact with the system and form long lasting impressions. It is crucial that patients are satisfied with their experience and come away with the feeling that the system is both caring and competent.

During the course of gathering information for the Emergency Care Task Force, attempts were made to gauge patients' perceptions of care in the Emergency Departments. While patient satisfaction surveys are regularly conducted, they are not specific to the Emergency Departments and so were of little help. There are also mechanisms to respond to complaints and concerns received from the public. While the public was encouraged to contact the Emergency Care Task Force and relate their experiences, the response rate to this request was minute in comparison to the number of Emergency Department visits/year. The small number who did call provided primarily negative comments.

Many health care facilities are using outside firms to conduct patient satisfaction surveys. The use of a standardized survey in the Region would allow for benchmarking between Emergency Departments. The measurements gathered through such surveys would also provide data to enable the development of appropriately focused improvements.

PROPOSED CHANGE:

The Winnipeg Regional Health Authority will develop and implement processes to measure patient satisfaction with and increase public awareness of complaint mechanisms in response to care provided in the Emergency Department. These processes should be specific to Emergency Department care and should provide measures of satisfaction with quality of care and timeliness of service.

Tracking Emergency Department patient satisfaction on a regular basis would provide WRHA Senior Management and Emergency Program Team with an accurate assessment of changes in public perceptions as well as highlight issues that required further investigation and improvement.

COSTS:

$50,000/year

To Be Implemented As Soon As Possible

Scheduled Visits **INPUT**

> *Facilities in the Winnipeg Regional Health Authority will develop plans to eliminate scheduled visits in Emergency Departments.*

RATIONALE

Over the years, Emergency Departments in Winnipeg have assumed responsibility for a number of ambulatory patient services, which are not considered to be Emergency treatments. The number of scheduled visits vary by site ranging from 2% to 10% with a region wide average between 4% and 5%. Scheduled visits were identified by the WRHA Emergency Program Council and Emergency Department staff, as a factor contributing to increased workload and prolonged wait times.

Patients come/are sent to Emergency Departments for a number of planned treatments on a non-urgent basis mostly because facilities have not identified other locations for these treatments/visits to occur. Scheduled visits may include:

- IV anti-infective therapy
- Wound Care
- Post-operative and, in some cases, pre-operative assessments
- Blood transfusions
- Referral visits to specialist services such as plastic surgery, orthopedics
- Follow-up appointments with Family Practice physicians
- Blood tests
- Procedures such as gastrointestinal endoscopy
- Referrals from physicians for more timely access to diagnostic tests and procedures

PROPOSED CHANGE:

Hospitals, in conjunction with Winnipeg Regional Health Authority Programs, will review the types of scheduled visits currently being delivered in Emergency Departments and develop plans to deliver these services in other areas of the facility.

A large number of scheduled visits to Emergency Departments are for IV anti-infective therapy. Work had been undertaken by the WRHA Home Care Program, to identify options for alternative sites for IV anti-infective therapy administration. One of these options is, following the initial assessment in the Emergency Department, to have patients seen by an Infectious Diseases physician in a bridging clinic and then receive IV therapy at either a community clinic or through the Home IV program. Another option would be to expand the Home IV program to accommodate more patients. These options need to be explored further and prioritized to provide optimal patient service and reduce reliance on Emergency Departments. This project should be undertaken using a project management approach.

Reducing scheduled visits from Emergency Departments has the potential to reduce the number of patients accessing services by up to 5% across the Region. This would result in shortened wait times for patients requiring emergency care.

COST:

To Be Determined
Estimate for IV anti-infective therapy $500,000/year

To Be Implemented As Soon As Possible

Social Work Enhancements **THROUGHPUT**

> *Social Work services in Emergency Departments should be redesigned to improve patient care.*

RATIONALE:

Patients who come to Emergency Departments often have concerns associated with social problems – unemployment, limited education, insufficient social supports, alcohol and drug problems. Hospital social workers most frequently deal with patients with these problems and other problems including: domestic violence, caregiver stress, catastrophic illness, sudden deaths and inappropriate housing. In facilities where there are no psychiatric nurses in the Emergency Department, social workers assist in the care of patients with mental illness.

Currently, social workers provide service in the Emergency Department Monday to Friday, from 8:30 to 4:30. Although social workers are assigned to the Emergency Department they also have responsibilities in other parts of the hospital. This means one of four things can happen to patients who need a social work consult:

- They wait in the Emergency Department until a social worker is available to come to the department.
- The patient leaves without being seen by the social worker.
- The patient may need to wait overnight in the Emergency Department until the social worker arrives for work the next morning.
- In extreme cases, the patient might be admitted to ensure a social work consult takes place before they leave the hospital.

The current model also means there is limited ability for follow-up and in some cases, it means the patient returns to the Emergency Department at a later date to go through the entire process again.

PROPOSED CHANGE:

The model of social work care now delivered to Emergency Departments should be adjusted. Social workers' focus, besides working directly with patients in the Emergency Department, should include working with the members of the Emergency Department team to develop a system focus, linking individuals to appropriate services/resources within Winnipeg. Protocols will be developed that would include contact names and numbers that Emergency Department staff can access when a social worker is not available. Protocols will be standardized at all sites. The social worker would then do the required follow-up, either directly with the patient or through the resource to which the patient was referred.

This change will:

- Reduce repeated admissions through assessment and follow-up;
- Increase quality of communication with patients and patient satisfaction;
- Strengthen links between the hospital and community services;
- Provide early diversion from the Emergency Department; and
- Reduce admission and discharge delays through early assessment.

Finally, the social worker should become an integral part of the Emergency Department team and introduce the entire team to a more broad-based approach to complex social issues.

This change will be accomplished through two measures. Currently, WRHA Social Work resources are not distributed equitably across Programs. The Winnipeg Regional Director of Social Work will identify Emergency Departments with needs and make changes to address these inequities.

Responsibility for implementing changes in the way social work services are delivered in Emergency Departments will be addressed with a cross-facility approach. However, there are substantial jurisdictional issues with such an approach that will have to be overcome.

Both of these changes will be accomplished with the addition of staff equivalent to 1.0 EFT for Social Work distributed across the Region.

COST:
$69,000 including benefits for 1.0 EFT Social Worker

To Be Implemented As Soon As Possible

Support Staffing **THROUGHPUT**

> *The Winnipeg Regional Health Authority (WRHA) Emergency Program should review support staffing at all sites.*

RATIONALE:

Support staffing in Emergency Departments includes Health Care Aides and Clerical staff. Their duties vary across sites. During meetings with Emergency Department staff, some sites identified that a lack of support staff is an issue affecting waiting times in their department.

The external review conducted by Deloitte and Touche revealed that for the most part there is adequate support staffing within the Emergency Program. However, there are currently differences between sites in the number of support staff (health care aides, unit clerks) in Emergency Departments. Often these differences are due to historic staffing patterns and staffing cultures at facilities as well as differences in the volume of visits and the nature of the patients presenting to the department.

PROPOSED CHANGE:

The WRHA Emergency Program will review the current complement of support staff at each site within the Region. Based on this review, the Winnipeg Regional Health Authority Emergency Program will identify any opportunities to address gaps in current staffing levels for support staff.

COST:

Within existing resources

To Be Implemented As Soon As Possible

Tracking System **THROUGHPUT**

> *An electronic patient tracking system should be purchased and installed in all Winnipeg Emergency Departments.*

RATIONALE:

The Winnipeg Regional Health Authority (WRHA) Emergency Program is a $36 million per year operation that does not have a comprehensive computer system and as a result does not have:

- sufficient data to effectively manage the clinical process during a patients visit to an ED;
- sufficient data for long-term planning;
- adequate information to make informed decisions and improve quality and efficiency within the Emergency Program.

In order to provide information regarding current practice in WRHA Emergency Departments for the Emergency Care Task Force, it was necessary to conduct an audit of Emergency Department charts. This audit required approximately 300 hours of time and cost $15,000 to complete.

A Patient Tracking System would:

- Track patients and monitor service delivery events throughout their course of stay in ER;
- Provide a detailed profile of patient demographics, diagnosis, and treatment;
- Track the use of resources;
- Monitor clinical practice.

Having the data collected by a Patient Tracking System would enable nurses and physicians to monitor the Emergency Department and individual patient status continuously and would allow the WRHA Emergency Program Team to:

- Effectively manage Emergency Department workflow;
- Know who and why patients are using Emergency Department;
- Know physician practices and thresholds for admission;
- Compare physician practices in terms of appropriate use of resources; (Best Practices)
- Take and measure corrective action;
- Assess the shift in emergency use based on program realignment across the region;
- Assist with setting operating budgets based on volume, acuity, and demand;
- Protect the public through public health surveillance and the monitoring of sentinel events and adverse outcomes.

Benefits – Within the WRHA Emergency Program

- More efficient and appropriate use of resources
- Continually analyze the impact of hallway patients, including such data as "Length of Hallway Stay" for peak demand analysis
- Compare practice patterns to "best practice" to enhance efficiency of care and reduce costs
- Relate Outcomes and Recidivism to practice patterns
- Matching of Emergency Department Diagnostic Services, and Allied Health resources results in better quality care matched to the patient's needs
- Standardization of data to allow regional and cross-regional comparisons
- Identification of benchmarks and assessment of impact of policy change

Benefits to Staff:

- Identify bottlenecks to care and create strategies to reduce length of stay
- One of the strongest determinants of patient satisfaction is waiting time
- Reduced Length of Stay results in enhanced sense of satisfaction with healthcare system
- Reduced left not seen rate
- Less duplication of information requests and data entry
- More effective tracking of patients in Emergency Department
- Alerts direct caregivers to patient in "greatest need of next attention"
- Feedback to physicians allows adjustment of practice patterns
- Quality Assurance to improve patient care
- Compare practice patterns to "best practice"
- Feedback to physicians will allow practice changes to occur

Benefits – Outside the Emergency Program

- Facilitates regional health planning from a top-level perspective
- Senior Management questions can rapidly be answered
- Faster reporting of "Critical Incidents" to Senior Management"
- Faster analysis of impact of other program decisions, with feedback
- Provide feedback to Diagnostic and Allied Health services to allow their own strategic planning.
- Allows for public health surveillance (e.g. epidemics)

Benefits – Academic

- Easier identification of research samples
- Auto flagging of patients for research
- Surveillance mechanisms for trends
- Monitoring and documentation of effects of policy change brings researchers and administrators together to address problems and improve patient care
- Ability to mine data for links between practice patterns and outcome variables

Examples of Information Deficits that a Patient Tracking System Could Solve

1. The WRHA Emergency Program is a $36 million per year operation that does not know:
Who its customers are

- What kinds of services its customers consume
- How much of each type of service its customers consume
- Whether or not the services provided (or components thereof) are appropriate, effective and provided in a timely manner
- Whether or not the same types of customers receive the same types of services from different sites or from different physicians at the same site
- Whether there are differences in the types of patients at different sites

2. Recently one site's Emergency Department Medical Director raised the issue of a perceived increase in the length of time to get Emergency CT Scans. The Head of that section replied with a request of "show me your data". This illustrates the difficulty in effecting improvements in services from areas outside of the Emergency Department such as diagnostics, consulting services, etc.

3. Research has shown that the introduction of the "Ottawa Ankle Rules" can reduce x-rays for patients presenting with ankle injuries by 30%. Within the WRHA ERs these guidelines have been distributed to physicians with the request to implement them. However, we don't know:

- How many patients present with an ankle related complaint;
- How many ankle x-rays are ordered;
- Whether any of the physicians are actually following the guidelines;
- The rate of compliance for those that are following the guidelines
- Whether or not communicating guidelines had any impact on reducing unnecessary ankle x-rays
- Whether there were any financial savings associated with the implementation of these guidelines.

PROPOSED CHANGE:

An electronic tracking system should be purchased for the Emergency Departments at Health Sciences Centre- Adult and Children's, Seven Oaks Hospital, Victoria Hospital, Concordia Hospital, St. Boniface Hospital and Grace Hospital.

COST:

	Year 1	Year 2	Year 3	Total Annualized
Capital	930,000	655,000	655,000	0
One-time start-up	730,000	242,000	242,000	0
On-going	275,000	275,000	124,000	675,000

To Be Implemented As Soon As Possible

Treat –No Transfer **INPUT**

> *The Winnipeg Regional Health Authority (WRHA)/Winnipeg Fire Paramedic Service (WFPS) Joint Operations Committee should review the feasibility of increasing the use of "Treat-No Transfer" protocols (also known as Treat and Release protocols) in the pre-hospital environment.*

RATIONALE:

Members of Winnipeg's Fire and Paramedic Service (WFPS) are required to take patients to an Emergency Department to ensure they have received the treatment they need. However, in a limited number of cases, paramedics can safely manage patients' healthcare needs at the scene, eliminating the need to transfer the patient to the Emergency Department.

The WFPS currently uses treat-no transfer protocols on a limited basis. However, there may be an ability to expand use of these protocols and affect the number of patients transferred to Emergency Departments.

There are some potential obstacles to such a process:

- The public may resist the concept of paying WFPS for clinical services delivered at the scene in lieu of the current payment for transportation to hospital.

- Third party payers such as Blue Cross, First Nations Inuit Health Branch, etc. would have to agree to paying for EMS services that do not include transport, to ensure patients' insurance benefits are not negatively impacted.

PROPOSED CHANGE:

The Winnipeg Fire and Paramedic Service/Winnipeg Regional Health Authority Joint Operations Committee should review the feasibility of expanding the use of the Treat-No Transfer protocols for patients who can safely be treated at the scene and do not require follow up care in ED.

COST:

No capital costs. May encounter one-time costs related to educating the public.

Long Term Implementation

Health Information System Project **THROUGHPUT**

> *Manitoba Health should continue to support the Health Information System Project (HISP) at St. Boniface Hospital and facilitate implementation of this system at facilities throughout the Winnipeg Regional Health Authority.*

RATIONALE:

The only information currently available to the Emergency Department (ED) staff is the paper chart that was generated if the patient previously visited that site. However, in order to access this information the chart must first be requested and then transported to the Emergency Department. If a chart exists at another site, there is no way for Emergency Department staff to access them or the health information they contain. This is the situation in many jurisdictions in Canada, although some efforts are being made in one region to implement a region-wide electronic patient record. Region-wide electronic health records enable health information to be shared between hospitals/facilities within the region.

PROPOSED CHANGE:

HISP is an initiative to provide an information system for St. Boniface Hospital. However, a number of Manitoba teaching and community hospitals as well as long term care facilities will also need to upgrade information systems in the near future. In order to benefit in terms of cost, process, support and functional standardization, HISP has been established as a provincial initiative. The two principal goals of the HISP project are: to improve the quality and safety of patient care and to increase the efficiency and effectiveness of health care service delivery within and across Manitoba's Teaching Hospitals, Community Hospitals and Long Term Care Facilities.

Implementation of HISP regionally is a long-term project. However, once fully implemented, it will mean better and shared access to patients' health records in all hospitals and long-term care facilities in a timely manner. This is especially important when a patient requires emergency care as those records can provide staff with important information regarding the patients' past and present medical conditions and will facilitate safe, quality patient care.

Long Term Implementation

Mental Health – Alternatives to Emergency Department **INPUT**

> *The Winnipeg Regional Health Authority Mental Health Team will develop a comprehensive Crisis Response Centre that would function as the main point of access to the health care system for patients with Mental Health issues.*

RATIONALE:

The Winnipeg Regional Health Authority Mental Health Team believes that the primary entry point for individuals in a mental health crisis should be outside the current hospital Emergency Department structure. Individuals with mental health issues currently wait for long periods of time in hospital Emergency Departments. In addition, their requirements for service are not effectively met within the current system and processes.

PROPOSED CHANGE:

The creation of a community based Crisis Response Centre is seen as a viable and effective alternative to the current reliance on hospital Emergency Departments as a primary access point for individuals in crisis. This facility would house mobile crisis services, brief treatment team, counseling and medical and nursing assessment and would provide service 24 hours a day, 7 days a week. The plan for such a facility has been developed and submitted as part of the Regional Health Plan.

COST:

Operating, one time and medical remuneration	$2,365,000

Long Term Implementation

Physician Staffing Model **THROUGHPUT**

> *The Winnipeg Regional Health Authority Emergency Program will determine the feasibility of a model for on-call Emergency Department physician coverage at all sites.*

RATIONALE:
A summary of Emergency Department Physician coverage is presented below:

Health Sciences Centre	45 hour coverage/24 hours	2 ED Physicians 18 hours/day 3 ED Physicians 2pm to 5pm 1 ED Physician from 2am to 8am
St. Boniface Hospital	42 hour coverage/24 hours	2 ED Physicians 17 hours/day 1 ED Physician 7 hours/day
Community Hospitals (including Misericordia Urgent Care)	40 hour coverage/24 hours	2 ED Physicians 16 hours/day 1 ED Physician 8 hours/day

The hours of physician coverage required was calculated using the Ontario workload model which is based on numbers of visits and CTAS category. Adjusting for night coverage and rounding found that the hours of coverage were within the Ontario workload calculations.

Site	Required Physician Hour Coverage	Actual Physician Hour Coverage
Concordia	37	40
Grace	35	40
Seven Oaks	39	40
Victoria	38	40
St. Boniface	44	42
Health Sciences	45	45

It is important to note that the Emergency Department Physicians in the community hospitals also provide emergency medical coverage throughout the hospital. This may impact on Emergency Department coverage if there are a number of emergency calls to the inpatient units.

PROPOSED CHANGE:
Although this coverage appears adequate for most situations, there are no provision for times when there is an extreme patient influx. An on-call physician that could be called into the Emergency Department to assist when there are a significant number of patients waiting or when there is a need for a physician to accompany a patient on an inter-facility transfer may be effective at decreasing waiting times and ensuring patient safety.

The WRHA Emergency Program will evaluate the feasibility of a model of on-call Emergency Department Physician coverage. Models that will be considered include site specific on-call and a Regional model. A number of issues will need to be considered in development of such a model including;

- The shortage of Emergency Department physicians;
- An Emergency Department physician culture that does not support being on-call;
- The number of hours that community Emergency Department physicians work per week, with associated shift work, make it difficult to persuade physicians to provide on-call coverage; and
- Cost of providing this coverage.

COST:

Dependant on model chosen	$389,000

Appendices

Appendix A	Public Input About Emergency Departments: Final Report
Appendix B	Recent and Ongoing Perception Measures of Health Care and Emergency Services
Appendix C	Letter to WRHA Staff
Appendix D	Staff Input About Emergency Departments: Final Results
Appendix E	Emergency Care Task Force – Meetings with Emergency Department Staff Summary
Appendix F	Potential and Actual Pregnancy Loss Focus Group Findings: WRHA Emergency Departments
Appendix G	Environmental Scan/Literature Review
Appendix H	Emergency Department Wait Times and Length of Stay Audit Summary – Draft Report
Appendix I	ED Tracking System Presentation

Appendices available on request.