

REGION OF OTTAWA CARLETON
RÉGION D'OTTAWA CARLETON

REPORT
RAPPORT

Our File/N/Réf. RC
Your File/V/Réf.

DATE 22 September 1998

TO/DEST. Co-ordinator
 Community Services Committee

FROM/EXP. Medical Officer of Health

SUBJECT/OBJET **LAND AMBULANCE HEALTH SERVICES YEAR 2000
DIRECTIONS - DOCUMENT REPORT**

DEPARTMENTAL RECOMMENDATIONS

That the Community Services Committee recommend Council approve the following:

- 1. That Regional Council direct staff to prepare a Land Ambulance Health Service system design for the year 2000 that will:
 - a) have one service provider;**
 - b) be performance based;****
- 2. That Regional Council approve the process and schedule as shown in Annex A;**
- 3. Further to Chair Chiarelli's letter to the Minister of Health on the issue of dispatch dated 8 September 1998, that members of Regional Council begin a letter writing campaign to Provincial Members of Parliament, to the Minister of Health and to the Premier. A sample is shown in Annex B;**
- 4. That Regional Council direct staff to meet with the five neighbouring County Councils to present possible co-operative partnerships for the highest quality, lowest cost options for all six Upper Tier Municipalities.**

PURPOSE

The purpose of this report is to present Land Ambulance Services system design principles, and a plan, including timelines and milestones to prepare for a high quality, reasonably priced pre-hospital emergency health service for the Region of Ottawa-Carleton in the year 2000 and beyond.

BACKGROUND

As of January 1, 1998 Upper Tier Municipalities (UTM) in Ontario became responsible for the funding for land ambulance services as a result of the *Services Improvement Act* which downloaded services to upper tier and lower tier municipal governments in Ontario. Ambulance services will be the responsibility of UTM as of 1 January 2000 unless they assume the service before that date.

In order to make an informed decision on what type of land ambulance health service Ottawa-Carleton will have in the future, it is important to understand what the current service is. The following describes the service, the structure, and the various stakeholders and their involvement in providing the service.

The Act

The *Ambulance Act* and associated regulations provide provincial legislation which outline a framework of how service delivery is conducted and regulated. Section 6.3 of the *Act* outlines that during the protection period (ending December 31, 1999) the same type of land ambulance services will be provided in the same manner and the existing operators will be compensated on a similar basis as they were prior to January 1, 1998. In other words, there will be protection for both the existing operators and the public they serve in terms of changes to the service during the protection period. The Province requires a final decision from Upper Tier Municipalities (UTM) as to what the service will be and who will be providing it in January 2000, by September 30, 1999.

Under the current *Act*, ambulance operators are not under a contract but rather operate under a license. As such there are negligible standards or measurable criteria established as part of the *Act* or regulations. The Region currently has a "level of effort" service. In level of effort systems, the service providers agree to try hard to provide good service but are not subject to specific clinical and response time performance criteria as a condition of continuing as the providers. Level of effort systems are remarkably common, despite their disadvantages. The perception of service quality is measured by consumer complaints rather than on actual performance data. In fact, the entire process of performance-based contracting has emerged as a response to the failures of many communities' level of effort systems. Displacing a service provider in a level of effort system is extremely difficult. It is usually difficult to determine whether the service failure arose from the performance of the provider or the design of the system itself.

The Stakeholders

Land Ambulance Services require a complex co-ordination of a multitude of stakeholders. The following will briefly describe a number of the main stakeholders and their interrelationships in the current system.

The Central Ambulance Communications Centre (CACC) or dispatch services is owned and regulated by the Province and operated by the Sisters of Charity of Ottawa (Elizabeth-Bruyère) on an annual contract. They dispatch both private and public operators both within the Region and bordering Counties. Dispatch does not report regularly on the time it takes to respond to a call. It provides regular reports on call volume and the breakdown of calls by call type and service.

The Base Hospital is designated by the Ministry of Health. In Ottawa-Carleton the Ottawa Hospital, General Site acts as the Base Hospital for the paramedics who serve under the license of Dr. Justin Maloney, Medical Director of the Base Hospital. Dr. Maloney delegates the authority to administer controlled medical acts. The role of the Base Hospital and the Medical Director is to certify the paramedics and to provide medical direction, quality assurance, training, and continuing education. Currently the Base Hospital is funded to do quality assurance on only approximately 10% of the calls requiring patient care.

Dr. Justin Maloney was a key player in bringing Advanced Life Support (ALS) paramedics to Ottawa-Carleton. Currently the Region is participating in a provincial study called Ontario Pre-Hospital Advanced Life Support (OPALS). The study is assessing the impact of pre-hospital defibrillation and advanced life support on cardiac arrest, trauma and respiratory distress patients as well as an economic evaluation of instituting Advanced Life Support paramedics across Ontario. In order to conduct the study we will require 78 Advanced Paramedics. Currently we have 48 Advanced Paramedics in the system.

There are currently six operators in Ottawa-Carleton: five private operators and one Ministry-run service. The Ministry-run service delivers approximately half the service in Ottawa-Carleton with the other five private operators representing the balance.

Some of the private operators are currently licensed to operate part of their business within the Region's geographical boundaries and another part in the neighbouring counties. For example, Rural Metro Ontario operates bases out of Barrhaven and the Queensway-Carleton Hospital in the Region, while also serving the Prescott-Russell area. Similar situations exist in Rockland/Orleans, Arnprior/Kanata and Carleton Place/Richmond services. Eastern Medical Services (EMS) operates their service specifically for Osgoode.

In order to ensure seamlessness between the boundaries, Mutual Aid agreements will be required between the Region and its neighbouring Counties. The Province recently introduced a new *Ambulance Act* regulation, part of which relates to "Charges As Between Delivery Agents And Upper Tier Municipalities".

This part of the new regulation ensures that in the absence of a specific agreement between UTM's and municipalities outside their boundaries, the recipient municipality will be billed an annual fee for services. The regulation sets out a specific formula for calculating the fee.

Other stakeholders include the hospitals and nursing homes in and around the Region, both for emergency as well as inter-facility transfer requirements. Other emergency services such as Fire, Police and 911 have significant roles in the provision of ambulance services. A clear understanding of the community's and these organizations needs will be required. The future impacts on these organizations and financial pressures could significantly impact land ambulance services in the Region.

System Measures

There are very few measures to ascertain how well the system is currently performing. Response times to pick-up and transport patients are not established as part of the legislation or through contractual obligations; there is little data available and limited public reporting on criteria required to determine performance of the system, or parts thereof. The focus is on how much rather than how well. Clinical performance is monitored by the Base Hospital.

Staff are working on obtaining the data from the Ministry to provide analysis of current response time performance in the existing system.

The Province has identified \$12.5 million dollars of costs associated with land ambulance services for the Region. Staff believe that this is significantly less than what it actually does cost. Due to the complex nature of the service, the fragmented current operation and the formula used by the Province to determine our allocation we believe the costs may actually be in the \$17 to \$21 million dollar range. Another concern is the inability to identify what level of service the allocated \$12.5 million dollar budget provides. Because no objective measurable criteria are established and closely monitored (such as response times for emergency or non emergency care), it is difficult to know what the Region of Ottawa-Carleton is paying for, how much would be reasonable or how well we are doing in a level of effort system. It is therefore inherently difficult to make decisions which may affect service level or costs in the existing system.

DISCUSSION

System Design

Ontario's land ambulance services system grew mostly out of market pressures and provincial government policies, and is not based on sound clinical and performance outcome criteria. The system Ottawa-Carleton is inheriting needs to be redesigned to achieve better pre-hospital patient care at an acceptable cost.

There is industry-wide agreement, that of all the forces influencing land ambulance services' ability to convert financial resources into clinical performance and response time reliability, system design is the most powerful. Experience throughout North America demonstrates that the design of the system has more influence on the system's success than any other single element.

The opportunity to design a land ambulance health service system is an extraordinary event for a community; full of possibilities, but not without challenges. However when approached in a systematic manner, it becomes a manageable and practical process which can yield enormous dividends to the community. Land Ambulance Health Services staff's goal is to take this opportunity to redesign the current Provincial system into a system that provides optimal clinical care in the most cost-effective manner for the citizens and visitors of Ottawa-Carleton.

There are two fundamental types of land ambulance services: those which are "performance based", and those which are based on "level of effort." They imply substantially different management and public accountability structures, and have significant implications for patient safety and medical control. A level of effort system has been described in the Background of this report.

Performance-Based

Performance-based systems are outcome-based. The system design specifies the result and not the activity. For example, a performance criteria could be: "Ensure an Advanced Life Support unit arrives at 90% of emergency calls within 8 minutes or less". The expectations are clearly stated, simple and objective.

Performance-based systems can be applied equally to internally (a department) and externally delivered services. Performance reporting is new to Canada and has been highly dependent on the very limited supply of individual champions/advocates.

In a performance-based system an agreement would be struck between the Region and the group delivering the ambulance service. In a detailed performance contract the service provider would agree to pre-defined standards of care and response times. Compliance would be monitored on a daily basis.

Performance-based contracts are explicitly not "level of effort" contracts. That is, no amount of capital investment, expertise, skill or good intention is a substitute for precise and consistent pre-determined and agreed upon outcomes.

Performance based systems are designed to be "fail safe" for the community. One salient feature is that the contract provides that a service provider group that fails to perform is subject to immediate replacement without intervening litigation. The design has the advantage of certain, pre-defined and orderly replacement of a faltering contractor long before a crisis of confidence can emerge in the community. The Region would re-tender the system while serving briefly as the ambulance system management team during the selection of a new provider.

In order to permit an orderly take over from a failed service provider, and to prevent the provider from holding the Region hostage, all major infrastructure assets must be under the ownership of the Region or within its ability to seize through three-way leasing arrangements.

The Region must also have direct control of the communication system, including the central ambulance communications centre (dispatch) and the radio system. Similarly, basic inventory would be contracted to the Region with a provision for compensation to the exiting contractor for the value of supplies moved into the Region's control in a take-over.

Performance based systems typically include the following six essential performance measures:

- Level of Response Time Reliability
- Level of Clinical Capability and Reliability
- Cost per Unit Hour
- Cost per Response
- Productivity
- Total System Cost per Capita

The performance-based design also permits all parties interested in being considered as service providers (hospitals, private companies, fire, etc...) to compete on a level playing field during the provider selection process. This is in the clear interest of the patients and the community at large.

Models

Over the summer staff conducted extensive reviews of a number of models. While there are hundreds of variations, models can be grouped into six categories:

- Fire department based ambulance using paramedics riding fire trucks
- Fire department based ambulance using a separate ambulance division
- Private ambulance company
- Municipal ambulance department
- Worker Cooperative
- Hospital based

One Service Provider

There is consensus among industry experts, the Ontario Ambulance Operators Association (OAOA) and the current service providers that it is most efficient and effective to have one provider service the community. If Ottawa-Carleton had more than one provider for the year 2000, economies of scale, efficiency and seamlessness would be fragmented. Accountability would be more difficult to pinpoint and thus, a performance-based system would not be achievable.

Dispatch

Dispatch forms the foundation of all excellent ambulance services in North America. The best practices review and literature search conducted by staff this summer confirmed that the control of dispatch is essential to clinical excellence, cost containment and system responsibility. There are no high performance ambulance systems where the service provider does not operate the dispatch and ambulance deployment process.

Response time defines the likelihood of a person's survival from critical illness and injury. Dispatch practices define and control the time to effectively process a call up to the notification of the responding ambulance, the location of units in anticipation of the next call and the travel time to each emergency call. Therefore dispatch controls response time. It also defines the established standards for service and customer satisfaction in non-emergency calls.

Deployment also controls system cost by determining the number of ambulances required to meet any response time standard as defined by the "owner" of the system. Poor deployment requires more ambulances and therefore more money. Conversely skilled deployment ensures the right ambulance meets or exceeds the required response time(s) in an efficient manner and therefore contain cost.

Since dispatch defines response time and system cost through deployment then whoever controls dispatch is responsible for system performance and conversely no one else is.

For these reasons, a decision on the question of control over the dispatch function is critical. Chair Chiarelli's letter to the Minister of Health is shown in Annex C. If the Region is to effectively move forward for the year 2000, a commitment from the Province that yields all day to day control and operation of the dispatch center to the affected UTM and their ambulance provider is urgently needed. In order to establish a performance based service in Ottawa-Carleton, the control of dispatch is an absolute requirement.

Paramedics

Ottawa-Carleton is extremely fortunate to have a group of highly skilled and dedicated paramedics. The paramedics will be relatively constant and will be the front line service providers, the ambassadors representing the Corporation on each and every call, each and every day in our community. The paramedics are and will be the most valuable asset of the Land Ambulance Health Service in Ottawa-Carleton.

Because of the existence of successor rights legislation and a limited skilled employment pool, continuity of employment and conditions of employment are expected in situations where the service provider must be replaced.

Best Practices Review

Land Ambulance Services staff spent several weeks this summer reviewing best practices. This included site visits, reviewing reports and documents as well as extensive discussions with recognized industry experts from a number of North America cities. The review confirmed that performance-based systems provide assurances to patients in terms of clinical reliability, system responsibility and customer satisfaction.

Regional staff have secured commitments from a number of these experts to assist with the ongoing review and development of best in class land ambulance health services in Ottawa-Carleton for the year 2000 and beyond.

NEXT STEPS

This section describes the next steps in the process. Annex A outlines a timetable and milestones for the next nine months in order to meet the 30 September 1999 deadline, as specified in the Ambulance Act. The process and schedule supports the possibility of any model for Ottawa-Carleton, including a private company, a Regional department and all others listed previously in this report.

Expressions of Interest/Regional Department or Request for Proposal

Staff recommend that the next step be a call for Expressions of Interest (EOI). The EOI process provides potential service providers with an opportunity to submit information on their organization, clinical performance, management, approach to customer service, operational experience and financial strength. During this time, staff will continue to gather information and explore options.

The EOI results will give the Corporation an early indication of the potential bidders and the amount of competition there will be. It is at this point that the Region will decide “who” the potential providers will be. The results of the process will also allow the existing service providers to know early on if they will be contenders or not. Council will need to direct staff to either (i) develop a full, in-house service, or, (ii) proceed with a Request for Proposal (RFP). If Council selects option (i), staff will proceed to develop a strategic and operational plan, including a full budget. If Council selects option (ii), staff will proceed with the RFP to those who pre-qualified as a result of the EOI. EOI submitters will either be determined to be qualified or not qualified and only those identified as qualified will be asked to submit a proposal.

If there is a Request for Proposal (RFP), it will be very carefully prepared with the assistance of independent third party, well renowned North American industry experts. The RFP would be very detailed and would contain clear and specific performance goals related to the conduct of the agreement including all the issues explained in this report. The RFP would detail incentive-based compensation arrangements based on outcomes, and penalties for non performance. The RFP would also outline mechanisms for major and minor conflict resolution, including alternative dispute resolution processes.

The contract would not necessarily be awarded to the lowest bid. The ability and quality of staff and management of the operator and the quality of care and ability to meet the required performance standards outlined in their proposal would be key to establishing the award. The initial RFP would likely call for a three to five year contract with the possibility of three one year extensions that would be earned based on consistently exceeding the provisions of the contract.

PUBLIC CONSULTATION

Consultation with the various stakeholders is key to understanding the need of the community as well as ensuring the effective operation of the system. The following lists the consultation activities which have occurred since the last report to Committee and Council:

- The Land Ambulance Transition Task Force, which is made up of industry stakeholders, met on two occasions. To more accurately reflect its role of information exchange and discussion (as opposed to recommendation formulation and/or decision making) the Task Force agreed to change its name to the Land Ambulance Services Consultation Group (LASCG). There continues to be a growing amount of interest in the LASCG. Two new stakeholders have been added to LASCG. To help keep indirect stakeholders involved, staff have set up a formal information exchange network. Network members receive copies of the LASCG minutes, any reports to Committee and Council as soon as they are made public, as well as any other relevant information.
- A formal information and idea exchange network was initiated by the Region of Ottawa-Carleton with other Upper Tier Municipalities in July 1998. A first meeting of Ontario UTMs was held in St. Catharines in August 1998, where there was complete support for this newly established network. In addition, some UTMs will be meeting on a monthly basis to prepare for the assumption of land ambulance services.
- Staff continue to communicate with the Ministry of Health and the private operators on a regular basis.

- The Director, Land Ambulance Services presented the Ottawa-Carleton experience at the Association of Municipalities of Ontario (AMO) annual conference in August. The session was well attended and a significant number of inquiries were responded to by staff. The Director has been invited back to speak at AMO's Regions and Counties section meeting in early October 1998.
- Staff also met with most of the local fire chiefs and had preliminary discussions with the Chair of the Tiered Response Committee. Staff will attend the next Tiered Response Committee meeting.
- As directed by Council, a Corporate Steering Committee was established in June of this year and meets on a monthly basis.
- The best practices review and consultation with industry experts confirmed that there are tremendous opportunities for improved service and economies of scale, in partnership with our five neighbouring Counties. Staff have had preliminary discussions with our neighbours staff to discuss possible options. Regional staff believe there are win-win solutions, and therefore have made a recommendation to this effect in the report.
- Because of growing concern and a sense of uncertainty amongst the paramedics, a letter was sent to each individual, by the Director, Land Ambulance Services on 14 September 1998 to alleviate rumours and confirm that no decisions had yet been made on the future of the service in Ottawa-Carleton. A second letter was sent on 25 September and included a copy of this report.

The second phase of public consultation has just begun and includes secondary stakeholders like nursing homes, and homes for the aged. Staff will continue to strive toward open, and timely information distribution and consultation with anyone who expresses an interest.

FINANCIAL STATEMENT

It is a challenge to predict costs for the year 2000 not only because of the lack of financial and operating information available from the Ministry of Health to date, but also because Land Ambulance Health Services in Ottawa-Carleton system design will look very different than it does today. If the transition is smooth and seamless, given the nature of this service the transfer should occur without disruption to the general public.

As Council is aware, the Province has provided the Region of Ottawa-Carleton with \$12.5M. Staff believe and have reported to Council that this is not sufficient. While it is extremely difficult to predict the "real" cost of service in Ottawa-Carleton today, staff estimate the current cost to be closer to \$ 17 M - \$ 21 M. Future costs will depend largely on system design, and established performance criteria.

In Ontario, Land Ambulance Services are provided from general tax revenues, as opposed to fee-for-service billings to patients and their insurers. This is a public policy choice, and probably widely held to be a wise one. However, certain ambulance services such as dedicated stand by's at sports or other special events, as well as complex special services such as inter-hospital critical care transport services are legitimate areas of direct billing revenue for land ambulance health services. The issue of the current revenue stream and future revenue generation requires further review.

CONCLUSION

The current service is based on a level of effort approach where the service provider agrees to try hard, but is not subject to specific criteria. There are currently very few measures of how well the system is performing. There is little data available, limited public reporting and the focus is on "how much" rather than "how well."

Developing a safe, cost effective and accountable land ambulance service is a major new challenge for Ontario's Upper Tier Municipalities. It may pose significant financial burden, however it creates a terrific opportunity for the health of our community to improve service and increase public accountability.

Staff recommend a strict performance-based contract with the clear intention of cancellation in the event of a major default. To ensure economies of scale and full accountability a single service provider is also recommended. Staff will also pursue win-win partnerships with the five neighbouring Counties.

All of the information gathered to date has confirmed the importance of the Region's control over dispatch. Dispatch is the initial point of accountability. It controls response time performance, clinical excellence and cost. No durable arguments could be found for the establishment or maintenance of a separation between dispatch and the service delivery agent. Several other UTMs have also indicated that they will be requesting control of dispatch from the Ministry of Health.

Land Ambulance Services requires the complex co-ordination of a multitude of stakeholders. Public consultation continues to be a very important part of the process, and staff have begun to contact some secondary stakeholders.

Of all forces influencing the ability to convert financial resources into clinical performance and response time reliability, system design is the most powerful. The question of "who" should provide land ambulance services continues to be debated. The answer for Ottawa-Carleton has, and will continue to be: Anyone qualified, just as long as they continuously meet all the provisions of the agreement. The focus should be on "what" and not "who".

A carefully designed call for Expressions of Interest will ensure that potential providers have the financial, managerial and technical capability to provide excellent service for the citizens and visitors of Ottawa-Carleton.

*Approved by
Robert Cushman, MD, MBA, FRCPC*

ANNEX A

SCHEDULE

October 1998	Year 2000 Directions Document - Community Services Committee
October 1998	Year 2000 Directions Document - Council
November 1998	Early Assumption Report to Community Services Committee
November 1998	Early Assumption Report to Council
December 1998	Advertise for Expressions of Interest (EOI)
February 1999	Deadline for receipt of EOIs
March 1999	Decision point: (i) Regional department or (ii) Request for Proposal (RFP)*

*For (i) Regional Department	For (ii) Request for Proposal
April-August 1999: Develop detailed strategic and operational plan	April 1999 - RFP to pre-qualified June 1999 - RFP closes July/Aug 1999 - RFP recommendations to the Community Services Committee and Council

September 1999	Inform the Ministry of Health as per <i>Ambulance Act</i> of service delivery agent in Ottawa-Carleton
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ANNEX B

Re: Land Ambulance Services

Dispatch forms the foundation of all excellent ambulance services in North America. The dispatch function directly controls cost and quality of service.

The Region of Ottawa-Carleton believes that control over the dispatch function is essential to meeting our mandate of providing cost effective, seamless and clinically sound ambulance services to the community.

The Region of Ottawa-Carleton would like a similar arrangement to that of the City of Toronto, wherein the Province funds and Toronto establishes operating procedures and operates dispatch.

Dispatch must be fully integrated with the Region's responsibility for service delivery. The separation of dispatch will prevent the Ministry of Health from holding Upper Tier Municipalities and/or service providers to any level of accountability. This, in turn may result in unnecessary risk to public safety and unnecessary cost increases to the taxpayers. Separate administration of the dispatch centres is a duplication of resources.

If the Region of Ottawa-Carleton is to effectively prepare for full assumption in the year 2000 and, is expected to meet the 30 September 1999 deadline as outlined in the *Ambulance Act*, a resolution to this matter is required immediately.