FINAL REPORT

10. FINDINGS & RECOMMENDATIONS

10.1 Patient Transfer Arrangements Need to Be Improved

Ambulances are called upon routinely to fulfill two roles: pre-hospital response to medical emergencies, and transport of patients both emergency and non-emergency patients to, from and between health care facilities.

The routine use of ambulance resources for non-emergency purposes not only impedes the ability of EMS providers to respond swiftly to pre-hospital medical emergencies; the practice also increases the cost of land ambulance service operations.

The limited availability of ambulances for non-emergency purposes coupled with their frequent (and often sudden) re-assignment from a non-urgent function to one involving an emergency, repeatedly hinder the timeliness of medical services afforded non-emergency patients.

Non-emergency patients having to wait extensively long periods for ambulance transport, medical diagnostics and *I* or medical treatment have become the norm. Occurrences of non-emergency patients arriving late or missing medical appointments entirely are on the rise, as are the potential for medical condition complications. Medical facilities also feel the effect i.e., in the form of bed blocking, emergency room overcrowding and increased operating costs.

Out of necessity some members of the health care community (i.e., hospitals, long-term care and home care) are turning to alternative methods other than ambulance for non-emergency patient transport: to private MTS for stretcher transport (i.e., companies other than EMS, which offer transportation primarily for medical purposes), and to taxi, community specialized transit agencies and volunteer driver programs for sedan *I* wheelchair accessible transport.

The use of MTS for non-emergency patient transport has not been without~criticism. MTS operate outside of any established regulatory framework, without provincially-uniform standards for vehicles, personnel or for the care and treatment of patients during transport. There are reported instances of MTS operators transporting emergency, medically unstable patients, even though such activities are strictly prohibited by legislation. Patient safety and the risk of a patient's medical condition deteriorating en-route are major concerns, as is the potential liability associated with decisions to use MrS.

10.2 Mode Choice Should Reflect Patient Care Needs

A medically unstable patient is one whose condition is life threatening or where there is a relatively high degree of risk to limb or function, or that the patient's condition can deteriorate rapidly. Such patients typically require transport by stretcher and accompaniment en-route by a regulated health care provider i.e., physician, registered

FINAL REPORT

nurse or paramedic. For such patients an ambulance would be the preferred choice of transport.

For patients described as medically stable the above conditions do not all apply. The patient's condition is not life threatening and the risk to limb or function is low. Many such patients do not require stretcher transport or accompaniment other than by a casual escort. For such patients there are a host of transport choices to consider, including taxi, community specialized transit, private auto and MTS companies.

10.3 Ambulances Should Be Used Predominately for Emergencies

Among stakeholders, the general view is that ambulances should be used predominately, to carry out emergency calls and 'medically unstable' patient transfers. Their routine use for non-emergency purposes is not an appropriate function *(for the reasons descdbed above)* and should be discouraged. Ambulances should be used to transfer 'medically stable' patients when:

- The condition or risk to the patient makes it medically necessary;
- Alternative means of patient transport are not readily available; or
- For reasons of cost-efficiency ambulance would be the preferred choice.

Otherwise alternate more cost-efficient means of patient transport should be encouraged.

10.4 MTS Operations Need to be Regulated

Ambulance services are regulated by the Ambulance Act, the activities of ta~ds and community specialized transit are controlled by municipal by-laws, and volunteer drivers are accountable to their host organizations. Of all available patient transport options MTS companies (i.e., companies other than EMS which offer transportation primarily for medical purposes) are the only ones, M/hich operate outside of any established regulatory framework.

The standards for MTS vary by company. Some set relatively high standards and maintain clear operating policies i.e., for their vehicles, personnel and for the care and treatment of patients; others do not.

Virtually all of the stakeholders with whom 181 Group consulted, contend that the operations of MTS companies need to be regulated by an authority other than the MTS company owner/ operator. The general view is that a regulatory authority is required to:

Establish a provincially uniform set of policies and standards for MTS

operations, inclusive of vehicles,. staff and patient care;

• Ensure that MTS operators are certified *I* licensed;

IBI LROLP

FINAL REPORT

- Ensure quality and accountability for MTS operations e.g., through a system
 of reporting and I or periodic inspection;
- Enforce the regulations e.g., to investigate complaints and where required, to take corrective action.

The above views are in keeping with recommendations previously articulated by both the Provincial Coroner's Office and the Provincial Auditor's Office. 181 Group concurs with these views.

The results of this assessment favour MOHLTC as the preferred 'regulatory authority for MTS. Such a role would be a natural extension to the Ministry's current regulatory responsibility for ambulance services. Policies and standards, certification processes, quality assurance processes, complaints investigation and enforcement processes are already in place for EMS. If the Ministry is provided with additional resources, the policies, standards and processes can be extended relatively easily to cover MTS.

The results do not favour a municipal regulatory option. Potentially, this option may result in multiple standards, requirements for multiple licensing and cross-border difficulties, which would make it relatively difficult to monitor MTS operations and enforce regulations. Also, the results also do not favour a hospital regulatory option, the status quo (unregulated) or industry self-regulation.

10.5 Support for Private and Publicly Operated MTS

At present MTS are delivered solely by private companies operating under contract or casually for health care facilities. In consideration of the following, this study concludes that a single MTS delivery model _relying solely upon MTS delivery by priv~te companies

- would not be an appropriate solution for all communities:
- The current volume of patient transports by private MTS is estimated to be approximately 140,000 annually. The potential market for MTS is estimated to be at least twice this figure; possibly higher if a regulatory framework is accompanied by funding instruments / incentives to encourage increased use of alternate modes of patient transport (when ambulances are not medically necessary);
- Potentially, it may be difficult for private MTS to respond to the increases in
 patient transport demand in the short term despite a willingness to do so i.e.,
 time is needed to acquire and outfit additional vehicles, to recruit and train
 additional staff, to purchase additional communications equipment, etc;
- In many northern and relatively rural communities, private sector MTS operations do not exist; nor are such operations viable. Such is the case wherever the demand for such services locally, is relatively low. In such

locations there may be no alternative other than ambulance _or alternatively, MTS operated by 'non-profif public services organizations.

9 5 GROUP

FINAL REPORT

The following 'non-profit' public service delivery alternatives were suggested by stakeholders:

- MTS to be delivered directly by municipalities through their EMS department;
- MTS to be delivered *directly* by hospitals or other 'non-profit' public services organizations;
- MTS service delivery via partnerships I brokerages e.g., Med-Lift brokerage, Kingston Area Patient Shuffle and the patient transfer partnership involving Superior North EMS and Thunder Bay Regional Hospital.

The study supports such solutions in addition to privately delivered MTS operations. All MTS providers _private and public would be expected to uphold the regulations, standards and policies established by the regulatory authority.

10.6 Community Networking Preferred as a Public Policy Instrument

The study considered the following three alternate 'patient transport models' as potential

public policy instruments by which to influence changes to patient transfer arrangements:

- Hospital Model: Continuation of current practices, wherein most members of the health care community (hospitals, long-term care and home care) would continue to address their patient transfer requirements individually;
- Ministry Model: MOHLTC to take responsibility 'centrally' for the delivery of MTS, in addition to an MTS regulatory responsibility;
- Community Network Model: Members of the health care community (hospitals, long-term care and home care) would be encouraged to network at the local community level (or regionally) to jointly address their collective patient transfer re*~uirements.

The assessment results favour the 'Community Network' model for the following reasons:

- Builds on the current practice by groups of hospitals to 'cluster' with oneanother to deliver a comprehensive range of diagnostic and medical services;
- Several groups of hospitals have already adopted such an approach for the provision
 - of non-emergency patient transport. They include hospitals in London Ontario; Osler,

Credit Valley and Trillium which operate in Peel Region; University Health

Network in

Toronto; and hospitals in Waterloo Ontarro (working through Med-Lift).

Several other

Ontario hospitals are also considering this approach i.e., including several in

Eastern

Ontario and the Niagara region;

 $\mathbf{f13J}_{\mathsf{GROUP}}$

FINAL REPORT

- Outside of the built up urban centers, most Ontario hospitals, long-term care and home-care organizations do not have sulficient mass in terms of patient transport demand, to induce either private or public sector MTS interests individually;
- Community Networking would be particularly advantageous to rural communities and to communities in the north, where by networking they may collectively build up sufficient mass to generate such business opportunities / interests;
- Most Ontario hospitals, long-term care and home-care organizations do not have sufficient administrative capability to dedicate resources solely to transportation issues. Transportation is not their core business, and if left to their own means, they will continue to make use of ambulances primarily for reasons of convenience and cost;
- Affords opportunity to reduce individual administrative overheads by consolidating the day-to-day transportation responsibilities of each member of a group to a single Transportation Coordinator / Broker, who would assume their collective responsibilities;
- Affords greater opportunity to control costs i.e., by standardizing transportation fees for all members of the community network, lower profit margins in return for guarantees of higher patient transport volumes, etc;
- Affords participants greater ongoing capability to develop uniform processes by which to administrate service delivery more efficiently, monitor and evaluate service delivery performance (including timeliness and quality), carry out complaints investigation and communicate with stakeholders and patients alike; and
- Would promote more efficient use of resources and appropriate patient transport choices taking into account the range of medical facilities and treatments available locally, demand for medically necessary transport, mode choice prospects and costs.

10.7 Improved Transfer Arrangements are Contingent Upon Funding

Cost is a dominant factor in the health care community's decisions concerning patient transport.

According to the Ontario Health Insurance Act the transfer of a patient by ambulance from one health care facility to another for insured, medically necessary treatment, is exempt from an ambulance charge. If a health care facility or agency (i.e., hospital, long-term care facility, OCAC, etc) chooses to use an alternate means of transport to carry out that same inter-facility transfer, then they

are obligated to pay the full cost for that alternate service.

Typically the cost of a trip by MTS ranges between \$90 and \$130 depending upon trip length, duration, the qualifications of the attendants, etc. For taxi and community specialized transit the costs may be as high as \$50 per trip.

1131 GROUP

FINAL REPORT

An ambulance charge applies for ambulance transports which are not classified as inter-facility i.e., transfers involving home care patients or trips which originate at/ are destined to locations other than a health care facility. The charge, frequently referred to as an ambulance co-payment, is typically \$45 for an Ontario resident possessing a valid Ontario Health Card. Hospitals are responsible to administrate invoicing for ambulance services. For their efforts they keep two-thirds of the money collected. Hospitals who choose to transfer patients using means of transportation other than ambulance, not only assume the full cost for such services, they also lose the revenue which would have been afforded had the patient been transferred by ambulance.

In view of the above one may conclude that achieving an appropriate funding mechanism has to be an integral consideration in the development of any strategy intended to improve upon current transfer arrangements.

10.8 Incentive (Grant) Funding Strategy Favoured in Short Term

The study considered the following four provincial funding strategies:

- Incentive strategy: This strategy would see the province provide the health care community (hospitals, long-term care I home care) with money in the form of a grant or subsidy, to encourage their use of transport modes other than ambulance. The grant or subsidy would be tied to a future reduction in the volume of non-emergency patient transfers by ambulance.
- Disincentive strategy: This strategy would see an 'ambulance charge' introduced to discourage the use of ambulance, where their use is not medically necessary. Specifically EMS operators would be permitted to charge health care facilities / agencies for the use of their ambulances for non-emergency transfers. ,The ambulance charge would apply if alternate modes of transport are available and if the patient's transfer by ambulance is not considered medically essential.
- **Combined funding** strategy: This strategy would combine the key features of the incentive and disincentive strategies; and
- **Co-Payment funding** strategy: This strategy would involve a regulatory change to increase the ambulance co-payment administrated by Ontario hospitals. The underlying objective is to provide Ontario hospitals an increased source of revenue, by which to pay the cost of patient transfers via modes other than ambulance; thereby negating the need for either a provincial grant or the application of an ambulance charge.

The funding strategies were assessed using various criteria including: potential to improve inter-facility transfer arrangements; potential impact on UTM ambulance operations; implementation challenges; expected stakeholder reaction; sector

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS financial impacts; potential impact on LAISC principles; and Influence on health care 'Community Networking'. The following conclusions are drawn from the assessment:

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

- There is no clear finding vis-a-vis a preferred funding strategy. There are advantages unique to each strategy. Also, there are disadvantages.
- The asses~ment is based in part on factual data and in part on assumptions I opinions. The
 latter would need to be verified before one may conclude with certainty, in favour of a
 preferred funding strategy.
- There are implementation challenges unique to each funding strategy. A decision in favour of a funding model would require a concurrent commitment to address these challenges expeditiously and carefully.
- The following are essential regardless of funding model: development of a provinciallyuniform decision making algorithm to differentiate between patients requiring ambulance and those who can travel by alternate means; and changes to CACC policies to ensure that the algorithm is followed.
- Healthcare community 'buy-in' will be essential regardless of funding model chosen.
- There are regulatory / legislative change requirements associated with most funding strategies (incentive strategy being the exception). These would take some time to enact. The absence of an interim / short-term solution would be a concern.
- Taking into account the time lapse to enact regulatory / legislative changes and the potential financial impact on the health care community the incentive strategy involving a provincial grant / subsidy appears preferable to an ambulance charge in the short term.
- For similar reasons, an incentive strategy appears preferable to an increased ambulance copayment in the short term.
- Incentive strategy appears to be compatible with the principles for non-emergency patient transfers adopted by LA1SC.
- Concern that an incentive strategy on its own, may not effectively reduce the volume of nonemergency patient transfers by ambulance. Opinion of several stakeholder groups (particularly EMS operators) that achievement of this objective will require a disincentive mechanism i.e., an ambulance charge.
- A pilot I demonstration could be an effective mechanism by which to determine the suitability
 of a funding model as a long-term solution. It would require monitoring effectiveness for an
 extended period.

1131 groci'

FINAL REPORT

10.9 On Moving Forward

The following 'next steps' are suggested for consideration:

 MOHLTC to assume regulatory responsibility for Medical Transportation Services

(MTS);

- MOHLTC to proceed with MTS regulations and early certification of MTS operators;
- Emergency Health Services (EHS) Branch of MOHLTC to pursue additional Ministry staffing for the above purposes;
- Health care Community Networking to be promoted as the preferred patient transport model;
- A process for consultation with health care community to be initiated. The following to be among the items for discussion, building on the contents of this report:
 - Community networking
 - Alternative short and long term funding strategies
 - Regulatory *I* legislative changes
 - Implementation challenges
- MOHLTC to give consideration to the adoption of an incentive (grant) strategy as the preferred funding strategy in the short term, and to one or more pilotsi demonstrations, to determine the suitability of such a funding model as a long-term solution~
- Work on the following initiatives to be commenced by MOHLTC in association '~ith other stakeholders as appropriate:
 - Development of a provincially-uniform decision making algorithm to differentiate between patients requiring ambulance and those who can travel by alternate means;
 - Changes to CACC policies to ensure that the algorithm is followed;

Readiness advancement of regulatory / legislative changes to accommodate the implementation of an alternate long term funding strategy, should one be required.

1131 GROUP

Ministry of Health and Long-Term care

Ministere de la 5ant~ et des Soins de longue duree

Protection of Privacy Office

de la protection de la vie priv~e

Ontario

Freedom of Information and corporate Management Branch 5th Floor, 5700 Yonge Street North York ON M2M 41(5 Telephone (416) 327-7040 Bureau de l'acc~s ~ information et Direction de la gestion centrale 5e Etage, 5700 rue Yonge North York ON M2M 41(5 Thl~phone (416) 327-7040 1171

Facsimile (416) 327-7044

Thl6copieur: (416) 327-7044

Our File _Notre r~t~rence A-2003-00796 / pm Your File _Votre r~t~rence

October 14, 2003

Mr. John Nicholas Land Ambulance Coordinator Hastings County Social Services Postal Bag 6300 228 Church Street Belleville ON K8N 5E2

Dear Mr. Nicholas:

I am replying to your request for access to the report on Inter-Facility Patient Transfers by the IBI Group, received on July 3, 2003, under the *Freedom of Information and Protection of Privacy Act* (the *Act*). This is to inform you that the decision provided to you on July *16,* 2003 has been re', ised and access is hereby granted in full to the records requested. Malcom Bates, Director, Emergency Health Services Branch was responsible for this decision.

You may request a review of this decision by the Information and Privacy Commissioner, Suite 1700, 80 Bloor St. West, Toronto ON M55 2V1. Please note that you have 30 days from the receipt of this letter to request a review. In the event that you do seek a review, please provide the Commissioner's Office with:

- 1. The request file number: A-2003-00796
- 2. A copy of this decision letter.
- 3. A copy of your original request.
- 4. A cheque or money order in the amount of \$25.00 payable to the **Minister of Finance**.

If you have any questions, please contact Elizabeth Medhurst, Team Lead, at (416) 327-7363.

Yours trul

Car yn Lentz

Co-ordinator

Enclosure

Study of Non-Emergency

Inter-Facility Patient Transfers

for Land Ambulance Implementation Steering Committee

Final Report

August 2002

IBI GROUP

Copy to: Frances Soloway, PC



August 15, 2002

Mr. John Gross LSR Project Office Ministry of Health and Long-Term Care sth Floor, Hepburn Block BO Grosvenor Street Toronto, ON M7A 1R3

Dear Mr. Gross:

FINAL REPORT NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

We are pleased to submit this report containing the findings and recommendations of our investigation.

Thank you for giving us the opportunity to work with you on this most interesting *i* assignment.

Sincerely,

IBI GROUP

/~1/

Marvin Rubinstein Associate

230 Richmond Street West, 5th Floor, Toronto, Ontario, Canada M5V IV'6 (416) 596-1930,

FAX (416) 596-0644

IBI is a group of compoolos practisiog professiooo~ coosoltiog aod is aff,liated o,ith BIA Boiohokor/Irssio Associates Architects,
Cogineers. P1800er5

Copy to: Frances Soloway, PC

TABLE OF CONTENTS

| AC | KNOWLEDGEMENTS | | |
|----|---|------------|--|
| | 11.0 1/202 02.122/12 | A. | |
| 1 | | | |
| | SUMMARY | | |
| 5. | 1 Study Objectives | | |
| | | S• | |
| 1 | | | |
| S. | 2 Patient Transfer Arrangements Need to Be Improved | | |
| 1 | | S. | |
| • | .3 Mode Choice Should Reflect Patient Care Needs | | |
| 3 | .3 Mode Choice Should Reflect Patient Care Needs | S. | |
| 2 | | Э. | |
| _ | S.4 Ambulances Should Be Used Predominately for Emergencies | | |
| | S.2 | | |
| | S.5 MTS Operations Need to be Regulated | | |
| | S.3 | | |
| | S.6 Support for Private and Publicly Operated MTS | | |
| | S.4 | | |
| | S.7 Community Networking Preferred as a Public Policy Instrument | | |
| | S.5 | | |
| | S.8 Improved Transfer Arrangements are Contingent on Funding | | |
| | S.6 | | |
| | S.9 Incentive (Grant) Funding Strategy Favoured in Short Term | | |
| | S.6 | | |
| | S.10 On Moving Forward | | |
| | S.8 | | |
| 1. | INTRODUCTION | I | |
| | 1.1 Background | I | |
| | 1.2 Study Objectives | .3. | |
| | 1.3 Scope | | |
| | 1.4 Approach | 5 | |
| | 1.5 Study Direction | 6. | |
| _ | 1.6 Report Structure | 7 | |
| 2. | CONTEXT | 8 | |
| | 2.1 Shared Accountability for EMS | 8 | |
| | 2.2 Historical Context | 9 | |
| | 2.3 Existing Legislation & Regulations | 11 | |
| _ | 2.4 Principles Adopted by LAISC | 14 | |
| ა. | ON CHOOSING APPROPRIATE PATIENT TRANSPORT | 15 | |
| | 3.1 Continuum of Patient Care Needs 3.2 Specific Non-Emergency Transfers Poquire Ambulances | 15 17 | |
| 1 | 3.2 Specific Non-Emergency Transfers Require Ambulances STAKEHOLDER CONSULTATION | 20 | |
| 4. | 4.1 Regional & Community Initiatives | 21 | |
| | 7.1 Negional & Community miliatives | 4 1 | |

| | NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS | |
|----|--|----|
| | 4.2 Views of Ontario Stakeholders | 27 |
| 5. | PATIENT TRANSPORT TRENDS | 40 |
| | 5.1 Ambulance Call Trends Province-Wide | 41 |
| | 5.2 Ambulance Transfer Trends Province-Wide | 42 |
| | 5.3 Ambulance Transfers by OHA Region | 43 |
| | 5.4 90~ percentile Response Times | 45 |
| | 5.5 Patient Transports by Other Mode | 46 |
| | 5.6 MTS Transports by OHA Region | 46 |
| , | | |

| | TABLE OF CONTENTS | | |
|-----|--|-----------|--|
| 6. | PRACTICES IN OTHER JURISDICTIONS | 47 | |
| | 6.1 Pinellas County, FL | 47 | |
| | 6.2 Phoenix, AZ | 51 | |
| | 6.3 Tulsa, OK | 52 | |
| | 6.4 Richmond, VA | 55 | |
| | 6.5 State College, PA | 57 | |
| | 6.6 West Midlands, U.K | 58 | |
| | 6.7 Winnipeg, Man | 59 | |
| | 6.8 Province of Alberta | 61 | |
| | 6.9 Calgary, AL | 61 | |
| | 6.10 Edmonton, AL | 62 | |
| | 6.11 Summary | 63 | |
| 7. | MTS REGULATORY & SERVICE DELIVERY OPTIONS | 65 | |
| | 7.1 Why Regulate MTS Operations? | 65 | |
| | 7.2 MTS Regulatory Options | 66 | |
| | 7.3 MTS Operational Regulations | 67 | |
| | 7.4 MTS Service Delivery Options | 68 | |
| 8. | PATIENT TRANSPORT MODELS | 71 | |
| | 8.1 The Models | 71 | |
| | 8.2 Summary of Key Features | 75 | |
| | 8.3 Assessment | 75 | |
| 9. | FUNDING STRATEGIES | 79 | |
| | 9.1 Incentive Strategy | 80 | |
| | 9.2 Disincentive Strategy | 82 | |
| | 9.3 Combined Ambulance Charge & Grant | 87 | |
| | 9.4 Co-Payment Strategy | 88 | |
| | 9.5 Assessment Summary | 90 | |
| 10. | FINDINGS & RECOMMENDATIONS | 93 | |
| | 10.1 Patient Transfer Arrangements Need to Be Improved | 93 | |
| | 10.2 Mode Choice Should Reflect Patient Care Needs | 93 | |
| | 10.3 Ambulances Should Be Used Predominately for Emergencie | s 94 | |
| | 10.4 MTS Operations Need to be Regulated | 94 | |
| | 10.5 Support for Private and Publicly Operated MTS | 95 | |
| | 10.6 Community Networking Preferred as a Public Policy | | |
| Ins | strument | 96 | |
| | 10.7 Improved Transfer Arrangements are Contingent on Funding 97 | | |

10.8 Incentive (Grant) Funding Strategy Favoured in Short Term 98

100 *ii*

10.9 On Moving Forward

ACKNOWLEDGEMENTS

IBI Group acknowledges the following organizations and groups, whose staff, members and representatives gave generously of their time to complete specifically designed survey questionnaires, to prepare briefs, and to arrange and participate in consultation sessions. Their assistance, documentation, oral and written inputs have contributed to the outcome of the study.

- Ontario EMS providers
- Ontario Hospital Association (OHA)
- Ontario Association of Non-Profit Housing and Services for Seniors (OANHSS)
- Ontario Association of Community Care Access Centres (OACCAC)
- Ontario Long Term Care Association (OLTCA)
- District Health Councils (DHC)
- Hospital Emergency Services Coordinators
- Ministry of Health and Long-Term Care (MOHLTC)
- Association of Municipalities of Ontario (AMO)
- Ontario Community Transportation Association (OCTA)
- Private "medical transportation service" companies (MTS)
- Labour organizations representing Ontario paramedics (CUPE & OPS EU)

IBI Group Consultant Team

- Marvin Rubinstein
- Steve Wilks
- Darryl Culley
- Jennifer Osther

1131 A.1

FINAL REPORT

EXECUTIVE SUMMARY

S.1 Study Objectives

IBI Group was retained by Ministry of Health and Long-Term Care (MOHLTC) on behalf of the Land Ambulance Implementation Steering Committee (LAISC) to carry out this study of "Non-Emergency Inter-Facility Patient Transfers". The study objectives are:

- To investigate current practices and arrangements
- To recommend options, including funding options, by which to improve upon current patient transfer arrangements
- To identify potential risks associated with the proposed changes and recommend strategies for managing those risks.

The study is intended to assist the Ministry in planning for patient transfers and to support LAISO in similar efforts.

A Steering Committee comprised of Ministry and LAISC representatives provided direction to the study.

The work program included a review of the Ontario legislative and regulatory environment governing patient transport, current patient transport trends, and regional and community initiatives throughout Ontario. It also included a survey of practices in other select jurisdictions outside of Ontario.

The consultant team placed considerable emphasis on stakeholder consultations as a principle mechanism to identify current practices and potential options for inprovement.

Stakeholders who were consulted include Ontario EMS providers, Ontario Hospital

Association, Ontario hospitals, Ontarip Association of Non-Profit Housing and Services for

Seniors, Ontario Long Term Care Association, Ontario Association of Community Care

Access Centres, District Health Councils, private medical transportation services (MTS)

companies, community specialized transit agencies, labour organizations representing

Ontario paramedics, and representatives of MOHLTC including land ambulance dispatch.

5.2 Patient Transfer Arrangements Need to Be Improved

Ambulances are called upon routinely to fulfill two roles: pre-hospital response to medical emergencies, and transport of patients both emergency and non-emergency patients to, from and between health care facilities.

The routine use of ambulance resources for non-emergency purposes not only impedes the ability of EMS providers to respond swiftly to pre-hospital medical emergencies; the practice also increases the cost of land ambulance service operations.

S

FINAL REPORT

The limited availability of ambulances for non-emergency purposes coupled with their frequent (and often sudden) re-assignment from a non-urgent function to one involving an emergency, repeatedly hinder the timeliness of medical services afforded non-emergency patients.

Non-emergency patients having to wait extensively long periods for ambulance transport, medical diagnostics and *I* or medical treatment have become the norm. Occurrences of non-emergency patients arriving late or missing medical appointments entirely are on the rise, as are the potential for medical condition complications. Medical facilities also feel the effect i.e.,in the form of bed blocking, emergency room overcrowding and increased operating costs.

Out of necessity some members of the health care community (i.e., hospitals, long-term care and home care) are turning to alternative methods other than ambulance for non-emergency patient transport: to private MTS for stretcher transport (i.e., companies other than EMS, which offer transportation primarily for medical purposes), and to taxi, community specialized transit agencies and volunteer driver programs for sedan *I* wheelchair accessible transport.

The use of MTS for non-emergency patient transport has not been without criticism. MTS operate outside of any established regulatory framework, without provincially-uniform standards for vehicles, personnel or for the care and treatment of patients during transport. There are reported instances of MTS operators transporting emergency, medically unstable patients, even though such activities are strictly prohibited by legislation. Patient safety and the risk of a patient's medical condition deteriorating enroute are major concerns, as is the potential liability associated with decisions to use MTS

S~3 Mode Choice Should Reflect Patient Care Needs

A medically unstable patient is one whose condition is life threatening or where there is a relatively high degree of risk to limb or function, or that the patient's condition can deteriorate rapidly. Such patients typi~ally require transport by stretcher and accompaniment en-route by a regulated health care provider i.e., physician, registered nurse or paramedic. For such patients an ambulance would be the preferred choice of transport.

For patients described as medically stable the above conditions do not all apply. The patient's condition is not life threatening and the risk to limb or function is low. Many such patients do not require stretcher transport or accompaniment other than by a casual escort. For such patients there are a host of transport choices to consider, including taxi, community specialized transit, private auto and MTS companies.

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS 54 Ambulances Should Be Used Predominately for Emergencies

Among stakeholders, the general view is that ambulances should be used predominately, to carry out emergency calls and 'medically unstable' patient transfers. Their routine use for non-emergency purposes is not an appropriate function *(for the reasons described)*

8

FINAL REPORT

above) and should be discouraged. Ambulances should be used to transfer 'medically stable' patients when:

- The condition or risk to the patient makes it medically necessary;
- Alternative means of patient transport are not readily available; or
- For reasons of cost-efficiency ambulance would be the preferred choice.

Otherwise alternate more cost-efficient means of patient transport should be encouraged.

3.5 MTS Operations Need to be Regulated

Ambulance services are regulated by the Ambulance Act, the activities of taxis and community specialized transit are controlled by municipal by-laws, and volunteer drivers are accountable to their host organizations. Of all available patient transport options MTS companies (i.e., companies other than EMS which offer transportation primarily for medical purposes) are the only ones, which operate outside of any established regulatory framework.

The standards for MTS vary by company. Some set relatively high standards and maintain clear operating policies i.e., for their vehicles, personnel and for the care and treatment of patients; others do not.

Virtually all of the stakeholders with whom IBI Group consulted, contend that the operations of MTS companies need to be regulated by an authority other than the MTS company owner! operator. The general view is that a regulatory authority is required to:

- Establish a provincially uniform set of policies and standards for MTS operations, inclusive of vehicles, staff and patient care;
- Ensure that MTS operators are certified / licensed;
- Ensure quality and accountability for MTS operations e.g., through a system of reporting and I or periodic inspection;
- Enforce the regulations e.g., to investigate complaints and where required, to take corrective action.

The above views are in keeping with recommendations previously articulated by both the Provincial Coroner's Office and the Provincial Auditor's Office. IBI Group concurs with these views.

The results of this assessment favour MOHLTC as the preferred 'regulatory authority for MTS. Such a role would be a natural extension to the Ministry's current regulatory responsibility for ambulance services. Policies and standards, certification processes, quality assurance processes, complaints investigation and enforcement processes are

S

FINAL REPORT

already in place for EMS. If the Ministry is provided with additional resources, the policies, standards and processes can be extended relatively easily to cover MTS.

The results do not favour a municipal regulatory option. Potentially, this option may result in multiple standards, requirements for multiple licensing and cross-border difficulties, which would make it relatively difficult to monitor MTS operations and enforce regulations. Also, the results also do not favour a hospital regulatory option, the status quo (unregulated) or industry self-regulation.

3.6 Support for Private and Publicly Operated MTS

At present MTS are delivered solely by private companies operating under contract or casually for health care facilities. In consideration of the following, this study concludes that a single MTS delivery model _relying solely upon MTS delivery by private companies

would not be an appropriate solution for all communities:

- The current volume of patient transports by private MTS is estimated to be approximately 140,000 annually. The potential market for MTS is estimated to be at least twice this figure; possibly higher if a regulatory framework is accompanied by funding instruments I incentives to encourage increased use of alternate modes of patient transport (when ambulances are not medically necessary);
- Potentially, it may be difficult for private MTS to respond to the increases in patient transport demand in the short term despite a willingness to do so i.e., time is needed to acquire and outfit additional vehicles, to recruit and train additional staff, to purchase additional communications equipment, etc;
- In many northern and relatively rural communities, private sector MTS operations do not exist; nor are such operations viable. Such is the case wherever th~ demand for such services locally, is relatively low. In such locations there may be no alternative other than ambulance _or alternatively, MTS operated by 'non-profit' public services organizations.

The following 'non-profit' public service delivery alternatives were suggested by stakeholders:

- MTS to be delivered directly by municipalities through their EMS department;
- MTS to be delivered *directly* by hospitals or other 'non-profit' public services organizations;

 MTS service delivery via partnerships I brokerages e.g., Med-Lift brokerage, Kingston Area Patient Shuffle and the patient transfer partnership involving Superior North EMS and Thunder Bay Regional Hospital.

The study supports such solutions in addition to privately delivered MTS operations. All MTS providers _private and public would be expected to uphold the regulations, standards and policies established by the regulatory authority.

S.

GROUP

FINAL REPORT

S.7 Community Networking Preferred as a Public Policy Instrument

The study considered the following three alternate 'patient transport models' as potential

public policy instruments by which to influence changes to patient transfer arrangements:

- Hospital Model: Continuation of current practices, wherein most members of the health care community (hospitals, long-term care and home care) would continue to address their patient transfer requirements individually;
- Ministry Model: MOHLTC to take responsibility 'centrally' for the delivery of MTS, in addition to an MTS regulatory responsibility;
- Community Network Model: Members of the health care community (hospitals, long-term care and home care) would be encouraged to network at the local community level (or regionally) to jointly address their collective patient transfer requirements.

The assessment results favour the 'Community Network' model for the following reasons:

- Builds on the current practice by groups of hospitals to 'cluster' with one-another to deliver a comprehensive range of diagnostic and medical services;
- Several groups of hospitals have already adopted such an approach for the provision

of non-emergency patient transport. They include hospitals in London Ontario; Osler,

Credit Valley and Trillium which operate in Peel Region; University Health Network in

Toronto; and hospitals in Waterloo Ontario (working through Med-Lift)~ Several other

Ontario hospitals are also considering this approach i.e., including several in Eastern

Ontario and the Niagara region;

 Outside of the built up urban centers, most Ontario hospitals, long-term care and home-care organizations do not have sufficient mass in terms

of patient transport demand, to induce either private or public sector MTS interests individually;

- Community Networking would be particularly advantageous to rural communities and to communities in the north, where by networking they may collectively build up sufficient mass to generate such business opportunities / interests;
- Most Ontario hospitals, long-term care and home-care organizations do not have sufficient administrative capability to dedicate resources solely to transportation issues. Transportation is not their core business, and if left to their own means, they will continue to make use of ambulances primarily for reasons of convenience and cost;
- Affords opportunity to reduce individual administrative overheads by consolidating the day-to-day transportation responsibilities of each member of a group to a single Transportation Coordinator / Broker, who would assume their collective responsibilities;

 \boldsymbol{S}

FINAL REPORT

- Affords greater opportunity to control costs i.e., by standardizing transportation fees for all members of the community network, lower profit margins in return for guarantees of higher patient transport volumes, etc;
- Affords participants greater ongoing capability to develop uniform processes by which to administrate service delivery more efficiently, monitor and evaluate service delivery performance (including timeliness and quality), carry out complaints investigation and communicate with stakeholders and patients alike; and
- Would promote more efficient use of resources and appropriate patient transport choices taking into account the range of medical facilities and treatments available locally, demand for medically necessary transport, mode choice prospects and costs.

S.8 Improved Transfer Arrangements are Contingent Upon Funding

Cost is a dominant factor in the health care community's decisions concerning patient transport.

According to the Ontario Health Insurance Act the transfer of a patient by ambulance from one health care facility to another for insured, medically necessary treatment, is exempt from an ambulance charge. If a health care facility or agency (i.e., hospital, long-term care facility, CCAC, etc) chooses to use an alternate means of transport to carry out that same inter-facility transfer, then they are obligated to pay the full cost for that alternate service.

Typically the cost of a trip by MTS ranges between \$90 and \$130 depending upon trip length, duration, the qualifications of the attendants, etc. For taxi and community specialized transit the costs may be as high as \$50 per trip.

An ambulance charge applies for ambulance transports which are not classified as inter-facility i.e., transfers involving home care patients or trips which originate at *I* are destined to locations other than a health care facility. The charge, frequently referred to as an ambulance co-payment, is typically \$45 for an Ontario resident possessing a valid Ontario Health Card. Hospitals are responsible to administrate invoicing for ambulance services. For their efforts they keep two-thirds of the money collected. Hospitals who choose to transfer patients using means of transportation other than ambulance, not only assume the full cost for such services, they also lose the revenue which would have been afforded had the patient been transferred by ambulance.

In view of the above one may conclude that achieving an appropriate

funding mechanism has to be an integral consideration in the development of any strategy intended to improve upon current transfer arrangements.~

S.9 Incentive (Grant) Funding Strategy Favoured in Short Term

The study considered the following four provincial funding strategies:

S

_

FINAL REPORT

- Incentive strategy: This strategy would see the province provide the
 health care community (hospitals, long-term care I home care) with
 money in the form of a grant or subsidy, to encourage their use of
 transport modes other than ambulance. The grant or subsidy would be
 tied to a future reduction in the volume of non-emergency patient
 transfers by ambulance.
- **Disincentive strategy:** This strategy would see an 'ambulance charge' introduced to discourage the use of ambulance, where their use is not medically necessary. Specifically EMS operators would be permitted to charge health care facilities *I* agencies for the use of their ambulances for non-emergency transfers. The ambulance charge would apply if alternate modes of transport are available and if the patient's transfer by ambulance is not considered medically essential.
- Combined funding strategy: This strategy would combine the key features of the incentive and disincentive strategies; and
- Co-Payment funding strategy: This strategy would involve a
 regulatory change to increase the ambulance co-payment
 administrated by Ontario hospitals. The underlying objective is to
 provide Ontario hospitals an increased source of revenue, by which to
 pay the cost of patient transfers via modes other than ambulance;
 thereby negating the need for either a provincial grant or the application
 of an ambulance charge.

The funding strategies were assessed using various criteria including: potential to improve inter-facility transfer arrangements; potential impact on UTM ambulance operations; implementation challenges; expected stakeholder reaction; sector financial impacts; potential impact on LAISC principles; and Influence on health care Community Networking'. The following conclusions are drawn from the assessment:

- There is no clear finding vis-a-vis a preferred funding strategy. Thereare advantages unique to each strategy. Also, there are disadvantages.
- The assessment is based in part on factual data and in part on assumptions I opinions. The latter would need to be verified before one may conclude with certainty, in favour of a preferred funding strategy.
- There are implementation challenges unique to each funding strategy.
 A decision in favour of a funding model would require a concurrent commitment to address these challenges expeditiously and carefully.
- The following are essential regardless of funding model: development
 of a provincially-uniform decision making algorithm to differentiate
 between patients requiring ambulance and those who can travel by
 alternate means; and changes to CACC policies to ensure that the

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS algorithm is followed.

 Healthcare community 'buy-in' will be essential regardless of funding model chosen.

5

FINAL REPORT

- There are regulatory / legislative change requirements associated with most funding strategies (incentive strategy being the exception). These would take some time to enact. The absence of an interim / short-term solution would be a concern.
- Taking into account the tir~ie lapse to enact regulatory / legislative changes and the potential financial impact on the health care community the incentive strategy involving a provincial grant / subsidy appears preferable to an ambulance-charge-in-the short term.
- For similar reasons, an incentive strategy appears preferable to an increased ambulance co-payment in the short term.
- Incentive strategy appears to be compatible with the principles for nonemergency patient transfers adopted by LAISC.
- Concern that an incentive strategy on its own, may not effectively reduce the volume of non-emergency patient transfers by ambulance.
 Opinion of several stakeholder groups (particularly EMS operators) that achievement of this objective will require a disincentive mechanism i.e., an ambulance charge.
- A pilot I demonstration could be an effective mechanism by which to determine the suitability of a funding model as a long-term solution. It would require monitoring effectiveness for an extended period.

S.10 On Moving Forward

The following 'next steps' are suggested for consideration:

 MOHLTC to assume regulatory responsibility for Medical Transportatior~ Services

(MTS);

- MOHLTC to proceed with MTS regulations and early certification of MTS operators;
- Emergency Health Services (EHS) Branch of MOHLTC to pursue additional Ministry staffing for the above purposes;
- Health care Community Networking to be promoted as the preferred patient transport model;
- A process for consultation with health care community to be initiated.
 The following to be among the items for discussion, building on the

contents of this report:

- Community networking
- Alternative short and long term funding strategies
- Regulatory I legislative changes
- Implementation challenges

S

. 8

FINAL REPORT

- MOHLTC to give consideration to the adoption of an incentive (grant) strategyas the preferred funding strategy in the short term, and to one or more pilots I demonstrations, to determine the suitability of such a funding model as a long-term solution;
- Work on the following initiatives to be commenced by MOHLTC in association with other stakeholders as appropriate:
 - Development of a provincially-uniform decision making algorithm to differentiate between patients requiring ambulance and those who can travel by alternate means;
 - Changes to CACC policies to ensure that the algorithm is followed;
 - Readiness advancement of regulatory / legislative changes to accommodate the implementation of an alternate long term funding strategy, should one be required.

mi 8.9

FINAL REPORT

1. INTRODUCTION

1.1 Background

With the transfer of the responsibility for land ambulance operations to upper tier municipalities over the period January 1, 2000 to January 1, 2001, new requirements for inter-governmental management, public-public and public-private partnerships have emerged.

The result is a newly evolving management paradigm in which land ambulance stakeholders function within a decentralized system of shared accountability, to ensure efficient, effective and seamless delivery of quality emergency medical services (EMS).

Stakeholders use various fora to discuss issues pertaining to land ambulance. One such forum is the Land Ambulance Implementation Steering Committee (LAISC). The Committees representation consists of Ministry of Health and Long-Term Care (MOHLTC), Ministry of Municipal Affairs and Housing (MMAH), Ministry of Finance (MOF) and the municipal sector represented by the Association of Municipalities of Ontario (AMO).

An issue of particular concern to LAISC, is the routine use of ambulances to carry out inter-facility and other non-emergency patient transfers, particularly the transport of 'medically stable' patients i.e.:

- Transport of medically stable long-term care (LTC) residents / medically stable home care patients to health care facilities for purposes of medical diagnostics or treatment;
- Transport of medically stable patients from one hospital to another, for purposes of medical diagnostics or treatment; or
- Return transport of medically stable individuals following their discharge from a health care facility.

While the Ambulance Act does not prohibit the use of ambulances for nonemergency medically stable patient transports, many within the EMS community have long maintained that the routine use of such highly trained (and relatively expensive) resources for non-emergency purposes is not an appropriate function, as it impedes the ability of EMS providers to:

- Accommodate rapidly rising demands for emergency EMS services;
- Maintain emergency response coverage;~

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS Maintain emergency response time performance;

- Respond in a timely fashion to inter-facility and non-emergency calls;

FINAL REPORT

 Contain the escalating cost of land ambulance services, as they strive to accommodate both emergency and non-emergency demands for ambulance services.

The health care community (i.e., hospitals, long-term care and home care) has also expressed concerns about the current system of inter-facility patient transport. In their view the availability of ambulances to carry out inter-facility and non-emergency patient transfers in a timely fashion, is pivotal to their ability to deliver quality health care services. Their concerns center about the following:

- Relatively low priority, which the Central Ambulance Communications Centre (CACC) and EMS providers assign to non-emergency patient transfers;
- Frequent re-assignment of ambulances from non-urgent calls to others involving an emergency;
- Non-emergency patient transfers which are not carried out in a timely fashion i.e., patients arriving late or missing appointments entirely;
- Impacts of late I missed appointments on patients' diagnoses and treatment:
- The potential for medical condition complications due to late *I* missed appointments:
- Impacts of late / missed appointments on health care operations i.e., bed blocking, overcrowding / backups in emergency rooms, extensive patient waits for return transport; and
- Increased operating costs due to backfilling for absentee escorts, staff overtime, additional inpatient days and patient (and escort) transport costs.

Out of necessity some members of the health care community are turning to alternative methods other than ambulance for non-emergency patient transport: to private MTS for stretcher transport (i.e., companies other than EMS, which offer transportation primarily for medical purposes), and to taxi, community specialized transit agencies and volunteer driver programs for sedan *I* wheelchair accessible transport.

While the use of alternative methods for inter-facility and non-emergency patient transfers is contributing to more timely patient transport, the practice has not been without criticism:

 MTS operate outside of any established regulatory framework, without provincially-uniform standards for vehicles, personnel or for the care

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS and treatment of the patient;

- Misconception among the public, and at dines the health care community that private MTS are regulated 'ambulance' operators;
- There are reported instances of MTS operators transporting emergency, medically unstable patients, even though such activities are strictly prohibited by legislation;

FINAL REPORT

- Patient safety and the risk of a patient's medical condition deteriorating en-route are major concerns; as is the potential liability associated with such decisions by health care facilities;
- Concern that decisions on the use of ~lternate means of transport, may be driven primarily by financial considerations, rather than the medical needs, health, safety and well-being of patients.

Cost is yet another issue; one which figures prominently in the health care community's decisions concerning patient transport. Most patients transported by ambulance for medically necessary services pay relatively little _an ambulance charge of \$45. Under the Ontario Health Insurance Act patients who are transferred by ambulance from one health care facility to another for insured, medically necessary treatment are exempt from ambulance charges.

If a health care facility or agency chooses to use an alternate means of transport to carry out that same inter-facility transfer, then they are obligated to pay the full cost for that alternate service. Their ability to recover the cost from the patient is an additional complication.

Cost therefore, is a principle reason why some members of the health care community continue to rely upon ambulances for all patient transfers, even when the use of an ambulance is not medically necessary.

1.2 Study Objectives

IBI Group was retained by Ministry of Health and Long-Term Care on behalf of LAISC, to carry out this study of 'Non-Emergency Inter-Facility Patient Transfers". Paraphrasing from the study terms-of-reference, the study objectives are:

- To investigate current practices and arrangements
- To recommend options, including funding options, by which to improve upon current patient transfer arrangements
- To identify potential risks associated with the proposed changes and recommend strategies for managing those risks.

The study is intended to assist the Ministry in planning for patient transfers and to support LAISC in similar efforts.

FINAL REPORT

1.3 Scope

Geographically the scope of the study extends province-wide. The focus, shown schematically in Exhibit 1.1, is on inter-facility and other non-emergency patient transfers,

as defined below. The study takes into consideration how changes to current inter-facility patient transfer arrangements may contribute to an improved EMS response capability.

Inter-Facility Patient Transfers

Inter-facility patient transfers are trips between health care facilities for medically necessary treatment. The trip originates at one health care facility and terminates at another.

Typically they may involve patient transports:

- Between hospitals;
- From long-term or chronic care facilities to a hospital, laboratory or treatment centre; or
- Back to long-term or chronic care facility following medical treatment.

Inter-facility transfers may involve the transport of medically stable patients.

They may also involve the transport of medically unstable patients.

EXHIBIT 1.1

STUDY SCOPE

Inter-Facility Patient Transfers (Emergency & Non-Emergency)

Hospital Hospital Long-Term care Hospital / Treatment

Long-Term

Hospital I care

Treatment centre

Other Patient Transfers (Non-Emergency)

Home Care – Hostital I Treatment

Centre

centre

Hospital /
Treatment Centre
Home Care

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS Other Non-Emergency Patient Transfers

This category refers to medically stable and medically unstable patient transports, which originate at locations other than a health care facility or which are destined to locations other than a health care facility i.e., while one end of the trip is a health care facility, the other is not.

Typically they involve patient transports from private residence (i.e., home care patient) to a health care facility for medically necessary treatment, or back to private residence following medical treatment. Occasionally the transfer may be between an airport and a health care facility e.g., land portion of a transfer by air ambulance.

FINAL REPORT

1.4 Approach

IBI Group's work program included the following tasks. They are discussed briefly below.

- Legislative and Regulatory Review
- Review of the Ontario Experience
- Assessment of Patient Transport Trends
- Survey of Practices in Other Jurisdictions
- Identification and Assessment of Options
- Identification and Management of Risks

Legislative and Regulatory Review

To establish a legislative and regulatory context for this investigation the consultant team reviewed existing Ontario legislation and regulations governing the use of land ambulance and alternate pafi~nt transport services, including pertinent sections of the Ambulance Act, Highway Traffic Act and Ontario Health Insurance Act. The team also investigated the existence of applicable by-laws.

Review of the Ontario Experience

Within this activity the consultant team assembled pertinent information on the Ontario experience dealing with inter-facility and non-emergency patient transfers e.g., current use of ambulances and alternate patient transport services; issues, challenges and impacts; and regulatory, service delivery and funding considerations.

The activity consisted of 3 tasks: review of available literature, stakeholder consultations and a survey of stakeholder experiences and opinions using specifically designed questionnaires.

Stakeholders included Ontario EMS providers, Ontario Hospital Association, Ontario hospitals, long term care and home care agencies, District Health Councils, private MTS companies, community specialized transit agencies, labour organizations representing Ontario paramedics, and representatives of MOHLTC including land ambulance dispatch.

Assessment of Patient Transport Trends

This activity involved the assembly and assessment of quantitative information on patient transfer trends by ambulance and alternate rfiodes.

Transfers by ambulance were determined by extracting call volume information from MOHLTCs Ambulance Response Information System (ARIS).

FINAL REPORT

Patient transports by means other than ambulance (i.e., by private MTS, taxis and community specialized transit services) were determined from the information supplied by stakeholders, through oral and written briefs and the completed survey questionnaires.

The consultant team also investigated the costs to c.arry out the patient transfers by ambulance and by alternate means.

Survey of Practices in Other Jurisdictions

The consultant team surveyed select jurisdictions outside Ontario to determine how they deal with non-emergency medical transportation, and whether their practices and arrangements may have potential application to Ontario jurisdictions. The survey instrument was administered by telephone. Several jurisdictions provided supplemental information by e-mail.

Identification and Assessment of Options

Within this activity the consultant team identified and subsequently assessed various sets of options by which to improve upon current patient transfer arrangements, including: alternate MTS regulatory frameworks, patient transport models and funding strategies.

Identification and Management of Risks

Within this activity the consultant team identifies potential risks associated with the

proposed changes and recommends strategies for managing those risks **1.5 Study Direction**

A **Steering Committee** comprised of the following Ministry and municipal sector representatives provided direction to the study:

- Roger Anderson
- Denis Merrall
- . Malcolm Bates
- BartMaves
- Dennis Brown
- Brian MacRae
- Ron Kelusky

Regional Chair, and Long-Term Care and Co-Chair, Land Ambulance Regional Implementation Steering Committee, helped to initiate

Municipality of the study Durham, and Co-

Chair, Land Former City Manager, City of Thunder Bay

Ambulance Implementation General Manager, Toronto Ambulance

Steering

Director of Transportation and Emergency Services, County of Middlesex

MPP, who as the

former

Committee

Director, Emergency Health Services, MOHLTC Parliamentary

Manager, Land Ambulance, EHS, MOHLTC Assistant to the

Minister of Health

FINAL REPORT

The Steering Committee was supported in its efforts by the following senior and executive

level staff:

Pat Vanini Director Policy and Government Relations, AMO

Jeff Fisher Senior Policy Advisor, AMO

Richard Dlorio Manager, LSR Project Office, MOHLTC

John Gross Project Officer, LSR Project Office, MOHLTC

I £ Report Structure

The work carried out by the IBI Group study team is described in this report, as are the key findings and recommendations.

Section 2, which follows this page, presents the reader with relevant contextual information including a historical context. The continuum of patient care needs is discussed in Section 3; experience and views of Ontario stakeholders in Section 4; patient transfer trends in Section 5; and practices of other jurisdictions in Section 6.

IBI Group's assessment of MTS regulatory and service delivery options is contained in Section 7, and the assessment of implementation strategies in Section 8. The report concludes with Section 9, which identifies and suggests means for managing potential impediments and risks.

The report is augmented by the following technical appendices, which are available under separate covers:

Appendix A: Stakeholder Surveys

Appendix B: Stakeholder Consultation

Appendix C: Ambulance Call Tabulations

IBI. GROL?

FINAL REPORT

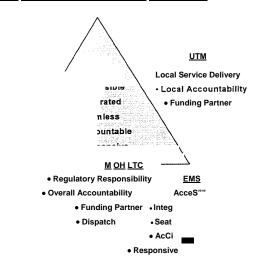
2. CONTEXT

2.1 Shared Accountability for EMS

With the transfer of the responsibility for land ambulance operations to upper tier municipalities, new requirements for intergovernmental management, public-public and public private partnerships have emerged.

The result, as shown by Exhibit 2.1, is a newly evolving management paradigm in which the province by way of MOHLTC, upper tier municipalities and the health care community function within a decentralized system of shared accountability, to ensure efficient, effective and seamless delivery of quality emergency medical services.

EXHIBIT 2.1: EMS MANAGEMENT PARADIGM



HEALTH CARE COMMUNITY
Choice of Appropriate
Means of Patient Transport
Based on Medical Condition

MOHLTC

 Maintains regulatory responsibility for land and air ambulance as well a~ dispatch: to set public policy and standards, certify EMS operators, ensure quality and performance (through periodic inspections and Base Hospital audits), investigate complaints and where necessary, take corrective action (enforcement);

- Maintains overall public accountability for EMS at a provincial level;
- Maintains responsibility for EMS dispatch, either operating CACCs directly or contracting their operation through other agents e.g., hospitals or municipality; and
- Funding partner, contributing 50% toward approved costs.

Upper Tier Municipalities

 Responsible for the delivery of EMS services within their local jurisdiction, which conform to the following provincial principles: accessible to all; integrated within the provincial emergency health care system; seamless across political or other boundaries; accountable medically, operationally and financially; and responsive to change. UTMs may provide the service directly using their own resources, or they may outsource the day-to-day service delivery function.

FINAL REPORT

- Bear public accountability at the local level, to their residents, for the quality and costs of EMS service; and
- Funding partner, paying 50 percent of all provincially approved costs including the net cost for inter-municipal services, and 100 percent of unapproved costs i.e., for staffing hours or geographic coverage beyond that agreed to by MOHLTC.

In northern Ontario, where there are no UTMs the responsibility for EMS service delivery falls to other designated agents, primarily District Social Services Administration Boards (DSSABs). In terms of EMS, their responsibilities are the same as those described above.

Health Care Community

Within the health care community EMS is viewed as a primary means of extending emergency pre-hospital patient care services beyond the walls of the institution, via the capabilities of the paramedics.

In this regard the health care community (hospitals, long-term care, homecare) can contribute to the achievement~f efficient, effective and seamless delivery of quality EMS by choosing appropriate means of patient transport based on the patient's medical condition and needs i.e., limit the use of ambulances to patient transports which require such highly trained resources.

2.2 Historical Context

The central issues surrounding inter-facility and non-emergency patient transfers are not new. They were dealt with in the 1991 Emergency Medical Services Review, also known as the "Swimmer Report". There, it was noted that:

"Over the past decade there has been a significant increase in the number of non-emergency transfers provided by Ontario's ambulance service. Between 1980 •and 1989, ambulance calls involving non-emergency transfers of patients to, from and between health care facilities grew by almost 40%. This increase has been prompted in part by changing demographics, as well as provincial health policies emphasizing rationalization and regionalization of institutional health resources. The current system for providing non-emergency transfers has resulted in discomfort and inconvenience for patients. It has also resulted in inappropriate use of ambulance equipment and personnel, as costly emergency vehicles are deployed on non-emergency calls and ambulance officers assume portering functions"

MOHLTC staff concur that non-emergency trips do not always require a special vehicle or medical attendants, and that the use of alternative transportation can be a cost-effective option for patients not requiring the medical services of an ambulance.

FINAL REPORT

In March 1997 MOHLTC issued a "Guide to Choosing Appropriate Patient Transportation". The guide specifies that an ambulance is the preferred choice of medical transport if:

- 1. It is an emergency situation
- If the patient has been judged by a physician or a health care provider designated by a physician, to be: unstable; in need of a nurse, other primary care provider, emergency medical attendant or paramedic enroute; and in need of a stretcher. The conditions must apply concurrently.
- 3. An ambulance is the only available means of transportation.

The guide suggests that an alternative to an ambulance should be considered if the situation is not an emergency, if the three criteria in 2 above are not met, or if alternative means of transport exist. Alternatives may include accessible taxis, stretcher capable private medical transport services and transportation services operated by volunteer agencies.

The increasing demand for non-emergency patient transportation has contributed to the emergence of numerous private medical transportation service (MTS) companies i.e., companies other than EMS, which offer transportation primarily for medical purposes.

Unlike ambulance services, which must adhere to a stringent set of provincial regulations, policies and standards, there are no such requirements for MTS operators. The absence of an established regulatory framework is of concern to many EMS operators and the health care community at large.

The importance of regulating MTS operators was reinforced in 1995 by the findings of a Provincial Coroner's inquest into the 1994 death of a patient following a non-ambulance transfer between two Toronto hospitals. The jury recommended that:

- Private non-emergency transfer services be regulated and licensed by government in order to ensure that standards for vehicles, vehicle maintenance and inspection, employee qualifications and minimum insurance coverage are consistently met to the level of those standards presently set for Basic Life Support vehicles and personnel under the Ambulance act:
- The medical community have a clear understanding of the equipment and services available through the two levels of ambulance services (Advanced Life Support and Basic Life Support) and the private nonemergency transfer services;
- At least the headquarters dispatch for the private transfer service have

direct radio access to the public ambulance dispatch;

 Since the number of patient transfers for the purpose of specialized medical procedures done elsewhere is significant, that careful medical consideration be given in each case to ensure that the minimum length of rest and observation time after the

1

FINAL REPORT

procedure is completed is preserved before the patient is then physically transported again;

- Guidelines be developed for the private patient transfer service for emergencies occurring in transit, and
- Guidelines be developed regarding the number of patients being transferred in the same vehicle, bearing in mind the severity of the medical history of each patient.

2.3 Existing Legislation & Regulations Ambulance Act

The Ambulance Act specifies that only an ambulance may be used to transport a person in an emergency situation. An "ambulance" is defined to be "a conveyance used or intended to be used for the transportation of persons who;

- a) have suffered a trauma or an acute onset of illness, either of which could endanger their life, limb or function;
- b) have been judged by a physician or a health care provider designated by a physician to be in an unstable medical condition and to require, while being transported, the care of a physician, nurse, other health care provider, emergency medical attendant or paramedic, and the use of a stretcher."

The Ambulance Act does not prohibit the use of an ambulance at any time. The following! are key sections of the Ambulance Act, pertinent to this investigation:

- Part II Section 4.(1) of the Ambulance Act specifies that the Minister of Health and Long-Term Care is responsible for establishing standards for the management, operation and use of ambulance services and to ensure compliance with those standards.
- Part III, Section 6.(1) addresses the transfer of responsibility for ambulance services to Upper Tier Municipalities.
- Part VI, Sections 22.(3) and (4) indicate that the Minister of Health and Long-Term Care through a change I incorporation of regulation, may create different classes of ambulances, ambulance services and operators and may establish different requirements, standards or conditions for each class created.
- Part VI, Section 22.1 (2) specifies that the Minister of Health and Long-Term Care may establish fees that may be charged by the operators of each class of ambulance service for each kind of service provided, may

determine the methods and times for payment of such fees to the operators and may determine the classes of persons to whom the fees may be charged.

FINAL REPORT

- Part VI, Section 20.1 indicates that no person shall charge a fee or a co-payment for or in connection with the provision of ambulance services, whether or not the person is transported by ambulance, unless the fee or co-payment is:
 - a) a co-payment authorized under the Health Insurance Act; or
 - b) a fee under the Ambulance Act.

The Ambulance Act, Ontario Regulation 501/97, Part XI, Section 42.(1) requires that the operator of an ambulance service in an upper tier municipality or designated area shall ensure that, in 90 percent of, the priority (emergency) calls received in a twelve month period, the response time performance of the operator's ambulance service is equal to the response time performance set by the person who operated the service in 1996.

Ontario Regulation 501/97, Part I states that "Medical Transportation Service" has the same meaning as defined in Section 191.5 of the *Highway Traffic Act.*

Highway Traffic Act

Bill 86 amends Part X.2 of the Highway Traffic Act to reflect not only a definition of "medical transportation service" but also how the delivery of non-emergency medical transportation can be handled.

- Part X.2, Section 191.5 defines 'Medical Transportation Service' as "a service that is designated by the Minister (of Transportation) and that offers transportation to the public, primarily for medical purposes, within, to or from a municipality, but does not include an ambulance service that is licensed under the Ambulance Act."
- Part X.2, Section 191.6(1) states, "A Municipality may pass bylaws to set standards for the operation of medical transportation services". Section 191.6 (2) states, "In areas where there is no municipal organization or, where the council of a Municipality delegates its power under this section to a local board, a local board may pass resolutions to set standards for the operation of medical transportation services."
- Part X.2, Section 191.7 states, "The Minister may make regulations, (a) providing that a body that performs a public function is a local board for the purposes of this part; (b) designating types of services to be medical transportation services and types of vehicles that may be used to provide medical transportation services."

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS Local By-laws

The Municipal Act provides the enabling legislation for municipalities to pass by-laws to set standards for the operation of MTS. IBI Group canvassed numerous stakeholders and did not identify any Ontario municipalities, which have implemented a bylaw pertaining explicitly to the operation of MTS.

FINAL REPORT

Ontario Health Insurance Act

The Health Insurance Act, Regulation 552, specifies that each person transported in an ambulance is responsible for the payment of appropriate ambulance charges. Each patient transported, regardless of the distance or number of patients in the ambulance, is responsible for payment of the costs as set out in the legislation.

Ontario residents who travel within Ontario by ambulance for medically necessary services and who have a valid Ontario Health Card are required to pay a portion (copayment) of the cost of ambulance services rendered, in the amount of \$45.00, except under the following situations (Ambulance Co-Payment Exemption):

- The person receives benefits under the Ontario Works Act, the Ontario Disability Support Program Act or the Family Benefits Act~
- The person receives provincial social assistance (general welfare assistance or family benefits);
- The person is being transferred fromone hospital or health care facility to another for insured, medically necessary treatment;
- The person is enrolled in the Ministry's Home Care Program;
- The person is living in one of the following facilities licensed or approved by the Ministry of Health and Long-Term Care: nursing home, home for the aged, rest home, home for special care, home or residence for psychiatric patients.

Ontario Residents who do not have a valid Ontario Health Card and those who receive ambulance service which a physician deems medically unnecessary, are required to pay:

- A charge of \$240 for each land ambulance service rendered _if the trip by ambulance originates in Ontario, and
- The full cost of the land ambulance service rendered if the trip by ambulance originates outside Ontario.

For visitors from other provinces, ambulance transportation costs are either fully covered or they are required to pay a charge of \$240, depending on whether the individual is insured under their province's health care plan, the individual is being transported between hospitals, timeframe for return and whether a physician deems the ambulance service medically necessary.

Out-of-country visitors are responsible for the full cost of the land ambulance services rendered.

When a person accepts transport in an ambulance, that person accepts the costs associated with that service, If a person does not wish to be transported by ambulance

FINAL REPORT

they can decline the service at the time of the incident by signing the "Refusal of Service" section of the Ambulance Call Report held by the ambulance crew. A person refusing ambulance service by signing this section of the Ambulance Call Report will not receive a charge for ambulance services.

2.4 Principles Adopted by LAISC

In their consideration of inter-facility and other non-emergency patient transfers the members of the Land Ambulance Implementation Steering Committee (LAISC) have adopted the following principles. In their view, options for improved, more efficient patient transport services are expected to adhere to these principles:

- Changes should result in a more appropriate and cost-effective level of care for patients.
- Changes should not threaten the health and safety of patients or the public.
- Authority for selecting a mode of patient transfer should as much as possible be linked with accountability for the efficient use of resources required for transfers.
- Accountability for selecting a mode of patient transfer will include a consideration of medical needs.
- Any changes to inter-facility transfer arrangements will not result in a shift of the financial burden from one sector to another, without a corresponding transfer of resources.

FINAL REPORT

3. ON CHOOSING APPROPRIATE PATIENT TRANSPORT

Many stakeholders within the EMS and health care communities will concur that the routine use of highly trained and relatively expensive ambulance resources for non-emergency purposes is not appropriate, and that alternative means of transport should be considered if the situation is not an emergency.

The above having been said, there is a significant concern among many stakeholders that decisions on the use of alternate means of transport, may be driven primarily by financial considerations, rather than the medical needs, health, safety and well-being of patients.

In their view it is the latter considerations which are paramount, and which should drive the transport decisions.

3.1 Continuum of Patient Care Needs

Exhibit 3.1 presents the basic attributes of medically stable and medically unstable patients.

A **medically unstable** patient is one whose condition is life threatening or where there is a relatively high degree of risk to limb or function, or that the patient's condition can deteriorate rapidly.

Medically stable

Patient's condition Non-Life Threatening Risk to Limb or Function Low Mobility Requirement Escort Requirement Medically Unstable Life Threatening or High Risk of Rapid Deterl~ration High Stretcher Regulated Health Care

Such patients typically

require transport by stretcher and accompaniment en-route by a regulated health care provider i.e., physician, registered nurse or paramedic.

For such patients an ambulance would be the preferred choice of medical transport.

For patients described as *medically stable* the above conditions do not all apply. The patient's condition is not life threatening and the risk to limb or function is low. Many such patients typically, do not require stretcher transport or accompaniment other than by a casual escort.

For such patients it would be appropriate to consider an alternative to an ambulance.

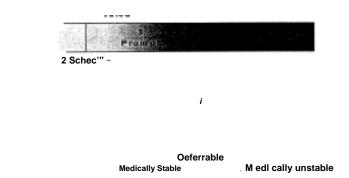
The *continuum of patient care needs* is presented pictorially in Exhibit 3.2 using as a basis the dispatch priority codes employed by CACC.

FINAL REPORT

The priority codes range from Code ito 4, as defined below¹.

- Code 1 'Deferrable Call' _a non-urgent call which may be delayed without being physically detrimental to the patient;
- Code 2 'Scheduled Call' _a call which must be done at a specific time due to the limited availability of special treatment or diagnostic I receiving facilities. Such scheduling is not done because of patient preference or convenience;
- Code 3 'Prompt Call' _a call which may be answered with moderate delay. Patients classified in this priority group are stable or under

EXHIBIT 3.2: CONTINUUM OF PATIENT CARE NEEDS



professional care and are not in immediate danger;

 Code 4 'Urgent' _This call refers to situations of a life threatening nature and time is crucial.

Codes I and 2 are referred to routinely as 'non-emergency' calls and codes 3 and 4 are referred to routinely as 'emergency' calls. While the characterization of the calls into two groups _as either 'emergency' or 'non-emergency' _is frequently useful, in'the context of this study _where it is important to distinguish between 'medically stable' and 'medically unstable' patients such characterization can be misleading.

Patients classified as either codes 1 ~nd 2 are by definition, 'medically stable'. Patients classified as code 4 are by definition, 'medically unstable'. Within the code 3 classification, the patient may be medically stable or they may be medically unstable and under professional care.

According to health care stakeholders it is the code 3 classification, where confusion *I* difficulty is generally encountered.

 Because code 3's are routinely characterized as emergency situations, some MTS operators will not transport patients within this classification.

¹ In addition to codes 1 to ⁴, CACC uses additional codes for administrative purposes and to signify which ambulances are on standby duty i.e., ambulance providing coverage temporarily, to a neighbouring service area ² oftentimes in addition to its own area.

1

FINAL REPORT

- On occasion CACC and the health care facility (sending facility) may disagree on a patient's medical condition. For example, a health care facility (sending facility) may deem a patient to be medically unstable due to a relatively high risk of their condition deteriorating rapidly. CACC however, using their Dispatch Priority Card Index Algorithm (DPCI), may interpret a patient's condition to be medically stable and assign a code 3 dispatch priority _one which permits a moderate delay.
- Dispatchers are judicious in their use of Code 3. The underlying assumption is that a patient in a medical facility, even if unstable, is not an emergency. If the patient is not immediately available for transport, then they are not dispatched as code 3, but rather as code 2. Upon commencement of transport, the patient would be upgraded to code 3 or4.
- Many health care stakeholders do not share the above view, particularly if the patient is out of their familiar surroundings e.g., temporarily in an alternate medical facility, which is not responsible for the patient's long-term care. In such circumstances, a prolonged delay in patient transport may present significant hardships to both patient and escort i.e., arranging meals, washroom visits, tending to patient care needs and medication.

To help decision makers choose more appropriately, between ambulance and alternate means of patient transport several Ontario medical facilities have commenced the development of locally applicable algorithms.

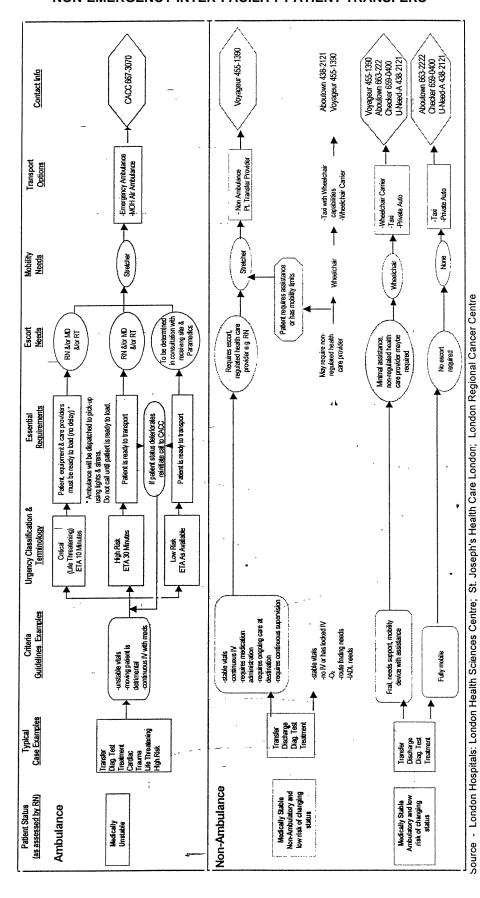
A sample of such an algorithm is shown in Exhibit 3.3. This particular version is one of several drafts developed jointly by London Health Sciences Centre, St. Joseph's Health Care London and London Regional Cancer Centre, to help their staff decide when to call for an ambulance, their contracted MTS operator (Voyageur Transportation~, taxi or community specialized transit.

Many health care stakeholders would support the development of a provincially-uniform (i.e., standardized) algorithm, over the use of local models. Many would also favour the integration of such an algorithm with CACC's priority assignment tool (typically the Dispatch Priority Card Index) in order to ensure overall compatibility amongst all transport decision makers, including those responsible for patient transport by ambulance.

3.2 Specific Non-Emergency Transfers Require Ambulances

All code 1 and 2 calls cannot be transported by means other than ambulance. On this point, consider the following illustrative examples of code 1 and 2 calls. In each case an ambulance would be the preferred choice of patient transport:

- The transport of an unstable patient from one hospital to another for a 'scheduled' medical treatment or test (i.e., MRI) will be assigned a code 2;
- Patients who are running IVs, medications, be hooked up to monitors or just need medical monitoring due to their medical complexity;



1131_{GROUP}

U, WU, Z IZW 4a. ~1 4.5 WZ Û Z U WEW NO Z

Z 0 4 0 a. c° Z 4 1 1. Z W .4 a W C . , Z '4 -J 4 2 C 2 U U

X

FINAL REPORT

- A booked appointment' for heart catheterization would be assigned a code 2. The return transfer following treatment would be a code 1.
 Ambulance is the preferred mode of transport for both legs of this trip due to the associated risks i.e., potential that patient's condition may deteriorate rapidly;
- Patients who are stable but require continuous 'medical" attention may be transported code 1 or 2 ie., patient in a long term coma or one with stoma for breathing. Paramedics may be able to provide that care, whereas it may not be available by alternate transportation;
- A patient under professional care who has a stable injury and requires transport to hospital for surgery i.e., elderly resident of a long term care facility who falls and suffers a fractured hip. That patient may have been examined by the resident physician and not be in an emergency mode. They may be transported code 1 but the appropriate transportation would be by ambulance due to the fracture;
- A psychiatric transfer may require professional transportation and monitoring. If the patient is under a Mental Health Act order, it would be appropriate to transport via ambulance rather than alternative patient transportation;
- A patient with a highly contagious disease may be stable however alternate patient transportation services may not besuitably equipped or staffed for such 'isolation' transfers. Ambulance services are so equipped and trained.

IBI Group surveyed Ontario's 46 EMS operators to determine what portion of 'inter-facility and other non-emergency' patient transfers may be carried out by alternate means of transport other than ambulance. Over two-thirds of the operators responded to this question.

Based on their responses, 50% to 60% of code I patient transfers would be candidates for alternate means of transportation; similarly 40% to 50% of code 2 patient transfers. In their view, very few (3% to 5% or less) code 3 patient transfers would be eligible; nor would any code 4's be eligible.

FINAL REPORT

4. STAKEHOLDER CONSULTATION

The consultant team placed considerable emphasis on stakeholder consultations as a principle mechanism to identify:

- Regional and community initiatives vis-~-vis inter-facility and nonemergency patient transfers;
- Challenges, practices and suggested improvements.

Highlights of the information assembled are presented in this section of the report. For additional information, the reader is referred to the technical appendices, which are available under separate covers.

Stakeholder consultations were carried out in various fora:

 Group meetings involving representatives from the following sectors and

organizations: Ontario EMS providers; Ontario Hospitals; Ontario Hospital

Association; Ontario Association of Non-Profit Housing and Services for Seniors;

Ontario Long Term Care Association; Ontario Association of Community Care Access

Centres; District Health Councils; Hospital Emergency Services Coordinators; and

MOHLTC. The group meeting locations are identified in Exhibit 4.1;

- Individual meetings with the following constituencies: Medical Transportation Services (MTS) companies and Community Specialized Transit Agencies; and
- **Teleconference call** involving the following labour organizations representing Ontario paramedics: OPSEU and CUPE.

During the course of this investigation, the consultant team spoke with over 300 individuals representing a broad cross-section of stakeholder organizations and provincial jurisdictions.

Most stakeholder sectors were asked to complete a survey questionnaire specifically designed by the consultant team, to elicit their views on such items as:

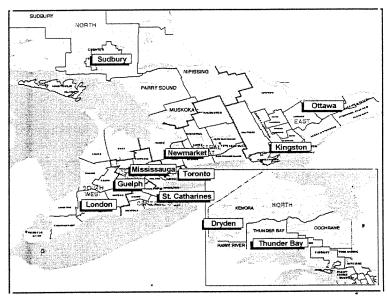
- Use of EMS and alternate patient transport services to carry out interfacility and other non-emergency patient transfers
- Cost for such services
- Regulatory and service delivery options for MTS
- Funding considerations i.e., who should 5ay I share in the cost of alternate patient transport services.

Copies of the survey forms and tabulations of the responses are contained in Technical Appendix A. Stakeholder Surveys.

2

FINAL REPORT

Completed survey responses were received from 174 organizations. Over 70% of the current 46 Ontario EMS providers responded to the survey. Approximately 60% of the current 150+ Ontario hospital organizations responded. Almost one-half the existing 30 private medical transportation service (MTS) operators completed the questionnaire. Completed returns were received from approximately 30 'regional' representatives of the long-term care! home care sector, and 10 from managersof community specialized transit agencies.



In addition to the completed surveys, IBI Group received over 50 written briefs offering additional insight.

EXHIBIT 4.1: LOCATIONS OF STAKEHOLDER MEETINGS

41 Regional & Community Initiatives

Documents and information provided by Ontario stakeholders have identified initiatives (vis-~-vis inter-facility and non-emergency patient transfers) in the following regions and communities:

- Southwest Ontario
- City of Toronto
- Waterloo Region
- Peel Region

FINAL REPORT

- Niagara Region
- Eastern Ontario
- City of Ottawa
- Former Regional Municipality of Hamilton-Wentworth

Southwest Ontario

Southwest regional stakeholders are working jointly in various fora, including the Non-Emergency Ambulance Transfers (NEAT) Expert Panel to review, develop, and recommend strategies to address the Non-Emergency Ambulance Services issue. They have developed a conceptual framework, which in their view would:

- Deal with the increased volume of non-emergency patient transfers in Southwest Region, resulting from hospital restructuring, an aging population and the transfer of responsibility for land ambulance services to Upper Tier Municipalities;
- Ensure that patients are discharged from hospitals *I* transported between health care facilities in a timely fashion; and
- Address the absence of public policy and public education on the issue.

Described as a strategy to create 'a separate non-ambulance medical transportation service either as part of! coordinated with the current dispatch and land ambulance system, the framework is based on the following provincial principles for Land Ambulance Transition: accountable, *integrated*, seamles,s, **accessible** and responsive.

The framework addresses the following items:

- Defines patient care categories for transport by ambulance or alternate means;
- Expectations of MTS owners / operators; their staff and vehicles;
- Booking and dispatch
- Expectations vis-~-vis patient documentation and confidentiality; quality assurance and accountability;
- Matters pertaining to implementation e.g~, communications, education, marketing and funding

Southwest regional stakeholders have requested provincial (MOHLTC) approval of a 'pilot' project to advance the implementation of the recommendations and concepts contained in the framework.

FINAL REPORT

City of Toronto

Under the leadership of Toronto EMS, the City has developed a *draft* bylaw to set standards for the operation of MTS. They have done so for various reasons, including:

- Response to the recommendations of the 1q95 Coroner's inquest, discussed previously in Section 2 of this report;
- Use of MTS is on the rise. There are increasing concerns to ensure patient safety;
- Perception by the public and within the health care community, that MTS are part of the municipally operated EMS system. Users of MTS may be unaware that such operations are not regulated;
- Opportunity to contain EMS costs, by ensuring the health care community of safe alternatives for the transport of patients, who do not require the services of ambulances.

The draft by-law addresses the following items:

- Regulatory role and responsibilities: Identifies which of the City's functional units would assume the regulatory responsibility for MTS; defines the regulatory responsibilities, including licensing and fees
- Service expectations of MTS owners *I* operators e.g., be licensed, maintain records, quality assurance, handling of complaints, etc
- Minimum qualifications of MTS attendants e.g., age, education and trair~ing, drivers license requirement, free of criminal record, etc
- Responsibility to patients, by both the sending institution and MTS
- Other matters including patient confidentiality; communications;
 equipment and vehicle standards; insurance; and fees.

Waterloo Region

The Region, through its 'specialized transit' unit operates a 'brokerage' for the provision of non-emergency medical transportation, known as *Med-Lift*.

IBIGROUP

The brokerage was initially funded as a pilot project through the Ontario Community Transportation Action Program (CTAP). Mid-way through the first year, July 1998, the project was so successful that it exceeded CTAP funding. Rather than lose the service, local health care facilities agreed to subsidize a portion. Currently, Waterloo Region costshares the service with local health care facilities.

FINAL REPORT

The Med-Lift brokerage contracts with *I* has access to pre-qualified service providers e.g., stretcher transport capable MTS, wheelchair accessible taxis, etc.

The brokerage handles call taking (requests for service), assigns patients to the appropriate service using defined triage criteria, ensures service quality, investigates complaints and takes care of invoicing.

Medical facilities are required to submit requests for transportation by fax. After hours booking is done through the Cambridge CACC.

Recently completed surveys of stakeholders and patients, administered by Med-Lift, attest to the success of the program. They indicate lower costs, relief of ambulance call pressure, reduced waiting times, fewer missed appointments leading to more efficient use of diagnostic resources, fewer stranded patients, better hospital discharge, decrease in missed meals and medication, and a decrease in hospital redirects.

Peel Region

In 1999 Peel Region, in conjunction with area hospitals, ambulance services and CACC engaged in a three-year planning process to examine the feasibility and application of non-urgent medical transportation options.

After examining considerable data, the Working Group recommended the establishment of a centralized brokerage for non-urgent medical transfers. In preparation for the implementation of a pilot project, a consultant was retained to help develop the necessary tools including a memorandum of understanding (among the stakeholders) and service standards.

The Region abandoned the process in 2001, when it became evident that circumstances had changed so much so, that the potential costs (to the Region) may outweigh the

intended benefits i.e., in terms of future ambulance cost avoidance

² Specifically, Peel Regional staff had reviewed their ambulance call records and had determined that very few ambulance calls would be eligible for transport by means other than an ambulance possibly less than 4% of annual calls.

Peel Region's findings are atypical to most jurisdictions. As shown later in

Exhibit 5.4, non-emergency (priority 1 and 2) transports by ambulance represent 23% of the annual ambulance call volume across Ontario. The figure varies by geographic region: 14% in the GTA, 25% in eastern Ontario, 35% in the southwest and 40% in the north.

Peel's relatively low volume of non-emergency transfers by ambulance is attributed to the following: relatively little change in local ambulance resources over the past decade _despite a significant increase in the demand for emergency and non-emergency ambulance services over the corresponding period. As a result, in Peel Region the use of alternate modes as a basic means of transport of non-emergency patients has become a relatively common practice by the health care community.

FINAL REPORT

Niagara

Niagara stakeholders have investigated several options, by which to regulate non-urgent medical transportation, including:

- Region to Set and Enforce Standards: In their view, enforcement of this option may be problematic;
- Region to Delegate Standard Setting Authority to Police Services Board: In their view, a key shortcoming with this option is that the Board lacks requisite expertise in matters pertaining to health care;
- Municipal Business Licensing By-Law with Combined Regional Standards By-Law: In their view, this option would be awkward to implement and enforce;
- Board Licensing By-Law and Regional Standards By-Law: Of the options examined, this is the option which stakeholders consider most feasible.

In the view of stakeholders, the latter option would combine the Region's inhouse expertise in health care with the Police Services Board's expertise in transportation licensing and enforcement. They view this arrangement as being consistent with current provincial directions i.e., changes enacted through Bill 86 to consolidate licensing and administration of health care standards.

Eastern Ontario

Eastern Ontario 'Area Emergency Health Services Committee' has prepared a *draft* bylaw for Non-Ambulance Transfer Services suitable for use by UTMs in Eastern Ontario and with provincial approval, in other regions of the province.

The draft, which is similar to that prepared by City of Toronto staff, identifies and addresses the following aspects of MTS operations:

- Defines regulatory responsibilities, including licensing
- Service expectations of MTS owners / operators e.g., be licensed, maintain records, quality assurance, handling of complaints, etc
- Minimum qualifications of MTS attendants e.g., age, education and training, drivers license requirement, free of criminal record, etc

- Responsibility to patients, by both the se~iding institution and MTS
- Other matters including patient confidentiality; communications; equipment and vehicle standards; and insurance.

FINAL REPORT

According to Eastern Ontario stakeholders the proposed by-law is intended to address potential liability issues and its preparation is consistent the Provincial Auditor's Special Report on Accountability and Value for Money (2000) which recommends that the "Ministry and municipalities should jointly develop and ensure standards are in place'.

The draft by-law is the result of several years' efforts including:

- Work carried out in 1999 by the Eastern Ontario Non Ambulance Health Related Transport Task Force, to develop guidelines for non-ambulance medical transport;
- Land Ambulance Services Transition Study for the Municipalities of Frontenac, Hastings, Leeds & Grenville, Lennox & Addington, Prince Edward and Renfrew completed by KPMG in 2000;
- Work carried out by the Municipal Cooperative of Eastern Ontario, which addresses the funding of alternative MTS. That effort concluded that funding for alternative MTS is "not the municipalities' responsibility. The appropriate and effective role should be to undertake the licensing and regulation of alternative MTS to ensure that high standards for vehicles, providers and equipment are maintained, and to protect the public from Operators offering the public services in an inconsistent or unrestrained manner".

City of Ottawa

In February 1994 MOHLTC initiated a 'pilot' project using dedicated 'patient transfer vehicles' to resolve transfer problems in the former Regional Municipality of Ottawa-Carleton (RMOC) and to provide the Emergency Health Services Branch of the Ministry of Health with information to assist in shaping Provincial policy and planning decisions regarding non-emergency inter-facility transfers.

Three vehicles, staffed by paramedics and operating without warning systems (lights and sirens) were introduced to handle inter-facility patient transfers. The vehicles were not used for regular emergency ambulance service. The pilot addressed only the needs of stretcher patient transportation.

The use of dedicated patient transfer vehicles proved immediately successful. Aside from a brief service interruption in year 2000, the operation continues to function, although with the following modifications. The vehicles are operated by Ottawa EMS and there are but two staffed vehicles.

The vehicles are staffed with primary care paramedics. They are intended for code 1 and 2 patients who require transportation by stretGher, and who do

not require complex medical care during transport. The service is bed-to-bed. Advance bookings with 24 hours notice are preferred. Depending upon vehicle availability, patients may be transported to other neighbouring jurisdictions.

Patient Transfer Vehicles are not assigned to emergencies. They may be called upon by Ottawa CACC, to assist in major incidents / disasters.

 $\mathbf{f13J}$ group

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

Former Regional Municipality of Hamilton-Wentworth

In 1994 an Elective Patient Transfer Task Force was established in Hamilton Wentworth to address problems and issues associated with non-emergency inter-facility patient transfers, including:

- Delays in ambulance pickup and drop-off for pre-booked patient transfers, contributing to delayed / missed appointments
- Inconvenience to patients and families
- Ineffective utilization of! communications between resources (CACC, hospitals, ambulance vehicles and attendants)
- Staff (escort) delays I overtime
- Inconsistent and conflicting policy and procedure between government, service providers (CACC and ambulance) and consumers (hospitals, nursing homes etc).

The Task Force developed a pilot project 'proposal' involving 2 to 3 ambulances, which would be dedicated to non-emergency (code 1 and 2) inter-facility patient transfers. Within the pilot concept, it was proposed that:

- Initially to handle code 2 'scheduled' patient transfers; and subsequently to be expanded to include code 1 'deferrable' calls;
- Local health care facilities to utilize a medical transportation decision matrix (developed by MOHLTC) to select appropriate patient transport services;
- Transfers to be pre-booked by fax; CACC would coordinate the booking;
- Service to be door to door;
- Vehicles to operate weekdays _daytime.

4.2 Views of Ontario Stakeholders

The views of Ontario stakeholders are organized under the following headings:

- RoleforEMS
- Alternative Transportation Services
- MTS Regulatory Considerations

- MTS Service Delivery
- Costs and Funding Considerations

1131 27

GROUP

FINAL REPORT

Role for EMS

Most of the stakeholders, with whom 181 Group consulted, concur that the role of EMS should be primarily, to carry out emergency calls and transfers of medically unstable patients.

In their view "the routThe use of ambulance services for the transfer of low priority non-emergent calls is an inappropriate use of scarce, highly specialized resources".

The above having been said, stakeholders also point out that "it is not reasonable to assume that all non-emergency ambulance calls can be eliminated or provided by another mechanism. However, better ambulance utilization and therefore improved resource allocation can be achieved through planning and careful design of alternative transport mechanisms that do not currently exist" particularly in rural and northern communities, where there are few, if any alternatives to ambulances.

Stakeholders of such communities contend that non-emergency transfers provide staff the opportunity to routinely practice their skills; also "the use of paramedics to handle these (norr~emergency) transfers makes economical sense and ensures that staff unit hour utilization is somewhat respectable".

Alternative Transportation Services

Virtually all stakeholders concur that there is a role for alternative patient transportation services and that it is to help carry out the *transport of non-emergencyinedicalfy stable patients in a timely fashion.*

In this regard there is very little disagreement. There is however, strong concern that the operabons of current MTS companies are not regulated. This point was cited repeatedly by EMS providers, hospital representatives and representatives of long term care sector. The reasons presented are similar to those outlined previously in this document i.e., concern for patients undergoing transport by MTS, liability exposure, etc.

EMS providers repeatedly cited the challenges, which they continue to experience due to the routine use of their ambulances for non-emergency purposes i.e., impedes their ability to accommodate the demands for emergency EMS services, to maintain emergency response coverage and emergency response time performance, etc. The challenges, they point out, are most prominent during the weekday daytime, when the demand for emergency calls and patient transfers coincide. Further, they are exacerbated by the prolonged absences of ambulances in other jurisdictions, while completing patient transfers.

In their view, EMS operations would benefit from the use of MTS to accommodate a portion of non-emergent patient transfers; but they must be regulated.

The health care community concurs. They too see MTS fulfilling an important role in the timely transport of medically stable patients; again, only if properly regulated.

2 8

GROUP

FINAL REPORT

Exhibit 4.2, summarizes the difficulties, which the health care community routinely experiences. The data is based on the completed survey questionnaires.

 70% to 80% of hospital respondents cite difficulties involving late / missed appointments, delayed departures / returns and difficulties

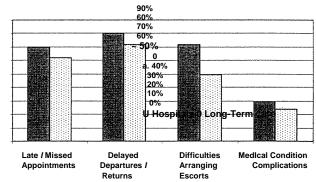


EXHIBIT 4.2: NON-EMERGENCY PATIENT TRANSFER DIFFICULTIES

arranging escorts. Similar views are expressed by the majority of long-term care sector respondents; and

 20% to 30% of the respondents in both sectors (hospital and long-term care) cite the occurrence of medical condition complications due to late I missed appointments.

Almost 60% of hospital respondents also cite backups (in ER, diagnostic imaging, etc) due to missed *I* delayed transfers; 66% cite inefficient use of resources du&to missed *I* delayed transfers; 74% cite problems associated with backfilling for staff; and 69% cite lack of compensation for the additional time and effort spent on theabove matters.

A general view among the health care community is that their capability to provide patient care would benefit from more timely transport of medically stable patients by MTS, as would the patients themselves. Most health care stakeholders would support the use of MTS so long as:

- Their operations are appropriately regulated, inclusive of standards for vehicles, staff and patient care; and
- Funding is made available to cover the cost to transport patients by such alternative means.

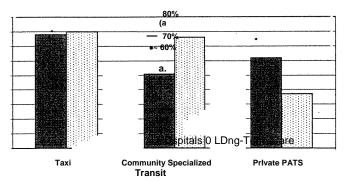
This message was cited repeatedly both orally and in writing. Several excerpts from stakeholder briefs are presented below to illustrate this point:

FINAL REPORT

- "Yes there is a role for a patient transfer service in our municipalities for a patient transfer service. It could become an integral component of the system, when used appropriately for medically stable patients only."
- "Alternate patient transport services are an essential component in the local strategy to contain the seemingly relentless escalation in land ambulance costs being experienced by local municipalities since the transfer of the system management responsibilities from the province."
- "With the current OPSEU strike, these private services are a tremendous asset to maintaining patient service..."
- "The transport of patients who do not fit the criteria for emergency patient transfer between facilities is a significant factor in patient care in most, perhaps all facilities. Unfortunately it has not received the respect that this issue demands _ there has long been a suggestion that non emergent patient transport is not all that import ant; that many patients could use some other form of transport, that it is not the responsibility of the health care system. This is very clearly not the case. The transfer of patients between facilities is a fact of life, it is not overused or abused, alternate means of transportation are used whenever they are appropriate and this vital part of the health care system deserves and needs to be supported both financially and with resources to ensure a cohesive system is in place."

EXHIBIT 4.3

<u>CURRENT USE OF ALTERNATIVE PATIENT TRANSPORT SERVICES</u>

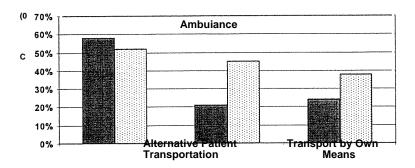


As shown by Exhibit 4.3 many Ontario hospitals and long-term care facilities already use the services of MTS, in addition to ambulances, taxis and community specialized transit, for medically stable patient transfers.

Over 60% of hospital respondents report use of private MTS companies – 30% via contractual arrangements.

Over 35% of the long-term care sector respondents report use of private MTS companies _less than 10% via contractual arrangements.





FINAL REPORT

• Hospitals o Long-Term care

According to hospital and long-term care respondents, the most common reason for using alternative means of transportation (other than ambulances) is to ensure a defined _response time for non-emergency patient transfers. As shown by Exhibit 4.4 the likelihood of a missed appointment decreases when patients are transported bymeans other than ambulance.

While the use of MTS has contributed to more timely transport of nonemergent patients, several health care stakeholders emphasize that "the situation is not great".

- Because the operators of MTS are unregulated, there is continuing concern over patient safety and potential liability; and
- MTS operators are finding it difficult to keep pace with the increasing demand for *timely* non-emergency patient tra.nsport.

MTS Regulatory Considerations

Stakeholders were asked to define what they mean by the term 'appropriately regulated'. The general view is that of an MTS operating environment having the following characteristics:

- Provincially uniform set of policies and standards for vehicles, staff, operations and patient care to be in place;
- MTS operators to be certified / licensed;
- Quality and accountability for service to be ensured through periodic

NON-EMERGENCY INTER-FACILITY PATI ENT TRANSFERS inspection~

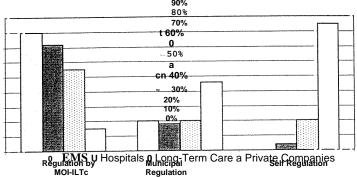
 Capability in place to investigate complaints and where required, to take corrective action (enforcement).

3

FINAL REPORT

Stakeholders were asked to identify which of the following bodies would be





best suited to assume these regulatory responsibilities: province, municipalities, hospitals or the MTS industry through self-regulation. Their preferences are summarized in Exhibit 4.5.

Most stakeholders contend that MOHLTC should assume regulatory oversight of MTS. The reasons presented include:

- MTS are fulfilling a role integral to health care, and it is the Ministry which bears overall accountability for provincial health care;
- It would be a natural extension of the Ministry's current regulatory responsibility for ambulance services;
- Policies and standards, certification processes, quality assurance processes and complaints investigation processes are already in place for EMS, and they can be extended relatively easily to cover MTS;
- Of the available regulatory choices (provincial, municipal, hospital and self-regulation) only the province, through MOHLTC, can establish a uniform set of policies standards
- Also, MOHLTO is in the best position to coordinate patient service delivery arrangements and mechanisms to ensure ongoing service quality.

Municipal and hospital regulatory options are not supported by many stakeholders. The concerns expressed include:

- Likely to result in the establishment of multiple standards and multiple licensing requirements (each unique to a specific municipality or health region);
- May lead to cross-border difficulties e.g., operator who meets one

u n i С р а s t а n d а r d b u t n а n 0 h е r m а У b е р е r m it t е d t 0 е n t

r t h е а tt е r m u n С а li t d 0 0 ff а р а ti е n t 3

2

FINAL REPORT

but would be prohibited from picking up a patient, or for returning the original patient following the appointment. The same would apply for operators who do not maintain multiple licenses;

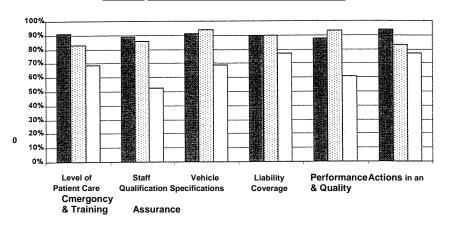
- Preference to a higher level of authority with a health care perspective, to establish a uniform provincially-wide set of standards;
- Many Ontario municipalities do not want the added responsibilities involving regulation, inspection and enforcement; or the associated potential liability and costs;
- For hospitals, patient transport is not a 'core business'. Ontario
 hospitals have gotten involved in patient transport not by choice but for
 reasons of necessity;

Most stakeholders vehemently oppose self-regulation by MTS industry _an option, which would require the establishment of a self-governing Association and accreditation of operators:

- Concern that decisions may be driven primarily by financial considerations, rather than the medical needs, health, safety and wellbeing of patients;
- Option will rely heavily on the cooperation of members to abide by the decisions of the Association;
- Unclear how the Association would enforce decisions _other than revocation of membership. This however, will not deter / impede nonaccredited (independent) operators from continuing to deliver services;
- Option does not represent a short-term solution. Private MTS
 operators~have but recently commenced discussions to form an
 Association. They will need time to get it established and gain the trust
 of the health care community;
- Private MTS are the principle supporters of this option, and all MTS companies do not agree with the concept;
- While there are several examples of professional groups which selfregulate, stakeholders could not cite an example of a service industry which is self-regulated e.g., EMS and Hospitals do not self-regulate.

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS FINAL REPORT

EXHIBIT 4.6: ITEMS REQUIRING REGULATIONS



0.

U Hospitals

O Long-Term Care O Private Companies

EXHIBIT 4.7

WHO SHOULD DECIDE WHETHER AN AMBULANCE IS REQUIRED

120%

100%

80%

0.

60%

40%

20%

0 EMS Provider

U Hospitals

U Long-Term Care

Long-Term Care

Long-Term Care

Long-Term Care

Long-Term Care

O Private Companies

EXHIBIT 4.7

Exhibit 4.6 summarizes

stakeholders views on which items should be regulated. In addition to the information shown in the exhibit, stakeholders also suggest that the regulations should cover 'communications' and 'fees for service'.

cAcC

Sending Facility Receiving Facility

EMS Provider

Stakeholders were asked to identify which of the following bodies should be responsible to decide whether a patient is transferred by ambulance or by alternate means: EMS provider, CACO, sending facility or receiving

facility.

As shown by Exhibit 4.7, the majority contend that the sending facility should decide.

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS FINAL REPORT

MTS Service Delivery

Stakeholders were asked to define what should be the responsibilities of the 'providers of MTS'. The general view is that they should be responsible to:

- Provide non-emergent medically stable patient transport for medically necessary treatment between hospital sites, to health care facilities / treatment centers and patient returns following treatment;
- Carry out the services in conformance to the operating policies and standards established by the regulatory body;
- To do so in a timely and cost-efficient manner, while safeguarding the care, health and well-being of the patients being transported; and
- Comply with or participate in quality assurance and complaints investigation activities, as may be required by the regulatory body.

Stakeholders identified the following options for MTS service delivery. IBI Group was asked to consider these options as part of the investigation:

- Private MTS company operating under contract or casually for health care facilities _current situation;
- MTS to be delivered directly by municipalities e.g., through EMS department;
- MTS to be delivered directly by hospitals or other 'non-profit' public services organizations;
- MTS service delivery via partnerships / brokerages. The following were
 ~ited as illustrative examples to consider: Med-Lift, Kingston Area
 Patient Shuttle and the patient transfer partnership invoMng Superior
 North EMS and Thunder Bay Regional Hospital.

MTS delivery by municipal land ambulance department is preferred by several EMS providers, health care advocates and labour (CUPE and OPSEU). Collectively, their view is that this model:

- Would be a logical extension of current EMS responsibilities;
- In most municipalities EMS policies and procedures, and quality assurance processes are already in place and they can be extended to cover MTS;
- Would afford new paramedic graduates the opportunity to apprentice /

gain field experience in a controlled, less stressful environment;

FINAL REPORT

- Would afford older paramedics and those undergoing rehabilitation for physical reasons or for reasons of stress management, opportunity for less stressful 'light duty' employment;
- Would afford all paramedics a temporary reprieve from the relatively high levels of stress and physical demands of emergency calls;
- Would afford continued employment for paramedics trained at the primary level of care who are unable, or choose not to pursue training at the advanced level;
- Both types of calls, emergency and non-emergency patient transfers, can be coordinated centrally through CACC; and
- Would yield operational flexibility i.e. transfer vehicles may be called upon with relative ease for support in multi-casualty incidents, or during periods of relatively high emergency calls, would facilitate the introduction of multiple patient units (MPU's), etc.

Private MTS companies disagree with the above view, contending that:

- They provide a unique patient transport service, which is not EMS and should remain separate;
- Integrating MTS with EMS (even in a simple fashion involving common management oversight) may pose a significant labour challenge, and would increase the risk of a disruption in both services _EMS and MTS _during a future municipal labour action; and
- Integrating the two services will introduce organized labour's involvement in MTS (where one currently does not exist). The resulting impact would be to drive up wages and consequently the cost of MTS services.

Most stakeholders concur that a single service delivery model will not fit all communities. Northern and relatively rural communities have special considerations i.e.,iess dense populations, fewer available medical services, longer distances to travel and few, if any, alternatives in the way of private or public organizations providing stretcher or accessible (wheelchair) transportation. The relatively low trip densities in such communities challenge the viability for private patient transfer services.

To many health care stakeholders it does not matter who is the 'provider of MTS" so long as their operations are regulated and the health care community is provided funds to cover the cost of patient transport by such means.

Costs and Funding Considerations

The following are the costs to transport a patient by ambuFance and by alternate forms of transport, based on information provided by stakeholders:

FINAL REPORT

- The cost of a trip by ambulance can vary from \$250 to over \$600 per trip. Province-wide, the average cost of an ambulance trip is approximately \$300. This figure does not include the marginal cost to backfill for the ambulance, if it is required to be out of the host jurisdiction for an extended period i.e., on a long-distance inter-municipal transfer;
- The cost of a trip by private MTS varies from \$90 to \$130. Several factors will determine the actual cost. A key factor is 'travel distance'. For longer distance trips MTS operators charge an additional \$1 to \$2 per kilometre, to cover the additional costs and time incurred. Another factor, which will drive up the cost involves the client's expectations, as may be expressed through contract. For example, some hospitals require that MTS operators commit to specific time based performance standards (i.e., arrival within 20 minutes of scheduled appointment 95% of the time) and others require that the attendants possess 'basic life support' skills as opposed to first aid or advanced CPR.
- The cost of a trip by taxi and community specialized transit is \$50 or less (e.g., cost of trip by Med-lift is approximately \$50).

According to hospital survey respondents, their average cost to transfer a patient by means other than ambulance is approximately \$65. This figure includes patient transfers by MTS, community specialized transit and taxi. It applies to patients transferred between hospitals sites, as well as patient discharges to long-term care facilities or private residences.

The following two questions were included in the Ontario Hospitals' survey:

- a) Approximately how much does your organization spend annually on patient transport services other than ambulance?
- b) What impact do the following items have on your organization: late patient arrivals, missed appointments, delayed patient departures, etc? In your opinion~ what is the approximate annual cost incurred by your organization as a result of the above items *I* impacts?

Seventeen (17) hospitals responded to both questions. Collectively they spend \$752,000 annually on patient transport by means other than ambulance. They estimate the system-incurred costs to be \$1.6 million. The ratio of system-incurred costs to the out-of-pocket costs is 2.2 to 1.

This would suggest that had these hospitals not spent the sum indicated on patient transport (\$752,000) they would have incurred system costs exceeding \$1.6 million.

On this basis one may conclude that there is an economic advantage for hospitals to spend funds on patient transport _as opposed to incurring relatively greater costs attributed to missed appointments, delayed patient departures, additional supervision, overtime, extra meals, etc.

IBI GROUP

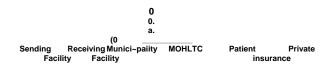
NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

Stakeholders were asked to identify which of the following bodies should pay *I* share the cost for a patient transfer by MTS: MOHLTC, municipalities, patient, sending facility, receiving facility or private (or group) insurance. Their preferences are shown schematically-in Exhibit 4.8, and are discussed below.

- Approximately 90% of EMS respondents feel strongly that MOHLTC and the sending facility should pay *I* contribute to the cost;
- Over 75% of hospital respondents feel strongly that that MOHLTC should pay I contribute to the cost; over 50% of respondents feel that private I group insurance plans should cover a portion of the cost;
- Long-term care community respondents expressed views similar to those of hospital respondents _although from this group 45% also felt that patients should contribute to a portion of the cost. This latter statistic is relatively surprising since most long-term care residents are elderly and subsist on a fixed income _a stipend of \$112 per month_to cover their personal needs. During oral stakeholder consultations, IBI Group was repeatedly advised that these patients can ill-afford to pay the additional cost7or medical transport;
- Almost 80% of private MTS company respondents feel strongly that the sending institution should pay I contribute to the cost; over 60% of

EXHIBIT 4.8 ~ ~Wfil II fI PAY I ~RARF THE COST OF A PATIENT TRANSFER BY MT5



0EMS Provider ● Hospitals o Long-Term care 0 Private companies

respondents feel that private *I* group insurance plans should cover a portion of the cost; and over 50% feel that patients should cover a portion of the cost.

 Relatively few stakeholders feel that municipalities or receiving facilities should pay I contribute to the costs.

100%

600/o

50%

40"A

30%

20%

3 8

GROLP

FINAL REPORT

Many stakeholders contend that financial support for non-emergency patient transport by MTS should be the responsibility of the Province. In this regard many requested that the following additional suggestions be considered by this study:

- Province to fund non-emergency patient transport by MTS through a mechanism which is separate and distinct from those currently used to fund land ambulance or hospital programs;
- Decisions on funding to include provisions for change to accommodate future increases in demand;
- Consideration to be given to a re-apportionment of the \$45 ambulance co-payment, so that a portion may be used to offset ambulance costs;
- Decisions on funding to consider the unique characteristics of the north, including the significant number of calls to and from air ambulance;
- Impacts on the funding formula for inter-municipal transfers to be considered in any future decisions;
- EMS operators to be permitted to charge health care facilities for the
 use of ambulances to carry out non-emergency medically stable patient
 transfers, if the patient's medical condition does not necessitate an
 ambulance and alternative modes of transport are available.

FINAL REPORT

5. PATIENT TRANSPORT TRENDS

Within the scope of this investigation, IBI Group assembled considerable information on recent historical patient transport trends, by ambulance and alternate modes, for the period 1996 to 2001.

Transfers by ambulance were determined by extracting call volume information from MOHLTC's Ambulance Response Information System (ARIS).

Patient transports by means other than ambulance (i.e., by private MTS, taxis and community specialized transit services) were determined from the information supplied by stakeholders, through oral and written briefs and the completed survey questionnaires.

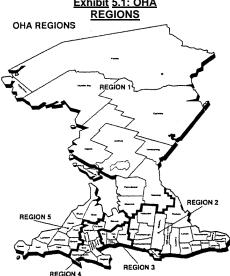
This section of the report highlights the key findings. For additional details, the reader is referred to technical Appendix C, which contains extensive ambulance call volume tabulations showing:

- Ambulance call volume and patient transport trends by dispatch priority
- Ambulance call volume and patient transport trends by UTM and on a regional basis

 Exhibit 5.1: OHA
- Split between 'inter-facility' and 'other'
- Split between 'municipal' and 'inter-municipal'
- Time spent by ambulances to

 complete calls / patient transports
 90th percentile response times to emergency calls.

For ease of presentation, the consultant team selected a 'regional' breakdown from among the following choices:



Ontario regions as defined by Ministry of Municipal Affairs; MOHLTC health regions; and health regions as defined by the Ontario Hospital Association (OHA).

While any one of these options would have been suitable, the consultant team chose the latter. The OHA regions are shown in Exhibit 5.1.

IBI

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

Throughout this section of the document, the OHA Regions are referred to loosely, as Region 1- North; Region 2— East; Region 3 $_{-}$ GTA; Region 4 $_{-}$ Central West; and Region 5 $_{-}$ Southwest.

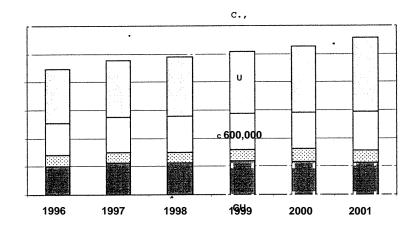
EXHIBIT 5.2: AMBULANCE CALL VOLUME TRENDS

1,200,000

1,000,000

800,000

Cu



~ 400,000

200,000

5.1 Ambulance Call Trends Province-Wide

Exhibit 5.2 presents the ambulance call volume trends, 1996 to 2001, broken down by dispatch priority code, as defined previously in Section 3 of this report. Over the 5-year period ambulance call volumes (priority 1 to 4) increased by 25%. Non-emergency calls (priorities 1 and 2) increased by 11%; code 3's by 20% and code 4's by 37%.

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | II'E296 To Nb. " | |
|----------------------------|---------|-----------|-----------------|---------------|---------------|---------------|---|------------|
| | | 236, | | | | | | |
| | | 752(3) | | | | | | |
| | | 301,800 | | | | | | |
| - R. 1 | 203, | | 226,0 0 | 236,600 | 23Z900 | 235,~ | ~C00 | 11% |
| -R.2 | 78700 | | 0 | 837(3) | 90800 | 88500 | 9800 31,800 | 12% 11% |
| Pr. I &2 | 282,800 | | 7650 0 | 320,300 | 323,700 | 314300 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| | | | 302,5 0 0 | | | | | |
| | | 246,400 | | | | | | |
| | | 400600 | | | | | | |
| | | 653,000 | | | | | | |
| -R.3 -F~.4 | 226, | | 256, 4~ | 254,90 0 | 258.30 0 | 275,20 0 | 46,800 141 4 | |
| Pr. 3 &4 | ~ | | 678, | ~ | 473800 | 523 | 37% 188,000 | |
| | 610,800 | | , | 698,10 0 | 732,10 0 | 798, | | |
| TcAal calls - Pr. Ito 4 | 893,3 | 00964,700 | 981, 400 | 1,018,5 00 | 1,055,8 00 | 1,113,1 00 | 219800 | 25% |
| Total calls- Pr. 1 to4&8 | 1,12 | 25,200 | 1,23 | 1,282,1 | 1,330, | 1,468, | 340,300 | 3er/, |

41

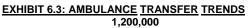
IBI GROUP

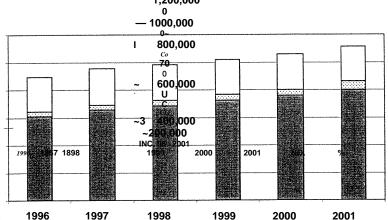
NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

5,2 Ambulance Transfer Trends Province-Wide

Exhibit 5.3 presents the transport trends by ambulance for the period 1996 to 2001 i.e., calls involving a patient~transport. Code 1 and 2 patient transfers by ambulance currently number approximately 253,400 annually (23% of all ambulance calls). Code 3 and 4 inter-facility patient



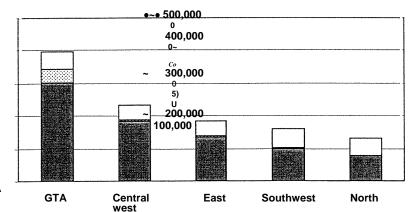


transfers by ambulance currently number approximately 56,900 annually (5% of all ambulance calls).

| o Non- | 290,300 28% | 263,700 27% | 254,200 28% | 253,700 25% | 254700 24% | 253,400 23% | '3.100 | 1% |
|--------------------------------|----------------|----------------|----------------|----------------|---------------|----------------|---------|-----|
| Emergency | 2070 | 2770 | 2070 | 2370 | 2470 | 2370 | | |
| Transports Pr I | | | | | | | | |
| &2 | | | | | | | | |
| o Inter-FacIIIty TranspOrts | 29,900 3% | 36,100 4% | 40,400 4% | 42,100 4% | 43,700 4% | 56,900 5% | 27,000 | 90% |
| Pr3&4 | | | | | | | | |
| OtherAmbulance Calls Pr I | 613,100 | 694,900 | 686,800 | 722,700 | 797,400 | 802,800 | 189,700 | 31% |
| to 4 | 89% | 69% | 70% | 71% | 72% | 72% | | |
| Total — Pr I to 4 | 883,300 | 994,700 | 881,400 | 1,018,50 0 | 1,055,80 0 | 1,113,10 0 | 219,800 | 25% |
| Total—Pri to4plus8 | 1 | ,126,200 1,2 | 02,000 1,23 | 9,600 1,282,1 | 100 1,330.70 | 0 1,466,500 | 340,300 | |

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS FINAL REPORT

EXHIBIT 5.4: AMBULANCE TRANSFERS BY OHA REGION



5.3 Ambulance Transfers by OHA Region

Exhibit 5.4 presents the current (2001) volume of ambulance transfers by OHA Region.

| | GTA | Central | East | South | North | Total |
|---------------------------|---------|---------|---------|---------|---------|-----------|
| | | West | | West | | |
| Non- | 53,800 | 45,300 | 45,800 | 56,200 | 52,200 | 253,400 |
| Emergency | | 19% | 25% | 35% | 40% | 23% |
| C-C Transports Pr | 14% | | | | | |
| I & 2 | | | | | | |
| Inter-Facility Transports | 38,000 | 6,600 | 4,000 | 5,000 | 3,200 | 56,900 |
| Pr3&4 | 10% | 3% | 2% | 3% | 2% | 9% |
| Other Ambulance | 304.70 | 183,300 | 133,600 | 99,300 | 75,900 | 802,8 |
| Calls Prito4 | 0 | 78% | 73% | 62% | 58% | 00 |
| | 78% | | | | | ,' 72% |
| Total — Pr Ito 4 | 396,500 | 235,200 | 183,400 | 160,500 | 131,300 | 1,113,100 |

'-ml

4

3

Exhibit 5.5 presents the time spent completing ambulance transfers

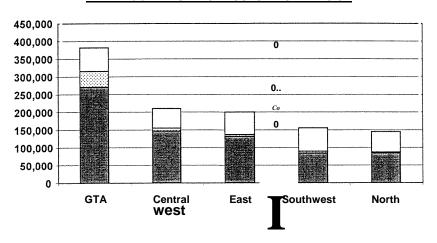
by OHA Region While code 1 and 2 patient transfers by ambulance currently represent 23% of all ambulance calls, they consume 27% of budgeted EMS hours annually.

In regions of the province, where there are relatively few alternative patient transfer services or where patients must be transported over long distances, the percent of time which EMS spends on non-emergent medically stable patient transport is significantly higher.

The values shown in Exhibit 5.5 do not include prolonged absences of ambulances in other jurisdictions, as a result of call re-assignments by CACO.

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

EXHIBIT 5.5: AMBULANCE HOURS BY OHA REGION



FINAL REPORT

| | | entral- ₁ A~ West East | | So ut h w es t | North | Tota[| |
|--|----------------|--------------------------------------|-----------------------|-------------------------------|---------------|--------------------|--|
| Non-Emergency Transports - Pr. I & 2 | 66,000 17% | 53,800 26% | 62,1 00 31 % | 64,700 42% | 39% | 303,30 0 27% | |
| o Inter-facility transports Pr.3&4 | 45,000 12%l | 9,700 5% | 5,900 ~ | 6,300 ~ | 3,900 ~" | 70,900 ~ | |
| Other Ambulance calls Prito4 | 270,400 ~ | 146,700 70% | 130,800 66% | 84,300 54% | 83,900 58% | 741,100 66% | |

| | 71% | | | | | | |
|---------------|------------------------|---|---------|----|-----|---------|----------|
| Total—Pr Ito4 | 11 1 381,4 198,8 | • | 210,300 |)~ | 155 | 144,400 | 1,115,30 |

44

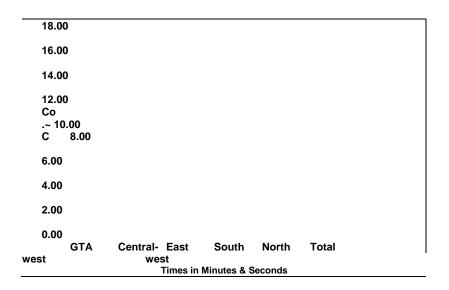
"sot-P

NON-EMERGENCY INTER-FACILITY PATI ENT TRANSFERS FINAL REPORT

5.4 90th Percentile Response Times

EXHIBIT 5.6: 90~ PERCENTILE RESPONSE TIMES South central-GTA westEast West North **Total** 2001 11:19 12:3216:31 13:07 IT:O013:18 <u>1996</u> 9:0412:0216:00 <u>12:50</u> <u>16:0312:00</u> 2:15 0:30 0:31 change 0:17 0:57 ,1:18 6% 25% 4% 3% **2%** 11%

Exhibit 5.6 presents a comparison of the g₀th percentile response times for years 1q96 and 2001, broken down by OHA Region. The values shown are T2 to T4 for priority code 4 calls, where T2 is the time the crew is notified and T4 is the time the crew arrives on scene.



FINAL REPORT

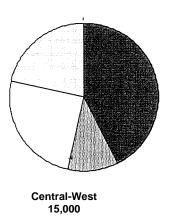
5.5 Patient Transports by Other Modes

Exhibit 5.7 presents IBI Group's estimate of the current volume of patient transports by means other than ambulance, derived from the information supplied by stakeholders through oral and written briefs and the completed

EXHIBIT 5.7: CURRENT PATIENT TRANSPORTS BY MODE



survey questionnaires. According to the information provided, patient transports by means other than ambulance are estimated to exceed 700,000 annually. Of these approximately 140,000 are stretcher transports by private MTS and 600,000 are patient transports by taxi, community specialized transit and volunteer private auto. The figures exclude patient transports by 'own means'.



5.6 MTS Transports by OHA Region

Exhibit 5.8 presents IBI Group's estimates of the current annual volume of MTS transports by OHA Region.

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS EXHIBIT 5.8: CURRENT MTS TRANSPORTS BY OHA REGION

East 30,000

Southwest 35,000

North 0

GTA 60,000

FINAL REPORT

6. PRACTICES IN OTHER JURISDICTIONS

The consultant team surveyed select jurisdictions in North America and globally to determine how they deal with non-emergency medical transportation, and whether their practices and arrangements may have potential application to Ontario jurisdictions.

The following jurisdictions were surveyed: Pinellas County, FL; Phoenix, AZ; Tulsa, OK;

Richmond, VA; State College, PA; West Midlands, U.K; Winnipeg, Man; Province of

Alberta; Calgary, AL; and Edmonton, AL. They were selected in consultation with

MOHLTC staff. The survey instrument was administered by telephone. Several

jurisdictions provided supplemental information by e-mail.

6.1 Pinellas County, FL Authority & Governance:

The Pinellas County EMS Authority was set up through a Special Act of the Florida Legislature in 1980. Chapter 80-585, Laws of Florida, created the countywide EMS district investing all powers in an elected board, empowered to oversee and regulate all emergency medical service activities in the County. The Authority holds the license for paramedic ambulance services in the county. Pinellas County is the third largest, multi-jurisdictional EMS system in the United States.

Pinellas County's EMS Authority provides a "One Tier Dual Response" i.e., all units are advanced life support (ALS); two paramedic units are sent to each 9-1-1 emergency call. It is a "Public Utility Model" EMS system.

The Public Utility Model EMS system has certain unique characteristics whibh make it different from other systems including:

- There must be a governmental oversight agency, which coordinates the provision of emergency medical services throughout the entire service area. In this case the role is assumed by the County.
- The highest quality of patient care with a "patient comes first" attitude must prevail in the minds of the providers and administrators.
- Services are provided by contractors who are under "performancebased" agreements. These type of arrangements require results be achieved using the creativity and innovative methods of the providers.
- Sound business financial controls must be in place where the Authority

controls all system funding. The ambulance System is designed to be funded through the collection of user fees and not reliance on tax dollars.

Advanced Life Support (ALS) resources are sent to all calls.

4

FINAL REPORT

The Public Utility Model EMS system is designed where the government not only regulates and oversees system performance, but the contractors are held accountable to meet or exceed performance requirements under penalty of removal, as well as fines being imposed. In this design, the government is a purchaser of First Responder paramedic, and paramedic ambulance services through a competitive process insuring that the most cost-effective provision of EMS services is guaranteed for the benefit of citizens.

As the overall responsible body for EMS in the County, the EMS Authority is charged with maintaining state of the art equipment and services, providing the highest quality of patient care available and providing such services in the most fiscally responsible and efficient manner possible. The EMS Authority oversees an EMS system that responds to 151,000 EMS requests for emergency and non-emergency ambulance and First Responder services each year. Sunstar paramedic ambulance service (EMS provider) transports 105,000 patients annually.

The Pinellas County EMS Authority is a purchaser of services, not a direct provider. They contract with 18 local fire departments for paramedic first responder services. They also contract with a single provider of countywide paramedic ambulance services, Sunstar EMS. The EMS Authority utilizes volume purchasing power for medical supplies. They purchase approximately \$1.3 million per year in disposable advanced life support supplies and medications. Through periodic competitive bidding for ambulance operations, and keeping the number of county government employees involved in the system's management small, they guarantee getting the best possible prices, and extending those savings to taxpayers and customers in the form of lower taxes and user fees.

The Authority employs 42 county government personnel in its department of EMS and

Fire Administration. The majority of County personnel work in the billing department. The

Authority controls all funding; sets the rates; bills and collects user fees for ambulance

services rendered and pay their contractors for services rendered.

The Authority funds the ambulance service through user fees, for two reasons: 1) there are legal payer sources, such as Medicare, Medicaid, private insurance arid private payers, and 2) they have such a high percentage of tourists and other visitors to their area every year. The Authority did not want to tax local residents for use of the paramedic ambulance service by people who don't live in their community. If you are transported, then they send a bill. As a courtesy to their patients, they bill Medicare, Medicaid and insurance companies directly.

The EMS Authority also makes available a subscription membership program for people who may utilize the ambulance service. The FirstCare

Membership Plan is designed to absorb unexpected out of pocket expenses. The membership covers <u>medically necessarv</u> transports, which originate and terminate within Pinellas County. The fees are \$60 a year for a family and \$35 a year for an individual. When a member is transported and meets the criteria, they will bill their insurance coverage(s) first and cover any outstanding balance from the membership pool. The patient will not receive a bill for the difference. Their membership fee will cover any out of pocket expense that would normally be charged directly to the patient.

f13J

GROUP

FINAL REPORT

Medical Control

The EMS system initiated centralized medical command in January $\dot{l} \sim 0$ through the staff of the Medical Director's Office, "On-Line Medical Control" (OLMC). OLMC is available to 24 hours a day, seven days a week. It is a real-time quality assurance (QA) mechanism for the patient care being provided by EMS system paramedics. The purpose of OLMC is to provide field personnel access to clinical consultations on a real-time basis.

Whenever a medical officer provides primary consultation services, there is a staff OLMC physician with direct responsibility for additional consultation as required. The system has 100% physician coverage available to field paramedics at all times when it is necessary.

Field Operations

Over 300 EMTs and Paramedics are employed to provide care and transportation to the citizens of Pinellas County. They respond to approximately 156,000 calls for service each year, resulting in about 107,000 transports. They are the exclusive transport providers for *9-1-i* service, and non- emergency care. They provide many other specialty services such as long distance transports and community standby coverage.

The fleet of 55 advanced life support ambulances is replaced (by contract) every 5 years. Support vehicles operated by EMT and Paramedic certified Supervisors are also in the field 24 hours a day.

Communication Center

| Tvoe of Service | Rate |
|--|---------------------|
| dvanced Life Support \$355.90 Per Person | |
| c~tical care Ambulance \$648.90 Per Person | |
| dvanced Life Support Out of Town | \$355.90 Per Person |
| Mileage per Loaded Mile \$8.60 | |
| Mileage per Loaded Mile After 50 Miles | \$5.60 |
| aiting Time per Half Hour \$41.80 | |
| Dedicated Standby per Hour 3 Hour Minimum | \$76.10 |
| Non-Dedicated Standby per Hour | \$38.00 |
| One Paramedic Standby 3 Hour Minimum | \$38.00 |
| Mileage per Loaded Mile (2 People in One Ambulance) | \$4.30 Per Person |
| Mileage per Loaded Mile (3 People in One Ambulance) | \$2.87 Per Person |
| Mileage per Loaded Mile (4 People in One Ambulafice) | \$2.15 Per Person |

The Sunstar Communication Center utilizes computer aided dispatch systems, Global

Positioning Satellites (GPS) and System Status Management, They effectiv~ly cover

Florida's most densely populated county. They process an average of 500 calls a day.

Billing Rates (effective January 1,2002)

Statistics

IMonth

Emg calls

Non Emg calls Transports

FINAL REPORT

| ontract 1999/2000 | 105 471 | 28.875 | 106,767 |
|-------------------|-----------------|-------------------|---------------------|
| Ontract 1999/2000 | 105,471 | 20,073 | 100,707 |
| ontract2000/2001 | 105,163 | 29,739 | 107,122 |
| | | | |
| ct-2001 | 8,447 2,435 8,6 | 44 Nov-2001 8,020 | _2,143 8,329 |
| Dec-2001 | 8,602 | 2,202 | 8,759 |
| 0000 | 0.070.0.700.0.0 | - <i>-</i> | |
| an-2002 | 9,279 2,726 9,9 | 21 | |
| | | | |
| Feb-2002 | 8,280 2,221 8,5 | 87 | |
| | | | |
| otals | 42,628 11,727 4 | 14,240 | |

Inter-Facility Transportation

Medicaid Patients: Patients who have only Medicaid Insurance are required to have preauthorization via the "Medicaid Report" form. Pre-authorization is required for non-emergency transports occurring Monday through Friday from 07:00 AM to 5:00 PM, excluding holidays. Transports occurring after business hours or on holidays or weekends must have "post-approval" performed. In either case, completion of the Medicaid Report form is required.

The transport coordinator in the communication center will ask if the patient has Medicaid and will request the Medicaid Report form with authorized preapproval to be faxed to him/her for verification.

Note: Section 40 1.252, Florida Statutes requires anyone who needs or is likely to need medical attention during transport, must be transported in a permitted ambulance.

Medicare Patients: Patients who have Medicare are required by Federal regulations to have a "Physician Certification Statement" (PCS) form completed with a physician's signature at the time of transport. This is regardless of time of day or day of week. The PCS form is not required for emergency i~sponses and transports. The PCS form is used to justify the medical need for ambulance transport in order for Medicare to consider payment.

Skilled Nursing Facility Patients: Non-emergency ambulance transportation for a Medicare patient residing in a "skilled nursing facility" (SNF) requires a Prospective Payment System (PPS) form. When a skilled nursing facility calls for a non-emergency transport, Sunstar's call-taker asks the caller specific questions regarding the patient's insurance coverage. The Balanced Budget Act of 1997 requires the SNF to pay for all ambulance transports that are part of a residents 'plan of care". For example, a patient is being treated in a nursing facility after fracturing a hip and subsequent hip surgery. The patient cannot walk or sit, but has an appointment with their orthopedic doctor. The patient can be safely transported only by ambulance~

and since this transport falls under their care plan, the SNF is responsible for the ambulance bill. An example of when Medicare would be billed is if this same patient developed a severe infection at their surgery site. This would be an unexpected occurrence, i.e., not in their plan of careiThe patient's condition would require further evaluation and treatment not available at the skilled

FINAL REPORT

nursing facility. Therefore, the patient would be transported by ambulance to the emergency-room and this transport will be billed to Medicare.

6.2 Phoenix, AZ

Authority & Governance

Ambulances are dispatched through the 9-1-1 system and are staffed by firefighters who are state certified emergency medical technicians. The State of Arizona's Department of Health Services, Bureau of Emergency Medical Services regulates the ambulance industry and sets mandated rates that include a base rate, mileage and disposable medical supplies.

State statutes, Title 9, Chapter 25, Section 901~ details the regulatory framework governing the provision of ambulance (and related patient transport) services including both municipal and private carriers.

Any agency, organization or business wishing to operate emergency or nonemergency

patient transport must acquire a *Certificate of Necessity* (CON) from the State's Bureau of Emergency Medical Services. Applicants must submit a detailed business plan articulating how they propose to provide the service, equipment to be used, ALS/BLS (levels of service), training, etc. for a specific territory in which they are applying to operate service. Following a hearing process, the applicant may be given exclusive rights for the delivery of land ambulance services.

The City of Phoenix, in collaboration with several private patient transfer services made application to the Bureau for a CON in the Greater Phoenix area. Through Mutual Aid Agreements (MAAs) with nineteen neighbouring municipalities, the Fire Department is the provider of emergency EMS service. The EMS Division reports to the Fire Chief who reports to the city manager, who reports to the city council. Phoenix Fire coordinates dispatch with the privates for the delivery of non-emergency patient transfer services.

All ambulance transports are funded through user fees, typically the legal payer sources, such as Medicare, Medicaid, private insurance and private payers.

The Phoenix Fire Department employs approximately 1,500 people, maintaining coverage in 52 fire stations. Of the 1,500, approximately eleven hundred are firefighters, three hundred of whom are paramedics. The remaining 400 are civilian staff.

Quality Assurance is done through Peer Review under the direction of the Medical Director who is an employee of the Fire Department. There are also District CQI officers monitoring QA. Medical direction is done through a base

hospital on a no charge contract. The State's Bureau of Emergency Medical Services monitors CON performance and certificate compliance.

Field Operations

FINAL REPORT

Approximately 300 paramedics are employed to provide care and transportation to the citizens of the Greater Phoenix Area. They respond to approximately 115,000 calls for service each year. Virtually all of their calls are of an emergent nature. Call and transport volumes for non-emergent patient transfers are not available.

Communication Center

Type of Service

Advanced Life Support

-Basic Life Support / Transfer

Mileage per Loaded Mile

Rate

\$360.27 Per Person

\$268.10 Per Person

\$10.04

Dispatch is a combined Fire *I* EMS dispatch run by the Fire Department. They use the

Clausen MPDS and their CAD software is a modified PRC program. All the vehicles have

GPS.

Billing Rates (effective January 1, 2002)

While the City of Phoenix provides emergency and non-emergent transport services on a cost-recovery basis, the State's regulatory body including staff and grant program for rural municipalities is funded through an EMS Operating Fund. The EMS Operating Fund's sole source of funding is from monies collected from fines levied for DUIs and Moving Violations.

6.3 Tulsa, OK Authority & Governance

Emergency Medical Services Authority (EMSA) was established in Tulsa in 1977. The service area was expanded to include Bixby, Jenks, and Sand Springs, and then into Oklahoma City and Edmond in 1990. EMSA now has two divisions _the Eastern Division, with Tulsa as the major city and the Western Division centered on Oklahoma City.

EMSA, *the Authority*, is actually an extension of the Tulsa and Oklahoma City governments. As an arm of local government, EMSA puts out bids for a private ambulance service to provide emergency and non-emergency

medical services and dispatching for the entire jurisdiction served. These service providers must meet stringent response times, and staffing and training requirements, as well as strict requirements for care. The personnel are monitored closely by EMSA personnel. Currently, Paramedics Plus holds the medical and dispatching contracts with EMSA.

Along with the contract oversight responsibilities, EMSA, through the city, owns all emergency services medical equipment used by the contractor to provide emergency services.

~ The State rules are available on-line at www.hs.state.az.us\bms

5

IBI_{GROUP}

FINAL REPORT

EMSA also administrates the system, manages agreements, maintains patient records, bills and collects, purchases goods and services, markets TotalCare, deals the financial matters and makes policy recommendations to the Board of Trustees.

The Authority is comprised of a staff of approximately 35 people who have offices in Oklahoma City and Tulsa. It is the oldest and most successful public utility model in the nation and is considered a benchmark for the industry.

- Mayors and City Councils of the communities EMSA serves appoint trustees to the EMSA Board and have final approval of any changes made to the Trust Agreement which governs EMSA operations.
- The EMSA Board of Trustees is a group of 10 volunteers appointed by the Mayors and City Councils from Oklahoma City and Tulsa. The trustees have the responsibility of establishing EMSA policies.
- Paramedic Plus is currently contracted with EMSA to provide emergency medical services personnel and to oversee operations. The contract extends through 2003.
- **The Medical Control Board** is composed of emergency room physicians from hospitals in the communities served by EMSA. This volunteer board oversees all medical procedures and issues.
- The *Medical Director*, also an emergency physician, is an employee of the Medical Control Board. This person develops and monitors the medical protocols followed by the EMSA medics and First Responders of the Fire Departments.

Field Operations

EMSA works closely with First Responders in the communities to offer th&fastest response to every call and provide universal coverage to individuals in our service area _regardless of the patient's ability to pay.

More than 300 nationally registered paramedics and emergency medical technicians provide EMSA's level of emergency medical care. The paramedic performs the full range of advanced cardiac life support (ACLS) emergency medical procedures.

The EMT supports the paramedic and performs basic life support measures such as CPR, bandaging, and splinting, taking blood pressyre and vital signs.

EMT-Basics receive at least 148 hours of clinical and field training and are required to complete 24 hours of continuing education and be re-certified every two years.

5

FINAL REPORT

- Paramedics receive approximately 1,000 hours of clinical training, must complete 48 hours of continuing education and be ACLS re-certified every two years.
- All Communications Center personnel are specially trained to provide information and

support while patients await the arrival of an ambulance in an emergency situation.

Computer Aided Dispatch

EMSA utilizes a computer program called System Status Management (SSM) to organize and manage EMSA's ambulance response and preparedness. The CAD also compiles statistical information for use in System Status Planning and keeps records of prior call information, employee data, hospital and nursing home information, and workload. EMSA's CAD system runs on two separate computers that communicate with each other. This allows for complete duplication in the event that the primary CAD computer should fail.

Billing Rates & Funding

The charge for an emergency transport in the Tulsa area is \$485-plus mileage. Non-emergency transport charges begin at \$315-plus mileage. In Oklahoma City and Edmond, the emergency transport rate is \$719-plus mileage, non-emergency is \$393-plus mileage.

EMSA is primarily funded through user's fees by patients transported. Revenue comes from insurance companies, Medicare, Medicaid and direct payments from users. At approximately \$2 per capita in Tulsa and \$4.65 per capita in Oklahoma City, EMSA's public subsidy is well below that of other cities in the region. The subsidies pay for capital expenditures such as new ambulances, medical equipment and information technology.

Another source of revenue for EMSA is a newly created program called TotalCare, which is a voluntary ambulance subscription program that allows household to control out-of-pocket expenses for ambulance service. Approximately 15% of the EMSA service population subscribes to the program.

Statistics

EMSA responded to 8,490 calls to the Tulsa and Oklahoma City

IB communications centers and transported 5,654 patients during

December, 2001. The totals were up from November's figures of 8,351 calls and 5,508 transports.

For the year 2001, EMSA responded to more than 102,000 calls and transported more than 68,00 patients.

December 2001 Statistics
Eastern Division calls Transports

| | N | Α | | 0 | | D | $\boldsymbol{\smallfrown}$ | D | T |
|---|-----|---|---|---|---|---|----------------------------|---|---|
| Г | II۷ | м | _ | ĸ | Е | ~ | J | К | |

| Tulsa | 3,954 | 2,508 | | | | | |
|------------------|------------|-----------|--|--|--|--|--|
| Bixby | 60 | 43 | | | | | |
| Jenks | 64 | 48 | | | | | |
| Sand Springs | <u>134</u> | <u>89</u> | | | | | |
| EastTotal | 4,212 | 2,688 | | | | | |
| | | | | | | | |
| | | | | | | | |
| western Division | | | | | | | |
| western Division | | | | | | | |

western Division

 Oklahoma City
 4,048
 2,810

 Edmond
 230
 156

 West Total
 4278
 2,966

December Total 8,4905,654 2001 Total 102,33168,128

EMSA is. required to respond to life-threatening emergencies within 8 minutes and 59

seconds for all calls in Tulsa, Oklahoma City and Edmond, and 11 minutes and 59

seconds in Bixby, Jenks and Sand Springs. EMSA's average response time is actually 5

minutes and 49 seconds.

EMSA Response Time: February, 2002

Emergency Average Response Time calls (MM:55)

Eastern Division (Tulsa)

western Division (Oklahoma City)

4,289 4,150 7:G5

6.4 Richmond, VA

Richmond is a city of 62.5 square miles with a population of 200,000. During the weekday day time the number of people within the city grows upwards of a million people as commuters come into Richmond to work.

The Richmond Ambulance Authority is described as a high performance, public utility model. Richmond Ambulance Authority (RAA) is a public utility established by the City with a board of directors made up of physicians, city council members and other health care professionals. It has an executive director. The RAA contracts through an RFP, a private company to provide the EMS service to the community. At this time the private company is Mercy Ambulance a division of American Medical Response (AMR).

The contract to provide EMS service includes exclusive service rights to both emergency and non-emergency ambulance service within the city of Richmond. A municipal by-law prevents other ambulance services from picking up patients within the city, either at residences or medical facilities, unless requested through mutual aid agreements. Private

FINAL REPORT

transfer services are permitted only to use wheelchair vehicles. If the patient requires the use of a stretcher the call is then performed by RAA.

All 26 RAA ambulances are full ALS, and there is no division in vehicles or crews between emergency calls and non-emergency calls.

Annually the RAA responds to approximately 42,000 emergency calls and 12,000 non-emergency calls of which approximately 8,000 are inter-facility transfers.

The RAA operates its own dispatch centre with 2 dispatchers on nights and up to 5 during peak day time hours. The Medical Priority Dispatch System is used to prioritize calls. The patient's insurance company or the patient covers the costs for the ambulance call. RAA will never refuse a request for transportation regardless of the patient condition, however they will advise the patient that their insurance plan will not cover the costs of those calls not deemed to meet their requirements for ambulance transportation, which encourages almost all patients to find alternate transportation in those situations.

The service has a medical director responsible for ALS protocol and quality assurance. Both the communications centre and the ambulance fleet have full time quality assurance staff.

American Medical Response finds a single contract to provide emergency and non-emergency service controls patient care quality, provides economies of scale and revenue from non-emergency calls subsidizes the emergency resources.

Costs for both emergency and non-emergency calls are \$350.00 plus \$7.00 per mile. The patient or their insurance company are responsible for ambulance charges. Three criteria are used to determine whether or not a transfer is eligible for insurance payment; require assistance getting out of bed, unable to ambulate but cannot use a wheelchair, and require a medical escort or medical treatment.

The city supplements the RAA service costs with approximately \$2.2 million annually (budget is \$10.5 M) however, none of the supplement is for non-emergency calls. Non-emergency calls charges are expected to cover the full cost of the transfer.

The contract between RAA and AMR requires AMR to respond to 90% of the emergency

palls within 8 migutes and arrival within. non-emergency calls the 90

59 minutes 59 sec if there was less than 2 hours notice;

- NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS
 29 minutes 59 sec of the requested pick up time if the request came in
 2 to 24 hours before the pick up time;
- 15 mm S~ sec of requested pick up time if there was more than 24 hours notice.

FINAL REPORT

There is a \$10.00 a minute penalty for the service provider (AMR) if these standards are not met. AMR currently exceeds the standard with 93% of the c-ails being completed on time, however, they are penalized from time to time.

The Executive Director of RAA feels that the system works extremely well and holds it out as an example for other jurisdictions. The combining of emergency and non-emergency calls make the system more operationally and economically efficient. Since all ambulances are staffed with at least one ALS paramedic, the patients are always receiving the highest quality of care and the staff are able to deal with any situation should the patient's condition deteriorate.

6.5 State College, PA

State College is a small city of 180 sq. miles with a population of 80,000. The main campus (with 41,000 students) of Pennsylvania State University is located in State College.

Center Community Hospital is located in State Park and is a teaching facility associated

with Penn State University.

State College is served by Alpha Community Ambulance Service which is a volunteer

governed charitable organization. In 2001 the service responded to emergency 4,599

calls of which 65% (2760) were life threatening emergencies. The service also operates a

non-emergency patient transportation service which did 2,600 transfers in 2001.

The service has 5 ambulances of which 3 (2 ALS 11 BLC) are staffed with full time staff during the day shifts and 2 on nights. The other ambulances are available to respond by paging volunteers who are on call. Onsite staffing is increased by call in volunteers for special events such as football games at the University which can have more than 100,000 spectators. Most of the volunteers~are students at Penn State University.

The transfer service uses vans that can accommodate both a stretcher or wheelchair as required and is staffed with two staff during the day shift. These two staff Will work together in one van if the transfer requires a stretcher or separately if they are transferring wheelchair patients. The service uses both "drivers" who have first aid training and EMTs for this service. The transfer service is staffed by volunteers on night shifts. The vans are equipped with oxygen and first aid kits for emergencies only. If the patient deteriorates they use an ambulance radio or the in-vehicle cell phone to contact the dispatch to request an ambulance respond to their location.

The service is a level of effort model but has response time goals for emergency calls based on distance from the base, and taking into consideration that the service operates with volunteer back up. The response time goals are 14 minutes for calls within 4 miles, 20 minutes fro calls between 5 and 10 miles and 30 minutes for calls over 10 miles from the station. There are not any response standards or goals for the transfer service.

The emergency calls are dispatched by the County 9-1-1 dispatch centre which dispatches all police, fire and ambulance calls in the County. The transfer vehicles are

5

FINAL REPORT

dispatched by an administrative staff member at the ambulance service office. A local ER physician is theservice Medical Director for treatment protocols, training and quality assurance.

The service is governed by a volunteer board of directors but regulated through Act 45 of the State of Pennsylvania which establishes vehicle and staff standards. The State Department of Health has established 13 Regional Health Councils that are responsible for issuing ambulance service licenses. The Regional Health Councils are funded by the State but are not directly operated by the State. The licensing applies only to the emergency ambulance service and does not apply to the non-emergency transfer service. Local municipal by-law regulates the rates that transfer services can charge but do not establish level of care or vehicle standards.

If the patient is in the hospital it is the attending physician that determines if the patient requires an ambulance or can be transported by a patient transfer vehicle.

The patient or insurance company (if insured) or HMO are responsible for the full cost of

the emergency call or transfer. Emergency calls, including emergency transfers are billed

at \$300 for BLS service and \$500 for ALS service plus \$1.00 per mile the vehicle travels.

Residents can purchase a subscription for \$27 for an individual or \$42 for a family per

year that covers the uninsured portion of any emergency call. Nonemergency transfers

are billed at \$75 for stretcher service and \$45 for wheelchair service, plus \$1.00 per mile.

Alpha Ambulance has a contract to provide transfer service to a 7 county area for the local HMO.

Alpha ambulance writes off as bad debt approximately 5% of their annual billing.

Alpha Ambulance has been in service for 60 years and operations work well. They rely heavily on university student volunteers for both the emergency and transfer services. A difficulty that is encountered is the on-going funding of the service. 65% of their collections are from insurance companies and there are often delays in receiving payment. The service is now fund raising for a new ambulance station.

6.6 West Midlands, U.K

West Midlands Ambulance Service (WMAS) is a public service, providing dedicated vehicles for non-emergency transfer services.

Hospitals solely responsible for funding patient transfer services

WMAS has two main functions:

- Emergency Services responding to close to 335,000 emergency and urgent calls in the 2000/2001 fiscal year; and
- Patient Transport Services (PTS) which provides in excess of 550,000 patient trips per year.

FINAL REPORT

Recruitment and Training: Operational staff providing *emergency* service functions complete an Ambulance Technician course prior to attending the WMAS Paramedic Training School.

The Ambulance Person course provides training to become an ambulance person working with patients who rely on the *non-emergency Patient Transport* Service. This course lasts two weeks and includes instruction in correct lifting and handling techniques, ambulance aid and nursing. Students also learn about the PT Service, local working arrangements, conduct and procedures. Time is also spent developing driving skills to ensure patient comfort and safety.

The non-emergency Patent Transport Service (PTS) conveys patients who are medically unable to travel by public transport to appointments at outpatients clinics, day centres and day surgery units. WMAS's PTS provides approximately 3000 patient transfers each weekday.

Patient Transport Services are paid for by hospitals. To ensure the WMAS delivers a cost-effective and professional service, local business managers and customer liaison managers are in close contact with patients and hospital managers.

6.7 Winnipeg, Man

The City of Winnipeg is approximately 400 sq. miles with a population of 671000.

The ambulance service is operated by the Winnipeg Fire and Paramedic service. The service responds to approximately 55,000 calls of which 20,200 are dispatched at the highest level of emergency call. The service does approximately 4700 inter-facility transfers per year.

The service staffs 11 ambulances on nightshifts and 16 ambulances on day shifts. Two of the ambulances 24 hours per day are staffed with an ALS paramedic, although 22 ALS paramedics are scheduled to graduate in June 2002. Two of the 16 dayshift ambulances are designated as transfer vehicles, although all ambulances other than the ALS ambulances are assigned transfers as required. Emergency calls are supplemented with EMTs on the fire trucks.

The Winnipeg Fire and Paramedic service has established goals of reaching emergency calls with a Fire Truck in 4 minutes 45 seconds and an ambulance in 8 minutes 59 seconds 90% of the time. Urgent, but not life threatening calls are to be responded to within 11 minutes 59 seconds and transfers within 15 minutes of the scheduled pick up time. There are not any stats available on compliance with the $_{90}$ th percentile. The service describes their operation as a level of effort service moving towards a performance based system.

There are currently separate Fire and EMS dispatch centres, however, they are scheduled to be moved together in May 2002. The EMS dispatch uses AMPDS for assessing dispatch priorities. The EMS dispatch has a full time Quality Assurance staff member.

1131 59

GROUP

FINAL REPORT

A Medical Director provides the service with patient care standards, protocols, training and quality assurance. This is supplemented with 2 full time paramedic QA staff. The province standard for ambulance staff is the EMT I level, however 70% of the Winnipeg ambulance staff are at the EMT 2 level. All new hires are at a minimum Firefighter / EMTs.

The province provides the regulatory framework under which the service operates. They also provide the vehicles and minimum equipment standards. The service is funded by the province and the Regional Health Authority. Currently discussions are being held regarding the provinces funding of the service.

The cost of an ambulance call is \$435. The patient is billed \$265 for emergency calls,

\$310 for ALS calls, \$195 if they receive treatment but refuse transport to the hospital and

\$1 15 if they refuse treatment and transportation. Patients are billed \$195 for transfers

although the system cost is approximately \$320. The difference between the actual cost

of the call and the patient portion is covered by the provincial subsidy.

Residents of long term care facilities are charged at the above rates as the facilities are considered their residence. Patients transferred between hospitals are also charged for inter-facility transfers although this has become a contentious issue because of hospital service rationalization.

A couple of non-emergency patient transportation services are operating in Winnipeg. They are currently unlicensed and unregulated. These services are frequently used by residents of long term care facilities as their charges are lower than the EMS service. They are also used by the hospitals when the ambulance service is not able to respond to the transfer demand due to emergency calls. These services are self dispatched and there are no guidelines on when they can or cannot be used for transfers. If a patient deteriorates, these services are to stop and call 9-1-1 although there is not ~ny legislated requirement. There are no figures available as to how many transfers they are completing.

The province of Manitoba is currently looking at studying this issue.

The service sees many areas of potential improvement including the needfor additional ambulances. Currently the transfer call volume is increasing and the service lacks the ability to fully meet the demand in a timely manner causing many delays.

There is a place for private patient transportation services to transport nonemergency inter-facility patients, however, there is a need for licensing and regulation to protect the patient and sending facilities.

An issue surrounding emergency inter-facility transfers involves the increasing request for ALS paramedics to provide care because the hospitals do not have the staffing to provide escorts for critical patients. This becomes difficult when only two ambulances per shift have ALS paramedics. There is discussion on bringing one ALS ambulance up to the Critical Care Paramedic level to do these transfers but the issue of who is to cover the costs has not been resolved.

6

FINAL REPORT

6.8 Province of Alberta

The Emergency Health Services Branch of Alberta Health and Weilness, under the Ambulance Services Act is responsible to ensure that 200,000 patients transported by ground ambulance in Alberta every year are conveyed effectively and efficiently, with the best possible outcome.

In the Ground Ambulance Program, the Branch has legislative authority to ensure compliance with the Staff, Vehicle and Equipment; Vehicle Maintenance; and Conformity regulations of the Ambulance Services Act. The Minister of Health and Weliness sets standards through the Ambulance Services Act and its regulations. Alberta Health and Wellness staff inspect and license all ground ambulances.

There are over 450 ground ambulances located in 140 communities throughout Alberta providing the public with prehospital ambulance transportation. There are 115 ambulance operators. Of these ambulance operators, two-thirds have lower call volumes (600 or fewer calls per year, or an average of 1 —2 calls per day). The low volume of calls means lower revenues, higher turnover of ambulance personnel (many positions are either volunteer or part-time) and difficulty in maintaining skill levels.

Currently there is a wide range of approaches to the provision of ground ambulance services across the province. Many ambulances are owned and operated by municipalities, while the private sector, volunteers, native bands and industrial firms operate others.

For most Albertans, the cost of the trip to the first emergency facility (pre-hospital) is the responsibility of the individual or his/her insurance company. Municipalities set the ambulance fees. Funding for pre-hospital ambulance services for seniors, widows, low income Albertans and individuals covered by Family and Social Services is a provincial government responsibility, administered through a program administered by Alberta Blue Cross.. Funding for pre-hospital services for Treaty Indians is the responsibility of the Medical Services Branch of Health Canada.

Funding for inter-hospital transfers is the responsibility of the Regional Health Authorities and are funded by Alberta Health. Funding for inter-hospital transfers of in-patients is included in the Regional Health Authorities' global budgets.

6.9 Calgary, AL

The Calgary EMS Department is one of 22 City Departments and a bylaw is in place that created the department and prevents any other ambulance service from doing Emergency Response calls within the city except by

mutual aid requests. The service also provides emergency service under contract to four neighbouring municipalities.

The service operates 18 ambulances 24 hours per day, with another 11 ambulances during peak periods. The service is supplemented with 5 paramedic response units that are on duty 24 hours per day. The service responded to 65,000 incidents requiring 74,000 ambulance responses in 2001. All ambulances are operated with an ALS capability.

6

FINAL REPORT

Calgary EMS is performance based. The response target to life threatening calls is 8 minutes 59 seconds 90 percent of the time. The current actual is 84.7 but the service is making significant headway in this direction.

Non-emergency transfers from residences and nursing homes are completed by the EMS department in the ALS vehicles. Non-emergency transfers are billed to patient under 65 at a cost of \$234.00 plus mileage. Patients over 65 and those on social assistance are billed at \$191.00 plus mileage. The cost to the patient eliminates most unnecessary calls.

Calgary EMS is self-dispatched, but shares a radio infrastructure with other city departments. Calls are prioritized using the AMPD System.

Calgary EMS is funded by the municipality, although they are lobbying for provincial funding to assist with the increased work load due to the reduction in hospital locations and Emergency Departments.

The Calgary Health Region, which is the administrative organization of all of the hospitals, provide inter-hospital transfer service in Calgary Health Region vehicles. The system is fully funded by the Calgary Health Region. Their staff meet the provincial standards of EMT-A and hospitals provide additional escorts as required to provide higher levels of care. This service only provides transportation between the hospitals themselves and will not transport patients to or from nursing homes or other locations. The vehicles meet the provincial ambulance standards and could be called upon in a disaster situation. Some of the full time Calgary Health Region staff work part time at Calgary EMS and vice versa. The salary rates are comparable (for EMT As) although slightly less at the Calgary Health Region. Many EMTs use the Calgary Health Region as a stepping stone to the Calgary EMS.

Staff at Calgary EMS felt there were disadvantages to the split. It was felt th~t a single larger-fleet could be used in a more efficient coordinated manner. There was a loss of revenue generation for Calgary EMS when the transfers were taken away. The transfer system within Calgary EMS was a go9d learning opportunity for new staff, and an option for staff nearing the end of their EMS career.

The Calgary Health Region sees transportation between hospitals as a continuum of hospital care, their responsibility to ensure appointments and returns were done in a timely manner, and a core function of a regional hospital system where services are spread between various locations.

6.10 Edmonton, AL

Edmonton EMS is a branch of the Edmonton Emergency Response Service, which also

includes three other branches, Fire Rescue, strategic Services and Integrated Services. The EMS branch staff 14 ambulances 24 hours per day plus an additional 4 ambulances during peak periods.

FINAL REPORT

The EMS emergency operations responded to approximately 51,200 calls in 2001 which included approximately 9,000 non-emergency calls and 750 non-emergency transfers. The patients are billed \$306.00 per call.

Edmonton EMS operates a separate Transfer Division within its operational structure. Staff and vehicles are coordinated exclusively for inter-hospital transfers by an EMS Transfer Supervisor. Both EMT-As and EMT-Ps are utilized in the transfer division, however, at lower salary rates than the emergency side of the operation.

They are dispatched through a distinct transfer dispatch center and communications link.

The Transfer Division is funded through a contractual agreement with the Capital Health

Authority. It does not impact the resources, staffing, or budget of the emergency side of

operations.

The transfer division did approximately 22,000 transfers including 1,000 emergency transfers, and 500 teamlequipment transfers for the Capital Health Authority.

The Edmonton Emergency Response Department is served by a full-time Medical Director whose duties include, overseeing the ongoing development of ERD staff, coordinating the medical control guidelines, and implementing treatment modalities and equipment.

6.11 Summary

Salient points from the review include:

 There exists a range of governance and service delivery models. For illustrative purposes, five alternate governance and service delivery models are shown in Exhibit

6.1.

- Dedicated patient transfer services are common practice throughout North America and the U.K.
- Typically they are performance based.
- The regulation of private patient transfer services appears to be more common in the

- Regulation of both emergency and non-emergency medical transport typically rests with the senior levels of government such as a State authority in the U.S. (i.e., Arizona Department of Health Services) or Provincial department (i.e., Alberta Health and Weilness).
- Regulation typically includes a single body responsible for setting regulations, licensing operators, inspection and enforcement. In some jurisdictions rates or fees charged are also regulated.

6

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

- Patient transfer services in the U.S. are typically funded (on a cost recovery basis) through user fees (Medicare, Medicaid, private insurance and private payers) with little or no public subsidy.
- Patient transport is typically viewed as an extension of the delivery of medical / health services (i.e., Alberta: inter-hospital transfers are the responsibility of the Regional Health Authorities). Similarly, the hospital trusts in the U.K. are financially responsible for patient transport.

| | EXHIBIT 6.1: SAMPLE OF GOVERNANCE & SERVICE DELIVERY MODELS | | | | | |
|----|---|--|--|--|--|--|
| | MODEL | Jurisdiction | | | | |
| | Public utility Model | PINELLAS COUNTY, FL: public utility model" — EMS Authority is a purchaser of services contracting with 18 local fire departments as well as single provider of countywide paramedic ambulance services. The latter is responsible for both emergency and non-emergency patient transport. RICHMOND,vA: "public utility model" — operator has exclusive rights for both emergency & non-emergency services | | | | |
| 2. | Integrated I Functional Fleet Association | TORONTO: public service, dedicated vehicles for non- emergency transfer services WEST MIDLANDS, U.K.: public service, dedicated vehicles for non- emergency transfer services. Hospitals solely responsible for funding patient transfer services | | | | |
| 3. | Hospital Base | CALGARYALTA: Municipal EMS Dept. has exclusive rights on emergency, transport. Non-emergency: residence & nursing homes done by EMS Dept. and inter-hospital transfers done by Regional Health Authority | | | | |
| 4. | Brokerage | KITCHENER WATERLOO/Med-Lift: Public-private partnership under brokerage arrangement. | | | | |



FINAL REPORT

7. MTS REGULATORY & SERVICE DELIVERY OPTIONS

7.1 Why Regulate MTS Operations?

Ambulance services are regulated by the Ambulance Act, the activities of taxis and community specialized transit are controlled by municipal by-laws, and volunteer drivers are accountable to their host organizations. Of all existing patient transport options, MTS are the only ones, which are unregulated.

Unlike most other modes of transport MTS are companies, which offer *transportation primarily for medical purposes;* yet for the most part, they remain unaccountable for their actions and services, to anyone other than themselves.

The services provided by all others in the health care sector, including EMS operators, are regulated, and therefore accountable to a higher authority. MTS appears to be the only health care service industry, which is not accountable to a higher authority, other than the MTS company owner! operator.

The standards for MTS vary by company. Some set relatively high standards for the vehicles, for the personnel and for the care and treatment of patients; others do not. Some have established and clear operating policies; again others do not.

While most within the health care community understand that MTS is to be used to transport only non-emergency medically stable patients, this is not clearly understood by all. There appears to be some misconception not only among the public, but also within the health care community, that private MTS are regulated ambulance' operators.

There are reported instances of MTS operators transporting emergency, medically unstable patients, despite the fact that such activities are strictly_prohibited by legislation.

Within the health care community there are growing concerns over patient safety, the risk of a patient's medical condition deteriorating en-route and the potential liability associated with decisions to transport patients by MTS.

Within the stakeholder community as a whole, there are concerns that the use of MTS, may be driven primarily by financial considerations, rather than the medical needs, health, safety and well-being of patients.

Virtually all of the stakeholders with whom IBI Group consulted, contend that the operations of MTS companies need to be regulated by an authority, other

than the MTS company owner *I* operator.

The general view is that a regulatory authority is required to:

- Establish a provincially uniform set of policies and standards for MTS operations, inclusive of vehicles, staff and patient care;
- Ensure that MTS operators are certified / licensed;



FINAL REPORT

- Ensure quality and accountability for MTS operations e.g., through a system of reporting and I or periodic inspection;
- Enforce the regulations e.g., to investigate complaints and where required, to take corrective action.

The above views are in keeping with the recommendations of the 1995 Coroner's inquest, discussed previously in Section 2 of this report and with the Provincial Auditor's Special Report (2000) on Accountability and Value for Money. 181 Group concurs with these views.

7.2 MTS EXHIBIT 7.1: ASSESSMENT OF MTS REGULATORY OPTIONS Regulatory **Options** SELF STATUS QUO MOHLTC MUNICIPAL. HOSPITAL REGULATION (Unregulated) The study considered the Set policies & following five standards options for the establishment of Certify / license an MTS regulatory Ensure quality & accountability authority: Status Quo Enforce regulations (unregulate d) Stakeholder Not Supported Preferred Little Support Little Support Support Selfregulation by Meets criterion Does Not meet criterion MTS

- Municipal regulation
- Regulation by Ontario

hospitals

Regulation by

MOHLTC

The options were

assessed using criteria, which reflect the responsibilities described above i.e.: capability to set provincially uniform policies and standards for MTS services, to certify / license MTS

operators, to ensure quality and accountability for services, and to enforce the regulations. The assessment also considered the likely degree of stakeholder support $_as$ determined through the stakeholder consultations.

The results of the assessment, which are shown in Exhibit 7.1, support the stakeholder opinions, described previously in Section 4 of this report.

The results favour MOHLTC as the preferred choice for MTS regulatory authority'. Assumption of this additional role would be a natural extension to the Ministry's current

FINAL REPORT

regulatory responsibility for ambulance services. Policies and standards, certification processes, quality assurance processes, complaints investigation and enforcement processes are already in place for EMS. If the Ministry is provided with additional resources, the policies, standards and processes can be extended relatively easily to cover MTS.

The results do not favour a municipal regulatory option. Potentially, this option may result in multiple standards, requirements for multiple licensing and cross-border difficulties, which would make it relatively difficult to monitor MTS operations and enforce regulations.

The results also do not favour a hospital regulatory option. For Ontario hospitals, patient transport is not a 'core business'; they are involved in patient transport not by choice but rather, for reasons of necessity.

The status quo (unregulated) and self regulation are the least preferred options.

7.3 MTS Operational Regulations

In this area, 181 Group draws heavily from the draft by-laws developed by the City of Toronto and Eastern Ontario 'Area Emergency Health Services Committee'. Based on these documents, the following are aspects of MTS operations, which one should consider addressing by regulatory legislation. The list is not intended to be all-inclusive:

- Certification / licensing of MTS owners and operators
- Owner! operator compliance with Employment Standards Act and other applicable employment legislation e.g., OH&S, WSIB
- Comprehensive liability insurance coverage for MTS services
- Patient eligibility requirements for transport by MTS, including establishment! adoption of an approved decision-making algorithm
- Patient care services, which MTS companies and staff would be permitted to provide
- Qualifications of MTS attendants e.g., education, training, experience, as well as age, drivers license, character, etc
- MTS attendants' immunization requirements (given the nature of their occupation)
 - MTS operational policies and procedures, including general security
 - Standards and specifications for transport equipment, medical equipment,

communications equipment and vehicles, including routine inspection and maintenance

• Performance and quality assurance e.g., records and reports, inspections, complaints investigation, etc

6 7

GROUP

FINAL REPORT

- Fee / fee structure for MTS services. Also, regulations to ensure that clients are advised in advance of service, of the costs to be incurred
- Patient confidentiality
- Actions to be taken in the event of emergencies
- Enforcement i.e. notices, penalties, fines and other actions in the event of a breach of

the regulations. 7.4 MTS Service Delivery Options

The patient transfer trends contained in Section 5 of this report, demonstrate that private MTS companies represent an effective alternative to ambulances, for medically stable patients requiring stretcher transport and a basic level of care during transport.

At present MTS are delivered solely by privately operated companies operating under contract or casually for health care facilities. The following are alternatives suggested by stakeholders:

- MTS to be delivered directly by municipalities through their EMS department;
- MTS to be delivered directly by hospitals or other non-profit' public services organizations;
- MTS service delivery via partnerships / brokerages. The following were cited as illustrative examples to consider: Med-Lift, Kingston Area Patient Shuttle and the patient transfer partnership involving Superior North EMS and Thunder Bay Regional Hospital; and
- Province to deliver MTS directly, or by contracting out to private or 'non-profit' public services bodies.

The following is a key question posed by several stakeholders at the outset of the study:

Is the private sector capable to respond to the demands which a change in regulatory environment may produce _ particularly if the change is coupled with various funding instruments / incentives, which may encourage increased use of MTS.

To respond to this question, 181 surveyed Ontario's 46 EMS operators to determine what portion of 'inter-facility and other non-emergency' ambulance transports may be carried out by MTS or other mode. Two-thirds of the operators offered an opinion.

In their view 50% to 60% of dispatch priority code 1 'deferrable' patient

transports would be candidates for alternate means of transportation; similarly 40% to 50% of code 2 scheduled' patient transports. Very few (3% to 5% or less) code 3 prompt' patient transports would be eligible; nor would any code 4 'emergency' calls be eligible.

6

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

In regard to the above values, there are three points to note:

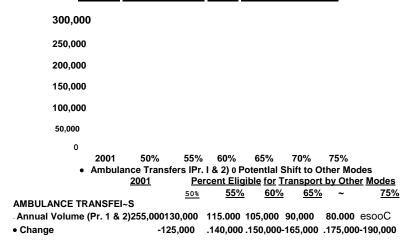
- First, they are predominantly subjective. EMS operators were asked for their 'opinion' and they complied. In most cases the operator's response is not based on a_detailed review of the local data records i.e., individual ambulance call reports.
- Second, the operators were referring to patient transfers which potentially, would eligible for transport by means other than ambulance. They were not asked to restrict their opinions solely MTS; nor did they do so. However, it is reasonable to assume that a large proportion would require stretcher transport capability; hence MTS.
- Third, in preparing their responses, it would appear that most EMS operators assumed 'current conditions' to apply. One would argue that if a regulatory framework' were put into place, along with standards and policies acceptable to the health care community and a provincially uniform decision guide, then the values should be higher.

For this study 181 Group assumed the following values:

- 50% as the minimum number of code 1 and 2 patient transfers, which would be eligible for transport by alternate modes. This figure is generally consistent with the 'current conditions' opinions expressed by EMS operators; and
- 75% as an upper value, to reflect what the conditions might be if a regulatory framework is put in place.

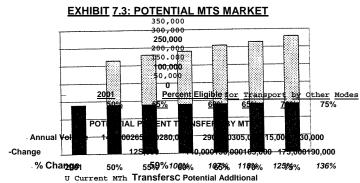
Exhibit 7.2, which has been developed for illustrative purposes, shows the potential reduction in 'non-emergency' code 1 and 2 ambulance transfers using the above figures as the basis for the calculations. The values shown have been rounded in 000's.

EXHIBIT 7.2: POTENTIAL SHIFT TO OTHER MODES



FINAL REPORT

Exhibit 7.3 shows the potential market for MTS _if one assumes that most of the patient transfers will still require stretcher transport capability. Based on the figures shown, one may conclude the potential MTS market to be



approximately twice the current volume of patient transports by MTS.

In light of the above and the following considerations, 181 Group concludes that a single MTS service delivery model would not be appropriate for all communities:

- Consideration of the additional resources which one would require in order to respond to the demand (i.e. in terms of vehicles, equipment, qualified staff and facilities);
- In many northern and relatively rural communities, private sector MTS operations do not exist; nor are such operations~ viable. Such is the case wherever the demand for such services locally is relatively low. In such locations there may be no alternative other than ambulance _or alternatively, MTS operated by 'non-profit' public services organizations; and

Existence of other 'non-private' alternatives, which are proving to be very
effective in responding to non-emergency medically stable patient transfer
needs e.g., Med-Lift brokerage, Kingston Area Patient Shuttle and the patient
transfer partnership involving Superior North EMS and Thunder Bay Regional
Hospital.

181 Group concludes that solutions involving MTS operated by municipalities and public services organizations, would be just as appropriate as those operated by private sector bodies _so long as they too commit to uphold the regulations, standards and policies established by the regulatory authority. This would be a requisite expectation of all MTS providers.

7

FINAL REPORT

8. PATIENT TRANSPORT MODELS

The following conclusions may be drawn from the information presented thus far.

- (1) It would be appropriate to consider changes to inter-facility transfer arrangements, if the changes will:
 - Provide the health care community with a range of patient transport choices, which are appropriate, timely, safe and cost-effective, and where mode choice can be made on the basis of patient care needs; and
 - Reduce the number of medically stable patient transfers by ambulance, or limit their use for such purposes to occasions where other alternatives are not readily available, or for reasons of cost-efficiency.
- (2) Given the regional differences province-wide (i.e., development density, range of medical facilities and treatments available locally, demand for medically necessary transport, mode choice prospects, etc) it would be preferable to see medically necessary patient transport solutions developed:
 - At the local community or regional level
 - By the health care community working closely with other stakeholders including private MTS and 'non-profit' public services organizations.
- (3) Authority for selecting a mode of patient transport should be linked as much as possible with accountability for the efficient use of resources.

If one concurs with the above, then the challenge to the province comes down to finding an appropriate mechanism(s) by which to influence the changes in the desired direction.

This section of the report explores the first of two mechanisms by which to achieve the desired result, specifically through alternate patient transport models. The following section (Section 9) investigates alternate funding strategies.

8.1 The Models

As noted above, the challenge herein is to explore the capability of alternate 'patient transport models', to influence changes in the desired direction. The models should reflect the full range of patient transport choices. Patient transport choices are shown in Exhibit 8.1, linked to the continuum of patient

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS care needs.

As noted previously in Section 3 of this report, a *medically unstable* patient is one whose condition is life threatening or where there is a relatively high degree of risk to limb or function, br that the patient's condition can deteriorate rapidly. Such patients typically require transport by stretcher and accompaniment en-route by a regulated health care

fl3J 71

GROUP

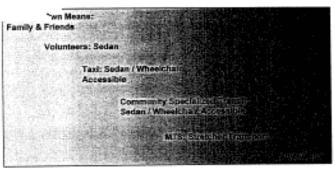
FINAL REPORT

EXHIBIT 8.1: PATIENT TRANSPORT CHOICES Medically Stat Patient's C

provider i.e., physician, registered nurse or paramedic. For such patients an ambulance would be the

preferred choice of transport.

For patients described as *medically stable* the above conditions do not all apply. The patient's condition is not life threatening and the risk to limb or function is low.



Many such patients do not require stretcher transport or accompaniment other than by a casual escort.

For such patients there are a host of transport choices to consider, including:

- For sedan / wheelchair accessible transport taxi, community specialized transit agencies, volunteer drivers and patient's own means;
- For stretcher transport _MTS companies.

All of the choices listed above are less expensive than ambulance. The cost of a trip by ambulance can vary from \$250 to over \$600 per trip. Provincewide, the average cost of an ambulance trip is approximately \$300. The cost of a trip by MTS varies from \$90 to \$130; and for taxi and community specialized transit it is \$50 or less per trip~.

The study team considered the three alternate 'patient transport models' identified below. They are described in Exhibit 8.2.

- Hospital (current)
- MOHLTC (centralized)
- Community (network)

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

Model Hospital (current)

EXHIBIT 8.2: ALTERNATE PATIENT TRANSPORT MODELS Description

continuation of current practices, wherein most members of the health care community (hospitals, long-term care and home care) would continue to address their patient transfer requirements *individually*.

They would continue to use ambulances for medically unstable patient transfers and for non-emergency medically stable patients requiring:

Stretcher transport, they would individually engage the services of privately operated MTS companies either under contract, or on a casual basis as needed:

Sedan *I* wheelchair accessible transport, they would individually use taxi, community specialized transit agencies, volunteer drivers and patient's own means.

This model would include the following variations:

Transport of medically stable patients, using in-house means of transportation, should they desire to develop such capabilities, and

Outsourcing of MTS to municipalities and 'non-profit' public services organizations, in addition to private MTS operators.

MOHLTc to take responsibility centrally' for the delivery of MTS, in addition to a regulatory responsibility.

MOHLTC (centralized)

MOHLTC would do so through competitive means, issuing RFPs for MTS on a regional / community basis,

competitions would be open to both private MTS operators and public services organizations.

In this model MTS operators would be under contract to MoHLTc, as were most ambulance operators prior

to the transfer of the responsibility for ambulance services to uTMs. MOHLTC would coordinate MTS activities via C~CC and would be responsible to pay MTS operators for the transfers, which they carry out.

In this model most members of the health care community would continue to address their patient transfer requirements *individually*. They would continue to use ambulances for medically unstable patient transfers. For non-emergency medically stable patients requiring:

- Stretcher transport, they would contact the local CACC:
- Sedan I wheelchair accessible transport, they would individually arrange for taxi, community
 specialized transit, a volunteer driver or patient's own means.

This model would include the following variation: transport of medically stable patients, using in-house means of transportation, should they desire to develop such capabilities.

73 **11** GROUP

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

| | EXHIBIT 8.2: ALTERNATE PATIENT TRANSPORT MODELS (cont'd) | | | | | | |
|----|--|---|--|--|--|--|--|
| | Model | Description | | | | | |
| 3. | community (Network) | In this model health care organizations would be encouraged to network <i>in community based groups to jointly address</i> their collective patient transfer requirements. The model builds on the current practice by groups of hospitals to 'cluster' with one-another to deliver a comprehensive range of diagnostic and medical services. | | | | | |
| | | Several groups of hospitals have already adopted such an approach for the provision of non-emergency patient transport. They include hospitals in London Ontario; Osler, credit Valley and Trillium which operate in Peel Region: University Health Network in Toronto: and hospitals in Waterloo Ontario (working through Med-Lift). Several other Ontario hospitals are also considering this approach. | | | | | |

This model would see the practice encouraged province-wide, as the preferred **means by which to influence changes to inter-facility transfer arrangements.**

Moreover, the practice would be extended to include long-term care and home care agencies, in addition to hospitals. All members of the health care community would be encouraged to work together, in community networks, to collectively address their respective patient transfer requirements.

Typically, such a model would see the members of a community network recruit a single individual to function **as 'transport coordinator'** on behalf of the network i.e., to coordinate transportation requests and oversee daily administration.

Alternatively, the community network may contract the services of a 'transportation broker'. This would be the preferred approach by networks that feel strongly that transportation is not their 'core business'. The broker may function in a dual capacity providing specific patient transportation services directly, and coordinating the provision of others.

The broker may be either a private or public sector provider of transportation services.

The successful application of this model would be contingent on several factors including: willingness by health care facilities and organizations, to work together: and arranging access to a sufficiently broad range of transport ,endors, with **sedan**, **wheelchair accessible and stretcher capabilities**.

Some vendors (i.e., MTS) may be contracted; others (i.e., taxi) may simply be prequalified. Contracting would be through competitive means. MTS operations would be open to both private MTS companies and public services organizations.

Members would continue to use ambulances for emergency *I* medically unstable patient transfers. For medically stable patients requiring other modes of transport, members would contact the 'Transport Coordinator' or 'Broker'.

The model may include seyeral variations. One health care organization may take the lead administratively on behalf of the network e.g., as in the case of the London hospitals group. Alternatively, members may establish a Board to jointly oversee transport initiatives and activities.

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

EXHIBIT 8.3: ALTERNATE PATIENT TRANSPORT MODELS

Common features:

- Ambulances used predominately for emergencies and medically unstable transfers
- Health care facilities! organizations are responsible individually to call CACC for ambulance transport
 - Alternate modes restricted to non-emergency patient transfers

MTS for stretcher transport. Specialized transit and taxi for ambulatory and wheelchair accessible transport

8.2 Summary of Key Features

The major features of the 3 patient transport models are summarized below:

| H Hospital (Current) | M MOHLTC (Centralized) | C Community (Network) |
|--|---|--|
| Continuation of current practices Individual health care facilities,' organizations make own patient transfer arrangements | MOHLTC contracts MTS Health care facilities I organizations individually arrange for other modes of transport | Health care facilities I organizations entire the care facilities I organizations entire the control of the con |
| Each facility / organization calls | They call CACC for MTS | Transportation Coordinator! Broker |
| transport provider directly when service is required | They call other transport providers directly when service is required | Members call the coordinator / Broker to arrange for patient |
| They are responsible individually for administration, patient safety and for handling complaints | They are responsible individually for administration, patient safety and for handling complaints | transport Coordinator! Broker handles administrative and day-to-day issues on behalf of the members |

8.3 Assessment

The patient transport models were assessed using the following criteria:

- Improved inter-facility transfer arrangements
- Ease of implementation
- Efficient Use of Resources
- Influence on private and public sector business decisions.

The results of the assessment are shown schematically in Exhibit 8.4, and are discussed below. Underlying the assessment is the following assumption: that MOHLTC will assume *regulatoiy responsibility* for MTS.

75 1131 GROLP

EXHIBIT 8.4: ASSESSMENT OF PATIENT TRANSPORT MODELS HOSPITAL MOHLTC COMMUNITY Model (Network) (Current) (Centralized) Improve Inter-**Facility Transfer** Arrangements Ease of Implementation Efficient Use of Resources Influence on **Business Decisions** - Private Sector - Public Sector Meets criterion Does Not meet criterion

FINAL REPORT

This criterion compares the alternatives in terms of their relative capability to Improved Inter-Facility Transfer Arrangements achieve the intended objectives i.e., to provide

the health care community with a broad lange of patient transport choices, to reduce the number of medically stable patient transfers by ambulance, to encourage the development of patient transport solutions at the local community or regional level and to promote partnerships among stakeholders for the development of patient transport solutions to serve their common interests~

Under this criterion Models I and 2 are assigned relatively low ratings, for the following reasons: While some hospitals may have sufficient mass (in terms of patient transport demand and administrative capabilities) to arrange their own non-emergency patient transport solutions, the same cannot be said of other hospitals, or of most long-term care and home-care organizations. Transportation is not their core business and it would be difficult to gain their involvement *I* cooperation individually.

Model 3 'Community Network' is rated relatively high under this criterion principally because of its potential to promote partnerships among stakeholders at the community level for the development of patient transport solutions to serve their common interests.

FINAL REPORT

Ease of Implementation

This criterion compares the models in terms of the relative impediments *I* risks associated with change e.g. to what degree will a successful outcome be contingent upon stakeholder associations or funding partnerships, upon approvals from host organizations, or upon the mitigation *I* resolution of labour issues. Also, to what degree would the timing of a successful outcome be influenced by the choice of patient transport model.

Under this criterion Model 1 is again assigned a relatively low rating, principally because of the limited business opportunities, which health care facilities / organizations operating individually can afford to private MTS operators and other alternate modes i.e., in terms of individual patient transport demand. From the information assembled previously in Section 5 of this report it is abundantly clear that most private MTS operate in the built up urban centers; relatively few in rural areas and until very recently none in Northern Ontario.

Model 3 'Community Network' is rated relatively high under this criterion principally because of the potential business opportunities which stakeholder partnership's would generate through a) the collective involvement of hospitals and numerous long-term care and home-care organizations; b) their collective demands for patient transfer services; and c) their requirement for a 'Transportation Coordinator / Broker' _a role which many operators of MTS / alternate modes would find attractive.

Model 2 'MOHLTC Centralized' also would afford greater potential than Model 1. By contracting for MTS services on a geographic basis, MOHLTC would be simplifying contractual arrangements, invoicing, etc _many such features would be of interest to transport operators. There are however, several disadvantages to consider. For this approach to work the Ministry may have to guarantee transport operators a minimum annual fee (regardless of actual demand). It would also re-involve the Ministry directly in a form of patient transport; contrary to the direction established when the responsibility for ambulance services was transferred to UTMs; and potentially could introduce a series of labour challenges pertaining to the Ministry's involvement, from employees of both ambulance operators and operators of MTS. For these reasons, this model is assigned a relatively low rating.

Efficient Use of Resources

This criterion compares the models in terms of their relative capability to link the authority for mode choice with accountability for the efficient use of resources. Under this criterion Model 3 'Community' is rated relatively high, for several reasons:

 Involvement of stakeholders working in p~rtnership and with a transportation 'Coordinator' or 'Broker' to ensure appropriate patient

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS transport choices;

 Potential greater ability to control costs i.e., by standardizing transportation fees for all members of the community network, lower profit margins in return for guarantees of higher patient transport volumes;

77

FINAL REPORT

- Reduced administrative overhead by consolidating the day-to-day transportation responsibilities of each member of the group to a single Transportation Coordinator / Broker, who would assume their collective responsibilities; and
- This model affords participants greater ongoing capability to develop uniform processes by which to administrate service delivery more efficiently, monitor and evaluate service delivery performance (including timeliness and quality), carry out complaints investigation and communicate with stakeholders and patients alike.

Models 1 and 2 are rated relatively low under this criterion.

Influence on Private and Public Sector Business Decisions

This criterion compares the models in terms of their relative capabilities to influence a private and *I* or public sector business decision i.e., in terms of providing MTS or alternate means of transport.

Under this criterion models 2 and 3 are rated highest in terms of their relatively greater capability to influence the *private* sector business decisions towards expansion, risk-taking and securement of additional resources (vehicles, staff and facilities). Both models (Models 2 and 3) would afford the private sector, 'coordinated' opportunities in all regions of the province including northern and relatively rural communities. In Model 3, the involvement of 'public services' brokers may occasionally impede the private sector from risk-taking.

Model 3 is rated high in terms of its relatively greater capability to influence the *public services* sector business decisions in terms of providing MTS or alternate means of transport. Model 2 is given a relatively lower rating since its application is specifically targeted to MTS (as opposed to all other transport modes).

Summary

The results of this assessment favour Model 3 'Community Network' as the preferred patient transport model, by which to influence changes to interfacility transfer arrangements. The model would encourage all members of the health care community (hospitals, long-term care and home care) to work together, in local community networks, to jointly address their collective patient transfer requirements. As described above it also promotes efficient use of resources.

Model 3 offers particular beneficial application to rural communities and to communities in the north. As noted previously most hospitals and health care facilities *I* agencies in such communities cannot generate sufficient patient transfer demands individually, to enlist a private sector interest (or one from the public sector).

By networking with one-another to jointly address their collective patient transfer requirements, health care facilities *I* agencies are likely to generate relatively greater business interests (and responses) from both the private and public sectors.

78

FINAL REPORT

9.. FUNDING STRATEGIES

The previous section investigated the capability of alternate 'patient transport models' to influence changes in a desired direction (briefly repeated below for the reader's convenience).

- To provide the health care community with a broad range of patient transport choices,
- To reduce the number of medically stable patient transfers by ambulance,
- To encourage the development of patient transport solutions at the local community or regional level,
- To promote partnerships among stakeholders for the development of patient transport solutions to serve their common interests, and
- To link authority for mode choice with accountability for the efficient use of resources.

The challenge herein is to investigate the capability of alternate 'funding str~iegies' to accomplish the same objectives.

In this regard it is important to note that funding is not an option in and of itself, but rather it represents 'a means to an end'. An appropriate funding strategy can be instrumental in effecting / managing change toward an intended outcome. Conversely, an inappropriate funding strategy can hinder / impede the intended outcome.

The study considered the following four provincial funding strategies. They are discussed individually in sections 9.1 to 9.4:

Incentive strategy: This strategy would see the province provide the
health care community (hospitals, long-term care / home care) with
money in the form of a grant or subsidy, to encourage their use of
transport modes other than ambulance. The grant or subsidy would be
tied to a future reduction in the volume of non-emergency patient
transfers by ambulance.

- **Disincentive strategy:** This strategy would see an 'ambulance charge' introduced to discourage the use of ambulance, where their use is not medically necessary. Specifically EMS operators would be permitted to charge health care facilities *I* agencies for the use of their ambulances for non-emergency transfers. The ambulance charge would apply if alternate modes of transport are available and if the patient's transfer by ambulance is not considered medically essential.
- **Combined funding strategy,** which combines the key features of the incentive and disincentive strategies; and
- **Co-Payment funding strategy** involving an increase in the ambulance copayment administrated by Ontario hospitals.

FINAL REPORT

9.1 'Incentive' Strategy

This strategy would see the province provide the health care community (hospitals, long-term care *I* home care) with money in the form of a grant or subsidy, to encourage their use of transport modes other than ambulance.

The effectiveness of this strategy would be gauged by tracking changes in the volume of non-emergency patient transfers by ambulance. If the strategy works then the volume of non-emergency ambulance transfers should decrease over time.

A mechanism such as ARIS would be needed at the outset to establish both the current volume of non-emergency ambulance transfers and the targeted reduction (i.e., those having potential for transport by alternate modes). Such a mechanism would also be needed to monitor future changes in ambulance transfer volumes over time.

Financial Considerations

According to *hospital survey respondents*, their average cost to transfer a patient by means other than ambulance is approximately \$65 (MTS, community specialized transit and taxi included). Note however, that relative to long term care and home care agencies, hospitals tend to use a higher proportion of MTS. For long term care and home care agencies, both of which tend to use a higher proportion of taxi and *I* or community specialized transit, the average cost to transfer a patient by means other than ambulance would be appreciably less _possibly averaging in the range of \$30 per trip.

Exhibit 9.1 addresses various financial aspects pertaining to the Incentive'Strategy. The exhibit shows:

- 181 group's estimate of the health care community's current expenditure on modes other than ambulance. Based on the stakeholder responses to our surveys, we estimate the health care community's current expenditure on such modes to be approximately \$30 million annually. This figure represents the direct out-of-pocket expense. It does not include administrative overheads, brokerage costs, etc;
- How this figure could rise upward to \$42 million annually if 50% to 75% of the current non-emergency' code 1 and 2 ambulance transports switched over to alternate modes. The following formed the basis for the calculations: potential transfers shown previously in Exhibit 7.2, each at an average cost of \$65 (which as noted above, is the value per trip reported by the hospital respondents); and
- The potential impact of a provincial 'incentive' funding strategy using two alternate grant! subsidy values: \$65 for each additional ambulance

transfer shifted to an alternate mode and \$120 for each additional ambulance transfer shifted to an alternate mode. The values were chosen arbitrarily.

At the lower value (\$65 per trip) the impact would be a netting-out of any increases in the cost of alternate modes, despite the projected increase in the volume of patient

80

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

transfers. At the higher value (\$120 per trip) the result would be an offset of future cost increases **and** a reduction in the amount, which is currently expended.

EXHIBIT 9.1 INCENTIVE STRATEGY 2001 Percent Eligible for Transport by Other Modes AMBULANCE TRANSFERS (Pr. 1 & Trip % of Annual Cost POTENTIAL SHIFT TO ALT, MODES COST OP ALT. MODES WITH PROV~L GRANT (S MILLIONS) Grant @ \$651 Additional Trip COST OF ALT. MODES W/O PROVL GRANT (S MILLIONS) Grant @ \$120/ Additional Trip <u>55%</u> 60% <u>65%</u> <u>70%</u> POTENTIAL LEVELS OF 130,000 115000 105,000 90,000 80,000 65,000 125,000 140,000 150,000 165,000 175,000 PROVINCIAL INVESTMENT (S 150,000 MILLIONS) \$30 \$38 \$39 \$40 \$41 \$41 \$42 \$5 \$9 21% 23% \$10 \$11 \$0 \$11 \$12 Grant @ \$651 Additional Trip 0% 24% 26% 29% 28% \$15 \$20 \$0 \$17 \$18 \$21 \$23 % of Annual Cost ب 0%

39%

\$20

\$23

43%

\$20

\$22

45%

\$20

\$22

48%

\$30

\$21

.51%

\$20

\$20

54%

\$30

\$19

Regulatory or Legislative Change Requirements

Grant @ \$120/ Additional

181 Group was asked to ascertain whether the implementation of an incentive strategy is contingent upon regulatory or legislative changes. In this regard, no significant regulatory or legislative change requirements were identified.

\$30

\$20

Potential Risks

Associated with the 'incentive' strategy are various potential risks including:

Concern that an incentive strategy on its own, may not effectively reduce the volume of nonemergency patient transfers by ambulance. Currently, for many health care facilities the choice of transport mode is not based on medical necessity, but rather on costs. In essence it will come down to setting an appropriate grant / subsidy value:

The higher the value of the grant / subsidy, the greater the likelihood that the health care facility / agency will consider modes other than ambulance. Conversely, if the grant / subsidy is set too low, stakeholders will likely continue to make relatively free use of imbulances;



FINAL REPORT

- The mechanism for calculating the apportionment of grants to health care facilities I agencies will need careful consideration. Some institutions have already implemented transfer programs, paying for them by drawing funds from their operating budgets. These institutions will need to be assured that they will not be disadvantaged due to their early implementation of transfer services i.e., due to their foresight to do the right thing;
- Need for changes to CACC policies to discourage inappropriate use of ambulances. In this regard, the decision-making algorithms developed by the London Group of Hospitals and others can be helpful, to more clearly differentiate between patients requiring ambulance and those who can go by alternate means _but only if their use is extended to include CACC;
- Concern that the amount of money required could quickly get out-of-hand. By way of example, consider the following questions. How would one deal with in-migration i.e., less reliance on family and friends in favour of more timely transport by alternate modes. Also, how would one deal with upward-migration i.e., a shift from less reliable (and less expensive) modes to more reliable (more expensive) modes. In this regard pre-planning and the use of a mechanism such as ARIS to monitor change, would be key considerations;
- For this strategy to succeed, it is imperative that one clearly establish the following at the outset: current volume of ambulance transfers being generated by individual health care facilities / home care agencies, as well as the potential for transport by alternate modes (i.e., the targeted reductions). MOHLTC could make such determinations independently; preferably however, such determinations should be made jointly with the health care community, at the local level.

Tying this back to the 'patient transport models' discussed in Section 8 previously, this is where a Community Network model could be advantageous. It would be particularly onerous on the Ministry to endeavour to consult individually with over 150 hospitals, 500 long-term care facilities and 40+ home care agencies. It would bepreferable that health care facilities / agencies cluster within the local community (or regionally) to jointly address their collective patient transfer issues; MOHLTC would subsequently consult with the facilities / agencies via their established 'community networks'.

If the approach does not effectively reduce the volume of non-emergency
patient transfers by ambulance then it will be necessary to adjust or terminate
the grant I subsidy in favour of an alternate strategy possibly one involving a
disincentive funding mechanism.

9.2 'DisIncentive' Strategy

This strategy would see a charge introduced to discourage the use of ambulance, where their use is not medically necessary. Specifically EMS operators would be permitted to charge health care facilities *I* agencies for the use of their ambulances for non-emergency

FINAL REPORT

transfers. The ambulance charge would apply if alternate modes of transport are available and if the patient's transfer by ambulance is not considered medically essential.

Financial Considerations

How much to charge for the use of an ambulance is a question, which needs to be addressed carefully. Several EMS operators have suggested that the charge should cover the full cost to operate the ambulance. That cost, as discussed previously, varies between \$200 and \$600 per trip, averaging at slightly over \$300 per trip province-wide.

Other stakeholders have suggested the use of a lower charge; which is comparable to the charge levied by operators of alternative transport services. Since the maximum fee currently charged by private MTS operators averages at \$130 per trip, these stakeholders suggest that an ambulance charge of \$150 to \$200 per call would be reasonable.

Exhibit 9.2 summarizes the potential costs associated with a 'disincentive' funding strategy. The key features are as follows:

- In this strategy the health care community would be faced with two sets of costs rather than one.
- First, there would be the cost to use the alternative modes of transport, which as noted previously, is estimated to be approximately \$30 million annually. If 50% to 75% of the current 'non-emergency' code 1 and 2 ambulance transports switch over to alternate modes, then this figure could rise upward to \$42 million annually⁴.
- Second, there would be the ambulance charges incurred for ongoing code 1 and 2 patient transfers by ambulance. For these calculations, we adopted twS alternate ambulance charges; one at \$150 per call and another at \$200 per call. For the sake of convenience, we applied the ambulance charge to 75% of the remaining code 1 and2
 - patient transfers by ambulance
- Even if one achieved a 75% shift in transfers from ambulance to other modes, the annual cost to the health care community would increase significantly beyond the present \$30 million annual level of expenditure on patient transfers.

[~] The assumptions underlying these estimates are the same as those discussed previously in respect to Exhibit 9.1.

 \sim The 75% figure reflects the fact that alternate modes of transport are not always readily available; also that on occasion the patient's transfer by ambulance may be medically essential. In these situations an ambulance charge would not apply.

fl3~

GROUP

N ON-EMERGENCY INTER-FACILITY PATI ENT TRANSFERS

FINAL REPORT

EXHIBIT 9.2 DISINCENTIVE STRATEGY

| | 2001 | | Percent Eligi | ble for Trans | port by Othe | r Modes | |
|---------------------------------|---------|------------|---------------|---------------|--------------|------------|------------|
| | | <u>50%</u> | <u>55%</u> | <u>60%</u> | <u>65%</u> | <u>70%</u> | <u>75%</u> |
| AMBULANCE TRANSFERS (Pr. 1 & 2) | 255,000 | 120,000 | 115,000 | 105,000 | 90,000 | 80,000 | 65,000 |
| POTENTIAL SHIFT TO ALT. MODES | | 125,000 | 140,000 | 150,000 | 165,000 | 175,000 | 190,000 |
| USER EXPENDITURES ON | | | | | | | |
| ALT. MODES (\$ MILLIONS) | \$20 | \$28 | \$29 | \$40 | \$41 | \$41 | \$42 |
| POTENTIAL ADDL COSTS TD | | | | | | | |
| USERS (S MILLIONS) | | | | | | | |
| Ambulance Charge ~ \$1501 Call | \$29 | \$15 | \$12 | \$12 | \$10 | \$9 | \$7 |
| Ambulance Charge @ \$2001 Call | \$28 | \$20 | \$17 | \$16 | \$14 | \$12 | \$10 |
| TOTAL COST TO | | | | | | | |
| USERS (\$ MILLIONS) | | | | | | | |
| Ambulance Charge @ \$150 / Call | \$59 | \$52 | \$52 | \$52 | \$51 | \$50 | \$49 |
| Ambulance Charge ~§ \$2001 Call | \$69 | \$58 | \$56 | \$56 | \$55 | \$52 | \$52 |

Regulatory or Legislative Change Requirements

Various legislative and I or regulatory changes would be required to accommodate the introduction of a disincentive strategy. They include regulatory changes to the Ambulance Act and amendments to the Ontario Health Insurance Act, as identified below:

- To establish an ambulance charge for the applicable non-emergency ambulance calls, and permit EMS systems to invoice health care facilities accordingly
- To de-list the applicable non-emergency 'inter-facility' ambulance calls~as an insurable expense (thus
 permitting EMS operators to charge for such calls)
- To require health care facilities to pay the ambulance charge
- To specify a municipal / provincial apportionment of the revenues generated by the application of an ambulance charge⁶
- To ensure that the ambulance charge would not apply to ambulance calls dispatched as emergency calls

6 MOHLTC is a funding partner of EMS delivery costs. All approved costs are apportioned between the Ministry and the designated ambulance agents (UTMs, OSSABs, etc) on a 50 / 50 basis. One might suggest therefore, that it would be appropriate to Consider _as an option _an arrangement in which the potential revenue from the application of an ambulance charge be apportioned on a similar basis.

FINAL REPORT

- To restrict hospitals and other health care from passing ambulance charges along to patients'~
- To address the potential for conflict with cross-border billing policies

Potential Risks

There are various potential risks associated with the 'disincentive' strategy including:

- In light of the additional financial pressures, which this strategy would generate, there is a significant risk that it will be resisted by members of the health care community;
- In the short term this strategy would likely hinder (or impede) rather than
 promote cooperation and networking among health care stakeholders to
 jointly address their collective patient transport needs;
- It will take some time (at minimum several months to a year) to enact the required regulatory changes. In the absence of a short term solution, EMS operators and the health care community will continue to be negatively impacted;
- Given the following uncertainty, it will be difficult to enact the required legislative / regulatory changes: ambulance charge to apply 'if alternate modes of transport are available' or 'if the transfer by ambulance is not medically essential'.

The success of this strategy will depend in large part on the resolution of these issues i.e., through better definitions and the development of appropriate decision-making tools. Note, even hospitals such as the London Hospitals, which have invested considerable effort in the development and refinement of a decision-maling algorithm routinely encounter difficulty i.e., differing interpretations by CACO, contracted MTS and even by their own hospital staff.

For ease of administration, it maj be simpler to apply a charge each time an ambulance is **dispatched** or **completes** a non-emergency (code 1 or 2) patient transfer _rather than make it contingent upon 'if alternate modes of transport are available' or 'if the transfer by ambulance is not medically essential'.

This in turn, raises other questions: Should the charge apply solely to health care facilities and organizations? What about ambulances called by doctors' offices or by private individuals (e.g., home care)? Should the ambulance charge apply to these individuals?

^{&#}x27;If health care facilities are permitted to pass the ambulance Charges along to

patients then they would have little or no vested interest in seeking alternative less expensive means of patient transport when ambulances are not medically essential. One might therefore consider $_as$ an option $_that$ they not be permitted to do so.

~ Potential for dual Charges for the same call i.e., once as an 'ambulance Charge' to a health care facility and a second time, as a cross border invoice to a neighbouring municipality.

fl3J 85

GROUP

FINAL REPORT

- Careful consideration needs to be given to the dollar value assigned to the charge. More so if the ambulance charge is extended beyond health care facilities to include doctors' offices and private individuals, then. Many individuals cannot afford a steep ambulance charge e.g., long term care residents and the elderly, who are on a fixed income. Setting too high a charge could influence their decision not to use an ambulance _ even if one is required for medical reasons
- Another risk to consider is how an ambulance charge might impact upon the ambulance 'co-payment' administrated by hospitals. Will it be necessary to increase the ambulance co-payment (which is currently \$45 in most instances) to match the value of the ambulance charge?
- Legislative / regulatory changes need to be considered carefully to avoid potential conflicts with other existing policies e.g., cross-border invoicing. Assessing the potential impacts on cross-border billing policies is beyond the scope of this assignment. It should be noted however, that several EMS operators particularly those in relatively rural or northern communities rely on the revenue generated by such services to supplement their operating budgets. Typically the revenue is a factor taken into consideration in determining both the total operating budget and the Ministry's contribution. These impacts will need to be examined carefully _possibly on a case-by-case basis;
- What would be the impact on the ambulance charge over time. If alternative services (e.g., MTS) increase their fee schedules over time, would it be necessary to increase the ambulance charge to maintain a balance;
- Perception among certain stakeholders that the introduction of an ambulance charge may trigger a reduction in the provincial operating grants for municipal ambulance

9 operations

[~] The position taken by EMS operators is that current provincial operating grants towards municipal ambulance operations should remain unchanged. The underlying rationale is that EMS operating budgets are established primarily on the basis of providing 'emergency response coverage'. Shifting a portion of the non-emergency calls to other modes would simply help UTMs achieve their response time performance targets as required by the Ambulance Act. Currently many UTMs are unable to do so.

Several EMS operators cite the following example of EMS operating in rural communities. Most operate with relatively few ambulances. Their budgets are established primarily on the basis of providing 'emergency response coverage'. Shifting a portion of the non-emergency calls to other modes would not alleviate these communities from this responsibility. Reducing their operating grant proportionately with a change in call volume would simply make their job more difficult.

86

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

9.3 Combined Ambulance charge & Grant

The 'combined' strategy discussed herein endeavours to mitigate the financial impacts associated with the 'disincentive' strategy by introducing a provincial grant *I* subsidy in conjunction with an ambulance charge.

Financial Considerations

The potential financial implications are shown in Exhibit 9.3. Two scenarios were considered drawing the salient information from Exhibits 9.1 and 9.2:

- Ambulance charge of \$150 and a provincial grant / subsidy value of \$65 per trip:
- Ambulance charge of \$150 and a provincial grant! subsidy value of \$120 per trip:

| COMBINED S | TRATEGY | BIT 9.3 | | | | | |
|--|--------------------|--------------------------|--------------|--------------------------|-------------|-------------|--------------------|
| AMBuLANcE TRANSFERS (Pr. 1 & 2) | Percent Eligi | | port by Othe | r Modes | | | |
| POTENTIAL SHIFT TO ALT. MODES | @ \$1: | 201 Addition | al Trip | 255,000 | | | |
| USER EXPENDITURES ON | <u>50%</u> | <u>55%</u> | <u>60%</u> | , | | | |
| ALT. MODES (\$ MILLIONS) | 120,000 65% | 115,000 70% | 105,000 | | | | |
| AMB. cHARGE § \$150/ call (\$ M) | 90,000 | 80,000 125,000 | 140,000 | 75% 65,000 150,000 | 165,000 | 175,000 | 190,000 |
| | \$20 | \$28 | \$29 | \$40 | \$41 | \$41 | \$42 |
| PROVINCIAL GRANT (\$M) @ \$65 I Additional Trip | \$29 \$0 | \$15 \$8 | \$12 \$9 | \$12 \$10 | \$10 | \$9 \$11 | \$7 \$12 |
| @ \$1201 Additional Trip | \$0 | \$15 | \$17 | \$18 | \$20 | \$21 | \$22 |
| TOTAL USER COST 1\$ | \$59 | \$45 | \$43 | \$42 | \$40 | S39 | \$27 |
| MILLIONS) ~ \$651 Additional Trip | \$59 | \$28 | \$25 | \$24 | \$21 | \$29 | \$27 |

Regulatory or Legislative Change Requirements

This strategy will require the same legislative / regulatory changes identified previously for

the disincentive strategy. Refer to Section 9.2. **Potential Risks**

This strategy is comprised of two independent and divergent strategies; each on their own, having various complexities and risks. Herein the result is a combined strategy with a significantly

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS higher degree of complexity and risk _relative to either of the previous two approaches.

1131 GROUP 87

N ON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

As per the disincentive strategy there is a significant risk that it may be resisted by members of the health care community because of the additional financial pressures that this strategy would generate; and that it may impede, rather than promote cooperation and networking among health care stakeholders in the short term. In addition there are the following issues, which would need to be addressed carefully: time lapse to enact the regulatory changes; the administrative challenges; potential impacts on multiple sectors; need for conflict avoidance; etc.

Rationalizing the merits of a grant component within this combined strategy _beyond that of simply reducing the financial burden will pose a challenge. So also will the proposed integration. The issue goes beyond simply setting a dollar value, which in itself is a key consideration, to include: the setting of targeted ambulance call volume reductions, changes to CACO policies (as described in Section 9.1) and the monitoring of changes in ambulance transfer volumes to ascertain the effectiveness of this approach.

9.4 Co-Payment Strategy

The fourth funding strategy considered by this investigation is to introduce a regulatory change to increase the 'ambulance co-payment' charged by Ontario hospitals.

The underlying objective is to provide Ontario hospitals an increased source of revenue, by which to pay the cost of patient transfers via modes other than ambulance; thereby negating the need for either a provincial grant or the application of an ambulance charge.

EVUIDIT 0.11

Financial Considerations

Exhibit 9.4 summarizes the financial considerations pertaining to this strategy.

| | _ | XHIBIT 9. L | - | |
|-------------------------------------|--------------------|--------------|-----------|--------|
| CO-PAYN | <u> 1ENT STR</u> | ATEGY | | |
| | - | MBULANCE C | O-PAYMENT | Г |
| | \$45 | \$100 | \$150 | \$200 |
| | (<u>current</u>) | | | |
| CALLS SUBJECT TO CO-PAYMENT | 800000 | 800,000 | 800,000 | 800000 |
| | | | | |
| 20751711 1111111 251/511/5 16 | | | | |
| POTENTIAL ANNUAL REVENUE 1\$ MILLIO | NS) | | | |
| - 100% Collectable | \$36 | \$80 | \$120 | \$160 |
| -75% Collectable | \$27 | \$60 | \$90 | \$120 |
| MOHLTC SHARE (\$ millions) | \$12 | \$27 | \$40 | \$53 |
| · | | | | |
| | | | | |
| (6 | | | | |
| NET TO HOSPITALS (\$ MILLIONS) | 604 | | + | |
| - 100% Oollectable | \$24 | \$53 \$33 | \$80 | \$107 |
| -75%Collectable | \$15 | \$23 | \$50 | \$67 |

• Inter-facility patient transfers are an insurable expense under the Ontario Hospitals Insurance Act, exempt from ambulance co-payment charges. Other ambulance calls

88

 $\mathop{ml}_{\text{grolp}}$

FINAL REPORT

are not exempt from co-payment charges. There are some 800,000+ ambulance calls annually, which are Thot exempt from co-payment charges;

 In most instances the co-payment charge is \$45 per call. Hospitals keep two-thirds

(\$30 per call). One-third (\$15 per call) is submitted to MOHLTC Using this figure we estimate the Ministry's share of the potential revenue through copayment charges, to be approximately \$12 million annually;

- The hospital share is estimated to range between \$15 and \$24 million annually, depending upon their ability to collect on invoicing. The lower figure assumes a 75% success rate; the higher value assumes that 100% of the co-payment charges are collected;
- The exhibit considers alternative increases in the co-payment to \$100 per call, \$150 and \$200. Note, even at these levels the co-payment would be substantially less than the true cost of an ambulance trip, which as discussed earlier averages at over \$300 per trip province-wide. An increase of the ambulance co-payment to \$150, \$200 or higher wouldbe consistent with the practices in other jurisdictions outside Ontario. As noted in Section 6 of this report, jurisdictions outside Ontario charge substantially higher ambulance fees in the order of several hundreds of dollars. An increase in ambulance co-payment would also be consistent with the views of stakeholders, who suggest that for many individuals private / group insurance plans could be used to

cover off the increased ambulance fees

 The estimated revenues for each scenario and their apportionment between hospitals and MOHLTC, are shown. The potential apportionment is calculated using the current parameters i.e., two to one split, where the Ministrys share is calculated on the total potential.

Regulatory or Legislative Change Requirements

Regulatory / legislative changes would be required to increase the ambulance co-payment charged by Ontario hospitals. Additional regulatory / legislative changes may be required to:

- Specify apportionment of revenues between hospital and MOHLTC (should changes to current parameters be desirable); and
- Ensure that hospitals dedicate the monies raised through the increased co-payment to the intended function i.e., to cover the costs of patient transfers by modes other than ambulance.

¹⁰ Note, hospitals may not receive payment from all patients; regardless MOHLTC is paid their entire apportionment.

 ${\scriptstyle \backsim}$ Note, IBI Group has not confirmed the validity of this suggestion, as it was deemed to be beyond the scope of the study.

fl3J 89

GROU?

FINAL REPORT

Potential Risks

The following risks are identified:

- That hospitals may use the monies raised for purposes other than the intended function:
- Increased revenues through co-payment would serve hospitals' needs. The current funding arrangement would not address the needs of the long-term care / home care communities. One solution would be to draw from the Ministry's share of the increased revenues to serve this purpose. This would create an additional challenge, as how to distribute / apportion the funds to the long-term care and home care agencies;
- It is unclear whether the 'co-payment' strategy would serve to promote cooperation and networking among health care stakeholders, so that they may jointly address their collective patient transport needs;
- Careful consideration needs to be given to the dollar value assigned to the copayment. As discussed previously vis-~-vis the ambulance charge strategy, setting too high a charge could influence future decisions by individuals, not to use an ambulance _even if one is required for medical reasons. Long term care residents and the elderly who are on a fixed income would be impacted most by such action;
- May contribute an undesirable financial impact on municipal social services expenditures. May have to consider a change to Section 21 of the Ambulance Act.

9.5 Assessment Summary

The advantages and disadvantages of each of the funding strategies were discussed in considerable detail throughout the preceding four sections. For the readers' benefit they are summarized in Exhibit 9.5 (located 2 pages forward). The following conclusions may be drawn from the assessment:

- There is no clear finding vis-a-vis a preferred funding strategy. There are advantages unique to each strategy. Also, there are disadvantages.
- The assessment is based in part on factual data and in part on assumptions / opinions. The latter would need to be verified before one may conclude with certainty, in favour of a preferred funding strategy.
- There are implementation challenges unique to each funding strategy.
 A decision in favour of a funding model would require a concurrent commitment to address these challenges expeditiously and carefully.
- The following are essential regardless of funding model: development

of a

provincially-uniform decision making algorithm to differentiate between patients

90

FINAL REPORT

requiring ambulance and those who can travel by alternate means; and changes to **CACC** policies to ensure that the algorithm is followed.

- Healthcare community 'buy-in' will be essential regardless of funding model chosen.
- There are regulatory / legislative change requirements associated with most funding strategies (incentive strategy being the exception). These would take some time to enact. The absence of an interim / short-term solution would be a concern.
- Taking into account the time lapse to enact regulatory / legislative changes and the potential financial impact on the health care community the incentive strategy involving a provincial grant / subsidy appears preferable to an ambulance charge in the short term.
- For similar reasons, an incentive strategy appears preferable to an increased ambulance co-payment in the short term.
- Incentive strategy appears to be compatible with the principles for nonemergency patient transfers adopted by LAISC (refer to Section 2 of this report).
- Concern that an incentive strategy on its own, may not effectively reduce the volume of non-emergency patient transfers by ambulance. Opinion of several stakeholder groups (particularly EMS operators) that achievement of this objective will require a disincentive mechanism i.e., an ambulance charge.
- A pilot / demonstration could be an effective mechanism by which to determine the suitability of a funding model as a long-term solution. It would require monitoring effectiveness for an extended period.

NON-EMERGENCY INTER-FACILITY PATIENT TRANSFERS

FINAL REPORT

EXHIBIT 9~5: FUNDING STRATEGIES ADVANTAGES & DISADVANTAGES

| | | FUNDING STRATEG | | | | | |
|--|--|--|-----------------------------------|--------------------------------------|--|--|--|
| | I | D D | c | C C | | | |
| | Incentive | Disincentive | combined | co-Payment | | | |
| | (Grant) Subsidy) | (Amb. charge) | | 1, 1 | | | |
| potential to improve inter- facility transfer arrangements Pot'l Impact on | Each affords potential to influence patient transport decisions and to reduce the number o medically stable patient transfers by ambulance. More timely transport of non-emergency patents. Fewer late I missed appointments. Less bed blocking, overcrowding. etc Improved capability to achieve response time performance targets. | | | | | | |
| UTM ambulance operations | · | | | | | | |
| Implementation | To establish value | To establish value | As per-incentive | To establish value of | | | |
| challenges | of grant I subsidy | of ambulance charge | and disincentive | aa maxmaant 8 | | | |
| | | Charge | strategies | co-payment & dedicate funds to | | | |
| | To tie grant I | | | transfer function | | | |
| | subsidy to a | Requires | | | | | |
| | reduction in non- | provincially-uniform decision making | | Apportionment of funds to LTC and | | | |
| | emergency | algorithm to decide | | home-care in | | | |
| | ambulance transfers To | between | | addition to hospitals | | | |
| | establish current | ambulance and | | · . | | | |
| | volumes and | altemate modes | | Likely to impact | | | |
| | reduction targets | | | negatively upon | | | |
| | at the outset | contingent upon | | patients' decision to | | | |
| | | various regulatory | | call for ambulance | | | |
| | Requires process | changes If | | contingent upon | | | |
| | to monitor | extended to | | regulatory I | | | |
| | effectiveness | | | | | | |
| | | individual patients, | | legislative changes To mitigate | | | |
| | | may impact | | undesirable financial | | | |
| | | negatively upon their decision to | | impact on municipal | | | |
| | | call for ambulance | | social services | | | |
| | | | | expenditures | | | |
| Expected | Should be well | Likely to be resisted | by health care | Should be well | | | |
| · | received by | community in short to | received by health care | | | | |
| stakeholder reaction | health care community | | | community | | | |
| | | Municipal EMS stake | | | | | |
| Sector financial | Ingressed provi | receptive to ambular Increased health | ce charge Impacts will | Potential to cover | | | |
| impacts | Increased provi expense | care facility | depend on values | health care | | | |
| | CAPOLICO | expenditures on | of ambulance | community's | | | |
| | Potential to reduce | patient transfers | charge, and grant/ | expenditure on patient transfers | | | |
| | health care facility transfer | Municipal EMS | subsidy | patient transiers | | | |
| | expenditures | could benefit from | | could result in an | | | |
| | | potential revenue | | undesirable financial impact on | | | |
| | | | | individuals | | | |
| Potential impact on | consistent with | Partially consistent: | can be consistent | Partially consistent: | | | |
| LAIsc principles | principles | | depending on the | may not result in | | | |
| | Should result in | would increase the financial burden on | values of ambulance charge | more appropriate and cost-effective | | | |
| | more cost-effective | manda buluen dh | and grant / | and cost-chective | | | |
| | | health care sector | | patient care | | | |
| | municipal EMS operations | | subsidy | | | | |
| Influence on health | compatible: should | High risk to hinder | Potential to hinder | impact is unclear | | | |
| care 'community | be rėlatively easy | stakeholders' | stakeholders' | | | | |
| Networking' | to integrate with community model | cooperative efforts in short term | cooperative efforts in short term | | | | |
| | Community model | III SHUIL LEITH | III SHUIL LEITH | ļ | | | |

FINAL REPORT

10. FINDINGS & RECOMMENDATIONS

10.1 Patient Transfer Arrangements Need to Be Improved

Ambulances are called upon routinely to fulfill two roles: pre-hospital response to medical emergencies, and transport of patients both emergency and non-emergency patients to, from and between health care facilities.

The routine use of ambulance resources for non-emergency purposes not only impedes the ability of EMS providers to respond swiftly to pre-hospital medical emergencies; the practice also increases the cost of land ambulance service operations.

The limited availability of ambulances for non-emergency purposes coupled with their frequent (and often sudden) re-assignment from a non-urgent function to one involving an emergency, repeatedly hinder the timeliness of medical services afforded non-emergency patients.

Non-emergency patients having to wait extensively long periods for ambulance transport, medical diagnostics and / or medical treatment have become the norm. Occurrences of non-emergency patients arriving late or missing medical appointments entirely are on the rise, as are the potential for medical condition complications. Medical facilities also feel the effect i.e., in the form of bed blocking, emergency room overcrowding and increased operating costs.

Out of necessity some members of the health care community (i.e., hospitals, long-term care and home care) are turning to alternative methods other than ambulance for non-emergency patient transport: to private MTS for stretcher transport (i.e., companies other than EMS, which offer transportation primarily for medical purposes), and to taxi, community sQecialized transit agencies and volunteer driver programs for sedan / wheelchair accessible transport.

The use of MTS for non-emergency p'atient transport has not been withoutcriticism. MTS operate outside of any established regulatory framework, without provincially-uniform standards for vehicles, personnel or for the care and treatment of patients during transport. There are reported instances of MTS operators transporting emergency, medically unstable patients, even though such activities are strictly prohibited by legislation. Patient safety and the risk of a patient's medical condition deteriorating en-route are major concerns, as is the potential liability associated with decisions to use MTS.

10.2 Mode Choice Should Reflect Patient Care Needs

A medically unstable patient is one whose condition is life threatening or where there is a relatively high degree of risk to limb or function, or that the patient's condition can deteriorate rapidly. Such patients typically require transport by stretcher and accompaniment en-route by a regulated health care provider i.e., physician, registered

FINAL REPORT

nurse or paramedic. For such patients an ambulance would be the preferred choice of transport.

For patients described as medically stable the above conditions do not all apply. The patient's condition is not life threatening and the risk to limb or function is low. Many such patients do not require stretcher transport or accompaniment other than by a casual escort. For such patients there are a host of transport choices to consider, including taxi, community specialized transit, private auto and MTS companies.

10.3 Ambulances Should Be Used Predominately for Emergencies

Among stakeholders, the general view is that ambulances should be used predominately, to carry out emergency calls and medically unstable patient transfers. Their routine use for non-emergency purposes is not an appropriate function *(for the reasons described above)* and should be discouraged. Ambulances should be used to transfer medically stable' patients when:

- The condition or risk to the patient makes it medically necessary;
- Alternative means of patient transport are not readily available; or
- For reasons of cost-efficiency ambulance would be the preferred choice.

Otherwise alternate more cost-efficient means of patient transport should be encouraged.

IOA MTS Operations Need to be Regulated

Ambulance services are regulated by the Ambulance Act, the activities of ta~ds and community specialized transit are controlled by municipal bylaws, and volunteer drivers are accountable to their host organizations. Of all available patient transport options MTS companies (i.e., companies other than EMS which offer transportation primarily for medical purposes) are the only ones, which operate outside of any established regulatory framework.

The standards for MTS vary by company. Some set relatively high standards and maintain clear operating policies i.e., for their vehicles, personnel and for the care and treatment of patients; others do not.

Virtually all of the stakeholders with whom 181 Group consulted, contend that the operations of MTS companies need to be regulated by an authority other than the MTS company owner! operator. The general view is that a regulatory authority is required to:

Establish a provincially uniform set of policies and standards for MTS

operations, inclusive of vehicles, staff and patient care;

• Ensure that MTS operators are certified / licensed;

FINAL REPORT

- Ensure quality and accountability for MTS operations e.g., through a system of reporting and I or periodic inspection;
- Enforce the regulations e.g., to investigate complaints and where required, to take corrective action.

The above views are in keeping with recommendations previously articulated by both the Provincial Coroner's Office and the Provincial Auditor's Office. 181 Group concurs with these views.

The results of this assessment favour MOHLTC as the preferred regulatory authority for MTS. Such a role would be a natural extension to the Ministry's current regulatory responsibility for ambulance services. Policies and standards, certification processes, quality assurance processes, complaints investigation and enforcement processes are already in place for EMS. If the Ministry is provided with additional resources, the policies, standards and processes can be extended relatively easily to cover MTS.

The results do not favour a municipal regulatory option. Potentially, this option may result in multiple standards, requirements for multiple licensing and cross-border difficulties, which would make it relatively difficult to monitor MTS operations and enforce regulations. Also, the results also do not favour a hospital regulatory option, the status quo (unregulated) or industry self-regulation.

10.5 Support for Private and Publicly Operated MTS

At present MTS are delivered solely by private companies operating under contract or casually for health care facilities. In consideration of the following, this study concludes that a single MTS delivery model _relying solely upon MTS delivery by privpte companies _would not be an appropriate solution for all communities:

- The current volume of patient transports by private MTS is estimated to be approximately 140,000 annually. The potential market for MTS is estimated to be at least twice this figure; possibly higher if a regulatory framework is accompanied by funding instruments / incentives to encourage increased use of alternate modes of patient transport (when ambulances are not medically necessary);
- Potentially, it may be difficult for private MTS to respond to the increases in
 patient transport demand in the short term despite a willingness to do so
 i.e., time is needed to acquire and outfit additional vehicles, to recruit
 and train additional staff, to purchase additional communications
 equipment, etc;
- In many northern and relatively rural communities, private sector MTS

operations do not exist; nor are such operations viable. Such is the case wherever the demand for such services locally, is relatively low. In such locations there may be no alternative other than ambulance _or alternatively, MTS operated by 'non-profit' public services organizations.

FINAL REPORT

The following 'non-profit' public service delivery alternatives were suggested by stakeholders:

- MTS to be delivered directly by municipalities through their EMS department;
- MTS to be delivered directly by hospitals or other 'non-profit' public services organizations
- MTS service delivery via partnerships / brokerages e.g., Med-Lift brokerage, Kingston Area Patient Shuffle and the patient transfer partnership involving Superior North EMS and Thunder Bay Regional Hospital.

The study supports such solutions in addition to privately delivered MTS operations. All MTS providers _private and public would be expected to uphold the regulations, standards and policies established by the regulatory authority.

10,6 Community Networking Preferred as a Public Policy Instrument

The study considered the following three alternate 'patient transport models' as potential

public policy instruments by which to influence changes to patient transfer arrangements:

- Hospital Model: Continuation of current practices, wherein most members of the health care community (hospitals, long-term care and home care) would continue to address their patient transfer requirements individually;
- Ministry Model: MOHLTC to take responsibility 'centrally' for the delivery of MTS, in addition to an MTS regulatory responsibility;
- Community Network Model: Members of the health care community (hospitals, long-term care and home care) would be encouraged to network at the local community level (or regionally) to jointly address their collective patient transfer re*~uirements.

The assessment results favour the 'Community Network' model for the following reasons:

 Builds on the current practice by groups of hospitals to 'cluster' with oneanother to deliver a comprehensive range of diagnostic and medical services:

 Several groups of hospitals have already adopted such an approach for the provision

of non-emergency patient transport. They include hospitals in London Ontario; Osler,

Credit Valley and Trillium which operate in Peel Region; University Health Network in

Toronto; and hospitals in Waterloo Ontarfo (working through Med-Lift). Several other

Ontario hospitals are also considering this approach i.e., including several in Eastern

Ontario and the Niagara region;

FINAL REPORT

- Outside of the built up urban centers, most Ontario hospitals, longterm care and home-care organizations do not have sulficient mass in terms of patient transport demand, to induce either private or public sector MTS interests individually;
- Community Networking would be particularly advantageous to rural communities and to communities in the north, where by networking they may collectively build up sufficient mass to generate such business opportunities / interests;
- Most Ontario hospitals, long-term care and home-care organizations do not have sufficient administrative capability to dedicate resources solely to transportation issues. Transportation is not their core business, and if left to their own means, they will continue to make use of ambulances primarily for reasons of convenience and cost;
- Affords opportunity to reduce individual administrative overheads by consolidating the day-to-day transportation responsibilities of each member of a group to a single Transportation Coordinator / Broker, who would assume their collective responsibilities;
- Affords greater opportunity to control costs i.e., by standardizing transportation fees for all members of the community network, lower profit margins in return for guarantees of higher patient transport volumes, etc;
- Affords participants greater ongoing capability to develop uniform processes by which to administrate service delivery more efficiently, monitor and evaluate service delivery performance (including timeliness and quality), carry out complaints investigation and communicate with stakeholders and patients alike; and
- Would promote more efficient use of resources and appropriate patient transport choices taking into account the range of medical facilities and treatments available locally, demand for medically necessary transport, mode choice prospects and costs.

10.7 Improved Transfer Arrangements are Contingent Upon Funding

Cost is a dominant factor in the health care community's decisions concerning patient transport.

According to the Ontario Health Insurance Act the transfer of a patient by ambulance from one health care facility to another for insured, medically necessary treatment, is exempt from an ambulance charge. If a health care facility or agency (i.e., hospital, long-term care facility, CCAC, etc)

chooses to use an alternate means of transport to carry out that same inter-facility transfer, then they are obligated to pay the full cost for that alternate service.

Typically the cost of a trip by MTS ranges between \$90 and \$130 depending upon trip length, duration, the qualifications of the attendants, etc. For taxi and community specialized transit the costs may be as high as \$50 per trip.

FINAL REPORT

An ambulance charge applies for ambulance transports which are not classified as inter-facility i.e., transfers involving home care patients or trips which originate at *I* are destined to locations other than a health care facility. The charge, frequently referred to as an ambulance co-payment, is typically \$45 for an Ontario resident possessing a valid Ontario Health Card. Hospitals are responsible to administrate invoicing for ambulance services. For their efforts they keep two-thirds of the money collected. Hospitals who choose to transfer patients using means of transportation other than ambulance, not only assume the full cost for such services, they also lose the revenue which would have been afforded had the patient been transferred by ambulance.

In view of the above one may conclude that achieving an appropriate funding mechanism has to be an integral consideration in the development of any strategy intended to improve upon current transfer arrangements.

10.8 Incentive (Grant) Funding Strategy Favoured in Short Term

The study considered the following four provincial funding strategies:

- Incentive strategy: This strategy would see the province provide the
 health care community (hospitals, long-term care / home care) with
 money in the form of a grant or subsidy, to encourage their use of
 transport modes other than ambulance. The grant or subsidy would be
 tied to a future reduction in the volume of non-emergency patient
 transfers by ambulance.
- **Disincentive strategy:** This strategy would see an 'ambulance charge' introduced to discourage the use of ambulance, where their use is not medically necessary. Specifically EMS operators would be permitted to charge health care facilities *I* agencies for the use of their ambulances for non-emergency transfers. ,The ambulance charge would apply if alternate modes of transport are available and if the patient's transfer by ambulance is not considered medically essential.
- Combined funding strategy: This strategy would combine the key features of the incentive and disincentive strategies; and
- Co-Payment funding strategy: This strategy would involve a
 regulatory change to increase the ambulance co-payment
 administrated by Ontario hospitals. The underlying objective is to
 provide Ontario hospitals an increased source of revenue, by which to
 pay the cost of patient transfers via modes other than ambulance;
 thereby negating the need for either a provincial grant or the
 application of an ambulance charge.

The funding strategies were assessed using various criteria including:

potential to improve inter-facility transfer arrangements; potential impact on UTM ambulance operations; implementation challenges; expected stakeholder reaction; sector financial impacts; potential impact on LAISC principles; and Influence on health care 'Community Networking'. The following conclusions are drawn from the assessment:

FINAL REPORT

- There is no clear finding vis-a-vis a preferred funding strategy. There
 are advantages unique to each strategy. Also, there are
 disadvantages.
- The assessment is based in part on factual data and in part on assumptions *I* opinions. The latter would need to be verified before one may conclude with certainty, in favour of a preferred funding strategy.
- There are implementation challenges unique to each funding strategy.
 A decision in favour of a funding model would require a concurrent commitment to address these challenges expeditiously and carefully.
- The following are essential regardless of funding model: development
 of a provincially-uniform decision making algorithm to differentiate
 between patients requiring ambulance and those who can travel by
 alternate means; and changes to CACC policies to ensure that the
 algorithm is followed.
- Healthcare community 'buy-in' will be essential regardless of funding model chosen.
- There are regulatory / legislative change requirements associated with most funding strategies (incentive strategy being the exception). These would take some time to enact. The absence of an interim / short-term solution would be a concern.
- Taking into account the time lapse to enact regulatory / legislative changes and the potential financial impact on the health care community the incentive strategy involving a provincial grant / subsidy appears preferable to an ambulance charge in the short term.
- For similar reasons, an incentive strategy appears preferable to an increased ambulance co-payment in the short term.
- Incentive strategy appears to be compatible with the principles for nonemergency patient transfers adopted by LAI SC.
- Concern that an incentive strategy on its own, may not effectively reduce the volume of non-emergency patient transfers by ambulance.
 Opinion of several stakeholder groups (particularly EMS operators) that achievement of this objective will require a disincentive mechanism i.e., an ambulance charge.
- A pilot! demonstration could be an effective mechanism by which to determine the suitability of a funding model as a long-term solution. It would require monitoring effectiveness for an extended period.

FINAL REPORT

10.9 On Moving Forward

The following 'next steps' are suggested for consideration:

 MOHLTC to assume regulatory responsibility for Medical Transportation Services

(MTS);

- MOHLTC to proceed with MTS regulations and early certification of MTS operators;
- Emergency Health Services (EHS) Branch of MOHLTC to pursue additional Ministry staffing for the above purposes;
- Health care Community Networking to be promoted as the preferred patient transport model;
- A process for consultation with health care community to be initiated.
 The following to be among the items for discussion, building on the contents of this report:
 - Community networking
 - Alternative short and long term funding strategies
 - Regulatory / legislative changes
 - Implementation challenges
- MOHLTC to give consideration to the adoption of an incentive (grant) strategy as the preferred funding strategy in the short term, and to one or more pilots'! demonstrations, to determine the suitability of such a funding model as a long-term solution;
- Work on the following initiatives to be commenced by MOHLTC in association '~ith other stakeholders as appropriate:
 - Development of a provincially-uniform decision making algorithm to differentiate between patients requiring ambulance and those who can travel by alternate means;
 - Changes to CACC policies to ensure that the algorithm is followed;
 - Readiness advancement of regulatory / legislative changes to

accommodate the implementation of an alternate long term funding strategy, should one be required.

09/30/0314:05

~705 5.64 4484

NORTHEAST FO #5 ---- EHSB 5700 YONGE

MENISTRY OF HEALTH AND LONG-TERM CARE

EMERGENCY HEALTH SERVICES BRANCH NORTH EAST FIELD OFFICE #3 SUDB1~LRY. ONTARIO

| SUDBI~LKI, UNIAKIU | | | | | | | |
|------------------------|--------------------------|---------------------------|------------|--|--|--|--|
| FACSIMILE TO; | | | | | | | |
| | | | | | | | |
| | (~j4~ (?~~ i< | | | | | | |
| FACSIMILE FROM; | CHRISTINE MAKI | | | | | | |
| | Administrative Assistant | | | | | | |
| OFFICE~ (705) 564-4336 | | FACSIMILES (705) 564-4484 | | | | | |
| 1-800 |)-277-9937 | - - | 5 / | | | | |
| Nwnbe~- oFPages: J~Al | . 0.63 | i ime: | Date: | | | | |
| Ondudkig lhk~) | ~Q 03 | | | | | | |
| MESSAGE: | | | | | | | |

PLEAS- NOTE. ~ lof8~ou ~autgl1c~ In ibis r~mb ni~ is piivsb~4 aM 5d-alis1. =d i~ 1.sa~ssi~ ta die use of die indisidosi named abuse ~M aihul edia base bane a₁,~ir~j:y~10 ttCe~se li. If you have reeeMd his kslba~ || us~. if = 'y ~'rnbls0i5 oees~ widi uaissmiulou, rienan endfy as Immedialdy by phase.

V~U5UD55~WO0fl'FAX.flM

09/30/0314:05 ~705 564 4484

NORTHEAST FO #5 • • EHSB 5700 YONGE ~J002/002

ONE-Tfl&-/YHM-CE3AE1- TUNDENG Y(EQUBSTS

| 8~rvica Na.a/LOciSt±oei | MOOSONEE | <u>: AMB. SERV.</u> | ~ Y~a~i | 2003—200 |
|---|------------------------|---------------------|------------------------------|---------------|
| 0P~R7~TOR B HEQUZS? | | | Borv-aa x~~ur: | 263 |
| "e~"~~'t 1L.i~,k ~a ~ m,~t ~.s | | Cp-h-d I | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| ~uading-ChaCk prOV2~iAt* Eo~ | | | | |
| 5 | | | | |
| | | | | |
| REQUESTED BY: | | | | |
| | | | | |
| | | | | |
| MUNICIPAL APPROVAL | | | | |
| Municipality Name | | | | |
| Numerpanty <u>Name</u> | Approved:~ | | Not APproVCd:m | |
| Comznents/Ratioflale (for approval or c | Usannroval): | | | |
| Comznenis/Kanojiaie (jor approvai or c | Ο εμφριοναι). | Number | Annualized | Calendarized |
| CuxweIlt Balance | | | \$1,429,445 | \$1,429,445 |
| 3asa ld~iugt1i1flfltB | | () | 6104 042 | \$184,843 |
| S&I1, and Baaef~tB XeCr8A~d | | () | <u>\$184,843</u> \$36,000 | \$36,000 |
| UtilIt10* | | | 430,000 | 430,000 |
| | | \mathbf{C} | | |
| 0na—'I-ziree AdIuatXneastB | | | | |
| RetzO,F~.W | | | | |
| | | () C | | |
| | TOThL | C | \$1,650,288 | \$1,708,407 |
| | | | * . , | ¥ 1,1 00, 101 |
| _ | | | | |
| Comments ± | | | | |
| | | | | |
| Fiald ihna | qer BenA.O~aid ?daoz | ager | | |
| | • | | | |
| | | | | |
| ZES PJ~VTBW AI~fI CASEPLOW | | | | |
| Comments: | | | | |
| | | | Daze: | |
| Seni | or Manager/flaflage | er FN & ADW~N | | |
| <pre>0ne~TimC/C5ShfJ.OW Date:</pre> | | | 5 -1-1 | |
| | | | Date: | |
| Fina | ncial Analyst | | | |

1131_{CR01.1'}