



OFFICE OF THE
AUDITOR GENERAL
MANITOBA

Department of Health

Web version

Helicopter Ambulance Program

4

Executive Management

Carol Bellringer

Brian Wirth

Principals

Jeff Gilbert

Erroll Kavanagh

Table of contents

Main points	161
Background	163
Audit approach	166
Findings and recommendations	167
1. Procurement did not comply with tendering principles, policies, and legislation	167
1.1 No public tender	167
1.1.1 Noncompliance with procurement policies	167
1.1.2 Untendered contract not reported	170
1.1.3 Value for money analysis was weak	171
1.2 Inadequate needs assessment.....	172
1.2.1 Health did not determine the HEMS program delivery needs	172
1.2.2 Health negotiated from a weak position	172
2. Some oversight of Services Purchase Agreement provisions, but not in all key areas....	173
2.1 Quality of patient care resulted in medical reviews and operational changes	173
2.2 Licensing and inspection framework in place.....	176
2.2.1 License issued on a provisional basis	177
2.2.2 Air ambulance and facility inspected routinely	178
2.2.3 Unlicensed air ambulance used	179
2.3 Some oversight of operations, but more needed.....	180
2.3.1 Medical Transportation Coordination Centre dispatches STARS	180
2.3.2 Call flow process breached	180
2.3.3 Helicopter arrival delayed	181
2.3.4 Performance reporting inadequate	182
2.3.5 Concerns affecting operations.....	183
2.3.6 Monitoring of insurance updates needed	183
2.3.7 Manitoba representatives in place on STARS' boards.....	184
2.3.8 Flight staffing requirement met.....	184
2.3.9 Hangar base requirement met.....	184
2.4 Monitoring of financial matters was weak	184
2.4.1 Budget requirements not followed	184
2.4.2 Ineffective monitoring of financial matters	185
Summary of recommendations and response of officials.....	187

Main points

What we found

Our audit objectives were:

- To assess if procurement of the helicopter ambulance program was in compliance with provincial tendering principles, policies, and legislation.
- To assess if the Department of Health (Health) has an appropriate oversight process to ensure compliance with key elements of the Services Purchase Agreement (SPA).

During the course of the audit other matters were brought to our attention regarding quality of patient care concerns. We have included this in **section 2.1**.

We concluded that:

- The procurement of the helicopter ambulance program was not in compliance with provincial tendering principles, policies and legislation.
- Health conducts some oversight of the SPA, but not in all key areas.

We base our conclusions on the findings discussed in our report and summarized below.

Feasibility study conducted - Health commissioned a feasibility study on adding a permanent helicopter emergency medical response service (HEMS) program in Manitoba. Health determined that a helicopter ambulance program would benefit Manitoba residents. The program would include emergency medical transport and transfers between medical facilities. It would provide access to areas not easily reached by other means and faster transport times. Health estimated that a helicopter ambulance program in Manitoba will save 35-50 lives annually.

No public tender - Health signed a SPA for 10 years with the Shock Trauma Air Rescue Society (STARS). Health did not conduct a public tender. This did not comply with government's tendering principles and policies. As well, contract information was not made available to the public as required by legislation.

Health estimated total program costs at \$159 million for 10 years. This included all staffing and servicing of a HEMS program and capital items, including a helicopter, equipment, and helipads.

Value for money analysis was weak - Health obtained budgets during SPA negotiations showing costs-per-mission were likely to be 231% to 618% higher than other province's programs. Despite these significant variances, Health performed inadequate procedures to assess if it would obtain value for money. Health did not conduct a detailed needs assessment to determine all requirements. Instead, it relied on STARS as the main source to define program delivery needs.

Quality of patient care - concerns about STARS' medical management of some patient transports were brought to the attention of Health. Health reacted with an adequate plan to assess the quality of patient care concerns. Health lacks a quality assurance process for the patient care that STARS provides. Such a process may have detected some quality of patient care concerns earlier.

On December 2, 2013 Health issued a News Release saying there was a recent patient transportation incident with STARS that resulted in a temporary suspension of service. On February 28, 2014 a report was released by a third-party independent doctor with critical care and aeromedical experience. He concluded "that STARS' preparation of its Air Medical Crews for helicopter flight operations in Manitoba is currently substantially less than other Canadian provinces."

License issued on a provisional basis - Health has a well-defined framework to license air ambulance operators and inspect air ambulances and facilities. Health has provided STARS with provisional operational licenses because the license applications lacked certain documentation. One of the key missing items was the Medical Director's agreement. While an individual occupies a Medical Director position in STARS, a signed agreement to document that individual's acceptance of their responsibilities was not on file with Health. The Medical Director's responsibilities are outlined in legislation. They are essential patient safety components of operating an air ambulance. The Medical Director must ensure that a quality assurance program is performed and documented, and that aeromedical attendants perform their patient care duties competently. It is a concern that this agreement was not on file at Health as required by the licensing process and Legislation.

Some oversight, but more needed - Health conducts some oversight of the SPA, but not in all key areas. It could improve performance reporting, management of operational issues, and monitoring of financial matters.

Why it matters

Procurement management of this complex \$159 million program is subject to a number of policies and acts. Careful planning and management of a tender process would have helped ensure that Health adequately defined the needs and achieved the best value for money. It would also have ensured that Health awarded a contract in a fair, open and transparent manner.

The SPA involves helicopter patient transports which is part of Manitoba's emergency medical services model. The SPA has many requirements for both Health and STARS. They cover finance, operational activities, compliance with various policies and legislation, and many other areas. Health has responsibility for oversight of all aspects of the SPA.

Background

Manitoba's relationship with the Shock Trauma Air Rescue Society (STARS) began in the spring of 2009. Treasury Board authorized the Department of Health (Health) to enter into an untendered contract with STARS for emergency helicopter medivac services. At the time, the province was experiencing flooding which impacted the ability of land transportation and fixed wing aircraft to respond to medical emergencies. The initial contract lasted for 5 weeks. In that period, STARS was dispatched 24 times, completing 20 emergency responses and 4 inter-facility patient transfers. Health considered STARS' performance exemplary.

At the end of 2009 a report entitled Manitoba Emergency Medical Services Rotor Wing Feasibility Project was produced by Health in consultation with industry experts. The purpose was to determine the feasibility of a helicopter emergency medical response program in Manitoba. The report included potential medical benefits, application of a helicopter model to specific medical conditions, geographic areas that could be effectively served, potential call volumes, known risks inherent to a Helicopter Emergency Medical Services (HEMS) program, means of mitigating those risks, infrastructure requirements and costs, options for governance and operational models, and an estimate of costs to operate the program.

The report found that a Winnipeg-based helicopter could operate within a radius of approximately 250 km, extending care to about 350,000 people. It estimated between 600 and 800 patient transports annually, potentially saving 35-50 lives annually. It also suggested that reduced morbidity and health costs could result in savings in excess of the cost of the program. The program would improve trauma care, rapid transport of stroke and heart attack patients, rapid access to cardiac catheterization, care for children with complex disorders, emergent obstetrical care, and care for neonates. It would also help in responding to natural disasters. And it would be a "safety net" to Manitoba rural emergency departments in times of temporary service reduction. The estimated cost was \$5 million annually.

The report's recommendations included:

- Approval is given to develop a detailed project plan for a provincial helicopter program.
- The program be based in Winnipeg...and serve the 250 km outside of Winnipeg representing approximately 90% of the (rural) population.
- The program be developed on the basis of an expanded Lifeflight program with aviation services provided by Manitoba Government Air Services, and medical operations be developed within a Special Operating Agency.
- Construction of helipads at HSC and St. Boniface Hospitals.

The recommendation to develop a detailed project plan was not implemented. Neither were the recommendations to expand Lifeflight, have Government Air Services provide aviation services, and to create a Special Operating Agency.

In the December 2010 Throne Speech, the Government indicated they would have a helicopter ambulance program for the long term in 2011.

In 2011, Health again contracted STARS for helicopter emergency services due to flooding. A Memorandum of Understanding (MOU) was signed on June 28, 2011 between the Province and STARS. The MOU recognized that the government wanted to negotiate a permanent HEMS in Manitoba with STARS. This negotiation process was managed by Emergency Medical Services (EMS) branch in the Department of Health. On August 19, 2011 Health made a submission to Treasury Board requesting an extension of the contract with STARS from September 1, 2011 to December 1, 2011. In total, the STARS contract cost \$7,547,031 in 2011/2012. Treasury Board authorized more extensions—keeping STARS services in Manitoba to March 31, 2012.

On January 31, 2012, Treasury Board authorized Health to enter into an agreement with STARS to provide HEMS for Manitoba and approved an amount, for 1-year, of \$10,241,000 which included STARS reimbursement as well as Health costs.

Health proposed a 10-year agreement at an estimated total cost of \$159 million. This included all staffing, servicing, and capital items of a HEMS program (including a helicopter, equipment, and helipads).

The program was to begin with 12 hours-a-day and 365 days-a-year service. By January 1, 2013, it was to expand to 24 hours-a-day and 365 days-a-year. Treasury Board discussed the cost and length of contract and directed Health to pursue a 5-year contract and to minimize costs. Health was also to return to Treasury Board annually to report on program performance.

The Province, represented by Health, signed a Services Purchase Agreement with STARS on February 22, 2012. The agreement begins April 1, 2012 and expires March 31, 2022.

Health, via STARS, bought and is outfitting a helicopter for \$3.2 million—this is in addition to (and separate from) the \$10,241,000 approved for the program.

The Minister was challenged by the Opposition and the media on why the agreement with STARS was untendered.

In an April 2012 letter to the Opposition Health critic, the Minister cited the following rationale in the government's decision to sole source the agreement:

- Manitoba contracted with STARS in 2009 and again in 2011 to provide medivac services to areas of the province affected by the flood because they had determined that STARS “was the only established ambulance helicopter provider available at the time.”
- The service provided in those years was influential in the government decision to announce a permanent helicopter ambulance in the 2010 Throne Speech.
- Health undertook a review and identified that over the longer term a helicopter ambulance service is expected to save at least 35 – 50 lives per year.
- STARS is a non-profit organization with over 25 years of experience which has flown over 20,000 missions delivering trauma and critical care helicopter ambulance transports.
- The government wanted to ensure uninterrupted helicopter ambulance service and STARS could offer that.
- STARS has highly specialized medical expertise and had experience in delivering the service in Manitoba.

- STARS also has contracted with Saskatchewan and Alberta and therefore can achieve economies of scale; provide access to an interprovincial fleet of helicopters which could be shared in event one of the helicopters needs to be taken out of service.
- STARS provide training and educational facilities for pilots as well as health care professionals.

In response to questions by the Opposition in the Committee of Supply (Health Estimates) and in Question Period, the Minister also said that she had advice from staff that it would take an estimated 18 months for Manitoba to implement its own HEMS.

On May 29, 2012 the Minister responded to questions from the Opposition in the Legislature about what due diligence had been undertaken before deciding to sole source the STARS agreement. The Minister said that EMS staff had done an analysis between 2009 and 2011 and incorporated the following factors into their analysis:

- What kinds of infrastructure did we have and what would have to be acquired? At what cost?
- What potential operators were within?
- How could we build the system?
- How would a home-grown helicopter ambulance program integrate into the existing EMS?
- How would we train staff?
- How would we build the workforce appropriately?
- Where would we get the pilots?
- Where would we get the people with expertise in trauma air rescue?
- Could we do it better than STARS? Could we do it cheaper?

The Minister stated that after she considered the analysis, they chose to pursue the uninterrupted service that STARS could provide.

At the Committee of Supply on May 30, 2012 the Minister stated that no industry provider in Manitoba offers helicopter ambulance services. Only land transportation and fixed wing ambulance services are available. In the same Committee meeting, the Minister said that EMS has on-going talks with land and air providers in Manitoba and staff know of the infrastructure held by different companies and their capacity. The Minister went on to say, about signing of the MOU with STARS in June 2011, that “there had been no other organizations expressing any interest before this date.”

The Minister reported that in February 2012, a provider had inquired and expressed interest in offering the helicopter ambulance service. Health reviewed the inquiry and decided that the company “did not possess the requisite experience in providing specialized ambulance helicopter service” and “could not ensure uninterrupted life-saving helicopter service.”

Audit approach

Objectives

Our audit objectives were:

- To assess if procurement of the helicopter ambulance program was in compliance with provincial tendering principles, policies, and legislation.
- To assess if Manitoba Health has an appropriate oversight process to ensure compliance with key elements of the Services Purchase Agreement (SPA).

During the course of the audit other matters were brought to our attention regarding quality of patient care concerns. We have included this in **section 2.1**.

Scope

We examined Health's procurement of the helicopter (rotary-wing) air ambulance program in Manitoba and Health's oversight of the SPA. The audit did not include a direct examination of STARS and it did not include any of the contracts for flood related services and associated contract extensions. Our audit took place between January 2013 and October 2013. Our audit examined the period leading up to the signing of the SPA on February 22, 2012 and the 19 month period from April 1, 2012 to October 2013. Some events which occurred subsequent to October 2013 have been included in this report.

We selected items within the SPA which we considered to be significant; therefore not all provisions of the SPA were examined. Those areas selected were examined for compliance and monitoring.

The audit included Health's Emergency Medical Services branch which is responsible for this program, Administration and Finance division within Health, Medical Transportation Coordination Centre (MTCC) in its role as dispatcher, and other appropriate people in Health. For the areas identified for audit we conducted interviews, analyzed records, and conducted other inquiries as appropriate.

Our examination was performed in accordance with standard practices for assurance engagements as recommended by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Findings and recommendations

1. Procurement did not comply with tendering principles, policies, and legislation

1.1 No public tender

Health could not provide any tender documents or other evidence that it had sought detailed quotes from companies that may have been able to provide HEMS. Treasury Board approval was obtained for this untendered contract.

1.1.1 Noncompliance with procurement policies

Health should have followed the principles in *The Government Purchases Act*, The General Manual of Administration (GMA) and the government's Procurement Administration Manual (PAM).

The Government Purchases Act, Section 7(1), reads as follows:

- a. all purchases must be made in the most economical manner possible;
- b. whenever possible, competitive offers are to be obtained through the use of public tenders or similar means.

The GMA, Section 1.3, Policy #3 sets out the following:

A fair, competitive process, which includes predetermined evaluation criteria, should be used for all contracts, to ensure that the best value is received for the funds expended, and to provide a fair and equal opportunity for vendors to present their services or products. These should include such processes as: Public Tender, Call for Tender, Call for Bid, Request for Quotation, Request for Proposal.

The PAM expands on the principles set out in both *The Government Purchases Act* and the GMA, referring to "open, fair, transparent, ethical, qualified, responsive & supportive, and value for money."

Manitoba has a fiduciary duty and responsibility to ensure that procurement is conducted in a fair, open and transparent manner; adhering to the principles that govern procurement.

The requirement for a fair, open and transparent procurement process is further emphasized in the PAM:

Manitoba is obligated to maintain a fair, open and transparent procurement process; consideration given to judgments of the Supreme Court of Canada influencing Competitive Bidding Law in Canada. Failure to follow these principles when conducting our procurement can create a liability for Manitoba.

The PAM is a policy document with 7 governing procurement principles. To see if Health followed these principles, we compared them to Health's procurement of the helicopter ambulance program.

Governing procurement principle	Finding
1. Open - having no barriers to suppliers competing for government business. - not limiting participation in a tender competition, without clear documented justification for exceptions. - publically advertising tender competitions whenever possible.	Suppliers could not compete as there was no public advertising of a tender for this service. By not tendering, supplier participation was limited. While Health documented why it did not tender, its reasons did not comply with the allowable exceptions for untendered contracting. See the following section, Procurement Administration Manual – Waiving of Competitive Bids.
2. Fair - equal treatment of suppliers. - marked by impartiality, free from bias in opinions and judgments. - free from self-interest, prejudice, or favoritism. - conforming with the established rules. - free of obstacles. - consistent.	Suppliers were not treated fairly as there was no opportunity for potential suppliers to bid.
3. Transparent - characterized by visibility or accessibility of information. - exposed to general view or knowledge. - lack of hidden agendas and conditions.	The procurement process was not transparent as there was no public tender. Possible vendors did not have access to information or knowledge of Health's procurement intent.
4. Ethical - no conflict of interest. - exercising probity, adhering to moral principles. - fiduciary duty, acting on behalf of Manitoba in an ethical relationship with suppliers that necessitates confidence, trust and good faith. - honesty, truthfulness, free from fraud or deception.	We found no specific ethical breaches, but failing to tender did not help necessitate confidence, trust and good faith with potential suppliers.

5. Qualified

- knowledgeable of procurement policies, guidelines and best practices.
- aware of and understanding the principles governing.
- maintaining integrity in the procurement process requiring everyone that feeds into the process understands and follows the principles, rules and procedures.
- access to appropriate and effective tools and systems.

Certain senior individuals at Health were not knowledgeable of some procurement policies, guidelines and best practices. There was a general lack of awareness and understanding of exceptions to tender requirements. Integrity was not maintained in the procurement process.

6. Responsive and supportive

- establish and implement supplier performance standards and an effective means of providing feedback which benefits both Manitoba and suppliers, enabling them to provide the highest standard of service.
- contributing to supplier development and growth by providing information on Manitoba's procurement model and practices, referring suppliers to end users and in general, fostering respectful and effective relationships.

By not conducting a public tender there was no contribution to potential supplier development and growth or to fostering respectful and effective relationships with suppliers.

7. Value for money

- achieving value for money in procurement, balancing price with economy, efficiency and effectiveness of the goods or services being acquired.
- includes both whole life costs and quality.

Without the benefit of a tendering process, Health could not demonstrate that they are achieving value for money, balancing price with economy, efficiency, and effectiveness of the goods and services acquired.

Procurement Administration Manual – Waiving of Competitive Bids

The PAM has 4 key exceptions when waiving of competitive bids may be justified: urgent requirements, single source, sole source, and emergency. Health was not in compliance with any of the justifications for waiving of competitive bids.

1. Urgent requirements

An urgent requirement is when, "only one supplier is contacted...to meet an immediate need and an assessment verified that any other supplier is not feasible or practical."

The events which led to the signing of the SPA do not support an "immediate need." The government announced in 2010 that it wanted a permanent HEMS in Manitoba. However, the SPA was not signed until February 22, 2012. This provided sufficient time for a public tender.

Further, Health had no detailed assessment verifying that any supplier (other than STARS) was not feasible or practical.

2. Single source

A single source exemption is, “to accommodate the procurement of requirements where only one supplier is considered capable of providing the goods or services.” There was some preliminary contact with ORNGE and Helijet, but we were told that they did not express interest. There was no formal documentation of needs, requirements or potential timelines. Because Health did not tender, it could not gain a full knowledge of potential companies in the market. The guideline states that “Justification must be in writing, on file and verifiable.” There was no documented evidence to conclude that only one supplier could meet operational, technical, or performance requirements.

3. Sole source

A sole source is, “when only one supplier is permitted to provide the goods or services and an assessment verified that any other supplier is precluded.” The guideline states that, “Justification must be in writing, on file and verifiable.” Although STARS had operated in Manitoba for various times between 2009 and 2011, there was no evidence of a requirement for only STARS, such as exclusive rights, licenses, copyright, patents, maintenance compatibility, specific assets, or other circumstances that necessitated contracting with only one provider. There was no documented evidence to conclude that only one supplier was permitted to provide these goods and services.

4. Emergency

An emergency requirement is when there is, “an unforeseen situation that poses a threat to life, health, property, public security or order and the goods or services must be obtained as soon as possible to mitigate the associated risks.” The guideline states that “justification must be in writing, on file and verifiable.” The policy further states that, “an emergency procurement strategy must not be used where poor advanced planning for operational goods or services has resulted in a requirement deemed to be urgent, but does not meet the criteria for an ‘emergency’.”

The government announced in 2010 its intent for a new ambulance helicopter program. The SPA was signed on February 22, 2012. There was enough time to conduct advanced planning and proceed to tender. No documentation showed that Health had met the emergency criteria.

Overall, Health’s procurement of STARS did not comply with the tendering principles and policies in *The Government Purchases Act*, GMA and the PAM.

1.1.2 Untendered contract not reported

Section 80 of *The Financial Administration Act* (FAA) requires public reporting of untendered contracts. The Minister of Health was responsible for providing the contract information to the Minister of Finance within one month of the date on which the contract was entered into. We requested copies of documents supporting the disclosure of the SPA information. Health could not provide any documents, and said that it had not reported the contract to the Minister of Finance.

The FAA requires the Minister of Finance to make certain contract information available for inspection by the public. This requirement supports openness and transparency when a contract has been entered into without a public tender. But in this case, the contract information was not available for public inspection.

Health did not comply with Section 80 of the FAA.

1.1.3 Value for money analysis was weak

Tendering would have provided a measure of fair value that Health could have used to assess if the proposals reflected value for money. Because Health did not tender, we expected it to perform detailed fair-market-value, or other, analysis to assess if estimated costs were reasonable.

Health compared some projected HEMS costs to other markets and Manitoba's Lifeflight program, with the following results:

	Projected missions	Program cost ⁵	Cost per mission ⁵
Southern Inter Facility Transport Pilot Project ¹			\$ 2,250.00
Lifeflight ²	600	\$ 3,150,000.00	\$ 5,250.00
STARS MB (12 Hour Program) - STARS estimate	475	\$ 10,100,000.00	\$ 21,263.16
STARS MB (24 Hour Program) - STARS estimate	651	\$ 12,253,971.62	\$ 18,823.31
STARS MB (12 Hour Program) - MB estimate	177	\$ 10,100,000.00	\$ 57,062.15
STARS MB (24 Hour Program) - MB estimate	250	\$ 12,253,971.62	\$ 49,015.89
BC Rotary Wing Program ³	1,738	\$ 14,158,000.00	\$ 8,146.14
ORNGE (Ontario) ⁴	18,906	\$ 150,000,000.00	\$ 7,933.99

¹ Southern Inter Facility Transport project is a program to fly patients facing ambulance rides of 2.5 hours or more from their local hospital or personal-care home to Winnipeg for testing and treatment.

² Lifeflight is a licensed specialized air ambulance service in Manitoba. Lifeflight has the resources to provide intensive care in the air. A group of critical care physicians, emergency physicians and obstetricians provide 24-hour coverage for the program. Lifeflight is owned and operated by the government of Manitoba. Lifeflight provides the primary means of air transport for all seriously ill or injured Manitobans from areas outside the 80-mile radius of Winnipeg in rural and northern Manitoba to urban referral centers in Winnipeg.

³ BC Rotary Wing Program provides specialized, pre-hospital and inter-facility treatment and helicopter transport for critically ill or injured patients across British Columbia.

⁴ ORNGE provides specialized, pre-hospital and inter-facility treatment and helicopter transport for critically ill or injured patients across Ontario.

⁵ Program costs and cost per mission are not fully comparable because of factors such as:

- population size impacting number of missions.
- additional services provided – such as the educational component offered by STARS.
- potential ability to fundraise.
- airplane versus helicopter operating costs.

Ignoring the complexities of comparing STARS and other programs, the estimated cost difference between vendors was substantial. Estimated costs per mission for STARS were likely to be 231% to 618% higher than other province's programs. This substantial cost difference should have prompted Health to do further analysis to determine if budgeted numbers were reasonable. We found no documented analysis or evidence explaining this significant cost difference. Health could not demonstrate to us that it is receiving value for money.

1.2 Inadequate needs assessment

1.2.1 Health did not determine the HEMS program delivery needs

The department had a vision of how HEMS would fit in to the broader EMS system through the work previously done on the feasibility study. However, the Executive Director of EMS felt that the department lacked expertise to determine the program delivery needs and wanted to hire a consultant to do a full needs assessment. But this didn't happen because of time constraints in the negotiation process. Consequently, reliance was placed on STARS to assess program delivery needs. The vendor provided important input on program delivery, such as where to locate a helicopter base, staffing requirements, hours of operations, market value of estimated expenditures, serviceable ranges, and the need for education and community outreach. Relying on a vendor to define program delivery needs is inappropriate.

The Manitoba Emergency Medical Services Rotor Wing Feasibility Project recommended in 2009 that Health complete a detailed project plan for a provincial helicopter program. Health did not implement this recommendation.

The limited due diligence that Health did conduct raised some significant issues that may have been prevented—see **section 2**.

1.2.2 Health negotiated from a weak position

Negotiations over the SPA commenced with the first draft STARS provided. Health reacted to the draft and made changes as the process proceeded. During the negotiation process, Health continued to learn about HEMS. Health developed a strong view on dispatch of the helicopter and concluded that MTCC should control it.

Health focused on obtaining an SPA with some controlling provisions. For example, funding is approved yearly by the government, Health can suspend service, and either party can leave the SPA with one year notice, for any reason. On termination, the financial obligation for Health would be to pay for services up to the date of termination. In the event of a suspension there is no obligation for Health to pay STARS for that period.

On December 2, 2013 Health issued a News Release saying there was a recent patient transportation incident with STARS. The Province temporarily suspended STARS' service and is reviewing the Critical Incident. Health is continuing to pay STARS during the review because they have concerns that if payments are not continued there will be a loss of essential staff and the delivery capacity of the program will be adversely affected. Health also told us that they do not want to be financially punitive when Critical Incidents are brought to their attention.

If the agreement is terminated, the costs of winding down the base would first be paid from STARS' (Manitoba) reserves, and then the financial obligation would fall to Health. Other sections of the SPA may apply depending on the circumstances surrounding termination or suspension.

During negotiations with STARS, Health officials had various experts assist them. For example, Health contacted staff in Health's finance division, Civil Legal Services, an external lawyer, and the Department of Finance's Insurance and Risk Management. Health told us that they wanted to use an expert in aviation and HEMS but there was not sufficient time. This may have included Manitoba Infrastructure and Transportation personnel with aviation experience. The Manitoba Emergency Medical Services Feasibility Project was completed in 2009, and was followed by the throne speech in 2010 announcing the intent to have a helicopter ambulance program. Given the timeframe of these events, we conclude that sufficient time was available for advanced planning, including hiring experts.

Overall, while it was good that Health consulted certain individuals, it should have assessed the overall needs of Manitoba as part of the planning phase, not as part of contract negotiations. The starting point of the SPA was a STARS draft contract that Health then responded to. A preferable model would have had Manitoba develop its needs first and then draft its own contract based on those needs. Further, Health did not use aviation experts to provide advice it needed.

2. Some oversight of Services Purchase Agreement provisions, but not in all key areas

2.1 Quality of patient care resulted in medical reviews and operational changes

Many quality of patient care matters have come to Health's attention. Health reacted with an adequate plan to assess the quality of patient care concerns. The response has been medical reviews and operational changes. Health lacks a comprehensive quality assurance process for patient care that STARS provides. Such a process may have detected some quality of patient care concerns earlier. The SPA has provisions for quality assurance by STARS, but there is no requirement stated for Health.

On April 17, 2013, a Health letter to STARS said it was investigating 6 STARS missions due to medical concerns. Two Associate Medical Directors (Air Medical Director and Ground Medical Director), with Health, both doctors, were concerned over the medical management of these missions. The letter said facilities that STARS has transported patients from had raised concerns about patient management. The letter concluded that, "there appears to be a pattern of medical failures and non-reporting from STARS."

As a result of these incidents, the 2 Medical Directors have said that all STARS missions will be investigated medically from the time of STARS' arrival in Manitoba on April 1, 2011. In addition, all ongoing STARS missions will be investigated until the Medical Directors conclude their case reviews. This process of investigating missions from a medical perspective was called Clinical Review by Health staff. There is a separate process if a Critical Incident (CI) is identified.

The letter stated additional actions to be implemented immediately:

1. All transport involving children <12 years of age must be done with a physician on board the STARS aircraft. The exception to this would be scene response cases which fall into the auto-launch criteria.
2. STARS will only be dispatched to calls beyond the 50 minute helicopter emergency medical services (HEMS) zone (i.e. Brandon) if Lifeflight is tasked elsewhere and if the patient is felt to be stable enough for transport by a nurse/paramedic team. The exception to this rule would be an emergent cath lab transport, and/or the inability to reach the Lifeflight physician for triage purposes.
3. Calls that are outside of STARS's fly radius must be triaged by a Lifeflight physician... If STARS is chosen as the responding asset, STARS must implement the medical direction provided by the Lifeflight physician.
4. All calls must be triaged by a Manitoba physician, and the STARS Emergency Link Centre (ELC) will not be involved in the co-ordination of any Manitoba Inter-Facility Transport. Should the STARS physicians or Medical Director be unavailable, the Lifeflight physician will triage the call and approve the mission if appropriate.
5. Any call that may result in the transport of neonatal patients must be immediately triaged by the Health Sciences Centre (HSC) neonatal transport team.
6. Physician consultations, bed locations services and any other services offered by STARS that do not have the express permission of the EMS Branch of Health may not be conducted.

On May 22, 2013 a letter from the Air Medical Director to the Executive Director EMS noted specific cases of medical concern. The letter contained information regarding 10 cases, as follows: 4 CIs (with one yet to be reported), 3 potential CIs, and 3 cases of concern. Subsequently the Air Medical Director removed 1 potential CI and 1 case of concern as they were found to not meet the criteria.

The letter also said that, "the number of concerning cases that I am hearing about is growing daily." It concluded that: "I recommend grounding the STARS vendor pending a complete review of all of the above-cited cases. I believe that there is enough evidence of serious patient concerns and infractions to justify such an action."

We were told that a meeting took place as a result of this letter between the Executive Director EMS, Medical Directors, and the Assistant Deputy Minister. They reached a compromise because complete grounding would mean no service which could result in the loss of beneficial activity. The compromise required a doctor on all inter-facility flights.

The next letter, dated May 28, 2013, from the Air Medical Director to the Executive Director EMS noted the same cases as the May 22, 2013 letter. This letter recommended, "that effective immediately, a physician be required to accompany the air medical crew on all inter-facility transports. The aforementioned cases leave me with serious concerns about the ability of the STARS crews to manage critically ill patients in the absence of physician supervision."

On July 12, 2013, we followed up with the Executive Director EMS. He was not familiar with the Air Medical Director's recommendation that a doctor be on board all inter-facility transports. Subsequent to our meeting, the Executive Director sent us a copy of his July 30 letter to STARS. It required STARS to implement the physician requirement effective September 1. The unnecessary delay from May 28 to July 30 is concerning, as there were significant medical concerns and risks. Health's lack of oversight on this issue could have resulted in higher risk to patients.

We were told that the CI and Clinical Review processes are ongoing. Health engaged a third-party independent doctor with critical care and Aeromedical experience. Health wanted to ensure that this doctor was independent, with no history with Health or STARS.

The timeframe for completing Health's Clinical and Critical Incident reviews is unknown. Management has difficulty estimating the timeframe because many parties and complexities are involved. Their position is that in the interim they have put the above noted additional controls and processes in place to mitigate patient safety risks.

In the interim between waiting for the third-party independent review and the release of their report, Health continued to conduct reviews. The findings of the Ground Medical Director review dated September 30, 2013, noted:

Based upon my chart review of the cases listed below I can find no evidence of pervasive substandard patient care on the part of any Stars air medical crews, no deficiencies in their reporting, and no deficiencies in their QA/QI processes. In three of the cases I believe the care was in fact excellent. In two cases I believe physician judgment was a major factor in either the outcome or the generation of the concerns. One of the cases is a current CI and will be answered in due course.

On December 2, 2013 Health issued a News Release saying there was a recent patient transportation incident with STARS, that resulted in a temporary suspension of service. The Minister stated "On the advice from medical professionals, I've instructed my department to take this action. Up until now, I've been assured that STARS is providing appropriate emergency care, but concerns have been raised following a recent incident...We all know STARS has played a vital role in our health-care system saving many lives every year, but we must ensure that each patient receiving care on board STARS is receiving the right care."

On February 28, 2014, the third-party independent doctor with critical care and Aeromedical experience that was engaged by Health released a report. He examined 16 cases to identify any underlying systemic issues that may have caused problems and to make recommendations. The executive summary contains the following:

My conclusion is that STARS preparation of its Air Medical Crews (AMCs) for helicopter flight operations in Manitoba is currently substantially less than other Canadian provinces. Compared to other air medical transport programs across the country, its training program is remarkably brief and cannot provide the necessary amount of training required for modern, complex, critical-care transports. The time allowed for experiential knowledge of the flight environment is too short. A complete review of training requirements for STARS Manitoba staff should be performed and further ongoing training of current staff should occur.

I have identified eight pressing issues:

1. STARS Manitoba nurses and paramedics require further training and experience to work in the Manitoba air medical environment;
2. STARS Manitoba air medical teams should have further training and experience for the special needs of pediatric patients;
3. Currently STARS Manitoba staff do not have sufficient experience in assessing difficult airways and require further training and experience in dealing with airways and maintaining oxygenation, especially in the air medical environment;
4. STARS Manitoba physician oversight requires further familiarization with STARS Manitoba and with STARS Manitoba air crews to become familiar with the air crews' capabilities and limitations;
5. The methods of dispatching STARS Manitoba teams are multiple and lack co-ordination, costing time and adding potential problems to inherently critical situations;
6. Hospitals lack heliports, which adds to the inherent risks of patient transfers;
7. Promoting and maintaining a culture of quality at the STARS Manitoba organization needs to be emphasized continuously and incorporated into all aspects of the operation;
8. STARS Manitoba AMCs require greater exposure to critical care cases to maintain their competencies.

The report contained 20 recommendations to address the 8 pressing issues.

Overall, Health has reacted with an adequate plan to assess quality of patient care concerns. Health lacks a comprehensive quality assurance process over patient care STARS provides. Some patient care situations may have been detected earlier if a quality assurance program had been in place.

Recommendation 1: We recommend that Health develop and implement an ongoing quality assurance process to oversee STARS clinical operations.

2.2 Licensing and inspection framework in place

Health has a well-defined framework to license air ambulance operators and inspect air ambulances and facilities. Health has provided STARS with provisional operational licenses because the license applications lacked certain documentation. One of the key missing items was the Medical Director's agreement. While an individual occupies a Medical Director position in STARS, a signed agreement to document that individual's acceptance of their responsibilities was not on file with Health. The Medical Director's responsibilities, outlined in *The Emergency Medical Response and Stretcher Transportation Act* and related Regulations, are essential patient safety components of operating an air ambulance. The Medical Director must ensure that a quality assurance program is performed and documented, and that aeromedical attendants perform their patient care duties competently. It is a concern that this agreement was not on file at Health as required by the licensing process and legislation.

The EMS branch is responsible for licensing and inspection. Staff involved in oversight had experience with, and knew about, the relevant legislation and policies. In addition to the Health

staff, an external aviation consultant is used to perform regulatory compliance audits for the helicopters and their operations. The EMS branch uses standard forms, including checklists, to collect and document information supporting the licensing and inspection processes.

The licensing of air ambulance operators is annual. So is inspection of the air ambulance and facilities. Inspections can also be done throughout the year if there is an aircraft change or if the EMS branch thinks one is warranted. An inspection may occur, for example, if an aircraft has been involved in an accident. We were told that the EMS branch monitors the Civil Aviation Daily Occurrence Report System. This Transport Canada system collects initial aviation occurrence information involving any Canadian-registered aircraft.

2.2.1 License issued on a provisional basis

The Emergency Medical Response and Stretcher Transportation Act and related Regulations set license requirements for operating an air emergency medical response system. They also contain requirements for licensing emergency medical response personnel and flight crew, technicians, stretcher attendants, and ambulance operators. These requirements apply to the STARS' air ambulance program.

Health issued a provisional Emergency Medical Response System License (Air System) to STARS for 2012 because STARS had not met all the requirements in the Regulations. The license application was missing some required documents. For 2013, Health again issued a provisional license because STARS did not meet legislative and regulatory requirements for a full air ambulance license.

The requirements in the *Air Emergency Medical Response System Regulation* (sections 2, 5, 8, 12 & 21) require a license application to include:

Section 2:

- a. a copy of a valid air operator's certificate issued by Transport Canada;
- b. a copy of the Transport Canada approved company operations manual;
- c. if the applicant is incorporated under *The Corporations Act*, the names and addresses of the directors and officers of the corporation;
- d. if the applicant is other than a corporation, the name and address of the owner, or if the applicant is a partnership, the names and addresses of all general partners in the partnership;
- e. the municipal address and the mailing address of all the premises from which the applicant proposes to operate the air medical response system;
- f. evidence that the applicant has obtained liability insurance, as specified in section 12;
- g. a proposed aeromedical policy and procedure manual; and
- h. any other information or documentation that the minister considers necessary to determine the ability of the person to operate the air medical response system.

Section 5:

A copy of an agreement with a medical director which includes the responsibilities as outlined in the regulations.

Section 8:

A listing of aeromedical attendants for whom the medical director has issued transfer of functions - including a complete listing of the authorized medical functions.

Section 12:

A current liability insurance policy which insures staff involved in the provision of air medical response services in an amount of at least \$5,000,000.

Section 21:

A person applying for either an aeromedical attendant or air ambulance pilot license must make application in a form approved by the minister.

A May 24, 2012 letter from Health to STARS said the application for 2012 lacked some key items, as follows:

- a signed contract with a Medical Director for the Manitoba STARS base.
- aeromedical attendants and air ambulance pilots had yet to obtain the required licenses to practice in Manitoba.
- listing of aeromedical attendants issued a transfer of function, including the authorized function(s), signed by the Medical Director – See Note 1.

A December 31, 2012 letter from Health to STARS said the application for 2013 lacked some key items, as follows:

- a signed contract with a Medical Director for the Manitoba STAR's base.
- revised listing of all aeromedical attendants and air ambulance pilots.
- listing of aeromedical attendants issued a transfer of function, including the authorized function(s), signed by the Medical Director – See Note 1.
- current liability insurance policy.

Note 1: Transfer of functions is the authorization given to an aeromedical attendant by the medical director which enables the attendant to legally perform certain medical functions. The medical director has the obligation under the Air Emergency Medical Response System Regulation, Section 8, to provide the names of every aeromedical attendant who has been issued a transfer of function, including a list of the medical functions the attendant has been authorized to perform. If an aeromedical attendant is hired during the term of the license holder's license, the medical director is obligated to immediately provide the attendant's name and specify the transfer of functions issued and the date of issuance.

In addition, the EMS branch told STARS that it had to respond to the inspection deficiencies communicated on November 16, 2012 to comply with the legislation and regulations—see **section 2.2.2**

2.2.2 Air ambulance and facility inspected routinely

As part of the licensing process, Health inspects the air ambulance, the airbase, documentation and manuals, and the medical equipment and supplies for compliance with Manitoba legislation.

For the 2013 license, Health inspected STARS on October 23, 2012. The findings of the inspection, and some additional requests for information, were communicated to STARS on November 16, 2012, as follows:

1. STARS is a seasoned carrier, with excellent systems and processes in place.
2. A request to implement a Minimum Equipment List system for tracking and completing aircraft repairs in a timely manner.
3. A request for comment on the information provided to the inspectors that the aircraft status was that of a single pilot helicopter.
4. A request for comment on aircraft equipment (airspeed indicator) that was operationally in question, and for which there was no record of the inspection procedure expected under the circumstances.
5. It was noted that deficits in medical supplies and equipment that were identified during the inspection had already been addressed.
6. Sundry items required in Schedules B and C (minimum patient care equipment and supplies) of the Manitoba Regulation were less than required, but this was considered appropriate given strict space and weight limitations.
7. A request for STARS to establish a policy to advise EMS when a replacement aircraft is rotated into service so that the required inspection could be made of the replacement aircraft.

STARS and the EMS branch communicated on these items through January and February of 2013. By early April, STARS had dealt with the items, except it had not fully implemented the Minimum Equipment Listing process (MEL). While the MEL listing was provided, it had not yet received Transport Canada approval. Health's aviation consultant told us that this approval can take a long time to obtain. STARS said it will tell Health once it receives the approval. STARS also said that procedures were in place for future inspection and testing of equipment, and that it would immediately report to Health any issues affecting full compliance of the helicopter or crew with Manitoba Air Ambulance Regulations.

2.2.3 Unlicensed air ambulance used

On December 9, 2012, STARS put an air ambulance into service without an inspection. An inspection is a requirement of the air ambulance license. On December 12, 2012, the aircraft was inspected. The inspection found one shortfall in medical equipment—the same equipment shortfall found in the October 23, 2012 inspection of the previous aircraft.

Health sent a December 14, 2012 letter to STARS describing the aircraft inspection requirement, directing STARS to develop a process to prevent recurrence, and telling STARS to notify the EMS Branch of the process, once created. The letter also covered the medical equipment shortfall. STARS responded on January 8, 2013, saying it had bought the missing medical equipment and put it in place, and that it had reviewed the policy and procedure for obtaining essential equipment and supplies with staff. The STARS letter acknowledged the inspection issue was a serious matter and assured Health that it would implement processes to prevent a recurrence.

2.3 Some oversight of operations, but more needed

2.3.1 Medical Transportation Coordination Centre dispatches STARS

MTCC provides EMS medical and inter-facility dispatch for most of Manitoba outside of Winnipeg. MTCC dispatches medical services for air ambulances, including LifeFlight, Basic Air Ambulance, STARS, and Southern Air Ambulance Inter-Facility Transport Program. Also, MTCC dispatches ground ambulances. MTCC operates as a division of Regional Health Authorities of Manitoba Inc.

The SPA requires MTCC to dispatch STARS in accordance with MTCC's operational policies and procedures, in cooperation with the Manitoba regional EMS system. STARS cannot be dispatched by any other means.

Individuals in areas outside of Winnipeg calling 911 would be connected to MTCC. Health staff requesting an air ambulance have to contact MTCC before a dispatch can occur. MTCC then uses a computer assisted process to determine which resource to dispatch.

MTCC assigned 260 incidents to STARS between April 1, 2012 and March 31, 2013. Of this number, 152 assignments led to patient transport and 108 were cancelled. Of the 152 assignments, 117 were inter-facility transports and 35 were primary or scene calls (directly to the site of an emergency).

2.3.2 Call flow process breached

The SPA states that MTCC should be the first point of contact for all patients requiring critical or emergent care. This automatically occurs when individuals outside of Winnipeg dial 911. This requirement for first point of contact is integral for MTCC to effectively and promptly dispatch resources. One advantage of this approach is that MTCC obtains the GPS coordinates of the person calling and controls the dispatch timing. MTCC keeps records of activities, including official time stamps and recordings of calls.

Outside of Manitoba, STARS operates with a different model. It receives calls and decides whether to dispatch. STARS' dispatch services are called the Emergency Link Center (ELC). The SPA states that within Manitoba it is MTCC who would receive the calls.

There have been two breaches of call-flow requirements, leading to Health issuing letters to STARS.

The first letter involved a call to the STARS' ELC and contained the following comments:

...The purpose of the call was for a member of the public to report an emergency and request emergency medical services. Only after some time on the phone with ELC was Medical Transportation Coordination Centre ("MTCC") brought into the call. This is in contravention of the Service Purchase Agreement ("SPA") between STARS and the Province of Manitoba as noted below.

Paragraph 3(1)(a): "MTCC will be the first point of contact for all patients requiring critical or emergent care."

In addition, when the call was linked to the MTCC, recordings and written transcriptions indicate that the ELC staff continually interjected in the MTCC call taking and triage process, adding confusion to the process and delaying life saving therapies to the patient involved. The interruption of these critical functions only serves to undermine the confidence of the public in the essential services provided by Emergency Medical Services and is a contravention of the SPA between STARS and the Province of Manitoba as noted below.

Paragraph 3(1)(e): “both Parties shall collaboratively work to create and maintain public and health system trust and awareness of the referral process for Critical and Emergent Care Patients and others requiring transport by helicopter. The Parties will ensure that they convey their mutual interest and collaborative respect when describing the Critical and Emergent Care patient referral process and all other Services agreed to herein.”

The letter also said that STARS staff had advocated using a STARS aircraft based in Regina. Health emphasized that MTCC is the sole organization that can dispatch emergency medical services in rural Manitoba. Health asked STARS to immediately disable its ELC 1-888 number for callers in Manitoba and, if possible, add a message for them to call 911 for any emergencies. The ELC not only contravenes the SPA, but it contravenes legislation and endangers public safety and medical care.

The second letter was about an advisory brochure involving ELC that STARS circulated. Health received a copy of a document called the, “STARS Site Registration Information Brochure.” The letter says that the brochure advised the public, including people in Manitoba, that in the event of an emergency they should be contacting the STARS ELC toll free number as opposed to contacting the 911 number and being linked with the MTCC. The response letter that Health sent out about this issue cited the same concerns as the first letter. Health required that STARS advise, in writing, to its operators at ELC and its corporate partners that operate in Manitoba that the only number called should be 911. Health received a response from STARS saying that it had done this.

Another possible SPA breach occurred: signage was put up in rural Manitoba with information on STARS’ services, including its ELC number. Health also followed up with STARS on this. Health officials said that MTCC has not reported on any further ELC breaches. They consider this to be a resolved issue.

2.3.3 Helicopter arrival delayed

The SPA requires Health to buy a helicopter for use in Manitoba for an estimated \$3.2 million. This purchase is in addition to (and separate from) the appropriation of \$10 million for the program. If the SPA is terminated, the helicopter would belong to Health. STARS is responsible to coordinate and manage the purchase, including any retrofitting requirements.

Health officials said they expected the helicopter would be available within 6 months of signing the SPA. The SPA was signed in February 2012, so delivery was expected by August 2012. But the helicopter was not delivered until November 2013. It will not be in service until it is tested and inspected. Meanwhile, STARS is using a helicopter from its fleet.

We found that there was some reporting and monitoring of the status of the helicopter delivery. However, Health’s aviation consultant said this delay is outside the norm.

2.3.4 Performance reporting inadequate

Many sections of the SPA set operational requirements for STARS. But many of these requirements lack performance indicators or metrics for management to assess STARS' performance. Examples of these requirements include:

- provide patients with timely access to high quality, patient-focused care.
- provide transportation that is sustainable and is connected within the EMS portfolio.
- available resources shall be utilized effectively and efficiently to optimize positive outcomes for patients served.

Ontario has a performance management framework that establishes key performance metrics, reporting timelines, and corrective actions where performance is lacking. Health should conduct a risk assessment to identify key performance areas. From this it could develop a performance management framework. The framework should include performance metrics and establish who is responsible for preparing the information, timing requirements, and corrective actions. Examples of possible metrics include:

- lists of complaints from patients, people outside of STARS, and internal concerns raised by STARS.
- results of any STARS' investigation reports.
- details as to investigation numbers, open investigations, closed investigations.
- measures of effectiveness and efficiency.
- exception reports as defined by Health.
- reasons for any dispatch not serviced.
- operational plans and plans for improvements.

Recommendation 2: We recommend that Health conduct a risk assessment to identify key performance areas. We also recommend that Health develop a performance management framework for key areas, including performance metrics, assignment of responsibility for information, timing requirements, and corrective actions.

The SPA requires STARS to deal with requests for its services within 15 minutes of receiving a dispatch request. This response is called the chute time. Health told us that the time that it takes to deal with a request should depend on whether the request is a scene (emergency) call or an inter-facility transport. Health considers inter-facility transport requests not as time sensitive because the person would already be in a health facility receiving some care. Health gave us statistics on average chute time responses for STARS. But they were not broken out by type of call (inter-facility vs. scene). Health officials said that inter-facility transport response times are not as relevant because the most important thing is to ensure stable transport, not speed.

Recommendation 3: We recommend that Health differentiate performance expectations for inter-facility transport and scene call chute times.

2.3.5 Concerns affecting operations

2.3.5.1 Flight manifests incomplete or late

Manifests are documents that list the flight crew on every shift. They include all pilots and medical personnel. A manifest is supposed to be provided to MTCC. Manifests change throughout the day as different shifts start and end and other changes occur. We were told of 5 situations where incorrect individuals were on the manifest, or MTCC did not receive the manifest promptly.

2.3.5.2 Stand down directions ignored

We were told of at least 4 situations where individuals at MTCC had asked STARS to stand down. This can happen as facts become available and the need for a helicopter may not be as strong as it first seemed. For example, if a person is assessed and it is determined that they do not need helicopter transport, the helicopter would be told to return to its base. We were told that despite MTCC telling STARS to stand down, it has not complied with those instructions on at least 4 occasions.

2.3.5.3 Referral emergency physician (REP) availability

There have been 4 instances reported to us where a STARS' REP could not be reached to consult on a patient care issue. While the REP is the primary contact point within STARS, the STARS Medical Director can be contacted as an alternate to triage the call. The Medical Director was available to act as the alternate in 3 of these cases, but in one case he could not be reached. This resulted in using ground transportation instead of the helicopter.

2.3.5.4 Responsibility for landing zones not clear

We were told that the STARS' helicopter has landed when it was not authorized. There have been concerns about who has to ensure a safe landing site, landing in areas where advance permission may have been required, and protocols to follow. Health officials said they knew of these issues, and had met with STARS and other officials in various regions to discuss them.

Recommendation 4: We recommend that Health review operational issues, including manifests, stand downs, REP access, and landing zones. We also recommend that Health develop policies to monitor and track operational issues and prescribe corrective actions for breaches of these policies.

2.3.6 Monitoring of insurance updates needed

The SPA requires STARS to maintain insurance for several things such as medical malpractice, comprehensive general liability, aviation general liability, aircraft public liability, and hangar/base. We obtained copies of the 2012 insurance certificate. It showed that STARS held the

insurance the SPA required. We also asked for the 2013 insurance certificates, but they were not readily available. Health requested the information and received the certificates after our inquiry.

Recommendation 5: We recommend that Health develop a process to ensure that certificates of insurance are updated annually.

2.3.7 Manitoba representatives in place on STARS' boards

The SPA states that, "STARS shall ensure that there is appropriate Manitoba resident representation on the boards of directors of each of STARS and the Foundation including at least one director on each..."

This requirement is met as there are two Manitoba representatives on the boards of STARS and the Foundation.

2.3.8 Flight staffing requirement met

The SPA states that, "STARS ensure each Rotary Air Ambulance flight...shall include, subject to the foregoing, at least two (2) of the following:

1. a qualified physician registered and in good standing with the College of Physicians and Surgeons of Manitoba;
2. a Registered Nurse registered and in good standing with the College of Registered Nurses of Manitoba; and
3. a registered Technician - Advanced Paramedic certified as current in advanced cardiac and advanced trauma life support skills."

MTCC's records show who was on each flight. The staffing requirement was met in all STARS missions in Manitoba. We reviewed the process in place to ensure staff were in good standing with the appropriate professional body. We reviewed 6 staff selected at random and found Health had conducted due diligence on each of them.

2.3.9 Hangar base requirement met

The SPA requires STARS to have a dedicated hangar facility which they either lease or own. This was the case.

2.4 Monitoring of financial matters was weak

2.4.1 Budget requirements not followed

The SPA contains an annual budgeting process through which the amount to be paid to STARS in each year of the 10-year agreement is negotiated. The SPA budgeting process fits within government's financial planning cycle and links to government's estimates process.

The SPA annual budget process is as follows:

- STARS prepares and submits a proposed annual budget by June 30 (preceding the fiscal year of proposed operation). The format is as mutually agreed with Health and the due date can be varied by written agreement.
- The proposed annual budget is subject to negotiation between Health and STARS and to an appropriation of funds being made.
- By June 30 (of the fiscal year of proposed operation) Health provides final approval of the annual budget for the fiscal year to STARS. This final approval is subject to STARS' annual budget having passed *The Appropriation Act*.
- Once the STARS budget is passed, Health gives STARS a funding letter with the amount of the approved STARS annual budget to be included in the provincial budget for the fiscal year.
- Until STARS receives the funding letter, it provides the same level of service as the previous fiscal year and is paid based on the previous fiscal year budget.

For the first year (2012/13), the SPA has an exception to the above process. The exception is that STARS is to be paid based on an approved Treasury Board submission. We were informed that this submission was prepared but not forwarded to Treasury Board through the Treasury Board submission process. Health said the submission was part of the department's estimates and was considered approved through that process. The Treasury Board submission referenced in the SPA as the basis for 2012/2013 payment was never approved. This is not consistent with the wording of the SPA.

The funding for 2012/2013 (\$6,730,000) approved on June 14, 2012 through *The Appropriation Act* for the SPA was less than the total of the 12 equal installment payments (\$8,778,355) made to STARS. The shortfall in legislative authority was resolved through supplementary funding of \$2,048,355 in March 2013. The Treasury Board Handbook says that the intent of supplementary funding is to provide funding in the following circumstance:

Occasionally, additional expenditure authority is required to provide for changes in policy or expenditures **unforeseen** at the time of preparation of the Estimates of Expenditure...this is provided by Supplementary Supply....

In this circumstance, the required funding for the year was known when the Estimates of Expenditure was prepared. It should have been fully included in the Provincial Budget. It was not an unforeseen expense.

The funding for 2012/2013 approved through *The Appropriation Act* for purposes of the SPA was deficient. The use of supplementary funding to resolve the funding shortfall did not comply with Treasury Board Handbook direction.

2.4.2 Ineffective monitoring of financial matters

The Treasury Board Handbook outlines government policy about financial monitoring and reporting. Departments have to monitor and control expenditures so that they do not vary significantly from budget plans. If there are variances from those plans, an adequate explanation is required. There is also a requirement to report on the use of public funds to ensure accountability.

Expenditure forecasts prepared by departments are used by Treasury Board Secretariat to monitor and evaluate programming and funding approved during the estimates process.

The SPA has a monitoring and reporting framework consistent with the basic requirements outlined by Treasury Board Secretariat. The SPA establishes key “budget reconciliation dates” for the preparation and submission by STARS of quarterly and annual reconciliations of actual expenditures to budget amounts. The format of these submissions is what Health and STARS agree on.

Budget reconciliation dates are defined in the SPA as within 30 days following the end of each quarter and within 30 days of the end of the year. Quarterly reporting dates fall on June 30th, September 30th, December 31st and March 31st. The reconciliation for the year end would be due on April 30th. The SPA monitoring and reporting cycle fits within governments overall process and allows for the timely reporting of significant matters to Treasury Board Secretariat.

The SPA has a provision to respond to cases where actual expenditures exceed or are less than the approved budget allocation. It reads in part as follows:

Upon satisfactory review and mutual agreement of the quarterly or annual budget reconciliation, and if the actual operating and/or actual capital expenses for the term exceed the approved budget allocation ... any financial shortfall to budget shall be paid by MH (Health) to STARS forthwith and any financial excess in respect of non-Donated Funds shall be reimbursed to MH by STARS forthwith.

The year-end reconciliation the SPA required was not completed until November 2013. This was a significant delay from the SPA timing requirements. The agreed-on surplus owing to Manitoba by STARS is \$2,408,000. Health plans on reducing future amounts owing to STARS to recover this balance by February 2014. In addition to the \$2,408,000, there was another overpayment of \$496,435 in services funding. Health also plans on reducing future payments to recover this.

The SPA sets out a monitoring and reporting process that fits within government’s overall process and allows for prompt identification and reporting of significant matters and variances. But the process was ineffective for 2012/2013—there was no adjustment to the flow of payments to STARS throughout the fiscal year, although significant variance was occurring.

Key SPA financial date requirements missed were the June 30th approval of the budget for the 2012/2013 year, and the annual budget reconciliation, which was not completed by April 30th.

Summary of recommendations and response of officials

General comments from the Department

Manitoba Health (MH) would like to thank the Office of the Auditor General (OAG) for its review into Manitoba's Helicopter Ambulance Program (HAP). This review will be useful in strengthening patient safety as well as the administration and management of this program. The department accepts the findings outlined and will act immediately to implement the recommendations of the report. Manitoba Health's first and foremost priority is patient safety and recommendations affecting this will be implemented as a priority for the department.

Many of the recommendations in this report refer to issues that are unique to both the HAP and Emergency Medical Services (EMS). There is an opportunity to leverage findings from this report to benefit patients across the system. The EMS Review conducted in late 2012 and released in spring of 2013 also identified some similar issues across the EMS system. The recommendations of the EMS review are beginning to be operationalized and there is an opportunity to expedite the implementation of the recommendations in this report through that mechanism.

In addition, there has been considerable work on behalf of MH since the implementation of the HAP to ensure best practices in rotary wing EMS are being brought to Manitoba. To accomplish this, the team at MH EMS branch have developed networks nationally and internationally. The work of the OAG and this report is supportive of this direction.

Response to recommendations

1. We recommend that Health develop and implement an ongoing quality assurance process to oversee STARS clinical operations.

Response: Agreed. As part of the EMS review of 2013 the need for a quality assurance program (QAP) across the system was identified. MH prioritized this recommendation for implementation and it is expected early in 2014 that The Office of Medical Direction (OMD) will be established. The OMDs role is to ensure consistency of medical training and practice across the EMS system in Manitoba. To ensure this consistency, monitoring and evaluation of the system's medical performance will be essential. This will be accomplished through a QAP. The QAP will be led by an Assistant Medical Director specifically tasked to the QAP. QAP reviews will be conducted based on reported concerns, requests to investigate as well as randomly, and will utilize dispatch records and electronic medical/patient care records. Findings from these reviews will be provided to medical professionals involved and will be used if necessary to develop remedial actions, alter treatment practices and create/enhance educational programs.

2. We recommend that Health conduct a risk assessment to identify key performance areas. We also recommend that Health develop a performance management framework for key areas, including performance metrics, assignment of responsibility for information, timing requirements and corrective actions.

Response: Agreed. The development of a risk based performance management framework for the administration and operation of the HAP program is currently being enacted by the EMS branch. The precepts and principles of the risk based performance management framework will be extended to all of the contracts developed and implemented within the EMS branch.

The EMS branch has been working with other jurisdictions in Canada that operate HAPs to identify appropriate patient safety, operational as well as administrative performance based metrics. As part of this work, experts from other Canadian HAP programs have visited Manitoba to learn more, and staff from Manitoba have visited other Canadian provinces to learn best practices in these programs. It is expected that a comprehensive risk analysis and performance based metrics will be in place by mid 2014.

Work around responsibility of information and timing of contractual requirements is now being routinized within the branch. This will ensure that the timing of reporting and information submission to the department is within the expectations of the legislation, regulations and the Service Purchase Agreement (SPA).

A corrective action process has been developed within MH. This process will ensure that appropriate levels of authority within the department are engaged to resolve SPA issues.

3. We recommend that Health differentiate performance for inter-facility transport and scene call chute times.

Response: Agreed. Chute times for the EMS system are monitored by the EMS dispatch centres in Winnipeg and Brandon. Specifically the HAP program is dispatched by the Medical Transportation Coordination Centre (MTCC) in Brandon. The MTCC tracks all mission metrics associated with an HAP call. Currently, the MTCC data indicates that the chute time of HAP primary scene response calls (PS) as 10.1166 minutes, as well the chute time of Interfacility (IFT) calls is 16.6666 minutes.

There are significant differences in the patient needs and risks for response times to IFT and PS missions. PS response calls have a significant patient need for reduced chute times to ensure an appropriate response time. During IFTs response time is not typically as important as a well planned and executed patient transport, this is because in most cases patients are in a hospital environment that can stabilize and manage their care for a reasonable period of time. MH will be working with the vendor to ensure that appropriate chute time benchmarks are differentiated. These performance times will be reported publically.

4. We recommend that Health review operational issues, including manifests, stand downs, REP access, and landing zones. We also recommend that Health develop policies to monitor and track operational issues and prescribe corrective actions for breaches of these policies.

Response: Agreed. In a complex and high risk operational environment like EMS, it is essential to have articulated roles and responsibilities in place through policies and procedures. MH has worked with the MTCC to develop policies for the above noted issues. MH will be working with the vendor to ensure appropriate implementation.

5. We recommend that Health develop a process to ensure that certificates of insurance are updated annually.

Response: Agreed. The department has incorporated the timings as listed in the contract into individual work streams. This will ensure that items requiring specific timing for reporting will trigger a two week reminder to the vendor as well as a due date reminder. This work has been normalized within the branch.