

ACT Auditor-General's Office

Performance Audit Report

Delivery of Ambulance Services to the ACT Community

ACT Ambulance Services (ACTAS)

Emergency Services Agency

June 2009



ACT AUDITOR-GENERAL'S OFFICE



PA08/18

The Speaker
ACT Legislative Assembly
Civic Square, London Circuit
CANBERRA ACT 2601

Dear Mr Speaker

I am pleased to provide you with a Performance Audit Report titled '**Delivery of Ambulance Services to the ACT Community**', for tabling in the Legislative Assembly, pursuant to Section 17(4) of the *Auditor-General Act 1996*.

Yours sincerely

Tu Pham
Auditor-General
17 June 2009

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LIST OF ABBREVIATIONS

ACTAS	ACT Ambulance Service
AQTF	Australian Qualifications Training Framework
ASO	Ambulance Support Officers
CAD	Computer Aided Dispatch System
CAA	Council of Ambulance Authorities
CBR	Chemical Biological or Radiological (incident)
COAG	Council of Australian Governments
ICP	Intensive Care Paramedic
JACS	Department of Justice and Community Safety
ESA	Emergency Services Agency
PCR	Patient Care Records
Priority 1	Emergency response (lights and sirens), using an ICP resource
Priority 2	Emergency response (road speed), using an ICP resource
Priority 3	Non-emergency transport (inter-hospital patient transport)
Priority 4	Non-emergency transport (Patient Transport Services)
PT Services	Patient Transport Services
ROGS	Report on Government Services
RTO	Registered Training Organisation
HLT	Health Training Package

1. REPORT SUMMARY AND AUDIT OPINION

INTRODUCTION

- 1.1 This report presents the results of a performance audit that reviewed the operations of the ACT Ambulance Service (ACTAS). The audit focused on ACTAS' ability to deliver ambulance services to the Canberra community, and its operational performance.

BACKGROUND

- 1.2 The ACT Ambulance Service was established under the Emergencies Act 2004, and holds legislated responsibility within the Australian Capital Territory (ACT) for the provision of emergency, non-emergency and aero-medical ambulance services to the Canberra community. The main services provided are illustrated in Table 1.1.

Table 1.1: Main services provided by ACTAS

Emergency ambulance services that include emergency responses, medical treatment of the patient, and may or may not involve ambulance transport to a medical facility (road or air).
Non-emergency ambulance services that include the routine transport of patients to, from and between, health care facilities (road or air) by Intensive Care Paramedic (ICP) crews or by Ambulance Support Officers (ASO).
Attendance at public events.
Medical retrieval services (road or air).
Maintaining capacity to respond effectively to mass casualty and other major incidents.

Source: ACTAS Internal documents

- 1.3 ACTAS is the only ambulance service within Australia to provide a single tiered Intensive Care Paramedic (ICP) response for emergency services.¹ For non-emergency ambulance services, ACTAS provides two levels of care using either ICPs or Ambulance Support Officers (ASO).
- 1.4 The Canberra community is serviced from seven ambulance stations located in Dickson, Woden, Calwell, Belconnen, Kambah, Gungahlin and Fyshwick.
- 1.5 In 2007-08, ACTAS attended 32,481 incidents involving 34,030 responses, representing 64 per cent of all Emergency Services Agency responses.²

¹ Other jurisdictions provide a tiered ambulance service comprising of both Intensive Care Paramedics and Ambulance Paramedics.

² This included all emergency responses, patient transfers and inter-hospital transfers. An incident is an event that results in a demand for ambulance resources to respond. An ambulance response is a vehicle sent to an incident.

- 1.6 Audit acknowledges the complex and high pressure working environment of ACTAS staff and observed staff conducting themselves in a professional and dedicated manner. Audit appreciates ACTAS' cooperation and assistance during the audit.

Administration

- 1.7 The Department of Justice and Community Safety has administrative management of ACTAS through the ACT Emergency Services Agency (ESA). ESA is responsible for the strategic management and coordination of emergency services delivered to the ACT community. ESA's other operational services are ACT Fire Brigade, ACT Rural Fire Service and ACT State Emergency Service.
- 1.8 Government funding is provided to the ESA through appropriations to JACS. The ESA in turn allocates operational budgets to various services. In 2007-08, ACTAS' operational expenditure was \$16.8 millions.



ACT ambulance vehicle (Courtesy of ACTAS)

AUDIT OBJECTIVE

- 1.9 The objective of this Audit was to assess the effectiveness of ACTAS' operational response to emergency and non-emergency incidents. The audit focused on ACTAS' ability to service the needs of the Canberra community and its operational performance.
- 1.10 The audit did not focus on ACTAS' operational and administrative management of the Snowy Hydro SouthCare Helicopter, nor did it focus on workplace matters relating to ACTAS employees.
- 1.11 Appendix A provides details of the audit criteria, approach and methodology.

AUDIT CONCLUSION

- 1.12 The Audit opinions drawn against the audit objective are set out below:

ACTAS has delivered a complex range of services against growing demand and limited capacity.

There is significant scope for ACTAS to improve its performance by addressing deficiencies in planning, documentation of policies and procedures, risk management and performance management and review. In particular:

- response times to emergency incidents have worsened in recent years and have not met targets set by government, leading to higher risks of adverse patient outcomes, especially in life-threatening incidents;
- although ACTAS undertook clinical reviews, its clinical governance systems currently in place were not sufficiently robust to provide assurance of a quality service on patient care;
- non-emergency response services were not well coordinated and delivered; and
- ambulance data was not appropriately collected and analysed. This has impeded ACTAS' ability to improve services, and to provide government with sound advice on meeting the present and future needs of the Canberra community.

KEY FINDINGS

- 1.13 The audit conclusions are supported by the following findings:

Managing ambulance services (Chapter 2)

- The Department of Justice and Community Safety's Strategic Plan did not provide the strategic guidance and direction to ACTAS staff on what was expected to be achieved and how ACTAS performance would be measured.
- ACTAS' Business Plan did not clearly specify or capture the scope of work delivered across each of ACTAS' service areas. As a result ACTAS was not actively focused on managing delivery of some services for greater effectiveness.

- ACTAS did not have a sufficiently comprehensive performance management framework by which to manage and monitor performance of service delivery. This makes it difficult for management to fully assess, monitor and report on performance.
- There was no specific risk management plan for ACTAS. There were a number of risk areas which warranted consideration of, and assessment by ACTAS.

Responding to demand (Chapter 3)

- Demand for emergency ambulance attendance has increased by 68 per cent between 2000-01 and 2007-08. Peak periods of demand reduced ambulance availability; translated into higher crew utilisation and longer response times. High crew utilisation rates have had implications for staff workload, fatigue management and ACTAS' ability to appropriately manage staff. ACTAS has recently implemented a roster that partially reflects peaks of demand.
- ACTAS has responded to growth in demand through a variety of mechanisms. However, it has not used demand data to manage crews according to peaks in demand by location as well as time of day. There have been poor response times for most Canberra suburbs and occasions of closure of ambulance stations due to resourcing difficulties.
- ACTAS has managed demand periods by reprioritising emergency responses and to a lesser extent, by dispatching non-intensive care paramedic ambulance and fire brigade crews and using single response units (non-stretcher vehicles crewed by a single intensive care paramedic) as emergency response measures. Accordingly, some patients were possibly not receiving the level of care that could be provided by an ICP in a timely manner.
- ACTAS has also implemented a mandatory patient off-load policy whereby patients are off-loaded at Emergency Departments after a period of twenty minutes.
- Shared Services has not been able to collect in full the expected revenue from user charges for ACTAS, which means that ACTAS' operational budget has not kept pace with demand. There should be clearer policies and systems in place across JACS, Shared Services and ACTAS to better manage the collection of ambulance fees, to ensure this source of revenue is available to support ACTAS operations.
- In 2007-08, ACTAS was unable to resource its minimum emergency response crewing levels 92 times. This resulted in 22 incidents of full shift ambulance station closures in 2007-08.
- There are a number of factors that drive demand. However, ACTAS is yet to determine what demand driver data it will collect and analyse in order to estimate and plan for future demand.

Responding to emergencies (Chapter 4)

- Performance against ACTAS' own standard, which was to answer triple zero calls 'within three rings 90 per cent of the time' was not systematically monitored and was not measured in 2007-08.
- There was no assurance that all calls answered by Communication Centre Staff were recorded in ACTAS' Computer Aided Dispatch (CAD) system.
- In-service refresher training for staff on emergency call taking and dispatching was only recently provided by ACTAS, after a gap of more than five years.
- There was no documented policy on ambulance refusal. Furthermore, ACTAS did not actively monitor or collate information on how often they refused to dispatch an ambulance, and any adverse consequences.
- The Clinical Dispatch Guidelines Policy was developed over eight years ago and has not been updated to reflect current practice and technology.
- There was no clinical supervision to oversight and control grading of priority ambulance responses. Audit found inconsistencies in prioritisation of ambulance responses.
- Some responses were reprioritised in order to hold an ambulance resource in case a highly critical life threatening incident was called in, requiring a lights and siren response.
- ACTAS responded to 37 per cent of all priority 1 incidents across Canberra within eight minutes, compared to a target of 50 per cent.³ This poor response rate reflected the higher utilisation rate of crews during peak periods than the accepted Australian standard, and location of ambulance response crews. As a result, the Canberra community has not always received care on a timely basis, which is needed in a life threatening out-of-hospital event, such as a cardiac event.
- There was no documented policy to guide ambulance officers' decisions on when it was appropriate not to assess, treat or transport a patient, or whether an alternative clinical pathway was more appropriate, or when to refuse to transport a patient.

Non-emergency ambulance services (Chapter 5)

- Non-emergency transport services were not managed separately from the provision of emergency services, which has led to difficulties and possible inefficiencies in the management and coordination of bookings and crews.
- Non-emergency transport services have been processed without the support of robust and documented procedures and on-going training. This has

³ 50 per cent represents the median of the sequential count of response times for the total metropolitan area of Canberra within the target time.

affected quality of service and caused dissatisfaction and frustration to some major users.

- Under current data collection approaches, there was no assurance that ACTAS was meeting the government's accountability indicators with respect to non-emergency ambulance services.

Provision of care (Chapter 6)

- The clinical governance framework in place was not sufficiently robust and well documented to oversight the provision of quality care to patients.
- ACTAS has recognised the importance of ambulance officer qualification attainment and maintenance of intensive care paramedic (ICP) skill levels. However, on-going clinical education (in-service) programs have not been provided to Ambulance Support Officers.
- Some ambulance officers without ICP qualifications were dispatched to respond to an emergency when an ICP Crew was unavailable. On these occasions, there was a risk of an adverse patient outcome as patients may not receive appropriate care.
- Minutes of meetings of the Clinical Advisory Committee referred to some discussions about the appropriateness and adequacy of ACTAS' clinical management guidelines and procedures. However, there was no evidence that ACTAS had formally sought advice or recommendations from this Committee on these guidelines and procedures. Guidelines and procedures define the types of treatments available to ambulance officers in the care provided to patients.
- One of the stated aims of ACTAS' Clinical Quality Management Process was to identify clinical practice, procedures or documentation, which are below service standards. However, internal reviews of Patient Care Records and other reviews were not robust and did not provide assurance of effective follow-up actions to address identified problems.
- There was no clinical care information database, which would enable ambulance officers to record patient information electronically. Instead patient care records were paper based. Consequently, data was not readily available to enable tracking and monitoring of patients care records, or to inform ACTAS management about patient types and trends.

Patient care satisfaction (Chapter 7)

- ACTAS has had in place a number of mechanisms to obtain feedback from its patients and stakeholders on key aspects of its services.
- There was no overarching policy and no procedures in place on how feedback obtained by ACTAS about its service would be processed, or how complaints would be addressed.
- There was no documented approach on how feedback would be measured, monitored or used to improve the delivery of services.

RECOMMENDATIONS AND RESPONSES TO THE REPORT

- 1.14 The audit made 17 recommendations to address the audit findings detailed in this report.
- 1.15 In accordance with section 18 of the *Auditor-General Act 1996*, a final draft of this report was provided to the Commissioner for Emergency Services and the Acting Chief Executive of JACS for consideration and comments.

- 1.16 The key points of the Acting Chief Executive's overall response are shown below:

The Department of Justice and Community Safety welcomes the Auditor-General's Performance Audit of the effectiveness of the ACT Ambulance Services operational response to emergency and non-emergency incidents. While Audit's recommendations are agreed in the main there are however a number of key findings and associated statements which are not agreed to.

The Auditor General's recommendations on opportunities to enhance the internal procedures and control environment within ACTAS are welcomed. Over the past several years ESA, with support of Government, introduced a range of organisational changes to reconcile increased demand against the costs of service delivery. Some of these key changes include introduction of rostering practices more effectively aligned with the variable and changing demands of the ACT community; increase to the size of its highly specialised fleet of response vehicles; recruitment of thirty additional positions to the Ambulance Service over the last two years; introduction of new qualifications aligned within the National Health Training Package and enhancements to a state of the art trunked radio network system.

The Audits observations on the enhancements required in the administrative support around service delivery are acknowledged however, as with any key service delivery area the implementation of administrative process is balanced with the overriding priority to deliver a 24 hour seven day per week essential public service which impacts on the health and lives of the Canberra community.

The issue of most significance arising from the findings is the potential community perception of ESA capacity to respond to an emergency – in particular, the audit findings which form the opinion that the Canberra community "has" not always received care on a timely basis. The Department does not support this finding and points out that the methodology used by Audit in calculating priority one responses on a suburb by suburb basis is, to the best of the Department's knowledge not used by any other Ambulance Service in Australia in measuring priority one response times across a metropolitan area.

Notwithstanding the recommendations for areas where practice could be enhanced, ESA has at all times continued to protect the ACT community by ensuring uninterrupted delivery of high quality services to the residents of the ACT and its visitors.

The day to day operations of ESA involves a broad range of risk management and risk mitigation activities that can be properly defined as "risk management planning". The Department agrees that there is scope for improvement in formalisation of a number of administrative aspects, however not at the expense

of frontline operations in a tough fiscal environment, unless those administrative improvements impact positively on operational outcomes.

In addition, the Acting Chief Executive provided responses to each recommendation, as shown below:

Recommendation 1 (Chapter 2)

ACTAS should revise its Business Plan to address key priorities and activities for each key service delivery function. This would include clearer expected outputs to be delivered annually and their prioritisation.

JACS' response:

Agreed in part. The ACTAS Business Plan is reviewed annually. Timing of the 2009 review will be adjusted to ensure alignment with the ACT Emergency Services Agency Business Plan and outputs specified in the Budget Papers. These will be reported in the Department's Annual Report.

Recommendation 2 (Chapter 2)

ACTAS should develop a comprehensive performance management framework that includes key performance indicators and targets aligned to its service delivery activities, to help inform management and stakeholders of its performance.

JACS' response:

Agreed in part. Key performance indicators and targets are specified in the Budget Papers and performance against them is reported in the Department's Annual Report.

Recommendation 3 (Chapter 2)

ACTAS should enhance its approach to risk management by:

- systematically identifying risks to the delivery of services;
- developing and implementing appropriate mitigation strategies; and
- systematically monitoring risks and their treatments.

ACTAS' response:

Agreed. The operations of Ambulance involve a broad range of risk management and risk mitigation activities that can be properly defined as "risk management planning". ESA identifies this as a key priority. This program is being implemented consistent with resourcing priorities.

Recommendation 4 (Chapter 3)

ACTAS should enhance its approach to demand modelling in order to better guide current and future ambulance resourcing by:

- identifying the drivers of demand and what data it will collect and collate in order to model future demand; and
- modelling demand data by time of day and geographical distribution of incidents.

JACS' response:

Agreed in part. The introduction of variable rostering practices was based on collection and analysis of data on emergency incidents by time of day. ESA already deploys available ambulance resources to maximise responsiveness to community demand. ESA will continue to identify key drivers of demand as an inherent requirement for future development and maintenance of capability. This program is being implemented consistent with ESA resourcing priorities.

Recommendation 5 (Chapter 4)

ACTAS should log all emergency calls on CAD to document non-ambulance dispatch decisions, and to provide more complete data on demand.

JACS' response:

Agreed. ACTAS has already taken steps to ensure that in-service training provided to communications centre staff reinforces the requirement to log all emergency calls.

Recommendation 6 (Chapter 4)

ACTAS should:

- develop appropriate guidance and procedures on ambulance dispatch decisions;
- collate and monitor information on ambulance dispatching; and
- develop a quality assurance process to facilitate review and, where necessary, improvement of clinical decisions made by dispatchers.

JACS's response:

Agreed in part. ESA has relevant guidelines providing advice to operators on dispatch procedures that are updated on an 'as required' basis.

Recommendation 7 (Chapter 4)

ACTAS should develop and implement as a matter of priority, appropriate strategies to address declining response times.

JACS's response:

Agreed in part. As noted by Audit the Ambulance service delivered a complex range of services against growing demand and limited capacity.

This increased demand has been recognised by government with ESA receiving significant additional funding in the 2007-08 & 2008-09 budgets. This has allowed ESA to enlarge the size of its emergency and non-emergency fleet, procure a specialised vehicle to safely manage morbidly obese patients, maintain a state of the art radio communications system and recruit thirty (30) additional positions to areas of front line emergency, non emergency and operational support.

It is accepted that increased demand plays a part in the capacity to improve. Appropriate strategies include seeking increased efficiencies in the first instance.

Recommendation 8 (Chapter 4)

ACTAS should develop policies and guidelines to assist ambulance officers' decisions on whether or not to transport a patient to hospital. This guidance might include appropriate responses when a mentally impaired patient declines transport or treatment, and when to call on management or clinical guidance.

JACS's response:

Agreed. ACTAS has already commenced the drafting of guidance for officers to assist with decision making on whether or not to transport a patient to hospital.

Recommendation 9 (Chapter 5)

ACTAS should improve systems to manage its non-emergency transport services, provide training and guidance to staff on use of these systems, and implement a quality assurance process.

JACS's response:

Agreed in part. ESA is engaged in a review of systems to support non-emergency transport services. This process includes the provision of training to Ambulance Support Officers and changes to the Computer Aided Dispatch System to more effectively manage delivery of non-emergency transport services.

Recommendation 10 (Chapter 5)

ACTAS should implement systems to enable the accurate collection and measurement of non-emergency ambulance service bookings to facilitate monitoring of performance and the provision of accurate advice to Government.

JACS's response:

Agreed. As noted in the response to the recommendation above significant changes are being implemented which will assist in the accurate collection and measurement of service bookings.

Recommendation 11 (Chapter 6)

ACTAS should specify and document the role of each of its various clinical governance processes, how they relate to each other, and how these will be managed, measured and monitored within an overarching clinical framework.

JACS's response:

Agreed in part. ACTAS' clinical governance processes include the Clinical Advisory Committee, Clinical Management Guidelines, Patient Care Report Review, Specific Reviews and Medical Reviews. It is agreed that these processes need to be updated and consolidated into a single overarching framework.

Recommendation 12 (Chapter 6)

ACTAS should conduct formal reviews of its clinical procedures manuals in consultation with its Clinical Advisory Committee, and develop guidance to oversight these reviews.

JACS's response:

Agreed in part. The Clinical Advisory Committee reviews clinical practice and clinical management guidelines and makes recommendations to the Ambulance Chief Officer.

Recommendation 13 (Chapter 6)

ACTAS should improve patient care processes by:

- developing risk-based procedures for selecting, planning and conducting 'Patient Care Record Reviews', 'Specific Reviews' and 'Medical Reviews';
- monitoring whether these reviews are carried out as planned; and
- reporting results to management.

Management in turn should monitor whether agreed recommendations are implemented.

JACS's response:

Agreed in part. Ambulance clinical governance processes are aimed at managing and improving patient care outcomes. These include the Clinical Advisory Committee, Clinical Management Guidelines, collection of complaints related to treatment, Patient Care Report Review, specific reviews and medical reviews. ESA agrees that these processes need to be upgraded towards improving the

monitoring of specific trends in patient care, reporting of analysis results and implementation of agreed recommendations.

Recommendation 14 (Chapter 6)

ACTAS should establish a clinical information database that:

- enables the tracking and analysis of patient care records;
- facilitates improvements to the clinical care of patients; and
- provides an evidence based dataset to inform the future planning of the delivery of ambulance services.

JACS's response:

Agreed. The introduction of an electronic patient care record system has been identified as a priority for 2009 -2010.

Recommendation 15 (Chapter 7)

ACTAS should develop a policy that provides direction on what type of feedback it will seek, from whom it will seek the feedback, and how this feedback will be used to improve the patient care experience.

JACS's response:

Agreed in part. ACTAS maintains a range of feedback mechanisms however agrees that the current process could be enhanced.

Recommendation 16 (Chapter 7)

ACTAS should develop and implement policies and guidance to staff on how complaints should be assessed and actioned, including timeliness targets.

JACS's response:

Agreed. ACTAS agrees that the current complaints handling mechanism could be enhanced.

Recommendation 17 (Chapter 7)

ACTAS should develop a set of standards to measure and monitor patient satisfaction, so that improvements to the service can be made, based on patient satisfaction information.

JACS's response:

Noted. ACTAS currently conducts an annual patient satisfaction survey and monitors trends over time.

2. MANAGING AMBULANCE SERVICES

INTRODUCTION

- 2.1 ACTAS is required to manage the delivery of a complex range of services. These services involve responding to serious accidents, sudden illness, and providing a range of procedures and practices that substantially impact on the well-being, mortality and morbidity of patients requiring emergency and non-emergency assistance.

KEY FINDINGS

- The Department of Justice and Community Safety's Strategic Plan did not provide the strategic guidance and direction to ACTAS staff on what was expected to be achieved and how ACTAS performance would be measured.
- ACTAS' Business Plan did not clearly specify or capture the scope of work delivered across each of ACTAS' service areas. As a result ACTAS was not actively focused on managing delivery of some services for greater effectiveness.
- ACTAS did not have a sufficiently comprehensive performance management framework by which to manage and monitor performance of service delivery. This makes it difficult for management to fully assess, monitor and report on performance.
- There was no specific risk management plan for ACTAS. There were a number of risk areas which warranted consideration of, and assessment by ACTAS.

STRATEGIC DIRECTION

- 2.2 The strategic direction of ESA (and ACTAS) is articulated in the Department of Justice and Community Safety's (the Department's) Strategic Plan.⁴ The Plan covers a broad range of policy and operational activities, which provide either justice or community safety services to the ACT. There are two goals with 25 guides for each goal, 17 strategies and 12 measures stated within the Department's Strategic Plan. None of these are specific to ACTAS, which is a key functional area of JACS.
- 2.3 The Department advised Audit that the Strategic Plan's structure is intended to reflect the common goals of all its business areas, which are to 'improve service delivery to government and community and to ensure we continue to meet community needs into the future.'
- 2.4 In examining the Department's Strategic Plan, Audit found that it was insufficiently clear as to which elements of the Plan's 'Strategies' and 'Measures' of success applied to ESA.

⁴ *Our Plan for Justice, Our Plan for Community Safety*, ACT Department of Justice and Community Safety's Strategic Plan 2008-11.

- 2.5 Furthermore, the specification of the Plan's stated 'Strategies' and 'Measures' lacked sufficient definition to be clear or assessable. For example, the strategy 'improving the accessibility and effectiveness of our service' might involve ensuring that Canberra suburbs are equitably serviced, or involve improving overall emergency services to all key stakeholders (which would lead to very different strategies), but these are unclear from the strategy.
- 2.6 The Department advised Audit, that the Plan's stated 'strategies are not exhaustive' and that 'these strategies are generic and applicable to all business units dependent on their service delivery obligations and maturity. Business units undertake these via a range of differing activities to various degrees and (these) are generally articulated through business plans.' Additionally, the Department advised that the Plan's stated measures are 'variable and depended on business activity.'
- 2.7 However, the Department's 'Strategies' and 'Measures' were not articulated through ESA or ACTAS Business Plans. ESA and ACTAS' business plans were developed prior to the Department' Strategic Plan and have not been updated to reflect or align with the Department's Strategic Plan.
- 2.8 Overall, Audit considers that the Department's Strategic Plan provided little strategic guidance and direction to ESA staff on what was expected to be achieved and how ESA's performance would be measured.

BUSINESS AND OPERATIONAL PLANNING

- 2.9 ACTAS' Business Plan lists eight *Key Priorities*, which have been identified as critical to ACTAS' ongoing development and growth over the next three years:⁵
- Operational Response Capability;
 - Risk Based Resource Allocation;
 - Training;
 - Recruitment, Retention and Industrial Relations;
 - Fleet, Facilities and Resource Management;
 - Governance Enhancement;
 - Public Awareness and Community Education; and
 - Emergency Services Agency Headquarters.
- 2.10 These are aligned with ESA's Business Plan. For each *Key Priority* there are stated outcomes, action strategies, timelines and responsibilities.
- 2.11 There were no operational plans to support ACTAS' Business Plan for each of its 'service' areas: Clinical Services, Operational Services, and Operational Support.

⁵ ACTAS Ambulance Service Business Plan, 2007-08-2010, pg 3.

Instead, planned ‘Outcomes’ and ‘Activities’ for each of ACTAS’ service areas are included within ACTAS’ Business Plan and are variously grouped together according to the eight identified key priority areas for ACTAS.

- 2.12 Audit found that ACTAS’ Business Plan’s ‘Outcomes’ and ‘Activities’ did not clearly specify or capture the scope of work delivered across each of ACTAS’ services areas.
- 2.13 For example, ACTAS’ current Business Plan did not address Patient Transport (PT) Services, operationally or strategically. Consistent with this, Audit found a number of weaknesses in ACTAS’ delivery of PT Services. These are discussed in Chapter 5.
- 2.14 Furthermore, none of the Business Plan’s stated ‘Activities’ were prioritised. Management of a large number of activities without prioritisation may result in a lack of focus in both strategic direction and operational implementation.

Recommendation 1

ACTAS should revise its Business Plan to address key priorities and activities for each key service delivery function. This would include clearer expected outputs to be delivered annually and their prioritisation.

PERFORMANCE MANAGEMENT

- 2.15 ACTAS is required to report against agreed performance measures in the Department of Justice and Community Safety’s Annual Report and to the Council of Australian Governments (COAG) Report on Government Services (ROGS).
- 2.16 ACTAS has an ‘Information Management System’ by which it monitors, for example, the number of incidents by priority, incident types (e.g. cardiac) and the percentage of activity for each type.
- 2.17 ACTAS also has a number of quantity target measures for delivery of its services, such ‘as an Ambulance will be dispatched within 45 seconds of receiving the 000 call.’ However, reflecting the weaknesses in ACTAS’ planning documents, these measures and targets do not cover the scope of ACTAS’ key processes and deliverables. They do not measure ambulance availability, timeliness of responses by individual suburbs, or timeliness of ACTAS’ complaint’s review processes.⁶
- 2.18 In conclusion, ACTAS did not have a sufficiently comprehensive performance management framework by which to manage and monitor performance. This means that it is difficult for management to fully assess, monitor and report on ACTAS’ performance in the delivery of key services.

⁶ Complaints management processes are discussed in Chapter 7.

Recommendation 2

ACTAS should develop a comprehensive performance management framework that includes key performance indicators and targets aligned to its service delivery activities, to help inform management and stakeholders of its performance.

MANAGING RISKS TO DELIVERY

- 2.19 The Department of Justice and Community Safety has established an Enterprise Risk Management (ERM) framework, which is articulated in the Department's Business Risk Management Plan 2007-08. Together, the framework and plan set down the methodology by which risks are identified, monitored and reviewed across the Department and each of its business units such as ESA.
- 2.20 The Plan also states the key risk for each of its business units, such as ESA. The ESA key risks are broadly specified and generic in nature, so that they are applicable across the range of services delivered by ESA. For example, one risk is described as 'Major emergency or incident in the Territory'. However, it is not clear from the Plan how ESA will address this risk and the other risks articulated in the Plan.

ACTAS' risk management approach

- 2.21 ACTAS did not have a separate risk management plan or policy. Instead, risks that are specific to ACTAS are articulated within ACTAS' Business Plan under the heading 'Risk Based Resource Allocation'.
- 2.22 Audit found that none of the risk outcomes or activities within the Plan identified what specific risks they were addressing or what was intended to be achieved in managing a risk.
- 2.23 Furthermore, Audit found that ACTAS' approach to managing risk via the Business Plan did not enable the clear identification or assessment of the key risks facing ACTAS in the delivery of its services, including how these risks would be mitigated.
- 2.24 ACTAS has been aware of a number of risks areas which required its further consideration, assessment and actions to manage these risk areas. These are summarised in Table 2.1.

Table 2.1: Risks requiring ACTAS' consideration

Possible Risk	Possible Consequence
Assessment and treatment refused by a patient (especially by mentally impaired patients).	Adverse patient outcome.
Growth in demand outstrips operational and administrative capacity.	Poor response times → adverse patient outcome.
Inability to resource ambulance crews.	Ambulance stations close → adverse patient outcome.
Limited capability and capacity to support Special Operations, such as: <ul style="list-style-type: none"> — Major disasters and incidents; — Chemical, Biological and Radiological (CBR) incidents; and — Urban Search and Rescue for Structural Collapse of Buildings. 	Adverse patient outcome.
Interruption/breakdown of key infrastructure in the delivery of services such as: <ul style="list-style-type: none"> — Headquarter evacuations; and — Computer Aided Dispatch system goes off-line. 	Limited ability to provide coordinated ambulance service → adverse patient outcome.
Poor clinical decision making in the dispatch of ambulances.	Adverse patient outcome.

Source: ACT Audit Office (based on ACTAS information)

2.25 Audit notes that some of these risks have occurred. For example, ACTAS has experienced difficulties in being able to adequately resource ambulance crews. This resulted in 22 incidents of full shift ambulance station closures in 2007-08.

2.26 Given the nature of activities being delivered by ACTAS, the consequences of interruption or prevention to the delivery of these crucial services could be significant for ACTAS and its patients.

Recommendation 3

ACTAS should enhance its approach to risk management by:

- systematically identifying risks to the delivery of services;
- developing and implementing appropriate mitigation strategies; and
- systematically monitoring risks and their treatments.

2.27 In its response to the Report, JACS has commented that:

As noted by Audit, the services delivered by the ACT Emergency Services Agency (ESA) are provided against an environment of increasing demand and community expectation as well as factors including fiscal resources, industry change, workforce expectations and accountability requirements. Despite these challenges, the focus of ESA has been, and remains, the provision of high quality frontline

Managing ambulance services

services under the general auspices of the Emergency Services Commissioner who has statutory responsibility for the overall strategic direction and management of each of the emergency services consistent with the ESA Business Plan.

3. RESPONDING TO DEMAND

INTRODUCTION

- 3.1 This chapter examines ACTAS' response to demand for ambulance services – present and future. Demand is characterised by the number of triple zero calls to ACTAS requesting ambulance attendance.

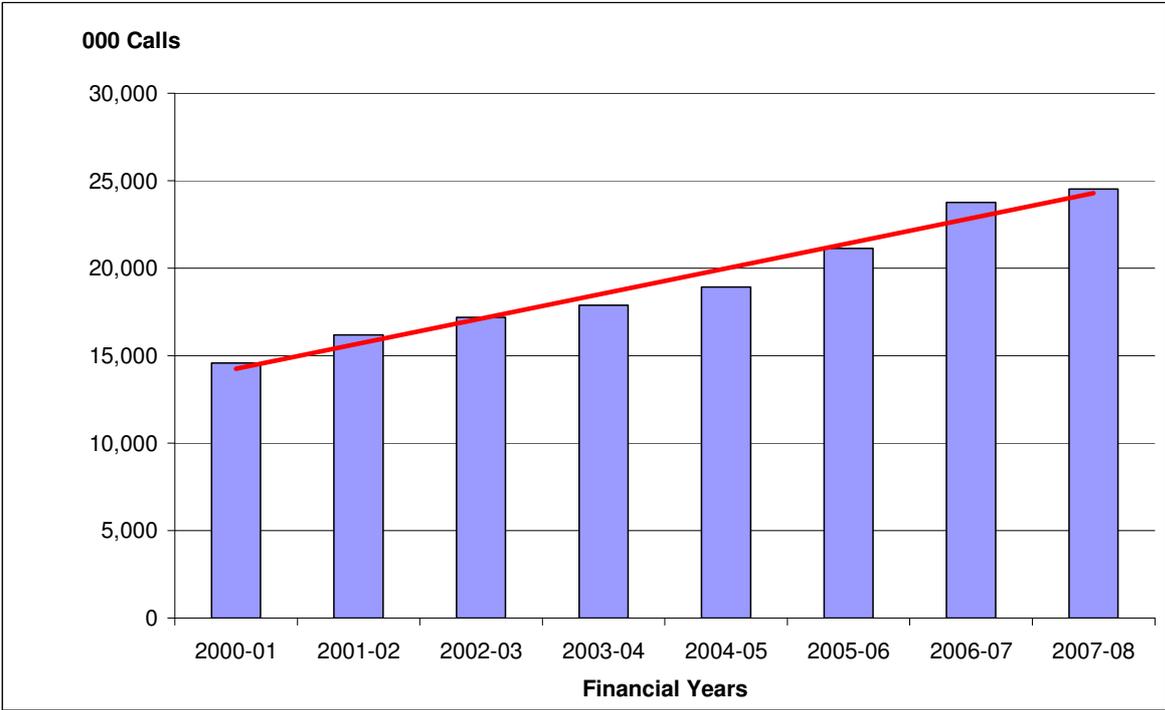
KEY FINDINGS

- Demand for emergency ambulance attendance has increased by 68 per cent between 2000-01 and 2007-08. Peak periods of demand reduced ambulance availability; translated into higher crew utilisation and longer response times. High crew utilisation rates have had implications for staff workload, fatigue management and ACTAS' ability to appropriately manage staff. ACTAS has recently implemented a roster that partially reflects peaks of demand.
- ACTAS has responded to growth in demand through a variety of mechanisms. However, it has not used demand data to manage crews according to peaks in demand by location as well as time of day. There have been poor response times for most Canberra suburbs and occasions of closure of ambulance stations due to resourcing difficulties.
- ACTAS has managed demand periods by reprioritising emergency responses and to a lesser extent, by dispatching non-intensive care paramedic ambulance and fire brigade crews and using single response units (non-stretcher vehicles crewed by a single intensive care paramedic) as emergency response measures. Accordingly, some patients were possibly not receiving the level of care that could be provided by an ICP in a timely manner.
- ACTAS has also implemented a mandatory patient off-load policy whereby patients are off-loaded at Emergency Departments after a period of twenty minutes.
- Shared Services has not been able to collect in full the expected revenue from user charges for ACTAS, which means that ACTAS' operational budget has not kept pace with demand. There should be clearer policies and systems in place across JACS, Shared Services and ACTAS to better manage the collection of ambulance fees, to ensure this source of revenue is available to support ACTAS operations.
- In 2007-08, ACTAS was unable to resource its minimum emergency response crewing levels 92 times. This resulted in 22 incidents of full shift ambulance station closures in 2007-08.
- There are a number of factors that drive demand. However, ACTAS is yet to determine what demand driver data it will collect and analyse in order to estimate and plan for future demand.

DEMAND ANALYSIS

- 3.2 Demand analysis enables organisations to predict future call demand patterns based upon the historical information available from the system.
- 3.3 Although ACTAS has recently (March 2009) undertaken work on the deployment of resources to respond to demand, Audit noted that analysis was limited to time of incident. In order to be able to match appropriate resources to current and future demand for ambulance services, ACTAS should further analyse demand data by call time and geographical distribution of incidents. ACTAS should then use this data to guide both ambulance resourcing and geographical positioning of ambulances close to known high call demand locations.
- 3.4 This will enable ACTAS to better manage the risk of not having an ambulance available when a life threatening event is called in. This is particularly important at peak call times or at particular geographical locations which historically suffer high incident rates or poor response times.
- 3.5 Since 2000-01, calls requesting ambulance attendance have increased by approximately 68 per cent.⁷ This represents an annual average increase of approximately eight per cent per year as illustrated in Figure 3.1.⁸

Figure 3.1 Triple zero calls for emergency assistance 2000-01 to 2007-08



Source: ACTAS Communication Centre

⁷ This figure only captures requests for emergency ambulance attendance and does not include other ambulance services.

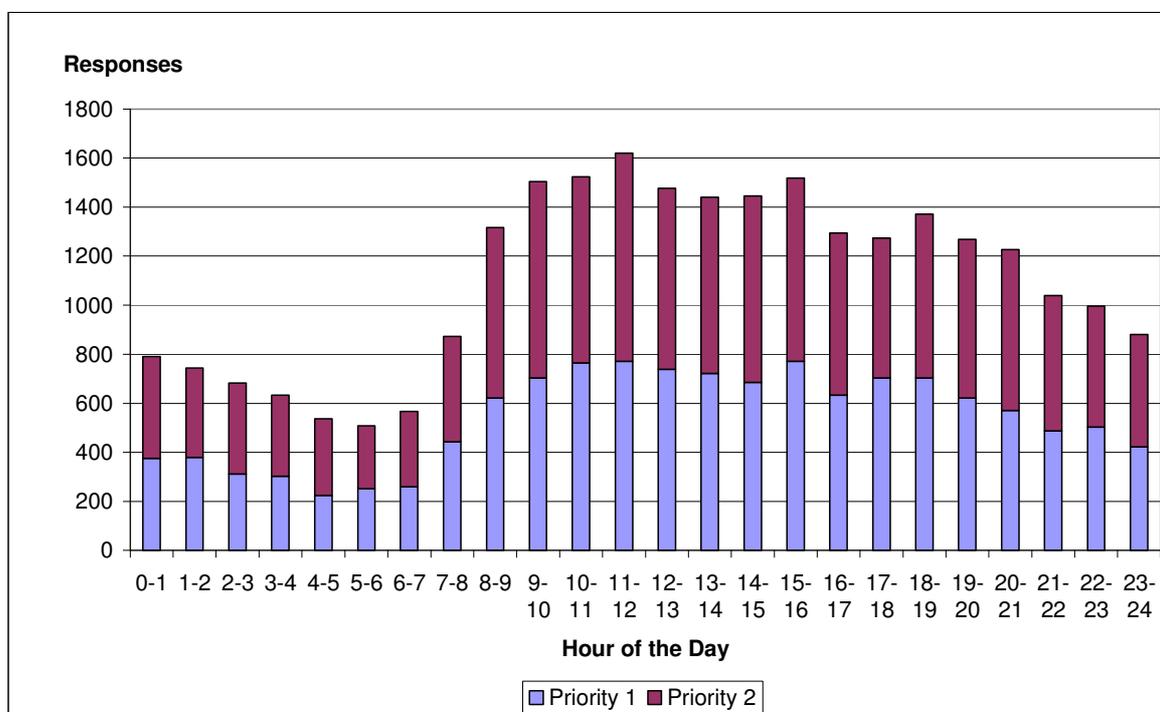
⁸ In 2007-08, ACTAS also received 24,424 other call types (inquiry, patient transport bookings, etc).

- 3.6 As illustrated in Figure 3.1, in 2007-08, ACTAS received a total of 24 525 triple zero calls for ambulance assistance. To meet that call demand, ACTAS provided an estimated 26,000 emergency responses in the same period.⁹
- 3.7 Based on this historical data, ACTAS can expect projected demand to continue to increase. This is supported by recent national studies, which have suggested that demand for Ambulance services will continue to rise substantially for the foreseeable future.¹⁰

Time distribution of demand

- 3.8 To assess historical demand, Audit calculated the twenty-four hour time distribution of priority 1 and 2 emergency responses from ACTAS 2007-08 batched CAD data.¹¹

Figure 3.2 Emergency response demand curve 2007-08



Source: ACTAS 2007-08 batched CAD data

- 3.9 As illustrated in Figure 3.2, the period of highest peak demand for ambulance services, is between 8.00 am and 9.00 pm after which demand steadily declines to midnight. The lowest period of demand is between midnight and 8.00am.¹²

⁹ Report on Government Services 2009, Table 9A.23 – Note: This figure does not include hospital transfers and patient transfers.

¹⁰ *Factors in Ambulance Demand: Funding and Forecasting*, Consolidated Report, Australian Institute for Primary Care, April 2007 pg 10.

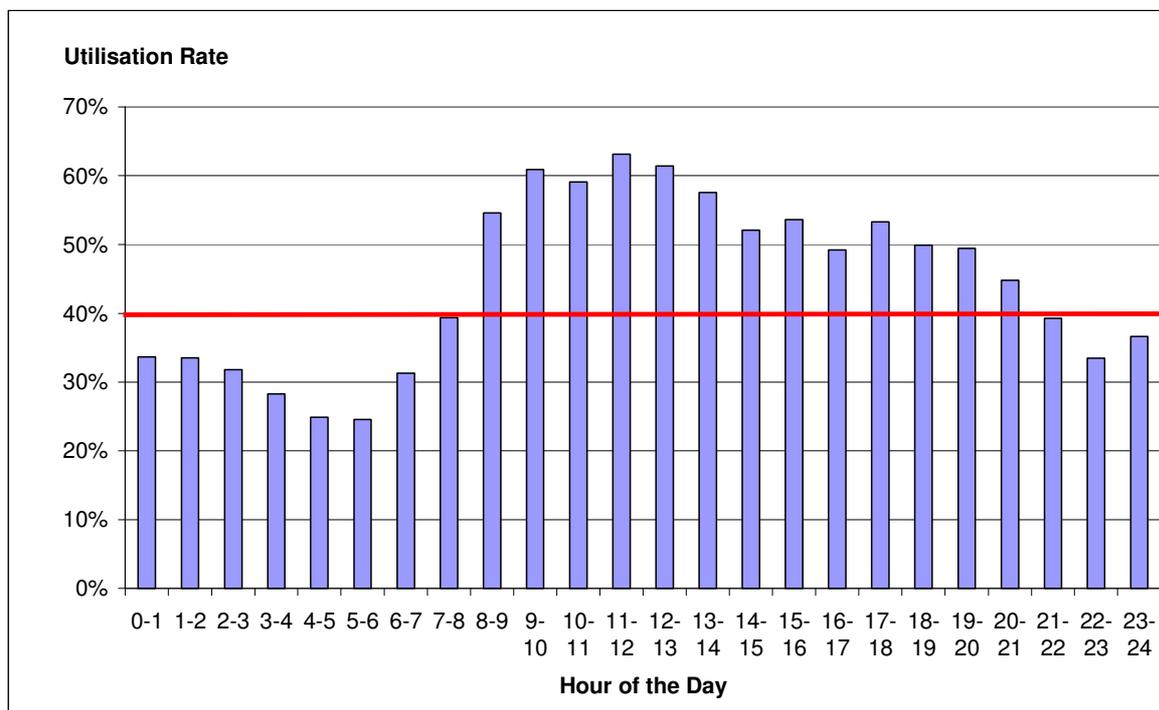
¹¹ Priority 1– Emergency response (lights and sirens), using intensive care paramedic resource; Priority 2– Emergency response (road speed), using intensive care paramedic resource.

3.10 ACTAS advised Audit that the peak demand period places considerable demands on ambulance availability and hence responsiveness.

...It is not uncommon to be faced with a circumstance where no ambulance is immediately available to respond or the ambulance needs to respond from one side of the city to the other...¹³

3.11 The accepted Australian industry utilisation rate to maintain an effective ambulance coverage and responsive service is 40 per cent across any given hour of the day.¹⁴ However, as illustrated in Figure 3.3, crew utilisation rates averaged over a twelve month period for 2007-08, can climb as high as 63 per cent at twelve noon.

Figure 3.3 Crewing utilisation rate (averaged) 2007-08



Source: ACTAS

3.12 ACTAS has advised that high utilisation rates have had implications for staff workload, fatigue management and ACTAS' ability to provide staff with appropriate meal breaks.

¹² While the data illustrates an average 24 hour distribution over a 12 month period, ICPs advised Audit that this distribution changes for Thursday, Friday and Saturday evenings because there is higher demand for ambulances during these periods due to increased Canberra night time activities.

¹³ ACTAS internal report: Decreasing Ambulance Availability and Declining Response Times of the ACT Ambulance Service, 14 November 2005, pg 7.

¹⁴ Utilisation rates are used to measure resource 'productivity', and are calculated as a percentage of the time spent on task against the time available for tasking (e.g. an ambulance crew that spends 5 hours of a 10 hour shift actually responding to emergency incidents has a utilisation rate of 50 per cent).

- 3.13 As a result, ACTAS response times to emergencies in Canberra have been steadily worsening as demand increases. Response times are discussed in Chapter Four.
- 3.14 In addition, it clear from preliminary analysis of peak demand, that some stations are no longer positioned geographically to provide optimum coverage for Canberra.
- 3.15 ACTAS states that during the day and during peak periods, an ambulance is more likely to be dispatched to an emergency incident while ‘on the road’ rather than at a station. However, the reverse is often the case during the night. Dispatching from the road and not from ambulance stations is due, in part to:
- high demand and constant mobility of the ambulance service – until March 2009, there were only seven ambulance crews rostered on 24 hours a day. Table 3.1 shows that there are now different crew levels according to time of day; and
 - location of some existing ambulance stations.

How has ACTAS responded to demand?

- 3.16 ACTAS’ resource deployment policy states that crews and resources are allocated to stations based on predicted locations where incidents are likely to occur (by time of day).¹⁵
- ...ambulance crews will be deployed to an ambulance station, to provide operational coverage to an area, minimising response times to emergency cases.¹⁶
- 3.17 In practice, ACTAS has not fully used demand data to better manage crews, their locations and their resourcing according to peaks in demand by location as well as time of day. In March 2009, it implemented a new roster to partially reflect expected peaks in demand.
- 3.18 Snowy Hydro SouthCare Intensive Care Flight paramedics also form part of Canberra’s seven ambulance crew. SouthCare Missions result in immediate withdrawal of paramedics from one of the seven paramedic crews rostered to service Canberra.¹⁷
- 3.19 In addition, Audit found that while not an ACTAS policy, there were number of examples where peak periods of demand were managed by re-prioritising some Priority 1 emergency incidents to a Priority 2, with Priority 2 responses down graded to either a Priority 3 or 4 responses, so that ACTAS could delay the

¹⁵ ESA Station Relocation Feasibility Study / TP3 ACTAS Locations, Sites and Facilities, pg 3.

¹⁶ Deployment of ACTAS Resources, Policy Statement, 9 September 2002, pg. 6.

¹⁷ In 2007-08, ACTAS provided an Intensive Care Paramedic crew for 375 SouthCare missions.

dispatch of an ambulance because of ambulance unavailability.¹⁸ The practice of re-prioritisation was recently addressed.

- 3.20 Other mechanisms that ACTAS has employed include requesting either Ambulance Support Officers, or the ACT Fire Brigade to provide a first response until a backup Intensive Care Paramedic crew can arrive at the scene. In 2007-08, Ambulance Support Officers responded to 150 emergencies, while the Fire Brigade responded to 266 emergencies. While these two groups are trained to provide first aid care to an advanced level,¹⁹ neither is trained to the level of an intensive care paramedic. This means that some patients are possibly not receiving the level of care that can be provided by an ICP, in a timely manner. ACTAS commented that the use of the ACT Fire Brigade for medical assistance reflects national practice.
- 3.21 In addition, since 2001, ACTAS has also used Single Response Units (two units since 2006) on an ad hoc basis as an interim emergency response measure when ICP ambulance crews are unavailable. Single Response Units are non-stretcher vehicles crewed by a single intensive care paramedic.²⁰
- 3.22 Audit acknowledges that ACTAS adopts practices of allocating available resources to the most urgent cases based on information received from the caller.
- 3.23 To deal with peak demand periods, ACTAS implemented a demand roster from 2 March 2009, where additional crews were rostered on during peak periods. Table 3.1 shows the new demand roster for crews, which includes the SouthCare Mission crew.

Table 3.1: Demand roster

Shift	Crew Levels
11.00pm-7.00am	7 crews
7.00am-11.00am	8 crews
11.00am-7.00pm	9 crews
7.00pm-11.00pm	8 crews

Source: ACTAS

- 3.24 ACTAS also implemented a mandatory patient off-load policy in 2007 at Canberra Hospital Emergency Departments, whereby patients were off-loaded into the care of a nurse onto a stretcher, after a period of twenty minutes regardless of whether there was an emergency bed available, thereby freeing up ambulance resources to attend to the next emergency.²¹

¹⁸ Prioritisation of ambulance dispatches is discussed in Chapter 4.

¹⁹ Advanced first aid care includes oxygen and defibrillation.

²⁰ These units cannot transport patients.

²¹ ACTAS data analysis in 2005 reported an average of 34 hours per week lost in ambulance availability due to delays off-loading patients from ambulance stretchers at hospitals.

Use of demand data

- 3.25 ACTAS has yet to systematically analyse the geographical distribution of incidents so that it can effectively manage ambulance resources. This is despite having the capacity to do so with ACTAS' Computer Aided Dispatch System (CAD) which would enable analysis of incident location and time of occurrence. Such analysis would enable ACTAS to predict where incidents might occur, which would provide information as to where to best locate an ambulance resource.
- 3.26 ACTAS has advised that analysis of such data formed the basis for the introduction of the Deployment of ACTAS Resource policy and was also analysed as a component of the Strategic Station Feasibility Study. However, Audit found that ACTAS' work was not comprehensive and did not analyse incidents by location, time and number of incidents.

Funding for ACTAS

- 3.27 The ACT government provides annual appropriation to the ESA, which takes into account projected ESA revenue and user charges. The ESA in turn allocates an operational budget to ACTAS and other emergency services, according to the priorities of the ESA.
- 3.28 Within the ESA, the funding to ACTAS is based on prior year actual expenditures and indexing of that expenditure. This budget is not linked to the number of ambulance services provided, or growth in demand.
- 3.29 As for other agencies, funding to address increases in demand for ambulance services is considered through the annual budget process when ESA brings forward its budget proposals for new initiatives, as well as to address increases in demand through the annual budget process.
- 3.30 Between 2006-07 and 2008-09, two out of five budget proposals put forward by ACTAS resulted in additional funds to address ambulance response capability. These funds were appropriated over the last two budgets (2007-08 and 2008-09) via Output 4 of JACS and provided:
- in 2007-08 budget, \$4.9 million over four years for additional 16 staff, two additional intensive care ambulances, one Specialist Bariatric vehicle, and one Patient Transport Vehicle;²² and
 - in 2008-09 budget, \$6.746 million over four years for 14 staff and biometric safes.
- 3.31 Audit notes that while government appropriation to ACTAS has increased in recent years, the revenue collected from non-government user charges (ambulance

²² Audit notes that \$0.5 million of the funding provided was through a recurrent off-set against the 2007-08 initiative. A bariatric vehicle is for the safe and efficient transport of morbidly obese patients.

fees and charges), which forms part of ACTAS' funding base has declined because these charges have not been collected in full.

- 3.32 Indeed in 2006-07 and 2007-08, 'Bad and Doubtful Debts' accounted for \$1,045,762 and \$1,566,742, or seven and nine per cent respectively of ACTAS' operational budget. This compared to only \$157,181 of debts in 2005-06. As a result, actual base funding available for ACTAS' operation was reduced in these years by the same amount of uncollected ambulance fees and charges, classified as 'Bad and Doubtful Debts'.
- 3.33 Shared Services advised that as of March 2009, total ambulance debt was \$4.46 million, with the provision for doubtful debts at \$2.6 million. The provision level increased when the doubtful debt calculation methodology changed after Shared Services' commencement of collection of fees in 2007.

Table 3.2: ACTAS' recent years' expenditure budget* and debt liabilities

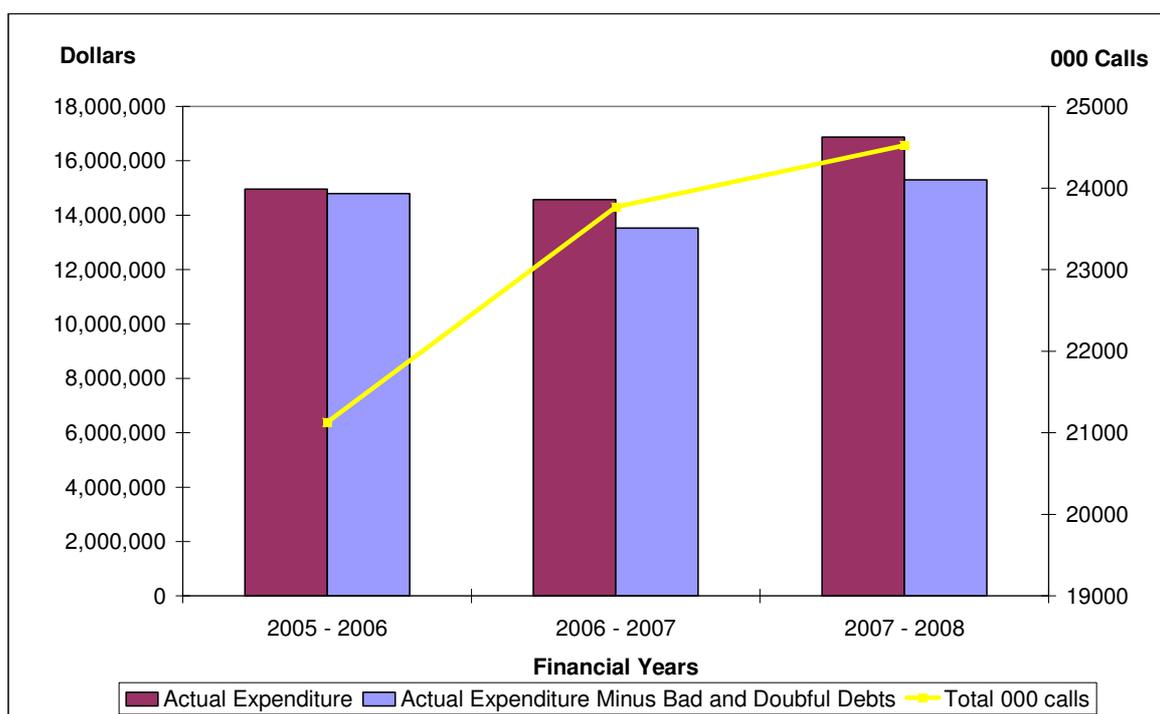
Years	Operational expenditure	Bad and Doubtful Debts	Actual Operational expenditure after bad and doubtful debts
2005-06	\$14,960,121	\$157,181	\$14,802,940
2006-07	\$14,567,132	\$1,045,762	\$13,521,369
2007-08	\$16,867,303	\$1,566,742	\$15,300,561
Percentage increase between 2005-06 and 2007-08	12.75%	-	3.36%

Source: ACTAS Oracle Summary

* Note: Excludes ACTAS' share in JACS and ESA overheads and corporate costs.

- 3.34 As indicated in Table 3.2 and Figure 3.4, ACTAS' operational expenditure grew by 12.7 per cent from 2005-06 to 2007-08, while triple zero call demand for ambulance services increased by 16 per cent for the same period. However, actual expenditure by ACTAS grew by just over three per cent during the same period because of 'Bad and Doubtful Debts'.

Figure 3.4 ACTAS expenditure compared with growth in triple zero calls



Source: ACTAS Oracle Financial Data

- 3.35 JACS advised Audit that it expected ambulance fees debts to be uneconomical to recover. This is due to difficulties in either identifying who to invoice for the service, or the invoiced user refuses or can not settle their account due to financial reasons. ACTAS is charged a fee by ACT Shared Services for the collection of ambulance fees and charges, including the pursuit of debt.
- 3.36 Audit considers that JACS, ACTAS and Shared Services should jointly analyse the reasons behind the high level of debts, and implement clearer policies and systems to better manage the collection of ambulance fees, to ensure this source of revenue is available to support ACTAS operations. ACTAS advised Audit that it has commissioned an external auditor’s report to examine ‘bad and doubtful’ debt practices.
- 3.37 ACTAS advised Audit that future growth of ACTAS must reflect increased community demand of services.
- 3.38 In 2007-08, Audit found that ACTAS was unable to resource its minimum crewing levels 92 times. That is, 13 per cent of all shifts in 2007-08 were below the seven minimum crews required to maintain ambulance coverage.²³ Inability to resource crew shifts resulted in 22 occurrences of ambulance stations full shift closures in 2007-08. This is despite ACTAS’ extensive use of overtime as a mechanism to resource crew rosters. Audit found ACTAS used overtime to

²³ Audit has applied a shift definition consisting of seven rostered ambulance crews.

maintain minimum crewing levels 263 times (or 34 per cent of all shifts) in 2007-08.

- 3.39 Overall, Audit considers that improvements are required in the management of ACTAS' response to increasing demand for ambulance services. Since ACTAS has not received in full the expected revenue from user charges, its operational budget has not kept pace with demand. Further, ACTAS' modelling of demand data is also not sufficiently developed to enable ACTAS to effectively target service delivery to the Canberra community and to strategically plan for ACTAS' future.

DRIVERS OF DEMAND

- 3.40 The Council of Ambulance Authorities²⁴ has identified a number of factors which drive demand, such as:

- demographic change;
- social change;
- clinical and epidemiological factors;
- changes in medical practice and patient management;
- accessibility of alternative services;
- quality and accessibility of ambulance services; and
- community expectations, including awareness of early intervention.²⁵

- 3.41 However, with the exception of demographic change, few national data sets are available to estimate the relative impact that each factor may have on demand.

Factors that drive demand

- 3.42 ACTAS has recognised that there are a number of factors which drive demand for its ambulance services. These factors are discussed in Emergency Services Agency's (ESA) recent 'Station Relocation Feasibility Study (2007)', which identifies and discusses the range of factors which impact on ACTAS' service delivery.

²⁴ The Council of Ambulance Authorities Inc. (CAA) is the peak body representing the principal statutory providers of ambulance services in Australia, New Zealand and Papua New Guinea.

²⁵ *Factors in Ambulance Demand: options for funding & Forecasting, Consolidated Report*, Australian Institute for Primary Care, Australian Institute for Primary Care, Council of Ambulance Authorities, April 2007, pg 11.

3.43 The study identified the following drivers of demand for the ACT:

Aging population of the ACT	ACTAS has identified 65 as the age at which the likelihood of a person requiring ambulance services will increase. ²⁶
Aged population distribution	ACTAS has undertaken analysis which shows the 2006 geographical distribution of population aged 65 and above in the ACT and the likely concentrations of this age group in 2032.
Reduced availability of medical services	According to the CAA, reduced access to primary health and community support services may also be associated with an increase in demand for services. ²⁷
Availability of hospital beds	Due to increased pressure on hospital services, patients spend less time in hospital, which may result in an increase in demand for ambulance services.
Changing population health	According to the CAA, disease patterns will affect ambulance utilisation simply by changing the number of people within the population who live longer with serious chronic illnesses. ²⁸

Source: ESA

3.44 However, ACTAS has not determined what demand driver data it will collect and how this data could be used to best model demand and inform ACTAS of the most efficient use of its ambulance resources. This is despite ACTAS recognising that:

...the key driver of demand for ambulance services is ‘people’, the future of ambulance services in the ACT will, for the most part, be determined by future population characteristics as well as any policy changes to the health sector as a whole.²⁹

3.45 In practice, ACTAS collects data against key ambulance activity indicators. These include:

- emergency triple zero call activity;
- incidents counts;
- responses counts;
- transport not required (TNR) rates; and
- hospital destination.

²⁶ According to the ABS, the ACT has the fastest aging population in Australia, which means there will be more members of the population aged 65 and above.

²⁷ *Factors in Ambulance Demand: options for funding & Forecasting, Consolidated Report*, April 2007, Australian Institute for Primary Care, Australia Institute for Primary Care, Council of Ambulance Authorities, April 2007, pg 10.

²⁸ *ibid*, pg 12.

²⁹ ESA Station Relocation Feasibility Study TP3 ACTAS Locations, Sites and Facilities, pg 4.

Conclusion

3.46 According to the Council of Ambulance Authorities, there are a number of inherent difficulties in quantifying potential demand drivers. In particular, there is little useful data describing the characteristics likely to be useful in determining the role such a factor might play in driving changes in demand.

This is particularly so with respect to such potential drivers as socio-economic change, community expectations, and substantially so in the case of changes in medical practice and patient management. However, relatively reliable data relating to demographic change are available.³⁰

3.47 Since 2003, most Australian jurisdictions have been collecting and storing demand data on demographic and other characteristics of actual users of emergency ambulance services in order to be able to model future demand.³¹

3.48 However, ACTAS has not determined what demand driver data it will collect about the ACT's population and how this data will be used to strategically position ACTAS to meet future demand.

Recommendation 4

ACTAS should enhance its approach to demand modelling in order to better guide current and future ambulance resourcing by:

- identifying the drivers of demand and what data it will collect and collate in order to model future demand; and
- modelling demand data by time of day and geographical distribution of incidents.

³⁰ *Factors in Ambulance Demand: options for funding & Forecasting, Consolidated Report*, April 2007, Australian Institute for Primary Care, Australia Institute for Primary Care, Council of Ambulance Authorities, April 2007, pg 68.

³¹ *ibid*, pp. 42, 68.

4. RESPONDING TO EMERGENCIES

INTRODUCTION

- 4.1 Survival from an out of hospital life-threatening event is directly related to ambulance response times. Optimal ambulance response times are based on an eight minute ‘window of opportunity’ to both respond and provide life saving clinical treatment.³² In the absence of intervention, a patient’s chance of survival decreases every minute. After eight to nine minutes without treatment, the chance of survival from a life threatening event such as a cardiac arrest, is less than ten per cent.
- 4.2 The ability of an ambulance to respond as quickly as possible to an emergency relies on the management of emergency calls, ambulance locations, ambulance availability at the time and how the ambulance is dispatched to an emergency.

KEY FINDINGS

- Performance against ACTAS’ own standard, which was to answer triple zero calls ‘within three rings 90 per cent of the time’ was not systematically monitored and was not measured in 2007-08.
- There was no assurance that all calls answered by Communication Centre Staff were recorded in ACTAS’ Computer Aided Dispatch (CAD) system.
- In-service refresher training for staff on emergency call taking and dispatching was only recently provided by ACTAS, after a gap of more than five years.
- There was no documented policy on ambulance refusal. Furthermore, ACTAS did not actively monitor or collate information on how often they refused to dispatch an ambulance, and any adverse consequences.
- The Clinical Dispatch Guidelines Policy was developed over eight years ago and has not been updated to reflect current practice and technology.
- There was no clinical supervision to oversight and control grading of priority ambulance responses. Audit found inconsistencies in prioritisation of ambulance responses.
- Some responses were reprioritised in order to hold an ambulance resource in case a highly critical life threatening incident was called in, requiring a lights and siren response.

³² The eight minute window of opportunity is also recognised by other international countries, such as the United Kingdom where the National Health Service established a national performance standard, which requires ambulance services to respond within eight minutes on 75 per cent of occasions to emergencies that are potentially life threatening.

- ACTAS responded to 37 per cent of all priority 1 incidents across Canberra within eight minutes, compared to a target of 50 per cent.³³ This poor response rate reflected the higher utilisation rate of crews during peak periods than the accepted Australian standard, and location of ambulance response crews. As a result, the Canberra community has not always received care on a timely basis, which is needed in a life threatening out-of-hospital event, such as a cardiac event.
- There was no documented policy to guide ambulance officers' decisions on when it was appropriate not to assess, treat or transport a patient, or whether an alternative clinical pathway was more appropriate, or when to refuse to transport a patient.

MANAGEMENT OF EMERGENCY CALLS

- 4.3 Triple zero calls for ambulance assistance are directed from Telstra to ACTAS' Communications Centre (Communication Centre Staff). Telstra presents triple zero calls to ACTAS for a period of 27 seconds. If ACTAS does not answer the call on the first presentation, Telstra represents it for another period of 27 seconds. If ACTAS still does not answer the call on the second presentation, the call gets diverted to the ACT Fire Brigade.
- 4.4 Between the hours of 07:30 – 23:30, calls are managed by two Ambulance Paramedic Communications Officers (a 'Dispatcher' and 'Primary Call Taker'), and one Ambulance Support Officer (ASO) ('Secondary Call Taker'). From 23:30-07:30, the Dispatcher and the Primary Call Taker manage calls overnight.

Answering Triple Zero calls

- 4.5 'Triple zero call answering time' has been identified for development as a key performance indicator by Australian governments within the Council of Australian Governments (COAG) framework, for inclusion in future Reports on Government Services.³⁴
- 4.6 ACTAS' internal ambulance service standard for answering triple zero calls is:
...they will be answered within three rings 90 per cent of the time.
- 4.7 Audit found that ACTAS did not systematically monitor performance against the above standard. Instead, ACTAS monitored the number of calls received that it was unable to answer. For example, in 2007-08, Communication Centre Staff answered 88 per cent of calls on their first presentation and 99.6 per cent of calls on their second presentation. The remainder were answered by the ACT Fire Brigade. As the first presentation of 27 seconds was longer than three rings, this

³³ 50 per cent represents the median of the sequential count of response times for the total metropolitan area of Canberra within the target time.

³⁴ Report on Government Services 2009, pg 9.60.

showed that the standard of answering 90 per cent within three rings was not met in 2007-08.

- 4.8 ACTAS advised Audit that it did not monitor against the standard because ACTAS' phone system was not integrated into its CAD system, which would enable monitoring against the standard.
- 4.9 Every second counts in saving a life in a medical emergency. All things being equal, the faster a call is answered, the quicker an ambulance can be dispatched. If call answering is not monitored, ACTAS does not have assurance that calls are being answered within three rings 90 per cent of the time. Furthermore, it does not have data available upon which to improve performance.
- 4.10 ACTAS expects to implement a new phone system this year that will be linked into its CAD system. This should enable ACTAS to better monitor and report against this indicator, and subsequently improve performance if necessary.
- 4.11 Audit considers that ACTAS should appropriately monitor compliance against the standard and take practical steps to improve performance against the standard.

Logging calls

- 4.12 All calls received by telephone or radio to ACTAS' Communication Centre are recorded on audio tape. During a triple zero call, information from the caller is entered into ACTAS' CAD System.
- 4.13 Audit found that ACTAS did not have assurance that all triple zero calls answered by Communication Centre Staff were recorded in ACTAS' CAD system. If an answered call does not result in an ambulance being dispatched, some Communication Centre Staff do not record this information into the CAD. This is despite ACTAS' call taking manual which sets down step by step how to record a call in CAD.
- 4.14 Although ACTAS may not have recorded all calls in CAD, it did follow its legal obligation to record all emergency calls on a voice recording system.
- 4.15 However, ACTAS did not analyse this data for future planning purposes.

The need for logging all calls

- 4.16 Logging calls is particularly important due to legal obligations, especially in the event of an adverse patient outcome when an ambulance is not dispatched.
- 4.17 Logging the calls would also provide data for future analysis as to why an ambulance was not dispatched. Reasons could include triple zero callers deciding to transport themselves or their patient to hospital, because of advice from ACTAS about ambulance delays, or a caller realising that he or she did not need an ambulance.
- 4.18 Collecting data on the percentage of calls not requiring an ambulance enables ACTAS to capture in CAD a full picture of demand and plan activities to address

demand issues. These activities might include public information campaigns designed to reduce unnecessary or non-urgent calls.

Recommendation 5

ACTAS should log all emergency calls on CAD to document non-ambulance dispatch decisions, and to provide more complete data on demand.

Staff call-taker training

- 4.19 ACTAS through ESA' Registered Training Organisation (RTO) accreditation, is accredited to provide training to ambulance officers under the Australian Qualifications Training Framework (AQTF) Health Training Package HLT07.³⁵ This includes training to staff on how to receive and respond to emergency calls. Since 2007, ACTAS has awarded eleven Certificates IV in Call Taker/Dispatch Communications.
- 4.20 Audit found that while ACTAS has recognised the importance of attainment of ambulance communication qualifications, ACTAS only recently (March 2009) provided continuing (in-service) training on emergency call taking and dispatching for all of its communication staff, after an absence of more than five years of in-service training.

The need for on-going staff training

- 4.21 ACTAS' Communications Centre is the first point of contact for people in the community in cases of emergency and for more routine matters.
- It can often be... the first link in the chain of survival.³⁶
- 4.22 Emergency call taking is done in a high pressure, stressful environment, which increases the risk of incorrect decision making. Training is fundamental to support Communication Centre Staff obtain and enter into CAD, critical primary caller information (location of incident, nature of emergency, and a call back number).

AMBULANCE DISPATCHING

Dispatch decisions

- 4.23 Ambulances are dispatched according to a prioritisation system which also determines the level and speed of an ambulance response. ACTAS uses the Emergency Services Authority's (ESA) multi agency *Computer Aided Dispatch (CAD)* system to control and dispatch ambulance crews to emergencies.³⁷

³⁵ This includes accreditation to deliver a range of qualifications from Certificate II to the Advanced Diploma level.

³⁶ Internal ACTAS report.

³⁷ ACT Fire Brigade (ACTFB), the ACT Bushfire Service and the ACT State Emergency Service also use the same dispatch system.

4.24 The Communication Centre Staff member who controls the dispatching of ambulances is known as the Dispatcher.

4.25 ACTAS can refuse to dispatch an ambulance in response to an emergency call. ACTAS advised:

This generally only occurs when there is quite sound information that the patient has no medical problem and is still requesting ambulance transport. In the case of the (Communication Centre) refusing to send an ambulance (and obviously not being able to assess the patient) – this usually only occurs in cases where the patient is well known to ambulance as a person who makes spurious calls for assistance, or where the main complaint is something very obviously trivial.

4.26 Audit found that ACTAS did not have a documented policy about ambulance refusal. Furthermore, ACTAS did not actively monitor or collate information on how often they refused to dispatch an ambulance.

Importance of guidance and monitoring

4.27 Audit considers that guidance to staff about decisions on whether to dispatch an ambulance would facilitate robust clinical decision making, transparency and provide assurance to the community that all calls for assistance are equitably and consistently managed.

4.28 In addition, the collation of information on dispatch decisions would further assist ACTAS to monitor trends and decisions on ambulance dispatching and provide data for demand modelling.

Prioritisation of dispatch

4.29 Ambulances are dispatched according to prioritisation of an emergency incident. After the description of an emergency incident is entered into CAD, the CAD system automatically assigns a default priority response to that emergency.

4.30 A Communication Centre ‘Dispatcher’ can then change the default CAD priority and the type of ambulance response provided on the CAD system. This must be undertaken in accordance with ACTAS’ Clinical Dispatch Guidelines.³⁸

4.31 Priority response classifications used by ACTAS and designated in CAD are:

- Emergency response types:
 - Priority P1 – Emergency response (lights and sirens), using intensive care paramedic resource;
 - Priority P2 – Emergency response (road speed), using intensive care paramedic resource.

³⁸ Paramedics have the ability to reprioritise a priority response, if they believe on reasonable grounds what type of response is required according to information available to them.

- Non- emergency response types:
 - Priority P3 – Inter-hospital transfers;
 - Priority P4 – Non- emergency patient transfers.
- 4.32 Data from CAD forms the basis of reports to government on key performance indicators.
- 4.33 However, audit notes that staff internal submissions made in May 2008 to ACTAS management state that CAD ‘is way behind on the requests for updates, and many of its functions are not being utilised to their full potential.’³⁹ Furthermore, staff suggested that these difficulties could be overcome by having ‘in-house technical capacity to implement changes to the CAD System, or fund a specialist contractor for this work.’
- 4.34 In addition, ACTAS’ Clinical Dispatch Guidelines Policy was developed over eight years ago and has not been updated to reflect current practice and technology. For example, the Policy refers to a paper based card system used prior to CAD’s introduction and not to how current priority response types are applied within CAD. That is, the Policy only advises staff to apply a priority 1 ‘to cases of high risk or known respiratory or cardiac arrests.’ No other priority response types are referred to within the guidelines.
- 4.35 Audit also found that there was no clinical supervision to oversight and control grading of priority responses. Audit analysis found inconsistencies in the grading of Priority 1, 2, 3 and 4 responses in the CAD 2007-08 datasets.
- 4.36 According to ambulance staff, this is because when ambulance demand is high, some non-life threatening incidents are reprioritised to a lower priority response to hold onto that ambulance resource just in case a highly critical case is called in that requires a life saving priority 1 emergency response.⁴⁰
- The current practice of downgrading jobs to (priority 3 responses), or simply ‘holding on’ to non-urgent (priority 2 responses) when workload is high is not supported by established policy.⁴¹
- 4.37 Audit considers that current CAD business rules on the grading of priority 1, 2, 3 and 4 responses needs reviewing so that ACTAS can better manage (triage) case workload.
- 4.38 Additionally, Audit found that there were no clinical governance processes in place to provide quality assurance of the clinical decisions made by dispatchers, or of the decisions made by paramedics, in reprioritising responses for example, from a Priority 1 response to Priority 2 response.

³⁹ Internal submission to ACTAS Management.

⁴⁰ Communication Centre’s dispatch business rules require an ambulance to be dispatched within 45 seconds for all priority 1 responses and within 2 minutes for priority 2 responses. There are no targets for priority 3 and 4 responses.

⁴¹ Internal submission to ACTAS Management.

4.39 ACTAS commenced in April 2008 a Communication Centre Review. The review included examining the above issues and their impact on the provision of ambulance services. The review was expected to be reported on in June 2008, but is not yet completed.

Importance of ambulance prioritisation

4.40 The absence of clinical supervision and outdated business rules means that Communication Centre staff must use their own clinical knowledge to triage cases. This has led to inconsistencies by different 'Dispatchers' in the grading of emergency responses, which increased the risk of an incorrect prioritisation of an ambulance dispatch.

4.41 Furthermore, the inconsistent grading of response prioritisation has reduced the reliability and integrity of ACTAS' datasets that form the basis of reports to government on the effectiveness of its service.

4.42 Audit also considers that the absence of quality assurance processes to review Communication Centre staff decisions in managing ambulance resources means that ACTAS has limited assurance that staff is appropriately and effectively managing ambulance dispatch responses.

Recommendation 6

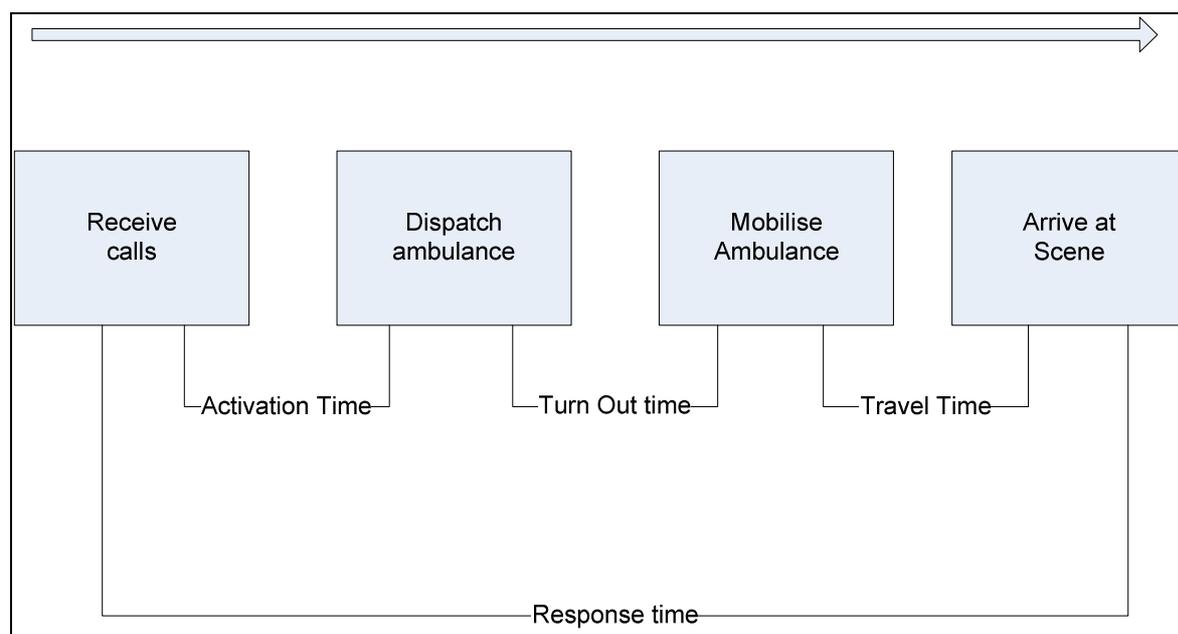
ACTAS should:

- develop appropriate guidance and procedures on ambulance dispatch decisions;
- collate and monitor information on ambulance dispatching; and
- develop a quality assurance process to facilitate review and, where necessary, improvement of clinical decisions made by dispatchers.

RESPONSE TIMES

4.43 'Response times' are included as indicators of performance by Australian governments within the Council of Australian Governments '(COAG)' Report on Government Services (ROGs). Figure 4.1 illustrates the start and finish points for measuring response times.

Figure 4.1 Response time points and indicators for ambulance events



Source: Report on Government Services 2009.

4.44 As illustrated in Figure 4.1, ‘Response times’ are defined as the time from receipt of a triple zero call within which:

- (1) 50 per cent of the count of the total number of first responding ambulance resource arrives at the scene of an emergency in a code 1 situation; and
- (2) 90 per cent of the count of the total number of the first responding ambulance resource arrives at the scene of an emergency in code 1.⁴²

4.45 The ACT Government Accountability Indicator for ambulance emergency response times is aligned with the ROGs indicator. These are:

- Ambulance 50 percentile - target eight minutes
(Target of 50 per cent of emergency responses within 8 minutes)⁴³
- Ambulance 90 percentile - target 12.50 minutes
(Target of 90 per cent of emergency responses within 12.50 minutes)⁴⁴
- Percentage of suburbs covered within response times – target 100 per cent

⁴² Code 1 is a CAA definition for an emergency lights and siren response (Report on Government Services, Box 9.19, pg 9.55).

⁴³ This indicator only applies to Priority 1 emergency responses. There is no ACT Government Accountability Indicator for Priority 2 responses.

⁴⁴ This indicator also applies to priority 1 emergency responses.

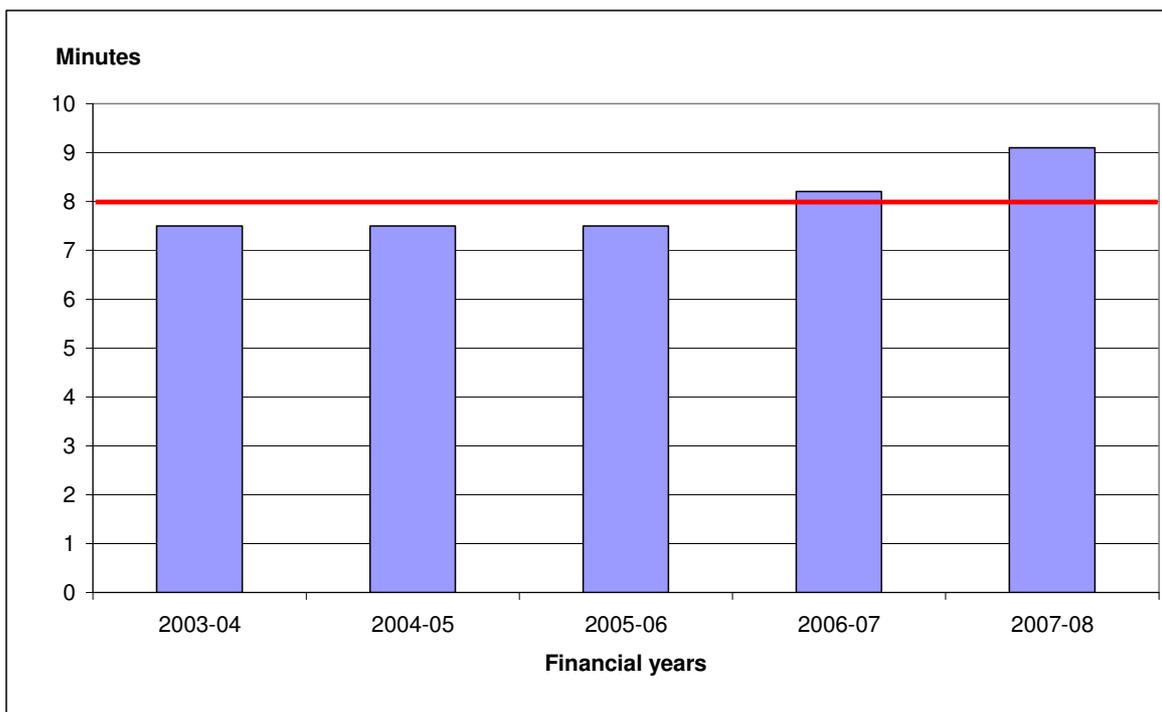
(Target of 100 per cent of suburbs covered within response times.) This measure was discontinued after 2007-08 and is no longer reported on.

Performance of ambulance responses

4.46 Since 1 July 2007, ACTAS has reported the response time from the time of the operator's 'first key stroke' on the computer dispatch system in the Communication Centre after the emergency 000 call was connected to the emergency service organisation. Previously response times were calculated from the allocation of response priority to the crew. While the immediate effect of this has been to contribute to an increase in emergency response times, the new definition provides a better performance measure, more closely aligned to public perception and expectation.

4.47 In 2007-08, the ROGs reported that ACTAS achieved a response rate of 9.1 minutes for 50 per cent of responses for Canberra. Past responses reported in ROGs are illustrated in Figure 4.2.

Figure 4.2 ACTAS response times (2003-04 to 2007-08)



Source: Audit Analysis

4.48 ACTAS has responded to 37 per cent of all priority 1 incidents across Canberra within eight minutes, compared to a target of 50 per cent.⁴⁵ This poor response rate reflected the higher utilisation rate of crews during peak periods than the accepted Australian standard, and location of ambulance response crews.

⁴⁵ The median is that time for which the sequential count of 50 per cent of responses for the total metropolitan area of Canberra are within the target time. Response time was calculated from dispatch time of responding crew.

- 4.49 Audit acknowledges that ACTAS' operations have been based on the ACT Government target of median responsiveness within eight minutes for the total metropolitan area of Canberra. This target however did not fully demonstrate the different response times achieved for individual suburbs.
- 4.50 Audit undertook further analysis and found that the reported performance for 2007-08 was not consistently achieved for the majority of Canberra suburbs. Nor was the Government's target of 50 per cent of emergency responses within eight minutes or less calculated across Canberra achieved.
- 4.51 Audit calculated that ACTAS was only able to meet the Government's 50 per cent target rate of a response time of eight minutes or less for 16 out of 101 suburbs. Alternatively, across all Canberra suburbs, only some 37 per cent of all priority 1 responses achieved the response rate of eight minutes or less. Audit acknowledges that it is difficult to achieve the overall target for each individual suburb, but Audit was concerned about the poor response time for many suburbs, and this issue should be addressed.
- 4.52 For example, while ACTAS reported a response time of 9.1 minutes for 50 per cent of responses in 2007-08 across the whole of Canberra, less than two per cent of ambulance responses were achieved within eight minutes for one north-side suburb. That is, only two incidents out of 96 priority 1 cases were responded to within the eight minute target. The median priority 1 response time for this suburb in 2007-08 was 12 minutes and 49 seconds. For one south-side suburb, the median priority response time was 12 minutes and 13 seconds.
- 4.53 Poor response times were not just confined to outer suburbs. For example, in the same period, 25 per cent of target responses times were achieved for an inner suburb, meeting only half the 50 per cent target. For this suburb, only 22 out of 88 Priority 1 incidents were responded to within the eight minute target.

Effect of declining responses times

- 4.54 Survival from an out-of-hospital life-threatening event such as a cardiac arrest is directly related to ambulance response times.
- 4.55 Due to poor response times to the majority of Canberra suburbs, there is limited assurance that the residents in these suburbs will receive care on a timely basis, which is needed for a life threatening out-of-hospital event, such as a cardiac event because ambulance services are unable to meet the eight minute target on fifty per cent of priority 1 incidents.
- 4.56 As discussed earlier, ACTAS has received funding in recent years to improve response time, such as additional staff and crews.
- 4.57 In August 2008, to reduce the risk of a slow ambulance response, ESA enhanced ACTFB first response ability by installing oxygen and defibrillators on all Fire Brigade vehicles.

4.58 As discussed in Chapter 3, (from paragraph 3.16), ACTAS has taken a number of measures to improve response times. Nevertheless, Audit considers that further strategies need to be in place to constantly monitor, review and improve the delivery of ambulance services, specially to cover a larger percentage of suburbs within the response time targets

Recommendation 7

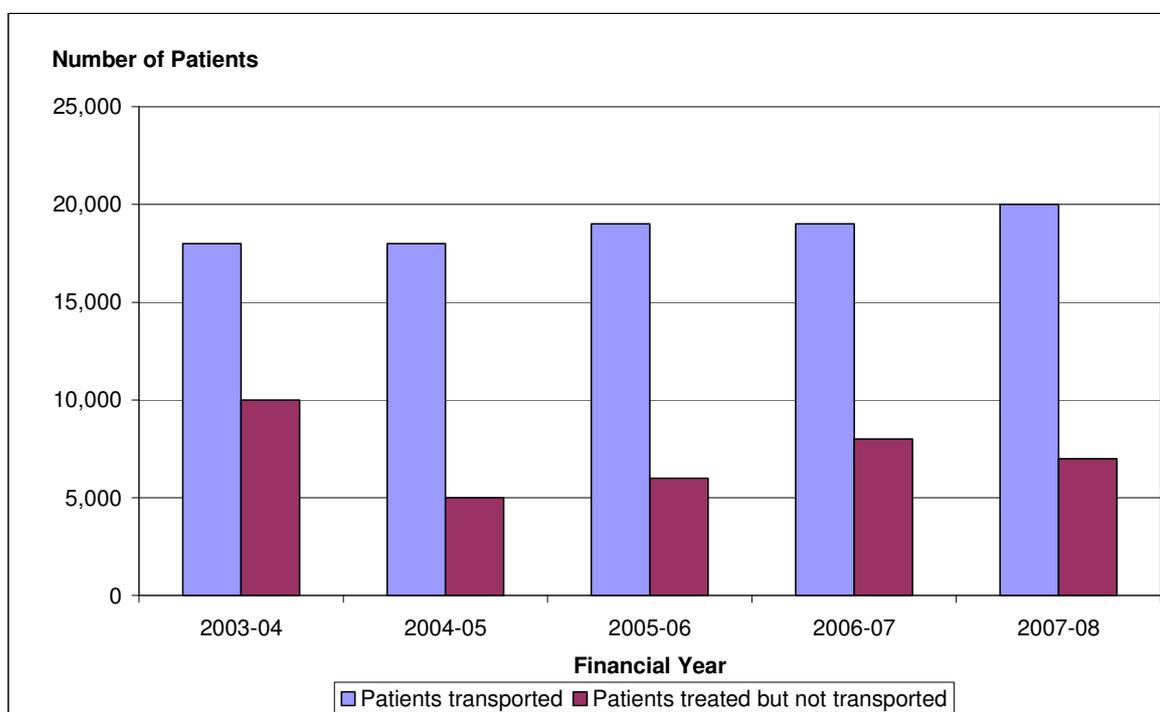
ACTAS should develop and implement as a matter of priority, appropriate strategies to address declining response times.

TRANSPORT TO HOSPITAL

4.59 Not all emergency responses result in a patient requiring transport to hospital. Some patients do not require transport after treatment or they refuse transport. ACTAS refers to these incidents where the patient is not transported to hospital as ‘Transport Not Required’ (TNR).

4.60 If patients are not transported, that ambulance crew is then immediately available to be dispatched to another incident. Figure 4.3 illustrates the number of patients not transported by ACTAS.

Figure 4.3 Number of patients transported and patients treated but not transported



Source: Report on Government Services 2009 – Table 9A.23

4.61 Table 4.1 illustrates the range of reasons for not transporting a patient to hospital.

Table 4.1: Reasons for patients not being assessed, treated or transported

Assessment or treatment is refused by patient
Treatment of a medical problem that does not require transport
Back-up ambulance resource arrives to assist another resource, leaving incident scene without patient
Patient deceased at scene
Transport is refused by patient
Single officer response in sedan vehicle unable to carry stretcher patient
Resuscitation attempts are stopped after death following a cardiac arrest
Hoax situation

Source: ACTAS

Policies and guidance to staff about patient transport decisions

- 4.62 Audit found that ACTAS did not have a documented policy that guided ambulance officers' decisions on when it was appropriate not to assess, treat or transport a patient, or whether an alternative clinical pathway was more appropriate, or when to refuse to transport a patient. Instead ACTAS has had procedures in place which provided guidance to ambulance officers on how to appropriately document a 'patient not transported' case.
- 4.63 Furthermore, Audit found that ACTAS did not systematically collate information and then examine why patients were not assessed, treated or transported, and whether the decision was appropriate. Instead, ACTAS advised Audit that they periodically undertook a series of random 'patient not transported' studies consisting of 'generally' one month of priority 1 and priority 2 responses to examine patient acuity and no transport rates.⁴⁶
- 4.64 Audit considers that the absence of a documented policy that guides ambulance officers' decisions about not transporting patients increases the risk that ambulance officers may make poor decisions about transporting patients.
- 4.65 This is especially important where a patient also refuses treatment as well as transport, and where mental health issues are involved. In 2008, ACTAS experienced a series of adverse patient outcomes following a series of 'Transport Not Required' cases. Some of these cases involved refusal by the patient to be assessed for treatment. ACTAS undertook a specific study into these cases.
- 4.66 Furthermore, Audit considers that a more systematic approach to recording and monitoring the reasons why patients are not transported would provide assurance to ACTAS and the community that Intensive Care Paramedics are consistently making the right 'Transport Not Required' decisions in the best interests of the patient.

⁴⁶ These studies were undertaken in 2000, 2004, 2006 and in 2008.

- 4.67 Appropriate information on 'Transport Not Required' rates would also provide ACTAS with data by which to strategically plan for the future delivery of ambulance services.
- 4.68 During the course of the audit, ACTAS advised that they had commenced the development of a policy to address decisions relating to 'Patient Not Transported' cases.

Recommendation 8

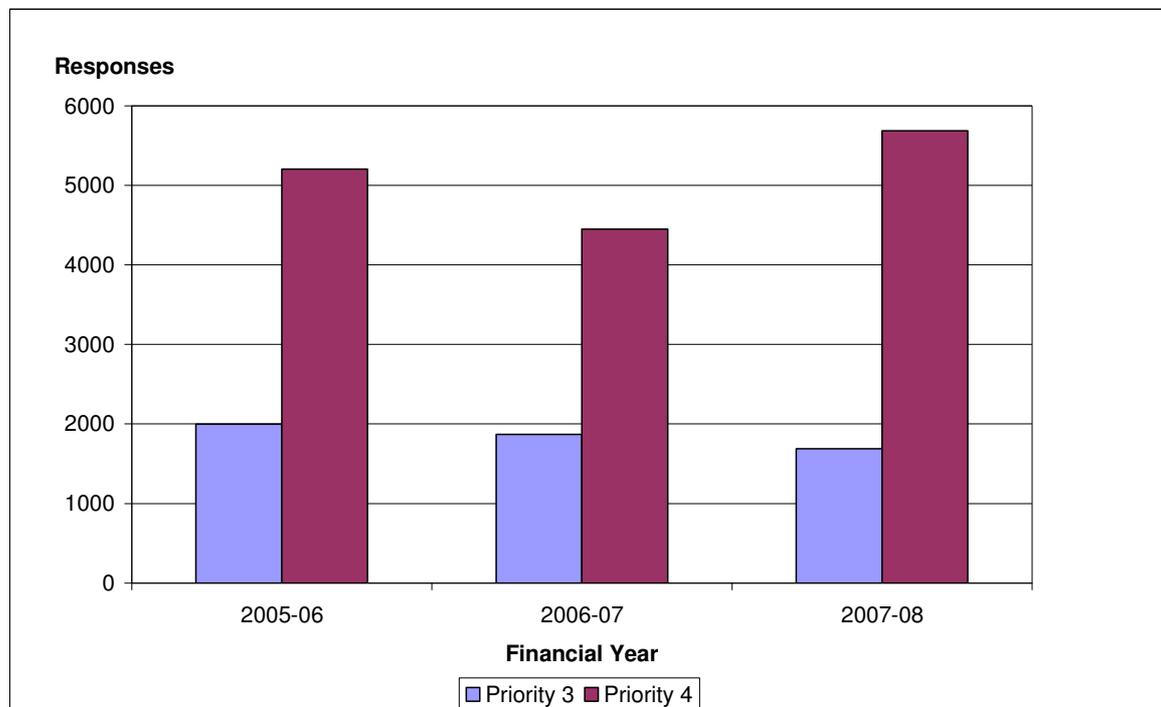
ACTAS should develop policies and guidelines to assist ambulance officers' decisions on whether or not to transport a patient to hospital. This guidance might include appropriate responses when a mentally impaired patient declines transport or treatment, and when to call on management or clinical guidance.

5. NON-EMERGENCY AMBULANCE SERVICES

INTRODUCTION

- 5.1 Non-emergency ambulance services (inter-hospital transfers or Patient Transfer Services) include the routine transport of patients to, from and between health care facilities (road or air) by intensive care paramedic crews or Ambulance Support Officers.
- 5.2 These services are pre-booked. Inter-hospital transfers are provided to high acuity patients requiring Intensive Care Paramedic transport between hospitals. Patient Transfer Services are provided to patients who are unable for medical reasons to use private or public transport to get to and from hospital.
- 5.3 Both services help non-emergency patients (who have varied clinical needs), to be safely transported between hospitals, or to attend a variety of outpatient clinics and diagnostic procedures.
- 5.4 The vast majority of non-emergency patient transports are organised by health services. In 2007-08, as illustrated in Figure 5.1, ACTAS provided 1688 Inter-hospital Transport Services (Priority 3) and 5,686 Patient Transport Services (Priority 4).

Figure 5.1 Count of non-emergency patient transport services



Source: ACTAS CAD Batch Data

- 5.5 These services can also be provided by ministerially approved other service providers. To date, no other providers have been approved in the ACT.⁴⁷ In some States, non-emergency transport is viewed, treated and priced as a separate business which is operated on a commercial basis.

KEY FINDINGS

- Non-emergency transport services were not managed separately from the provision of emergency services, which has led to difficulties and possible inefficiencies in the management and coordination of bookings and crews.
- Non-emergency transport services have been processed without the support of robust and documented procedures and on-going training. This has affected quality of service and caused dissatisfaction and frustration to some major users.
- Under current data collection approaches, there was no assurance that ACTAS was meeting the government's accountability indicators with respect to non-emergency ambulance services.

PROVIDING THE SERVICE

- 5.6 ACTAS' inter-hospital transfers are crewed by Intensive Care Paramedics (ICP), while PT Services are crewed by Ambulance Support Officers (ASO). ASOs are qualified to Certificate III in Non-emergency Client Transport and Certificate IV in Ambulance Communication. This cross training arrangement allows ASOs to cross crew between the Communications Centre and non-urgent patient transport services.
- 5.7 ACTAS provides three ASOs five days a week and one service over the weekend. Inter-hospital transfers are serviced by ICP during down times in ambulance demand.

MANAGEMENT SYSTEMS

- 5.8 ACTAS did not have a separate system in place to manage either inter-hospital transfers or PT Services.
- 5.9 Instead, bookings and management of both services were undertaken using an emergency response systems approach. For example, bookings were taken by ACTAS' emergency communication's staff and were then recorded on the Computer Aided Dispatch (CAD) system.
- 5.10 Bookings are electronically recorded using the same data entry points on the CAD system as used for an emergency. Accordingly, non-emergency ambulance services appointments can not be pre-planned. For example, Ambulance Support Officers are notified and dispatched to a booking the same way as an ICP crew is dispatched to an emergency.

⁴⁷ ACTAS is the designated 'health' authority that advises the Minister on such approvals.

- 5.11 In the absence of a dedicated non-emergency management system, ACTAS has experienced difficulties in the management and coordination of bookings and crews.
- 5.12 This has led to possible inefficiencies where higher skilled emergency call takers and dispatchers handle routine PT services. For example, if an ASO call taker is already occupied with a call, a PT Service booking call may be answered by ACTAS' emergency call taker or dispatcher. These staff will process the Services booking. This effectively ties up ACTAS' emergency Communication Centre staff away from emergency communications responsibilities.
- 5.13 In addition, the absence of a separate electronic processing system for Service bookings has presented technical challenges for ACTAS in being able to manage pre-planned Service bookings.

GUIDANCE FOR STAFF

- 5.14 In September 2008, ACTAS issued a procedure on PT Bookings addressing the data entry requirements for PT Service bookings on ACTAS' Computer Aided Dispatch (CAD) System. Previously, there was no internal guidance available to ACTAS Communications staff on how to receive and then enter a PT Service booking on CAD.
- 5.15 However, ACTAS is yet to provide documented guidance to Communications staff on the process of how to allocate and dispatch a booking to a PT Service crew, or provide guidance to staff on how to manage and arrange an inter-hospital transfer.
- 5.16 In addition, prior to March 2009, none of ACTAS' communications staff had received training on how to process or manage a Service booking or crew.
- 5.17 Audit also noted that there was no supervisor located within the Communication Centre to monitor staff practices in the management of non-emergency transport services.

Conclusion

- 5.18 Non-emergency transport services have been processed without the support of robust and documented procedures, and on-going training. Without documented guidance or training as to what individuals should do, ACTAS has been unable to implement any type of quality assurance process. This means that ACTAS has also had limited assurance that Services were being consistently and appropriately managed to provide a high quality effective service.
- 5.19 Audit noted that ACTAS provided in-service training to communications staff in March 2009.
- 5.20 There was also evidence to suggest that the major users of the non-emergency transport services were not satisfied with the quality of the service. ACTAS

advised Audit that it was not aware of any patient transport services issues arising from its regular Senior ACT Health network meetings.

- 5.21 Frustration with patient transport services is reflected in ACTAS internal reports with users of the service stating:

..the number of beds we lose because we can't get the patient home (using Patient Transport Services). This means we can't get patients up from the Emergency Department. Therefore, ambulances can't unload at ED.

Commonly we can wait 2-3 hours for a vehicle and up to six hours was the longest.⁴⁸

- 5.22 Similarly, Ambulance Support Officers have expressed frustration at turning up to a PT Service appointment at a hospital only to find that the patient was not ready to be released for another couple of hours, which meant that this Ambulance Support Officers may then be unavailable to service another job.

Recommendation 9

ACTAS should improve systems to manage its non-emergency transport services, provide training and guidance to staff on use of these systems, and implement a quality assurance process.

ACCOUNTABILITY INDICATORS

- 5.23 Time limits within which to arrive at a non-emergency ambulance service booking, are included as part of the ACT Government's Accountability Indicators for ambulance services. For non-emergency ambulance service bookings, these are:

- **Inter-Hospital transfers** - percentage of non-emergency ambulance service bookings, requiring an Intensive Care Paramedic resource, responded to within 20 minutes of booked time (target 90 per cent).
- **PT Services** - percentage of non-emergency ambulance service bookings, requiring a Patient Transport Service resource, responded to within 20 minutes of booked time (target 90 per cent).

- 5.24 Under these indicators, an ambulance meets the target if arriving 20 minutes before or after the appointment time. For example, for a non-emergency service booking requiring a pick up at 2.00pm, a service crew would meet these indicators if they arrived at the appointment any time between 1.40pm and 2.20pm.

⁴⁸ Report on the ACT Ambulance Service Communications Centre External Stakeholders' Workshop, Tuesday 2nd June, 2008 pg 8.

Performance of non-emergency ambulance services

- 5.25 In 2008-09, the ACT Government Budget Papers reported that ACTAS achieved an outcome of 85 per cent for inter-hospital transfers and 86 per cent for PT Services.⁴⁹
- 5.26 However, while ACTAS reported good performance against the government's accountability indicator for non-emergency services, Audit found that the data used to measure actual performance did not measure from the booked Service appointment time, but from the time the crew was dispatched to the Service's 'job'.⁵⁰
- 5.27 For example, for a booked PT Service appointment time of 2.00pm, the crew might be dispatched to the 'job' at 1.30pm so that they will arrive at 2.00pm. However, because the CAD only records ambulance crew dispatch times, performance is measured from 20 minutes either side of the 1.30pm dispatch time and not the 2.00pm booked appointment time.
- 5.28 Accordingly, ACTAS could not effectively monitor actual performance for non-emergency ambulance service bookings against the government's indicators. This was because its electronic system, CAD, was not configured to manage pre-planned bookings.
- 5.29 As a result, ACTAS did not have any assurance that it was meeting the government's accountability indicators.
- 5.30 Audit considers that ACTAS' structural inability to monitor performance of non-emergency ambulance service bookings has impeded ACTAS' ability to provide accurate reporting to government on the performance of this service.

Recommendation 10

ACTAS should implement systems to enable the accurate collection and measurement of non-emergency ambulance service bookings to facilitate monitoring of performance and the provision of accurate advice to Government.

⁴⁹ 2008-09 Budget paper 4, Department of Justice and Community Safety, pg 242.

⁵⁰ ACTAS' CAD system does not enable operators to pre-assign non-emergency ambulance service crews by booked appointment times.

6. PROVISION OF CARE

INTRODUCTION

- 6.1 Pre-hospital care is described as the early and effective medical intervention by ambulance paramedics at the scene of an accident or en route to hospital. This phase is recognised as being critical in both saving lives and in reducing the impact on the patient and the cost of further medical treatment.

KEY FINDINGS

- The clinical governance framework in place was not sufficiently robust and well documented to oversight the provision of quality care to patients.
- ACTAS has recognised the importance of ambulance officer qualification attainment and maintenance of intensive care paramedic (ICP) skill levels. However, on-going clinical education (in-service) programs have not been provided to Ambulance Support Officers.
- Some ambulance officers without ICP qualifications were dispatched to respond to an emergency when an ICP Crew was unavailable. On these occasions, there was a risk of an adverse patient outcome as patients may not receive appropriate care.
- Minutes of meetings of the Clinical Advisory Committee referred to some discussions about the appropriateness and adequacy of ACTAS' clinical management guidelines and procedures. However, there was no evidence that ACTAS had formally sought advice or recommendations from this Committee on these guidelines and procedures. Guidelines and procedures define the types of treatments available to ambulance officers in the care provided to patients.
- One of the stated aims of ACTAS' Clinical Quality Management Process was to identify clinical practice, procedures or documentation, which are below service standards. However, internal reviews of Patient Care Records and other reviews were not robust and did not provide assurance of effective follow-up actions to address identified problems.
- There was no clinical care information database, which would enable ambulance officers to record patient information electronically. Instead patient care records were paper based. Consequently, data was not readily available to enable tracking and monitoring of patients care records, or to inform ACTAS management about patient types and trends.

CLINICAL GOVERNANCE

- 6.2 Clinical governance is the name for the processes that organisations use to monitor and improve the quality of clinical care services delivered to patients. The processes are necessary to ensure the organisation's delivery of care and treatment is of high quality and up to the standards expected.

6.3 For patients, clinical governance provides a level of assurance that they are attended to in a clean, safe environment by competent and trained staff, and that the care they receive is up to date and evidence-based.

CLINICAL GOVERNANCE FRAMEWORK

6.4 ACTAS should have in place a clinical governance framework to provide assurance that the quality of care and treatment delivered to patients is safe, of a high standard and continually improved. In particular, ACTAS should have structures and processes in place that:

- maintain the service's capacity to delivery high quality clinical care;
- monitor the safety of clinical care delivered to patients;
- enable the collection and use of appropriate information on clinical care; and
- facilitate continuous improvement of the service based on lessons' learnt from patient safety incidents and near misses.

6.5 ACTAS has in place a number of elements of a clinical governance framework to promote and monitor the quality of clinical care provided to patients. These include:

- providing ambulance officer training and in-service programs;
- issuing clinical advice to ICPs and Ambulance Support Officers (informally, and by staff notices and clinical bulletins);
- key staff attendance at relevant conferences and venues;
- participation in the Council of Ambulance Authorities National Clinical Committee;
- administering ACTAS' Clinical Advisory Committee;
- undertaking clinical quality assurance via examination of patient care records and 'specific reviews'; and
- a range of clinical policies, guidelines and procedures.

6.6 However, ACTAS has not specified the role or emphasis to be given to its various clinical governance elements, how they related to each other, or how each of these would be managed, measured or monitored within a documented overarching clinical framework.

6.7 To date, ACTAS' approaches have largely focused on new ambulance staff attaining qualifications, bi-annual in-service training of existing qualified ICP staff, and quality assurance against clinical indicators. These are important activities, but ACTAS also needs to take action on updating policies,⁵¹ identifying and documenting emerging patient care issues, collating clinical care data to track

⁵¹ Audit found that all of ACTAS' clinical policy statements are more than five years old.

trends, and benchmarking ambulance officer performance to assess the effectiveness of its clinical care.

The importance of a clinical framework

- 6.8 The absence of an over-arching clinical governance framework means there is limited strategic or informed operational direction on how ACTAS should implement, monitor and provide continuous improvement in the delivery of clinical care to patients.
- 6.9 Furthermore, ACTAS had experienced adverse patient outcomes, which may suggest there were failures in its present clinical approaches.⁵² A robust clinical governance framework would mean there are systems in place to identify patient care issues that need correction or continuous improvement, while also providing opportunities to learn from what may have gone wrong.
- 6.10 More generally, Audit considers the absence of an overarching clinical governance framework reduce assurance that the quality and safety of patient care is being managed in a structured manner.

Recommendation 11

ACTAS should specify and document the role of each of its various clinical governance processes, how they relate to each other, and how these will be managed, measured and monitored within an overarching clinical framework.

CAPACITY TO DELIVER CLINICAL CARE

- 6.11 ACTAS through ESA' Registered Training Organisation (RTO) accreditation, is accredited to provide training to ambulance officers under the Australian Qualifications Training Framework (AQTF) Health Training Package HLT07.⁵³ ACTAS provides the following medical treatment qualifications:
- Advanced Diploma of Paramedical Science (for ICPs); and
 - Certificate III Non-emergency patient transport (for Ambulance Support Officers).
- 6.12 Since 2007, ACTAS has awarded 17 Advanced Diplomas and 13 Certificates III. In addition, ACTAS is providing on-going training to 25 student ICPs under the Advanced Diploma programs and six Ambulance Support Officer students for the Certificate III.
- 6.13 To maintain skill level and an up to date clinical knowledge base, ACTAS also provided bi-annual continuing education (in-service) programs for its ICP staff.

⁵² A series of incidents occurring between May and September 2008 were referred by ACTAS to the ACT Coroner.

⁵³ This includes accreditation to deliver a range of qualifications from Certificate II to the Advanced Diploma level.

Clinical skills and qualifications of ambulance officers

- 6.14 Under the AQTF 2007, RTOs must deliver training and assessments using trainers and assessors who hold relevant competencies and qualifications.
- 6.15 ACTAS' key trainers and assessors hold the most current HLT07 qualification and competencies, which qualify them to train both ICPs under the Advanced Diploma Programme and Ambulance Support Officers for the Certificate III in Non-emergency Client Transport.⁵⁴
- 6.16 Audit found that ACTAS has recognised the importance of qualification attainment for ambulance officers, and maintaining annual ICP skill levels. However, ACTAS has not provided similar continuing 'clinical education' (in-service) programs for its Ambulance Support Officers.

Importance of on-going education

- 6.17 The absence of on-going continuing education training program for Ambulance Support Officers means that crews may not be up to date with the latest skills and clinical practices that they require to carry out their roles safely and effectively.
- 6.18 As a result, PT Service crews may be providing clinical care below industry standards when transporting patients.

AUTHORITY TO PROVIDE CARE

- 6.19 The authority for ICPs and Ambulance Support Officers to provide clinical treatment unsupervised is obtained from ACTAS' Chief Officer.⁵⁵ Their scope of clinical practice is determined in accordance with advancement and obtainment of relevant qualifications.
- 6.20 Audit found some instances where non-ICP ambulance officers were dispatched for an emergency response when an ICP Crew was unavailable.
- 6.21 For example, audit found that in 2007-08, ACTAS dispatched an Ambulance Support Officer, as a first response to approximately 32 emergency responses without providing any ICP back-up support. Table 6.1 illustrated the grade of the priority response and the associated incident type descriptions that Ambulance Support Officers were dispatched to without ICP backup.

⁵⁴ These qualifications include: For Trainers, a Certificate IV in Training and Assessment (TAA40104); and for Assessors (TAAASS401A, TAAASS402A, TAAASS404A).

⁵⁵ Each jurisdiction provides its own authority for an ambulance officer's clinical practice and the scope of clinical practice.

Table 6.1: Types of priority responses and incidents attended by ambulance support officers 2007-08

Actual Incident Type Description	CAD Priority (as per ACTAS business rules)	Actual dispatch priority Grade
Cardiac problem, Motor Vehicle accident, Diabetic, Fitting, breathing difficulty, unconscious person	Priority 1	Priority 1
Falls, sick person, cardiac problem, abdominal pain, motor vehicle accident	Priority 1 Priority 2	Priority 2
Sick person, psychiatric, back pain/injury, falls, abdominal pain, stroke	Priority 1 Priority 2	Priority 3
Sick person, psychiatric, breathing difficulty	Priority 1 Priority 2	Priority 4

Source: ACTAS 2007-08 Batched CAD data

- 6.22 These Ambulance Support Officers also provided emergency care and transport to hospital. This was inconsistent with ACTAS' policy, which stated that officers were only authorised by the Chief Officer to practice clinical skills unsupervised, within their scope of practice for their clinical level. The role and function of Ambulance Support Officers were to provide transport for patients who do not require active intervention. They are not qualified to practice to the clinical level of an ICP, which is often required when attending to emergency incidents.
- 6.23 Furthermore, Audit also found cases where ACTAS had rostered pairs of student ICPs as an emergency response crew. Crews are normally staffed by one ICP and one student ICP. Students ICPs are not qualified to practice to the clinical level of a qualified ICP. ACTAS advised that this situation occurred only when ACTAS was unable to resource crew levels, and the alternative was station closure.
- 6.24 Audit considers that the use of non-ICP crews to manage emergency cases may result in patients not receiving appropriate care. Therefore, this practice should not occur unless authorised by ACTAS' Chief Officer, or the Chief Officer's directions are amended to allow such approaches.
- 6.25 ACTAS commented that dispatch of an ASO crew as a first response when ICP crews are unavailable represents a sensible approach to provision of ACTAS resources.

STANDARDS AND PROTOCOLS OF CLINICAL CARE

- 6.26 Under the *Emergencies Act 2004* (the Act), ACTAS' Chief Officer determines the standards and protocols for emergency and non-emergency medical treatment of patients for Intensive Care Paramedics (ICPs) and Ambulance Support Officers.⁵⁶

⁵⁶ *Emergencies Act 2004*, Section 38 (2) (the medical treatment standards).

6.27 To assist the Chief Officer to determine these standards and protocols, the Clinical Advisory Committee was established in 2003.⁵⁷ One of the stated functions of the Committee is:

To review and advise on clinical management guidelines and procedures for ambulance personnel and to other persons authorised to support ambulance personnel at emergency incidents.⁵⁸

Adequacy of protocols and standards

6.28 ACTAS has a *Clinical Procedures Manual* and a *Clinical Management Manual (pocket edition)*, which provide guidance to ambulance crews on allowable treatment protocols and standards for use by crews.⁵⁹ Triggers for updates to these manuals include:

- in-house reviews of PCRs;
- changes in hospital practices; and
- advice from external bodies (for example, specialist groups such as the Australian Resuscitation Council).

6.29 ACTAS advised that it updates Manuals through:

- research;
- presentation to the Clinical Advisory Committee; and
- informal advice from external sources.

6.30 Audit found that the Clinical Advisory Committee minutes referred to discussions on several treatment protocols and standards, which have led to revisions of these. There were also discussions at these meeting on outcomes of case reviews. However, Audit did not find any evidence that ACTAS had formally sought advice or recommendations from this Committee on the appropriateness and adequacy of its clinical management Manuals and procedures. Nor had the Committee undertaken any formal reviews of these. Furthermore, there was no documented process to guide ACTAS' revisions of its clinical management manuals and procedures.

6.31 If protocols and standards are not appropriate and adequate, then ICPs and Ambulance Support Officers may not operate in accordance with better practice guidance and therefore may not be providing safe and appropriate patient care.

6.32 Audit considers that this increases the risk of adverse patient outcomes.

⁵⁷ ACTAS' Clinical Advisory Committee comprises: Chief Officer (ACTAS), Medical Advisor - Chair, Clinical Operations Manager (ACTAS), an ICP (ACTAS), two Clinical Coordinators (ACTAS), Director – Emergency Medicine (The Canberra Hospital (TCH)), Director – Emergency Medicine (Calvary Hospital), A General Practitioner, Medical Coordinator – Aero-medical Retrieval Unit (THC).

⁵⁸ ACTAS Clinical Advisory Committee, Terms of Reference.

⁵⁹ These provide guidance to all ACTAS clinical staff.

Recommendation 12

ACTAS should conduct formal reviews of its clinical procedures manuals in consultation with its Clinical Advisory Committee, and develop guidance to oversight these reviews.

MONITORING CLINICAL CARE

6.33 ACTAS' 'Clinical Quality Management Process 2004' policy sets down how ACTAS will monitor the safety of its clinical care.⁶⁰ Its stated aims are to:

- monitor and continually develop patient care standards of the service;
- provide one mechanism for identifying opportunities to improve operations within the service;
- contribute to maintaining the quality of patient care by identifying clinical practice, procedures or documentation, which are below service standards;
- provide feedback to staff that is supportive and developmental; and
- provide information flow on patient care standards and case load across the service.

6.34 There are also three key focus areas under ACTAS' 'Clinical Quality Management Process' Policy:

- Review of Patient Care Records ('PCR Reviews');
- 'Specific Review' Processes; and
- 'Medical Review' Processes.

6.35 To date, ACTAS' clinical quality management processes have largely focused on Review of Patient Care Records ('PCR reviews') by collecting data against the following clinical indicators:

ICP administered drug dosage use; number of patient falls; cardiac arrest outcomes data; alcohol and drug overdose rates; the number of patients assessed but not transported, who are seen again within 36 hours; use of rapid sequence induction; trauma pain thresholds; and high risk case notification for insurance purposes.

6.36 Audit found that there were reporting templates for each clinical indicator. 'PCR reviews' were not supported with procedural guidance to staff on the selection of PCRs for audit, how PCRs would be audited and reported on, or the circumstances under which findings from PCR reviews, such as a serious ICP error, should be raised with ACTAS' Clinical Service Manager or the Chief Ambulance Officer, and how it would be actioned.

6.37 ACTAS conducted reviews of identified high risk cases. However, there was also no procedural guidance to staff on how to select and undertake 'Specific Reviews'

⁶⁰ ACTAS' Clinical Services area is responsible for implementing the Policy.

or 'Medical Reviews' or how these reviews should address the stated aims of the 'Clinical Quality Management Process' Policy.

- 6.38 Audit notes that since 2000, ACTAS has undertaken five documented 'Specific Reviews' and no 'Medical Reviews'.
- 6.39 ACTAS advised that 'Specific Reviews' were undertaken all of the time and generally related to either a notification by an ICP to examine a specific incident, or the use of specific drug. These reviews were then benchmarked against ACTAS' treatment guidelines and the procedures. Other triggers for a review also included complaints about treatment provided, or if legal action commenced against ACTAS.
- 6.40 Of the documented 'Specific Reviews' undertaken, two 'Reviews' benchmarked ICP performance against treatment protocols and guidelines. For example, one review focused on reviewing ICP clinical activity in terms of ICP patient documentation and patient assessment as a measure of clinical care.⁶¹ The other review assessed actual clinical treatment provided against required standard treatment protocols.
- 6.41 The other three reviews have only focused on measuring and reporting 'Patient Not Transported' rates against patient acuity severity survey results.
- 6.42 Audit also found that there was no documented policy on when and how ambulance officers should report adverse patient outcomes to ACTAS' Clinical Services area. However, ACTAS did collate data on adverse outcomes for insurance purposes.

Conclusion

- 6.43 ACTAS conducted a number of reviews covering, for example, specific cases or the administration of medications. However, Audit considers the absence of procedural guidance to staff increases the risk that 'PCR reviews', 'Specific Reviews' and 'Medical Reviews' may not adequately address the stated aims of ACTAS' 'Clinical Quality Management Process', such as contributing to the maintenance of:
- patient care by identifying clinical practice, procedures or documentation, which are below service standards.⁶²
- 6.44 Furthermore, the absence of outcomes reporting to management on 'PCR reviews', 'Specific Review's and 'Medical Reviews', such as ICP drug dosage rates, benchmarked ICP performance, or centrally collated data on adverse patient outcomes, means that ACTAS may not gain valuable insight on the effectiveness of ACTAS' patient care processes. This limits ACTAS' ability to monitor trends

⁶¹ The review examined a series of 2008 patients that had been attended by ambulance officers, but not transported to hospital, who later died (Called the *Death Review*).

⁶² Clinical Quality Management Process 2004, Aim 2.3, pg 1.

in ICP performance, and inform and support a targeted risk based approach to improving clinical patient care.

- 6.45 As a result, ACTAS did not have a robust basis upon which to improve management of patient care and safety.

Recommendation 13

ACTAS should improve patient care processes by:

- developing risk-based procedures for selecting, planning and conducting 'Patient Care Record Reviews', 'Specific Reviews' and 'Medical Reviews';
- monitoring whether these reviews are carried out as planned; and
- reporting results to management.

Management in turn should monitor whether agreed recommendations are implemented.

CLINICAL CARE DATA

- 6.46 ACTAS did not maintain a clinical care information database to enable ambulance officers to record patient information electronically or collect data from patient care records. Instead patient information was paper based and remains in a paper based form.

- 6.47 In the 2007-08 Budget, ESA received \$300,000 in the Information and Communications Technology (ICT) budget to undertake a preliminary study on the commissioning of an ACTAS clinical care database. However, ACTAS advised that this funding was reprioritized to fund ESA-wide radio communications equipment to upgrade the Trunked Radio Network program. ACTAS further advised that funding for the clinical care database has been approved in the 2009-10 Budget.

- 6.48 ACTAS' current approach to information management of patient care records has made tracking and monitoring of PCR records difficult. For example, data was not readily available to determine how many PCR may be outstanding or whether ambulance officers were appropriately completing PCR records.

- 6.49 Furthermore, the absence of a clinical information database containing PCR records means that data is not readily available to inform ACTAS management about patient types and trends. This limits ACTAS' ability to:

- deliver targeted and informed training programs based on emerging patient types and trends;
- selectively target 'Specific Reviews' and 'Medical Reviews' to address identified treatment needs;
- undertake pre-hospital research based on comprehensive datasets;
- stock ambulances with an appropriate range of equipment and drugs; and

- design and position the service for the future based on emerging patient trends.

Recommendation 14

ACTAS should establish a clinical information database that:

- enables the tracking and analysis of patient care records;
- facilitates improvements to the clinical care of patients; and
- provides an evidence based dataset to inform the future planning of the delivery of ambulance services.

7. PATIENT CARE SATISFACTION

INTRODUCTION

- 7.1 Obtaining feedback on the experience of care delivered to patients provides an opportunity to gain patient perceptions of service delivery and assess their level of satisfaction with delivery. Such feedback also provides valuable information to a service delivery agency such as ACTAS, on how to improve services now and into the future.
- 7.2 Patients generally assess the quality of care experienced primarily by the sensitivity with which care is delivered:

Patients put empathy, understanding and respect as the key to them receiving good quality of care.⁶³

KEY FINDINGS

- ACTAS has had in place a number of mechanisms to obtain feedback from its patients and stakeholders on key aspects of its services.
- There was no overarching policy and no procedures in place on how feedback obtained by ACTAS about its service would be processed, or how complaints would be addressed.
- There was no documented approach on how feedback would be measured, monitored or used to improve the delivery of services.

IDENTIFYING PATIENT FEEDBACK

- 7.3 ACTAS should have in place an overarching policy that provides direction on what and how it will seek feedback from patients and stakeholders, and how this feedback will be used to improve the patient care experience and their satisfaction with the service. In particular, ACTAS should have structures and processes in place which:
- facilitate feedback from patients and stakeholders; and
 - provide for continuous improvement based on that feedback.
- 7.4 However, Audit found that ACTAS did not have an overarching policy in place on how ACTAS would determine patient satisfaction levels and how it would manage feedback from patients.
- 7.5 The absence of a policy increases the risk that ACTAS may not adequately identify issues or trends associated with patient care experiences, and then resolve these to enhance service delivery.

⁶³ *Improving quality and safety - Progress in implementing clinical governance in primary care: Lessons for the new Primary Care Trusts*, UK National Audit Office, Report by the Comptroller and Auditor General, HC 100 Session 2006-2007, 11 January 2007, pg 10.

- 7.6 ACTAS advised Audit that it provided assistance to members of the community via its website information, and offered assistance to complete and document concerns about service provision.

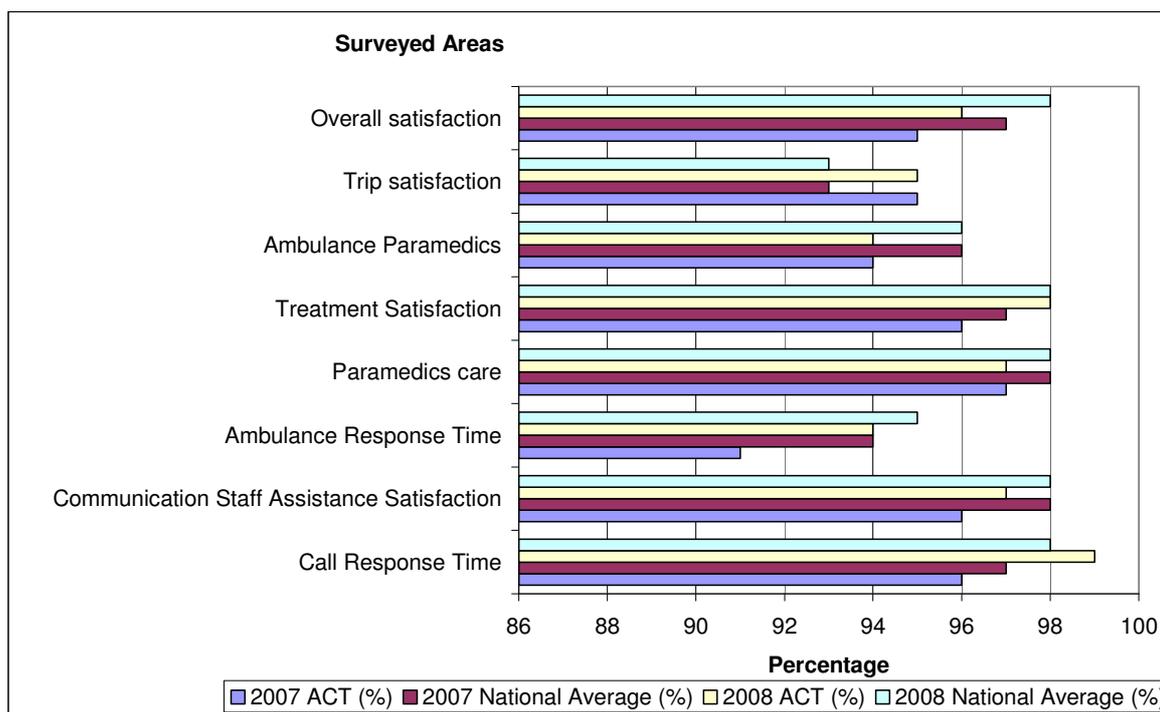
Recommendation 15

ACTAS should develop a policy that provides direction on what type of feedback it will seek, from whom it will seek the feedback, and how this feedback will be used to improve the patient care experience.

PROCESSING FEEDBACK

- 7.7 Notwithstanding the lack of an overall policy and procedures, ACTAS had in place a number of mechanisms to obtain feedback from its patients and stakeholders. These are:
- participation in the Council of Ambulance Authorities' (CAA) annual patient satisfaction survey;
 - a web-based complaints pro-forma to facilitate feedback from patients and stakeholders;
 - participation in cross-agency meetings; and
 - ad hoc stakeholder consultation workshops.
- 7.8 For example, as illustrated in Figure 7.1, the CAA survey provided information on a number of key areas such as, 'Treatment Satisfaction', 'Trip Satisfaction', 'Ambulance Paramedic' and 'Communication Staff Assistance Satisfaction'.

Figure 7.1 ACT CAA national patient satisfaction survey results for 2007 and 2008



Source: Council of Ambulance Authorities

- 7.9 Across each of the surveyed areas, satisfaction rating with ACTAS services in 2008 was very good and ranged from 94 to 99 per cent.⁶⁴
- 7.10 However, ACTAS did not have any guidance to staff on how feedback obtained via the above mechanisms would be processed.
- 7.11 For example, Audit found that while ACTAS developed a draft 'Complaint Management Policy' Statement in April 2007, the draft was yet to be signed off by management and issued to staff. As a result, staff have been processing complaints against the service without the benefit of policies and procedures.
- 7.12 This has led to inconsistent practices in the timeliness and assessment of complaints, including what action was taken, and if appropriate, how the outcome of an assessed complaint resulted in improvements to the service.
- 7.13 For example, Audit's examination of ACTAS complaint files showed that ACTAS' median response time to a complaint was 61 days. The shortest response recorded was eight days with the longest response time recorded as 436 days.
- 7.14 In addition, where complaints were made about an ICP's professional conduct, some reviews documented interviews with the alleged 'unprofessional' ICP, while others did not.

⁶⁴ The Council of Ambulance Authorities' Annual Patient Satisfaction Survey 2008.

- 7.15 ACTAS used pro-forma feedback forms, and these were helpful in obtaining sufficient information from complainants, that may not be provided in the initial correspondence or contacts. Audit found that on some occasions, ACTAS' insisted on complainants using its pro-forma feedback form, even after the complainant had already lodged sufficient information in writing. This may deter complainants from further pursuing the complaint.
- 7.16 The absence of guidance to staff on how to process and respond to complaints increases the risk that assessment of complaints may not be undertaken consistently, equitably or in a timely manner.

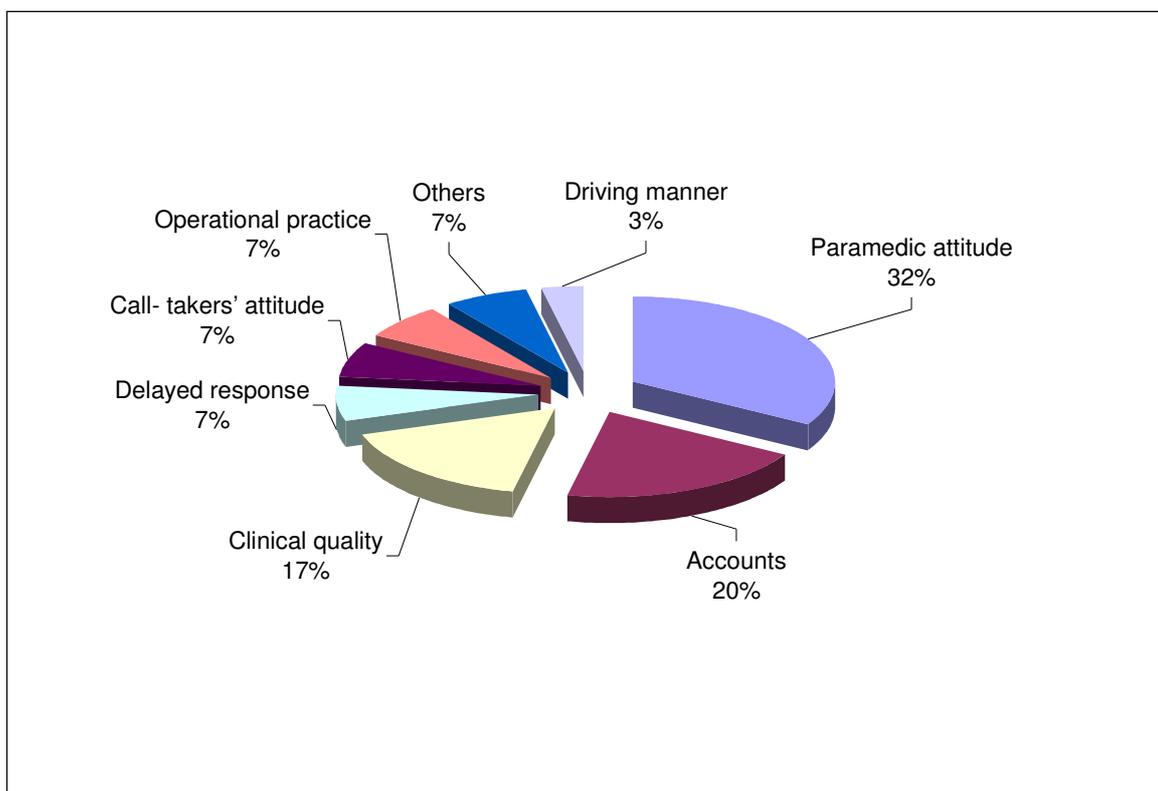
Recommendation 16

ACTAS should develop and implement policies and guidance to staff on how complaints should be assessed and actioned, including timeliness targets.

USE OF FEEDBACK

- 7.17 Reflecting the absence of an overarching policy governing feedback on the patient care experience, ACTAS did not have a documented approach on how feedback obtained through existing mechanisms would be measured, monitored or used to improve the delivery of services.
- 7.18 As a result, there was little assurance to patients and stakeholders that ACTAS was addressing areas identified as needing improvements. For example, the CAA survey illustrated that although patient satisfaction was very high, ACTAS ambulance paramedics have scored lower than the national average for the last two years in patient satisfaction scores. This was a measure that related to how satisfied patients were with the explanation given by paramedics about what was happening to them and why.
- 7.19 There were 30 recorded complaints received by ACTAS from November 2006 to November 2008. Audit also notes from examining ACTAS' complaints files that 32 per cent of total complaints against ACTAS were related to ambulance paramedics' attitude, manner or language.

Figure 7.2 Complaints to ACTAS in the period from November 2006 to November 2008



Source: ACTAS complaint files

- 7.20 Apart from the measures established by the CAA for the survey, Audit also found that ACTAS had not established any standards by which to measure patient care satisfaction, such as targets for customer satisfaction levels or timeliness of services. This is despite ACTAS identifying the need for a set of Customer Service Standards in 2001 against which to measure service delivery.
- 7.21 Audit considers that feedback and complaints policy and procedures need to improve to provide direction to staff on how improvements can be made to the service based on information on patient care experiences.

Recommendation 17

ACTAS should develop a set of standards to measure and monitor patient satisfaction, so that improvements to the service can be made, based on patient satisfaction information.

APPENDIX A AUDIT CRITERIA, APPROACH AND METHODOLOGY

AUDIT CRITERIA

The effectiveness of ACTAS' operational response to emergency and non-emergency incidents was assessed against the following criteria:

1. Operational performance:
 - ACTAS meets agreed performance targets and measures.
2. Effectiveness of ACTAS' service delivery model:
 - There are key governance arrangements in place to strategically and operationally manage the delivery of ambulance services;
 - Demand for ambulance services is monitored, analysed and used to manage ambulance resources;
 - ACTAS monitors performance against agreed measures and targets;
 - There are documented policies and procedures in place to supervise and guide staff in the delivery of ambulance services;
 - Governance arrangements, associated mechanisms and procedures are in place to govern the quality of clinical care provided to patients;
 - Data on patients care provided is recorded, tracked and monitored to inform delivery of services; and
 - Mechanisms are in place to collect, process and address patient and stakeholder feedback on the experience of care provided to patients.

AUDIT APPROACH AND METHODOLOGY

The audit approach and methodology consisted of:

- review of legislation and its requirements;
- reviews of ACTAS' procedures, documentation, databases and case files;
- consultation with ACTAS' executives, managers and staff including ambulance officers;
 - Audit also accompanied intensive care paramedic crews on their emergency day shifts at Dickson and Woden Ambulance Stations.
- a literature review on the provision of ambulance services;
- reviews of performance audits reported by Audit Offices in Australia and overseas; and

- discussions with relevant stakeholders, including:
 - The Canberra Hospital;
 - Calvary Hospital; and
 - Transport Workers Union.

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