



**Tasmanian**  
Audit Office



**Report of the Auditor-General  
No. 1 of 2016-17**

**Ambulance emergency services**

September 2016



## INTRODUCTION

The primary objective of an ambulance service, from a clinical perspective, is to provide optimal clinical outcomes for patients, including survival, cardiac arrest management, pain reduction and other appropriate care services within an appropriate response time. Aspects involved in doing so include following prescribed clinical practices and responding promptly, both of which are examined in this Report.

Emergency response times (response times) are one of the main performance measures for ambulance services throughout Australia and internationally. The standard used by a number of Australian jurisdictions is to respond to 90 per cent of Code 1 calls within 15 minutes.

Ambulance Tasmania's (AT's) responsiveness is dependent on a number of factors including the location of stations, availability of paramedics and volunteers, number of ambulance vehicles, quality of equipment and the health and ageing demographic profile of Tasmanians.

The challenge for AT is to manage service delivery targets in an environment of increasing demand for more ambulance services as our population continues to age.

The audit objective was to form an opinion on the effectiveness and efficiency of AT's provision of emergency and urgent responses.

The audit was limited to AT, which is organisationally part of the Department of Health and Human Services.

Our approach involved assessing processes in providing emergency and urgent responses, assessing outcomes from clinical interventions and treatments and assessing the efficiency of AT.

The audit concentrated on the five-year period 1 July 2010 to 30 June 2015. More recent data was used where available.

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<sup>1</sup> Response times is defined as the time taken between the arrival of the first responding ambulance resource at the scene of an emergency in Code 1 incidents and the initial receipt of the call for an emergency ambulance at the communications centre. State-wide response times are response times applied for state-wide ambulance service responses. Productivity Commission, Report on Government Services 2016, Volume D; Emergency management, Data quality information — Fire and ambulance services, Chapter 9, PC, Canberra, p.56.

## AUDIT CONCLUSIONS

These audit conclusions are based on criteria that we developed to support the audit's objective.

### Was Ambulance Tasmania effective in terms of clinical outcomes?

Based on the criteria assessed, AT was effective regarding clinical outcomes. In particular, there was reasonable evidence the level of AT's clinical outcomes were maintained over time and were similar and in some areas better than clinical outcomes of other Australian jurisdictions.

Limited data was available to assess clinical outcomes on a regional basis. However, relatively consistent pain reduction rates and high statewide patient satisfaction ratings suggested that clinical outcomes were reasonably consistent for all regions.

Results from our testing of AT reviews of clinical procedures indicated AT's compliance with established clinical practice guidelines.

### Was Ambulance Tasmania effective in terms of response times?

AT had been reasonably effective in terms of response times with consistent response times over the past five years, despite a rise of 16 per cent in emergency responses over that period.

Response times were slower than other jurisdictions, but this can be attributed to Tasmania's greater number of emergency responses per person and lower level of urbanisation.

However:

- there was disparity in overall response times noted across the three regions and variations in the regional deployment of resources and use of volunteers may have contributed to this disparity
- our testing identified that although AT response time outliers were being identified and examined, remedial action had not been evidenced in nine per cent of instances where a response time outlier had occurred
- AT's location of stations and branches were not entirely optimal based on a consultant's 2010 report.

## Were Ambulance Tasmania's emergency services cost effective?

AT emergency services were reasonably cost effective compared with other jurisdictions in terms of cost per emergency response and cost per capita. There had also been a significant reduction in real cost per response over the past nine years.

## Were Ambulance Tasmania's strategic management processes effective?

We concluded that AT's strategic management processes had been generally effective. In particular, AT was trying to improve its performance through trialling a raft of innovative strategies, such as use of first intervention vehicles and its defibrillation program.

On the other hand, it appeared that KPIs were not sufficiently well-defined, lacking in benchmarks or targets to be useful in driving efficiencies.

# LIST OF RECOMMENDATIONS

The Report contains the following recommendations:

REC	WE RECOMMEND THAT ...
1	... AT collects data (aligned with ROGS data) to allow regular and meaningful comparison of clinical outcomes at the regional level, to better allocate resources and to rapidly identify problems.
2	... regional summary reports of clinical reviews be standardised to facilitate review and comparison across regions.
3	... AT develop strategies to improve response times to those of other jurisdictions and undertake cost benefit analysis of those strategies before deciding on implementation.
4	... AT investigate whether the additional resources in the North and North West regions were effective in reducing average response times.
5	... AT investigate whether higher proportions of volunteers were impacting on mobilisation times in the North.
6	... AT reinforce the requirement to record factors contributing to response time outliers and the remedial action undertaken to address the contributing factors.
7	... AT regularly reviews its emergency and urgent determinants methodology to ensure that it continues to be best practice and in accordance with requirements of the National Academy of Emergency Medical Dispatch.
8	... AT investigate why the level of multiple responses had increased.
9	... AT outline what KPIs are measured and provide targets or benchmarks to define what is good or poor performance.

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