Strategic Review of the Ambulance Service of NSW
Final Report

June 2012
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Strategic Review Report

Introduction

In December 2011, I was approached by the Director General, NSW Ministry of Health, Dr Mary Foley, to conduct an independent review of the NSW Ambulance Service. The Director General also established a Steering Committee comprising herself (Chair), Dr Peter Sharley, (independent) and myself to coordinate the various components of the review. A reference group, comprising a cross section of Health and Ambulance representatives was also established to provide guidance and support. Membership is detailed in attachment 1.

To assist members of the Steering Committee in gaining an understanding of the issues previously examined and the subsequent recommendations flowing from past Inquiries/Reviews of the Ambulance Service, the Ministry made available copies of a number of past Inquiries/Reviews. Refer attachment 2.

In examining the past reviews, including issues addressed and recommendations made, it became apparent that yet another review covering all aspects of the NSW Ambulance Service ran the risk of simply going over ground already examined. The Steering Committee agreed that it would be more beneficial to conduct a “Strategic Review” that focussed on five major aspects associated with the NSW Ambulance Service. The areas identified were:

1. Models of Care and Demand
2. Non-Emergency Patient Transport
3. Finance
4. Governance and Structure
5. Aeromedical

The Steering Committee agreed that I would be responsible for aspects 1-4 and given Dr Sharley’s background and expertise he would take responsibility for progressing the Aeromedical component.

The Steering Committee signed off on a framework to conduct the “Strategic Review” and resolved that aspects 1-4 would be completed by the end of April 2012 and capture the progress made by the Ambulance Service in implementing relevant and related recommendations stemming from past reviews. The Aeromedical component, because of existing contracts and the need to examine the demand/service model across NSW, before initiating any procurement process, would be extended to conclude by December 2012.

The Steering Committee also agreed that it was important to engage staff from both Health and the Ambulance Service in the Strategic Review process. A series of workshops were arranged for staff to provide input into each of the areas being examined. Attachment 3 refers and also contains a list of a number of external stakeholders who were invited to respond to the Terms of Reference.
1. Analysis of Past Reviews

Before conducting the various workshops, I reviewed the actions taken by Health/Ambulance as a result of the relevant and related recommendations arising from past Inquiries/Reviews. This was to assist in identifying issues still outstanding and requiring resolution and also to help inform the proposed workshop deliberations. Ms Marian O’Connell was appointed by Mr Michael Willis, A/ Chief Executive Ambulance to assist in this exercise and was also seconded to provide me with assistance in conducting the Strategic Review.

For ease of reference I have divided these prior relevant and related recommendations in accordance with the subject areas in my report. In the table below I adopted a “traffic light” approach which highlights current status. In cases where the recommendations of a previous review corresponds to a recommendation in this Strategic Review I have also indicated that in this table.

### Model of Care – Recommendations and Ambulance response

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<thead>
<tr>
<th>Paper</th>
<th>Recommendation</th>
<th>Original Ambulance Response</th>
<th>Current Situation</th>
<th>Traffic Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Purpose Standing Committee No.2: The management and operations of the Ambulance Service of NSW - 2008</td>
<td><strong>Recommendation 20</strong> That the Ambulance Service of NSW should rely less on external consultants for planning by establishing an internal planning unit to provide long-term strategic planning. The unit should be operational before the end of 2009.</td>
<td><strong>Supported</strong></td>
<td>An Ambulance Services Planning unit was established in 2010.</td>
<td></td>
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<td><strong>Recommendation 35</strong> That should NSW Health continue the Extended Care Paramedic program, it increase the level of recurrent funding for the program and provide additional staffing to the Ambulance Service of NSW.</td>
<td><strong>Supported</strong></td>
<td>There are 70 trained ECPs and a further 12 officers commenced training in April 2012. 48 ECPs are currently available for rotation through 30 roster positions in the Hunter, Central Coast, Illawarra and Sydney.</td>
<td></td>
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<tr>
<td>NSW Government: Caring Together – The Health Action Plan for NSW - 2009</td>
<td><strong>Recommendation 80</strong> NSW Health, if it has not fully implemented the next recommendation, should within 18 months provide either by consensual arrangement or changed technology that Ambulance officers and the Emergency Department agree and determine jointly off stretcher time.</td>
<td><strong>Supported</strong></td>
<td>The Transfer of Care process commenced on 1 April 2012 and measures the time that care is transferred from the paramedic to the hospital. This replaces off stretcher time as an indicator of hospital performance although off stretcher time will still be measured by Ambulance.</td>
<td></td>
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<tr>
<td><strong>Recommendation 81</strong></td>
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<td>Within 18 months, the practice where by Ambulance officers remain with patients in EDs until the patient has their definitive treatment commenced ought to be abolished.</td>
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<td><strong>Further consultation required.</strong></td>
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<td>Ambulance supports this recommendation and is working towards the transfer of low acuity (selected patients from triage category 4 and 5) directly to emergency waiting rooms.</td>
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<thead>
<tr>
<th><strong>Recommended 118</strong></th>
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<tr>
<td>Extend the number of paramedics who are qualified and trained as <strong>extended care paramedics</strong> and who are also qualified and trained to make non-transport decisions in accordance with the relevant protocols of care.</td>
</tr>
<tr>
<td><strong>Supported.</strong></td>
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<tr>
<td>There are 70 trained ECPs and a further 12 officers commenced training in April 2012. 48 ECPs are currently available for rotation through 30 roster positions in the Hunter, Central Coast, Illawarra and Sydney.</td>
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<tr>
<th><strong>Recommendation 120</strong></th>
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<tr>
<td><strong>Paramedics</strong> in regional, rural and remote locations ought receive additional <strong>training</strong> so as to enable them to assist in the provision of immediate or emergency care delivered at the regional, rural or remote hospitals.</td>
</tr>
<tr>
<td><strong>Supported.</strong></td>
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<td>The development of the Paramedic Connect program, currently underway, goes someway to addressing this recommendation.</td>
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<th><strong>Recommendation 122</strong></th>
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<tr>
<td>NSW Health should develop a role description for and introduce a <strong>new category of staff member in the NSW Ambulance Service</strong> whose task would be principally to do all non-treatment duties which presently a two person team attends to, such as driving and attending to radio transmissions and paperwork.</td>
</tr>
<tr>
<td><strong>Not Supported.</strong></td>
</tr>
<tr>
<td>Not currently under consideration.</td>
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<tr>
<td>NSW Government: Review by NSW Department of Premiers &amp; Cabinet</td>
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<td><strong>Recommendation 5:</strong> That the Ambulance Service undertake an annual review of the determinants for its dispatching procedures (MPDS) with the aim of better matching resources to patient presentations, reducing multiple deployments, and freeing up capacity to respond to genuine life threatening emergencies.</td>
</tr>
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<td><strong>Recommendation 6:</strong> That the Ambulance Service develop a business case for the new Sydney metropolitan infrastructure model, and pursue other efficiencies to free operational capacity to better meet demand</td>
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<td>Recommendation 8:</td>
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| That the Ambulance Service develop and implement an ongoing community education program promoting appropriate use of Ambulances. This campaign should be designed using detailed research on Ambulance Service clients and potential clients and should seek to:  
* Promote effective use of Ambulance Service resources  
* Reduce unnecessary requests for Ambulances  
* Increase acceptance in the community that paramedics are well-equipped to determine whether treatment on site rather than transport to an accident and emergency department (A&E) is the most appropriate clinical response to an incident and  
* Promote effective use of ‘000 for life threatening events. | A public communication campaign on the appropriate use of Ambulances launched in November 2008.  
A hoax call campaign commenced December 2008.  
It is intended that the various campaigns will be ongoing. |

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<th>Recommendation 9:</th>
<th>Supported</th>
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<tr>
<td>That the Ambulance Service regularly report the number of hoax calls and other inappropriate calls. The Service should develop a policy and procedures dealing with the management of such calls, including the triggers for taking regulatory action. Where appropriate, the Ambulance Service should engage appropriate agencies or members of the community to work with those who have been identified as regular abusers of the Service.</td>
<td>The Service has developed a Policy for dealing with hoax calls – “Management of hoax and non-genuine calls” SOP 2010-008 which was released in March 2010.</td>
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<tr>
<td>Recommendation 23:</td>
<td>Supported</td>
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<td><strong>Recommendation 23:</strong>&lt;br&gt;Ambulance Service reduce its reliance on external consultants by strengthening its internal capacity to undertake business analysis to optimise operations, strengthen service planning, and estimate the operational impacts of new clinical practices and major projects.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td><strong>Recommendation 24:</strong>&lt;br&gt;That the Ambulance Service seek agreement with the Health Services Union on the transparent implementation of demand-based rostering that ensures that resources are matched to peaks and troughs in demand for Ambulance services.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td><strong>Recommendation 25:</strong>&lt;br&gt;That the Ambulance Service develops a policy by the end of January 2009 concerning the minimum educational requirements for new paramedic recruits and ongoing training needs for the existing workforce.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td>Paper</td>
<td>Recommendation</td>
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<tr>
<td><strong>Caring Together – The Health Action Plan for NSW - 2009</strong></td>
<td><strong>Recommendation 14a</strong></td>
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<td>NSW Health Should address the transport problems associated with providing care for rural patients including: (a) Abolishing the personal contribution and administration charge for all qualifying IPTASS claims</td>
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<td><strong>Recommendation 14b</strong></td>
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<td>(b) That there is a need to create a non urgent transport service to be responsible for the return transport of patients from metropolitan or rural hospitals to either their hospital of origin or alternatively to their homes, depending upon their clinical condition.</td>
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<td><strong>Recommendation 117</strong></td>
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<td>(f) The consideration of the availability of an efficient transport and retrieval system state-wide to transport patients to the hospital best placed to provide the medical service required, and return the patient to their original locations.</td>
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<td></td>
<td><strong>Recommendation 123</strong></td>
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<td>NSW Health is to ensure that there is provided, separately from the emergency transport service of NSW Ambulance, a non urgent transport service which is responsible for: (a) The return transport of rural patients from metropolitan or rural referral hospitals to either their hospital of origin or their home depending upon their clinical condition; (b) The transport of metropolitan patients between hospitals or from</td>
</tr>
<tr>
<td>NSW Government: Review by NSW Department of Premiers &amp; Cabinet</td>
<td><strong>Recommendation 1:</strong> That ‘tiering’ be adopted in the Ambulance Service as a means of focusing resources on greatest need (Accident &amp; Emergency demand).</td>
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<td><strong>Recommendation 2:</strong> That, to support progress towards a fully ‘tiered’ service, a review of NEPT be undertaken (in collaboration with NSW Health and AHSs) with terms of reference including (specified) elements.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td><strong>Recommendation 3:</strong> That the NEPT review be overseen by a steering committee comprised of NSW Health, Ambulance Service, Department of Premier &amp; Cabinet, and NSW Treasury. The review is to ensure detailed consultation with Area Health Services and other key stakeholders, including the Health Services Union.</td>
<td><strong>Supported</strong></td>
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## Finance – Recommendations and Ambulance response

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<th>Current Situation</th>
<th>Traffic Light</th>
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<tbody>
<tr>
<td><strong>General Purpose Standing Committee No.2: The management and operations of the Ambulance Service of NSW - 2008</strong></td>
<td><strong>Recommendation 25</strong>&lt;br&gt;That the NSW Government increase the capital works budget for the upgrades and repairs of Ambulance Service stations across NSW.</td>
<td><strong>Supported</strong></td>
<td>It does not appear that the RMR Budget has increased since 2008/09. In fact there was a reduction in 2011/12. <strong>Strategic Review Recommendation 17 relates</strong></td>
<td></td>
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<td><strong>NSW Government: Caring Together – The Health Action Plan for NSW - 2009</strong></td>
<td><strong>Recommendation 121</strong>&lt;br&gt;In regional, rural and remote areas, it is desirable that Ambulance stations be co-located with the principal hospital facility of the city or town.</td>
<td><strong>Supported</strong></td>
<td>Ambulance has co-located into three new multi-purpose service facilities at Bingara, Warialda and Merriwa. &lt;br&gt;Ambulance Support co-location however at times Ambulance are not included in hospital plan, eg. Hillston &amp; Peak Hill, due to funding. <strong>Strategic Review Recommendation 17 relates</strong></td>
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<tr>
<td><strong>Independent Pricing And Regulatory Tribunal Of New South Wales: Review of Financial Aspects of the Ambulance Service of NSW – December 2005</strong></td>
<td><strong>Recommendation 1:</strong>&lt;br&gt;That a single cost index be applied to all the fees on the fee scales, including the minimum charges</td>
<td><strong>Supported</strong></td>
<td>Implemented</td>
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<td><strong>Recommendation 2:</strong>&lt;br&gt;That the cost index be calculated using Australian Bureau of Statistics (ABS) price indices and Ambulance Service expenditure such that: &lt;br&gt;• The following four categories of Ambulance Service expenditure are used as weights:</td>
<td><strong>Supported</strong></td>
<td>Implemented</td>
<td></td>
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<tr>
<td>Recommendation 3</td>
<td>Not Accepted</td>
<td>No action</td>
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<td>That the change in the cost index for employee related costs be reduced by 1 per cent each year for expected efficiency gains.</td>
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<tr>
<th>Recommendation 4</th>
<th>N/A</th>
<th>No follow up from IPART. Therefore no action taken</th>
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<tbody>
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<td>That fees be rolled forward using this cost index for a three-year period, and be fully reviewed when the fee scales recommended in the first phase of this review are again reviewed (after three years). The review should in particular consider the indexation that applies to aero-medical costs.</td>
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<td>Strategic Review Recommendation 19 relates</td>
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<tr>
<th>Recommendation 5</th>
<th>Supported</th>
<th>Implemented</th>
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<td>That the Tribunal will calculate the cost index each year and provide the index to the Ambulance Service for application to the fee scales recommended in phase 1 of the review. The Tribunal will do this for the first time following the release of the ABS data for the March quarter 2006.</td>
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**NSW Government: Review by NSW**

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<tr>
<th>Recommendation 18:</th>
<th>Supported</th>
<th>A&amp;R committee established</th>
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<tr>
<td>That the Ambulance Service:</td>
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<td>• Assess its governance systems</td>
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<tr>
<td><strong>Department of Premiers &amp; Cabinet</strong></td>
<td><strong>Agenda</strong></td>
<td><strong>Support</strong></td>
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| against the better practice framework in the *Internal Audit Capacity in the NSW Public Sector, Final Report*;  
- Create a joint Audit and Risk Management Committee better to integrate the assessment of controls on identified risks; and  
- Benchmark the Ambulance Service current risk management systems and processes against *Australian and New Zealand Standard 4360:2004 – Risk Management*, and develop a strategy to address any deficiencies. | Recommendation 19:  
That the Ambulance Service review its key financial and human resource transactional processes, with a view to optimising automation, reducing corporate overheads, and ensuring compliance with government policies  

**Supported**  
Key financial and human resource transactional processes have been reviewed as part of the “shared services” program.  

See attachment 25 | Recommendation 20:  
That subject to finalising and promulgating its Hardship Policy the Ambulance Service develop a comprehensive policy and procedures to improve performance with respect to the collection of bad debts.  

**Supported**  
A Hardship Policy has been issued & is publicly available.  
Collection of bad debts remains an issue for Ambulance.  

Strategic Review Recommendation 18 relates |
### Governance – Recommendations and Ambulance response

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<tr>
<th>Paper</th>
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</table>
| General Purpose Standing Committee No.2: The management and operations of the Ambulance Service of NSW – 2008 | **Recommendation 43**  
That the Ambulance Service of NSW report directly to the NSW Minister of Health | Not Supported                 | No Action  
Strategic Review Recommendation 20 relates |                           |
|                                                                       | **Recommendation 44**  
That the NSW Government re-establish an Ambulance Service of NSW Board of Directors based on the former Board of Directors. The new Board should include at least one director who has been directly elected by members of the Ambulance Service. | Not Supported                 | No Action |                           |
|                                                                       | **Recommendation 45**  
That the NSW Government introduce a new *Ambulance Services Act* to provide comprehensive regulation of the Ambulance Service of NSW. The following provisions should be considered for inclusion:  
- a direct reporting line from the Chief Executive to the Minister of Health  
- a Board of Directors  
- management and conduct of performance provisions that apply to the Chief Executive  
- clear definitions and prescriptive provisions  
- registration of paramedics | Not Supported | No Action  
Strategic Review Recommendation 25 relates |                           |
**Government:**
*Review by NSW Department of Premier & Cabinet*

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<th><strong>Recommendation 10:</strong></th>
<th><strong>Supported</strong></th>
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<td>That the Ambulance Advisory Council be retained with its broad advisory function.</td>
<td>The membership and functions of the Ambulance Advisory Council has been retained. The Council functions are set out in the Act. Its current governance and operations were revised at the appointment of a new chair in September 2008.</td>
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<tr>
<th><strong>Recommendation 15:</strong></th>
<th><strong>Supported</strong></th>
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| That, in order to ensure that Ambulance Service managers are well supported in undertaking their roles, the Service undertake:  
  - A review of all position descriptions for executive/management/supervisory positions to ensure that key accountabilities and management competencies are properly articulated against business requirements  
  - An assessment of current management capabilities against revised position descriptions and a training & development program to assist managers to deal with any issues raised in the assessment. | Position descriptions for executives, managers and supervisors all contain key accountabilities and management competencies against business requirements. A new Performance Development Program (PDP) was introduced in September 2009 to support individual managers to continually build management skills, knowledge and capability while at the same time providing clear and consistent descriptions of what is expected of our managers. |

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<th><strong>Recommendation 16:</strong></th>
<th><strong>Supported</strong></th>
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| That, taking account of the previous recommendation, Ambulance Service design and implement a management development initiative targeting those people in operational roles who wish to move into management. This initiative should focus on:  
  - Assessing the suitability of officers to move from operational roles into management positions and for suitable candidates providing training in a number of core areas; financial, management, human resource management, conflict resolution, putting the Code of Conduct into practice. | The Ambulance Management Qualification (AMQ) is compulsory for all current managers and aspiring managers.  
*Strategic Review Recommendation 30 relates* |
<table>
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<tr>
<th>Recommendation 17:</th>
<th>Not Supported</th>
<th>No Action</th>
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<td><strong>Recommendation 17:</strong></td>
<td>That the Ambulance Service consolidate all existing corporate services functions (including Finance and Data Services) into a single Corporate Services Division. The existing positions of General Manager, Corporate Services and Director, Finance should be abolished and a new position of General Manager Finance and Corporate Services should be created.</td>
<td>Strategic Review Recommendation 30 relates</td>
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<table>
<thead>
<tr>
<th>Recommendation 21:</th>
<th>Supported</th>
<th>See recommendation 15 also.</th>
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<tr>
<td><strong>Recommendation 21:</strong></td>
<td>That the Ambulance Service establish a more highly structured performance management system comprising the following elements:</td>
<td>A structured organisational performance review system (Excellence in Care) was designed for the period 2007-2012. Annual performance agreements and reviews are part of the annual corporate review cycle. The proposed Performance Development Program (PDP) (see recommendation 15) is linked to this framework.</td>
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<td>• a five year corporate plan;</td>
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<td>• annual operational plans;</td>
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<td></td>
<td>• annual performance agreement with NSW Health; and</td>
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<td>• a staff performance and development system which links individual performance to corporate objectives.</td>
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<thead>
<tr>
<th>Recommendation 22:</th>
<th>Supported</th>
<th>The Chief Executive, Ambulance Service of NSW, is a member of the NSW Health Senior Executive Forum. Strategic Review Recommendations 20-22 relate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendation 22:</strong></td>
<td>That NSW Health ensure that it has mechanisms in place to secure Ambulance Service inputs to its strategic and corporate planning.</td>
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<tr>
<th>Recommendation 26:</th>
<th>Supported</th>
<th>The initial workforce plan recommendation 15 re: Performance Development Program. Strategic Review Recommendation 29 relates</th>
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<td><strong>Recommendation 26:</strong></td>
<td>That, by the end of June 2009, the Ambulance Service finalise an initial workforce plan, with development and succession planning linked to performance management for all staff.</td>
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2. Demand

2.1 Overview
A key objective in planning Ambulance services is the development of a methodology for projecting future service demand requirements. This requires an understanding of the key drivers of demand growth for emergency Ambulance transport and pre-hospital care.

Australia’s annual population growth is currently 1.7% however the population is ageing.

American research\(^1\) has identified patients aged >65 years were almost twice as likely to use emergency Ambulances compared with those <65 years with a concomitant incremental increase in usage from 65 to 85 years of age. Australian and British studies found a similar association in the late 1990’s.\(^2\)

More recently, the Australian Health Review, 2011, 35, 63-69 – increasing utilisation of emergency Ambulances notes:

‘There was evidence that the numbers of patients transported by emergency Ambulance services has increased over the past two decades in many developed countries. In summary:

- The emergency workload of the London Ambulance Service ‘doubled’ between 1989 and 1999, the number of patients transported to ED’s having increased at an average annual rate of 8.9%. This trend has continued with 7% growth in London between 2007-08 and 2008-09.
- In the USA, a national survey of ambulatory care in 2005 reported a 25% increase in all Ambulance arrivals at ED’s since 1997;
- In Canada, there was a rise of 20% between 2003-04 and 2008-09; and
- In New Zealand growth in incidents in the year ending 2007-08 was 20%.

Three Australian papers were identified, with each describing increased utilisation....Reports from Council of Ambulance Authorities Inc and the Productivity Commission indicate an annual rise in Ambulance responses ranging from 7% pa to 12.5% pa since 1996. In the year ending June 2008, the number of patients transported increased across Australia by 5.4%.’


The ageing of the population alone does not explain the growth in the use of Ambulance services.

In an article published in the Australian Health Review, 2011, 35, 63-69 a number of other factors were identified as possibly having an impact on Ambulance utilisation. These include:

Social support – increased usage of Ambulance services associated with living alone. The number of Australians falling into this category as a result of increased divorce rates, never married, wider participation of women in the workforce and erosion of the extended family. Government policies encourage older people to remain living in their homes for as long as possible. 7% of people aged >65 years live in retirement or aged care accommodation and of those residing in private accommodation, 62% live alone.

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Pricing and accessibility - American studies have associated higher rates of Ambulance use by patients entitled to free transport in their insurance coverage. In Queensland when residents were covered by a low cost annual contribution scheme, there was an increase in use by subscribers and later when a universal levy was introduced there was an increase in use.

Reduced access to traditional primary care services - the availability and working hours of GP's and hospitals specialising (hub and spoke).

Increased health awareness - media campaigns have shown a sustained impact on health awareness eg the recent advertising by the Heart Foundation stressing the need to call triple zero when experiencing early warning signs of a heart attack resulted in increased demand on Ambulance. Conversely the advertising campaign ‘an Ambulance is not a taxi service’ had the opposite effect. It can also be argued that changing community expectations generally also impact.

A major study was commissioned by the Council of Ambulance Authorities to develop models for forecasting demand for Ambulance services. The report, Factors in Ambulance Demand: options for funding and forecasting produced by the Australian Institute for Primary Care in 2007 identified a range of factors considered to drive demand for Ambulance services in Australia. These include:

- 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 benefits of early intervention

They found that, with the exception of demographic change, few data are available to estimate the relative impact of each of these factors on Ambulance demand. Further, when analysing the growth in demand for emergency transport in Melbourne between 1996 and 2001, they found that demographic change alone accounted for only around 25% of total increased demand. This was during a period when Ambulance incidents were increasing at a rate of around 6-8% per annum in Australia.

2.2 Methodology for Projecting Incidents and Responses (NSW)
Predicting and managing demand provides the foundation for delivering Ambulance Services. Information about current services and trends provides the basis for developing improvements in the provision of timely high quality, patient centred care.

Following recommendations in 2008 by the NSW Upper House General Purpose Standing Committee No. 2 Inquiry into the Operations of Ambulance and a Performance Review by the Department of Premier and Cabinet, Ambulance established an Ambulance Services Planning Unit in 2010. The objective of the Services Planning Unit is to provide internal capacity to inform long term strategic planning. This is a sound initiative and although only established for a relatively short period it has provided Ambulance with far greater capacity to plan, forecast and understand impacts on ambulance services in NSW. The Unit developed a compendium of information in 2011, which has been of great benefit in conducting this ‘Strategic Review’. Much of the information contained in this paper has been taken from various parts of the compendium.

The growth in total incidents and responses as illustrated in Figures 1 and 2 has followed a fairly linear rate of increase averaging around 4% per annum between 2000/01 and 2009/10. Around half of this increase can be attributed to the growth and ageing of the population, which are responsible for just under than 2% increase in demand for health services, as illustrated in Figure 2.
The major exception in this long term trend has been the higher rate of increase between 2003/04 and 2007/08 and the lower rate of increase between 2007/08 and 2009/10. Any projections based on the most recent time period, presented as Projection 3 (05/06 – 09/10) in Figures 2 and 3, are influenced heavily by the below average rate of growth for the past two years. Projections based on a longer period fit more closely with the historical growth trend and represent a more satisfactory basis for projecting future demand.

In estimating the projected increase in demand for total incidents and responses in NSW, it is recommended that the long term trend be used.

**Figure 2 - Projection for incidents (P1-9), NSW, to 2019**
2.3 **Trends in Demand - NSW**

Between 2000/01-2009/10 against a backdrop of a population increase of 7.8% total demand, for both emergency and non-emergency activity showed:

- 35% increase in incidents
- 42% increase in transports

Around half of the increased demand for transports may be attributed to the growth in ageing and size of the population, while half is due to other demand drivers.

Growth in emergency demand over the five years to 2009/10 increased by:

- 12.3% for incidents
- 12.6% for responses
- 21.4% for transports
- 4.1% increase in population growth
- 10.1% increase in admissions to hospitals for emergencies

The emergency transport to incident ratio increased over the five year period:

- By 8.1% from 70 to 76 transports per 100 incidents across NSW
- Showing greatest growth in Sydney Division with an 11.8% increase

Growth in non-emergency demand over the five years to 2009/10 increased by 13.1%; a higher growth rate than for emergency demand.

In the five year period 2003/04 to 2008/09, the number of emergency incidents increased by 31% in NSW, and the total number of incidents increased by 19%. The number of responses increased at an equivalent rate. It can be seen that, during this period, the annual rate of increase was not constant, but fluctuated significantly, as illustrated in *Figure 2*.

While the trend in total emergency incidents is clearly affected by factors other than population growth and ageing, *Figure 2* illustrates that there is a strong correlation with the trend in hospital emergency department presentations. As around one-third of these are transported by Ambulance, this is not surprising.
Over a longer period of time the year by year fluctuations are evened out and a smoother pattern of increase can be observed, as illustrated in Figure 3 which presents the growth in total incidents for NSW between 2000/01 and 2009/10, and presents three alternative projections to 2018/19 using alternative time periods.

2.4 Current Demand
An Ambulance response is each time a paramedic is assigned to an incident and commences to travel to the location of the incident. An Ambulance incident is defined as a request resulting from a Triple Zero call or a booking for a non-emergency patient transport.

In 2009/10 the demand for Ambulance care included:

- Total responses: 1,131,294
- Total incidents: 938,835 of which 662,167 (70.5%) were emergencies
- Total transports: 760,264 of which 503,250 (66.2%) were emergencies.

Some key facts in respect to these services:

- Of the 1,131,294 total Ambulance responses in NSW in 2009/10, 636,967, or 56% were P1 emergency responses, 188,577, or 17%, were P2 emergency responses.
- Emergency responses (P1-P2) comprised 73% of the total Ambulance responses in 2009/10.
- Around half (48.2%) are currently provided for the population aged 65 years, who represent 14% of the population.
- On average, a population of 1,000 people will generate 133 incidents, 160 Ambulance responses and 107 patient transports per annum.
- The rate of incidents per 1,000 population varies – in metropolitan areas it was 114 incidents per year, whereas in rural areas it was 150-160 incidents per year.
- 58% of emergency responses occur between 8am and 7pm.
- 37.5% of patients using Emergency Departments with life threatening conditions were transported there by Ambulance.
- Over the last five years there has been a 19% increase in the number of paramedics in the workforce.

2.5 Activity by Time of Day and Priority Category
On an average day in NSW in 2009/10, there were 1,745 P1 emergency responses, of which 58% were provided during business hours, a further 22% are provided between 7pm and midnight and 20% are provided between midnight and 8am, as illustrated in Figure 4.
A relatively higher proportion of non-emergency responses occur during business hours (8am-7pm) with 72% of R3 responses and 76% of Non-Emergency responses occurring during this period.

The peak hour for P1 emergency responses is 11am – midday and the peak hour for non-emergency responses is 2-3pm.
On an average day in NSW in 2009/10, there were a further 517 P2 emergency responses, of which 60% were provided during business hours, a further 20% were provided between 7pm and midnight and 20% were provided between midnight and 8am.

Total daily average responses across NSW are consistently around 3,000 to 3,300 across the five weekdays at all times of the year, as illustrated in Figure 5. The average daily responses decrease to around 3,000 on Saturdays and approximately 2,700 on Sundays.

2.6 Demand by Priority Categories and Control Centres

Ambulance Service responses are prompted by the receipt of a Triple Zero call to an Ambulance call taker in a Control Centre or via a non-emergency transport booking line.

For Triple Zero calls, the nature of the call and the response priority rating it is allocated, is determined by a call taking tool called ProQA, which consists of a list of standard questions which establishes the nature, size and location of an incident. There are no triaging tools applied to the non-emergency transport booking line. The proportion of calls by category for each Division is shown in Figure 6. The guidelines describing each response category are presented in the table A on page 27 of the report.

Figure 6 - Ambulance Demand: Responses by Priority Categories

2.7 Case Cycle Time

The Case Cycle Time is the time between the time of the call for an incident and the time that the crew are “cleared” to attend another case.

The average case cycle time in 2009/10, by division, are: (refer Figure 8).

- Sydney Division: 83.2 minutes, an increase of 8.4 minutes, or 11%, since 2005/06
- Northern Division, 76.1 minutes, an increase of 7.3 minutes, or 11%, since 2005/06
- Southern Division, 72 minutes, an increase of 5.5 minutes, or 8% since 2005/06
- Western Division: approximately 58 minutes which has remained steady over the past five years

Case Cycle Times are the lengthiest in Sydney as a result of congested city traffic and lengthy off-stretcher times at busy metropolitan hospitals. In the Sydney and Northern Divisions, there is a strong
correlation between increases in off stretcher time and the increases in case cycle time. In the Southern Division increases in case cycle times are less significant than the rise in off stretcher time. In Western Division despite significant increases in off stretcher time, case cycle time has marginally decreased.

Ambulance commenced to investigate the causal factors associated with increased case cycle times. Figure 7 depicts increasing case cycle times over the period 2006-12. This graph shows the time taken to complete a case (case cycle) is increasing at a greater rate than the number of responses. This highlights reduced response capacity over that period.

**Figure 7 - Case Cycle Times**

*State Operations - Ambulance Responses and Total Case Cycle Time (July 2006 to February 2012)*

**Figure 8 - Average Case Cycle Time by Division, 2005/06 – 2009/10 (PI Emergency) only*
2.8 Off Stretcher Time
When an ambulance arrives at an Emergency Department and cannot off load the patient it is usually because the Emergency Department is full and patients who have been processed cannot be transferred to the wards.

Although, at times, the condition of the patients in the Emergency Department will have an effect, mostly a lack of available beds in the wards is the significant factor. This is referred to as “Access Block”. The hours lost to and the cost of off stretcher time is depicted in figure 9.

Lengthy off-stretcher time at hospitals continues to pose a challenge for availability of Ambulance and paramedic care. Average off-stretcher time experienced by Ambulance increased by 17.7% from 2005/06 to 2009/10. Off-stretcher time increased across NSW between 2005/6 and 2009/10, with increases of 14% for the Sydney Division.

In the nine months to March 2011 paramedics spent an average of 31.8 minutes per case waiting in emergency departments. In over 35% of these cases, paramedics spent 30 minutes or more waiting in access block and more than 40,000 hours waiting to offload patients from their stretchers (taking into account that a 20 minute threshold is allowed for each case that has been identified as representing Ambulance best practice).

Solving the problem of access block will require new approaches to the transfer of patient care between Ambulance and the hospital. If the problem is not addressed, it will continue to have a negative impact on Ambulance operations, performance and costs and on the quality of patient care.

Figure 9 - Lost hours due to OST 09-11

![](image)

2.9 Trends in Off Stretcher Time
Off Stretcher Time is a demand trend that impacts on Ambulance services.

While Sydney Division has always been recognised as having the most significant problem with off stretcher time, Figure 10 indicates the trend suggests Western, Northern and Southern Divisions are facing similar difficulties. Increases in off stretcher time over the past two years contribute to increases in overall response times documented in Figure 11.
A more detailed breakdown by CHD, with respect to OST is attached of attachment 5. It should be noted Ambulance has lost more hours YTD in 11/12 than was lost in either of the two previous FY. The increase in Off Stretcher Time between 2005/6 and 2009/10 was 14% for Sydney, 21% for Northern, 36% for Southern and 50% for Western division.

Figure 11 - Response Times
3. **Demand Strategies – Operational**

3.1 **Current Strategies adopted by Ambulance to meet demand**

Ambulances have, over time, developed a range of strategies aimed at managing demand. These are outlined below.

3.1.1 **Response Code Changes**

Operational Response codes, listed in Table A (Page 26), provide a guide and timeline for Ambulance responses. The red and orange sections in this table represent emergency responses emanating from a Triple Zero call and as prioritised by ProQA, and the remaining categories are those which are booked via the non-emergency transport booking line, which are not prioritised (except the R3 category, which is discussed below).

Once the need for a response is determined the call taker transfers the incident to a dispatcher who then identifies the resource/s which will be responded i.e. the closest and most clinically appropriate Ambulance resource. Since August 2010, all four Control Centres operate as one “virtual” centre, meaning that a “Triple Zero” call can be answered and processed at any Centre using the ProQA tool.

The highest percentage of responses in NSW is for P1 Emergencies totalling 56.3% of all dispatches. This is consistent across all Divisions with Sydney at 56.8%, Northern 55.8%, Southern 54.9% and Western 57%.

P1 Emergencies by their nature require an immediate response and the individual dispatcher may allocate more than one response resource/Ambulance to a P1 incident in an attempt to provide the fastest response. In addition, the attending paramedic may decide the incident requires a higher skill level than that which originally was dispatched to the incident. In this case they notify the dispatcher to send a higher skill level which will generate another response.

In 2009/10 16.6% of responses throughout NSW were P2 Emergencies. The Northern Division had a higher percentage of P2 Emergencies with 20% of all responses being P2 Emergencies. In contrast, R3 Time Critical incidents account for 8.8% of responses throughout NSW. While Northern has a lower proportion of these at 7%, Southern and Western recorded a slightly higher proportion in this category (11% and 10.6% respectively).
### Table A: Operational response code

<table>
<thead>
<tr>
<th>Priority Code</th>
<th>Response Code</th>
<th>Category</th>
<th>Mode</th>
<th>Response Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1A</td>
<td>Emergency Immediate</td>
<td>Hot</td>
<td>Closest and most timely approved Ambulance resource. Minimum of three (3) officers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response</td>
<td></td>
<td>Highest Clinical Skill should form part of the response</td>
</tr>
<tr>
<td>P1</td>
<td>1B</td>
<td>Emergency Immediate</td>
<td>Hot</td>
<td>Most timely Ambulance response</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response</td>
<td></td>
<td>Highest Clinical Skill where available</td>
</tr>
<tr>
<td>P1</td>
<td>1C</td>
<td>Emergency Immediate</td>
<td>Hot</td>
<td>Most timely Ambulance response</td>
</tr>
<tr>
<td>P2</td>
<td>2A</td>
<td>Emergency 30 Minute</td>
<td>Cold</td>
<td>Ambulance to be at patient location within thirty (30) minutes of call. Consider ECP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>2B</td>
<td>Emergency 60 Minute</td>
<td>Cold</td>
<td>Ambulance to be at patient location within sixty (60) minutes of call. Consider ECP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>2C</td>
<td>Emergency 90 Minute</td>
<td>Cold</td>
<td>Ambulance to be at patient location within ninety (90) minutes of call. Consider ECP</td>
</tr>
<tr>
<td></td>
<td>2Ah</td>
<td>Emergency HAC Eligible</td>
<td>Cold</td>
<td>Incident eligible and may be referred to HAC for secondary triage.</td>
</tr>
<tr>
<td></td>
<td>2Bh</td>
<td></td>
<td></td>
<td>Unless advised otherwise by HAC Ambulance must arrive in accordance with the 2A, 2B</td>
</tr>
<tr>
<td></td>
<td>2Ch</td>
<td></td>
<td></td>
<td>or 2C grid above</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Consider ECP</td>
</tr>
<tr>
<td>P3</td>
<td>R3</td>
<td>Priority Medical</td>
<td>Cold</td>
<td>Medical calls to transport a patient to a health facility within an agreed time as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>determined by the Medical Practitioner / Nurse for admission, including hospital to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hospital transfers</td>
</tr>
<tr>
<td>P4</td>
<td>R4</td>
<td>Priority Aeromedical</td>
<td>Cold</td>
<td>Time critical prearranged response to and or from an airport/ heliport</td>
</tr>
<tr>
<td>P5</td>
<td>R5</td>
<td>Routine Appointments</td>
<td>Cold</td>
<td>Medical / treatment appointments, eg: Scans, Dialysis, X-Ray etc.</td>
</tr>
<tr>
<td>P6</td>
<td>R6</td>
<td>Post Appointments</td>
<td>Cold</td>
<td>Post Medical / treatment appointments, eg: Post Scans, Dialysis, X-Ray etc.</td>
</tr>
<tr>
<td>P7</td>
<td>R7</td>
<td>Convalescent</td>
<td>Cold</td>
<td>Discharge / Inter-facility convalescent / Palliative care transfer</td>
</tr>
<tr>
<td>P8</td>
<td>R8</td>
<td>Sports / Special events</td>
<td>Cold</td>
<td>Event Standby</td>
</tr>
<tr>
<td>P9</td>
<td>R9</td>
<td>Major Incidents</td>
<td>Hot/C</td>
<td>Major incidents as per service policy and to those events that require separation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>from other incidents</td>
</tr>
</tbody>
</table>
In December 2011 the Ambulance Performance Improvement Team produced a report, *Medical Priority Dispatch System (MPDS) Response Grid Assessment*, which compared the response codes used by NSW against that in use in Queensland Ambulance Service (QAS), Ambulance Victoria (AV) and Ambulance jurisdictions across the United Kingdom. The period of comparison was July to September 2011. The key findings include:

There were significant variations in the priority allocations to the MPDS response Grid amongst the jurisdictions. The examination of priority allocations confirms that NSW Ambulance has the highest proportion of hot responses compared to the three other jurisdictions. The UK has significantly less hot responses than all other areas while there was a similar outcome for hot responses recorded for QAS and AV:

- In the UK 34.4% of incidents are allocated a “hot” response (57,000 incidents)
- In Victoria 59.5% of incidents are allocated a “hot” response (98,000 incidents)
- In Queensland 61% of incidents are allocated a “hot” response (101,000 incidents)
- In NSW 80% of incidents are allocated a “hot” response (133,000 incidents)

There was good correlation of cold response priority allocations between all jurisdictions except NSW Ambulance which had significantly lower number of cold responses:

- UK (54,000 incidents) 33%
- AV (43,000 incidents) 26%
- QAS (45,000 incidents) 27%
- Ambulance (19,000 incidents) 11%

A significant reduction in Priority one (hot) responses from 78% to 35% would occur in applying the priorities of the UK MPDS response grid to NSW. Applying the QAS response Grid to NSW would reduce hot responses in NSW from 80% to 61%. Applying the AV Response Grid to NSW would reduce the hot responses in NSW from 80% to 59.5%

Taking these experiences into account, proposed changes to the response grid are currently before the Ambulance Executive, having been approved by the Response Grid Quality Committee. It is expected these will reduce cases allocated a “hot” responses to about 65% and potentially have an immediate and positive impact on response time performance, paramedic fatigue and operating costs.

**Recommendation 1**

*That the Acting CE of Ambulance submits the revised response grid recommended by the Response Grid Quality Committee to the DG, Ministry of Health for approval and implementation as soon as possible and the rationale for changes to the grid be presented for information to the Health Senior Executive Forum.*

The benefits of adopting a nationally agreed response grid was discussed with Mr Greg Mundy, CE Council of Ambulance Authorities (CAA). Although supportive he explained that gaining national consensus was often time consuming and difficult and given the CAA limited resources, often required leadership and drive from one of the jurisdictions. Given that NSW Ambulance has been able to gain the support of both QAS and VA in supplying data, NSW Ambulance could play a lead role in such a project.

**Recommendation 2**

*Ambulance continue in their leadership role and work with the other jurisdictions in developing a nationally agreed response grid.*

3.1.2. **Health Access Coordination Centre (HAC) and Health Direct**

The Health Access Coordination Centre (HAC) is located within the Sydney Control Centre, and provides a secondary telephone triaging service for low acuity calls. The HAC unit currently operates from 7am to 10pm.
The HAC unit's primary aim is to redirect non-urgent non-serious calls away from emergency Ambulance transport and subsequent ED presentations. HAC employs Registered Nurses and Intensive Care Paramedics who use clinical decision support software over the telephone to enable an appropriate outcome for the caller, based on information given during the call. That outcome may result in a non-Ambulance response, and include advice about seeking alternative methods of transport, or treatment by other health professionals.

Examples of calls referred to the HAC unit are vomiting, coughs and colds, muscle and limb pain, and blood pressure problems. Ambulance also receives calls where medical assistance is not required. On average each month the number of calls referred to HAC is 2,500, or 3% of the 81,000 triple zero calls received statewide in each month.

*healthdirect Australia* is a free 24-hour telephone health triage, information and advice service for residents of the ACT, NSW, the NT, Tasmania, SA and WA. Registered Nurses at *healthdirect* have access to sophisticated decision software systems which help them address the previous health concerns in a safe and consistent way, and provide appropriate advice based on the latest clinical evidence. The services available through *healthdirect* are wholly or jointly funded by federal, state and territory governments.

Since 15 June 2011 Ambulance has been trialling the referral of low acuity triple zero calls to the *healthdirect* Australia health advice line between 10pm and 7am when the Ambulance Health Access Unit (an internal secondary triage team) is not operating. The objective of the trial is to assess the viability of using *healthdirect*'s services to manage all secondary triage of triple zero calls.

During the period of the trial, 4664 calls have been referred to *healthdirect*. Of these, 630 have been returned to Ambulance for an emergency response.

Ambulance is current seeking quotes from *healthdirect* to conduct the telephone triage service for Ambulance, both on the current basis and on a 24 hour basis.

**Recommendation 3**

Once cost has been determined, Ambulance should, in concert with the Ministry of Health, agree on the best form for the provision of secondary triage, taking into account the impact on existing staffing and resources and also incorporating the experiences of EDs, once adopted.

If required Ambulance and the Ministry should also conduct the relevant funding negotiations with the Commonwealth.

**3.1.3 Ambulance Release Team (ART)**

ART consists of two paramedics who work on overtime to relieve an emergency crew and maintain care of patients who are unable to be transferred to hospitals due to access block. ARTs work out of a non-transport vehicle equipped with stretchers.

ART is active across the Metropolitan Division, including the Central Coast and Wollongong. There are up to 9 ART teams available for deployment.

An ART is deployed when one Ambulance has been waiting for 60 minutes, two Ambulances have been waiting for 30 minutes, or when an ED advises of an indefinite wait to unload Ambulances or requests the assistance of an ART.

ART commenced in 2004 and the costs are billed to the LHD. ART have not apparently effected waiting times for Ambulances in EDs, with hours lost to off stretcher time greater than 30 minutes increasing from 25,591 in 2008/09 to 39,060 in 2010/11. *Attachment 6* details the costs by hospital for financial years 09/10, 10/11, 11/12 to March.
It appears ART was implemented as a twofold strategy. Firstly, if a patient who is assessed as requiring urgent medical assistance necessitating an emergency transport to a hospital by Ambulance and upon arrival at the hospital cannot receive immediate attention, the patient remains under the care and supervision of a paramedic.

Secondly when this situation arises, a strategy was needed to free up paramedics and emergency vehicles in order that Ambulance is in a position to respond should an emergency arise.

More recently, as part of the joint consultative arrangements (JCC) with unions Ambulance has been able to have two duty ART crews operating. These crews are rostered on as ART but do not attract overtime rates, despite all other ART teams operating outside of rostered hours and therefore attracting overtime rates.

Although I appreciate the problem unanticipated high demand causes the LHD/ hospital, access block is essentially a LHD/hospital problem. The NSW Ambulance has neither control nor authority to address the problem being experienced by a particular hospital but the operation of ART teams represents an expenditure impost on Ambulance of approximately $869,000 in Fy10. Revenue received from LHD’s does not meet full costs (staff salary and on costs, vehicle, maintenance and equipment). Given that most ART teams are paid at overtime rates there is not only an issue associated with cost but because paramedics perform the ART in addition to their rostered hours, there is an important issue relating to staff fatigue.

Another issue that has been raised at the staff workshops, albeit anecdotally, relates to a possible disincentive for hospital admissions staff to prioritise the admission of the patient brought in by Ambulance because there is no cost impost until 30 minutes waiting time for two Ambulances or 60 minutes for one Ambulance.

Recommendation 4

a) ART cease to operate within Ambulance and LHD’s make the necessary local arrangements to address access block, or

b) Ambulance roster all ART crews, in consultation with the Ministry of Health and the relevant LHD’s. That these be located at the hospitals. LHD’s who have ART crews rostered reimburse Ambulance the full costs associated with ART, or

c) A combination of the above, subject to local negotiation and agreement by Ambulance and the Ministry of Health.

Ambulance should be authorised to utilise ART funds to backfill staff and the above arrangements should be reviewed at appropriate levels.

The above approach, if adopted, also presents an opportunity for some paramedics to continue to utilise their professional skills but whom, because of age or injury, find they can no longer meet the level of physical demands required of a paramedic when carrying out their day to day responsibilities.

3.2 Potential Demand Management Strategies

3.2.1 Frequent Caller Program

This program is currently in development but a ‘frequent caller’ is defined as anyone who makes ten or more calls in a one year period. Ambulance has recently recruited a Project Officer to develop the program, aimed initially at mental health patients and will involve work with LHD’s and Police.

Ambulance data has been used to identify frequent callers which show, for the 2009/10 period, across NSW there were 938 frequent callers who made 14,578 calls resulting in 11,428 transports to ED’s. Given an average case takes 66 minutes in Ambulance time, approximately 16,000 hours (or 47 FTE paramedic staff) were involved in responding to ‘frequent callers’. Ambulance estimates approximately $8.5million is spent in managing these patients. This does not include ED’s costs.
3.2.2 Reducing Transfer of Care Time in Hospitals
This involves the transfer of low acuity patients directly to emergency waiting rooms.

The best indication of the number of patients who could be triaged from Ambulances to the waiting rooms of hospital Emergency Departments (ED) are those in the lowest two ED triage categories i.e. Hospital Triage category 5. Triage Category 5 is described as:

“People who need to have treatment within two hours are categorised as having a less urgent condition. People in this group have minor illnesses or symptoms that may have been present for more than a week, such as rashes or minor aches and pains”.

The potential extent of this activity is extracted from the Demand Analysis Compendium of Information, February 2011.

In 2009/10:
- 530,766 patients arrived by Ambulance at EDs, or about 24% of all patients presenting at EDs.
- Over 200,000 of these were classified as triage category 4 or 5.
- 19% of all patients classified as category 4 (the largest volume of patients are triaged to this category) arrive by Ambulance

This is most likely an underestimate as data from EDs is incomplete. In 2009/10 more patients in category 5 arrived by Ambulance in NSW than in any other state.

Ambulance is currently consulting more broadly on a protocol, linked with the LAP protocols, which would allow paramedics to refer patients who are transported directly to the ED waiting rooms. Health Access Coordination and healthdirect already triage by telephone. This is an important initiative not only for the Health system generally but also for Ambulance.

Paramedics are recognised as having the level of skill and competency to triage cardiac arrest patients and trauma patients; not to recognise this level of professional clinical ability for Health triage level 5 defies logic.

Workshop participants cited numerous examples of emergency vehicles being tied up in off stretcher time with patients who are later assessed as Triage 5, whilst at the same time there are patients who are in the ED who have higher needs. Anecdotally it was also pointed out that some GP’s and patients access Ambulance services to by-pass waiting times experienced in ED’s.

Recommendation 5
The LAP protocol be adopted and implemented as soon as practicable, having regard to any changes required to Ambulance/LHD/hospital clinical handover policy and the necessity to supply information packages to related health stakeholders.

3.2.3 Emergency Responder Program
In 1998 the Victorian Government approved a 6 month pilot study to investigate whether the simultaneous dispatch of Fire and Ambulance resources to acute medical emergencies, including cardiac arrest, could lead to decreased response times and thereby improve the patients chance of survival.

The Emergency Medical Response (EMR) First Responder program pilot, as it was called, commenced on July 14, 1998 and concluded on January 12, 1999. The Pilot data demonstrated a decrease in emergency vehicle response time as well as time to defibrillation in the pilot area.

In early February 2000 the Victorian Government extended the pilot study for another 12 months to cover the entire MFESB area of operation.
The Victorian Government confirmed the inclusion of the EMR First Responder as core MFESB business in December 2001.

Results
The MFESB attended a total of 8227 incidents as part of the EMR program over the 7 year period. See Table 1 for total EMR incidents attended for each year of the program. Gender distribution was available for 7917 incidents; 63.3% were male and 36.7% female. The mean age was 57.2 years, median 63 years, range of several weeks to 101 years of age.

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Year of the program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Trauma incident</td>
<td>119</td>
</tr>
<tr>
<td>Drug overdose</td>
<td>88</td>
</tr>
<tr>
<td>Drowning/hear drowning</td>
<td>7</td>
</tr>
<tr>
<td>Suffocation</td>
<td>29</td>
</tr>
<tr>
<td>Electric shock</td>
<td>7</td>
</tr>
<tr>
<td>Gas/oxygen inhalation</td>
<td>34</td>
</tr>
<tr>
<td>Burns</td>
<td>13</td>
</tr>
<tr>
<td>Other medical</td>
<td>194</td>
</tr>
<tr>
<td>Cardiac arrest</td>
<td>638</td>
</tr>
<tr>
<td>Total</td>
<td>1129</td>
</tr>
</tbody>
</table>

There were 7218 incidents where the action type could be identified. The fire fighters provided “initial care” in 54% of the incidents they attended and “assisted” in a further 26% of the incidents attended. See Table 2 for the numbers for each action type by year of the program.

<table>
<thead>
<tr>
<th>Action type</th>
<th>Year of the program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Provide care</td>
<td>613</td>
</tr>
<tr>
<td>Assist only</td>
<td>220</td>
</tr>
<tr>
<td>Investigate/observe</td>
<td>244</td>
</tr>
<tr>
<td>Downgraded/cancelled</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>1081</td>
</tr>
</tbody>
</table>

The aim of using the MFESB as first responders was to decrease the response time to urgent incidents, predominately cardiac arrests, and to provide basic life support and early defibrillation to those in cardiac arrest.

The MFESB EMR program has demonstrated better response times than the Ambulance service to actual and potential cardiac arrest patients over the first 7 years of the program.

This study suggests that MFESB EMR program is providing defibrillator equipped fire fighters to the scene of a cardiac arrest on average quicker than the Ambulance service and that the program has assisted in increasing the survival from cardiac arrest in the MFESB area of operation.

In discussions with the Commissioner Fire and Rescue NSW, he is supportive of this initiative being piloted in his organisation. In discussion with the acting Commissioner NSWRFS, I was advised that approximately 15 months ago all RFS vehicles and emergency service vehicles were equipped with defibrillators at an approximate cost of $13million.
Apart from the fact that such equipment was needed to assist his own workforce should a member suffer a cardiac arrest whilst working at an isolated location, he was also supportive of the Early Responder program being expanded to meeting general members of the public. He advised that it was already operating at two locations.

Workshop participants also supported the expansion and confirmed the advice given by both Commissioners that it was a sensitive industrial issue for all organisations which would need preparatory work prior to implementation. There was strong agreement that “silob behaviour” or “turf protection” should not stand in the way of patient care and saving lives.

**Recommendation 6**

The Commissioners of Fire and Rescue NSW, RFS and the CE of Ambulance establish a project group to progress the resolution of any industrial, training and management issues with a view to implementing the Early Responder program in NSW by the end of 2013.

**3.2.4 Opportunities to improve the operating environment between LHD’s and Ambulance**

Although this matter also relates to Governance and structure I believe that, in the context of overall demand management, patient care, performance and cost that this be partly included in this component of the ‘Strategic Review’.

With the signing of the National Health Reform Agreement and the subsequent establishment of LHD’s coupled with restructuring the Department of Health to the Ministry of Health, there is a risk that the strategic and operational alignment of the Ambulance service is lost. Historically, Ambulance has relationships at the local health service level; reconstructing and enhancing these in the face of the changes to Health over the past 12 to 18 months is essential. Ambulance is a state-wide service and there are risks for Ambulance arising from changes that may be approved by Local Health District boards. If there is a lack of standardisation or an inability to respond to local needs, particularly in rural and remote NSW, this is likely to lead to problems at a number of levels.

At all the workshops held, participants from both Health and the Ambulance service raised this as a matter to be addressed. To do so requires establishing appropriate protocols at the LHD/Zone/Station level and between the Ministry of Health and Ambulance Service (Rozelle). With respect to the latter I will address this in the Governance and Structure section of the ‘Strategic Review’.

**Recommendation 7**

That representatives from the LHDs and local Ambulance management, who have appropriate delegated authority to resolve issues, meet on a monthly basis to raise matters impacting on patient care, performance and cost in the LHD area. A protocol be developed and monitored which outlines the standing agenda for these meetings and outlines the way in which outcomes will be monitored.

**3.2.5 Workforce**

In July 2011 Ambulance produced a project summary report ‘Managing a transition to a tertiary sourced workforce’ attachment 7.

The primary decision stemming from this project relates to the commitment to a five year phase in approach (2011-2016) to having all new paramedics recruited to be tertiary qualified. Currently, of the 200 to 300 new paramedics each year, less than 10% commence with tertiary qualifications.

It is not within my purview to advise on the merits of this approach however it is important to make the following observations:
- Consideration must be given to the impact of recruiting “graduates” to rural and remote locations. Although this may be somewhat addressed through future partnerships with rural based universities, it is important that the willingness of graduates to take up a position in a rural/ remote location be understood.
• Secondly, a number of rural/remote locations do not provide paramedics with the number and range of different clinical experiences compared to that which paramedics experience in the Sydney metropolitan areas.

This may result in not only choice of location because of the opportunity and job satisfaction in employing a range of clinical skills, but also on how the paramedic is assessed following the one year internship.

In August 2011, Ambulance commissioned a review of its Workforce Unit. This review was conducted by Jan McClelland and Associates Pty Ltd. The findings and recommendations contained in that review should also be used to inform any changes to this function within Ambulance. **Attachment 8 refers.**

Although this component of the ‘Strategic Review’ relates to ‘Demand and Models of Care’, the supply side, being workforce, is an important consideration in meeting demand. Without reviewing the recent McClelland review of the Workforce Unit I am advised that the current recruitment process for Ambulance consists of six steps. These are:

1. Application
2. Occupational suitability testing- consists of four components Writing sample; Abilities (literacy and numeracy) Intelligence Quotient and Psychometric Profiling. If successful applicants move to step 3
3. Structured Behavioural Interview integrated into the Psychometric Profiling and pre interview history questionnaire. If successful applicants move to Step 4
4. Pre-employment Health Assessment
5. Reference Check
6. Working with Children Checks

I am aware of psychometric testing being used as a tool (cull) when selecting staff in a number of uniformed occupations eg Defence Force and Police. Studies show its value in the selection of “uniform staff”, but I am not aware of its merit in selecting new recruits in a health related clinical occupation. I can find no evidence that psychometric testing produces recruits that are better suited or more resilient to the pressures of working as a paramedic nor can the Workforce Unit provide such evidence. A copy of the test is attached refer **attachment 9.**

Participants at the Workshops believed it of little value and when discussing workforce issues with the university sector and the proposed move to new recruits being tertiary qualified, strong reservations were expressed as to both the value and the application of psychometric testing for clinicians. In 2010/11 Ambulance spent $220k conducting psychometric testing.

Experience across both the public and private sectors shows that despite employing a range of strategies when attempting to recruit the right people for the right job, it is not always successful. Only after a period of time in the job does the new recruit and/or the employer know that the selection process worked. Ambulance has also commenced work on paramedics having to be tertiary qualified at the time of recruitment. It is envisaged that this would take effect in 2015/2016.

**Recommendation 8**

Psychometric testing cease within Ambulance and the performance review system be strengthened so that all new recruits to the position of paramedic, whilst under the internship period of their employment, be assessed at prescribed intervals, as to suitability.

If the tertiary qualified paramedic is adopted as policy new recruits for the position of paramedic should be formally advised that they are initially appointed on probation for the period of their internship; permanent appointment is subject to them being assessed as suitable. Suitability needs to be clearly defined as ability to work in both the clinical environment and the Ambulance operational domain.

It is important that a cost benefit analysis is undertaken prior to the adoption of the above policy.
3.2.6 Meeting Future Demand for Health Services in rural and remote communities.

In the section titled Overview of Demand, I identified a number of research findings and factors which are impacting on the demand and provision of health services. As previously mentioned, government policies and funding strategies are aimed at assisting people to remain in their own home for as long as possible. This approach, when combined with the limited availability of hospital services and of GP’s is already having an impact on a number of rural and remote communities. This challenge will increase in the future and will require a new way of meeting community needs.

Much work has been done in identifying strategies and incentives to get health professionals to locate to these communities but have had limited success. Workshop participants from both Health and Ambulance identified this as a critical issue and although community nurses, ECP’s and Paramedic connect are examples of approaches adopted to address this problem, these alone will not meet future demand. Workshop participants agreed that in these affected communities a new model of care was needed.

The term Community paramedic was used to describe a health professional of the future who would have the clinical skills equivalent to a community nurse; ECP, IP and paramedic connect. In those locations where a community nurse was available as well as a paramedic they, in the future, should be co-located and work together to meet the basic health needs of the community.

Recommendation 9
The Ministry of Health and Ambulance work together to identify the skill set needed of a clinician that can meet the future needs of identified remote communities.
4. **Models of Care**

Ambulance is the primary provider of time critical emergency and urgent pre-hospital care. Patients are provided care by Ambulance across a full range of acuity levels from life threatening to minor complaints. Care is provided to patients for whom the acuity level is unknown but could potentially be critical.

Contemporary practice in the provision of emergency care includes specific roles and strategies for Ambulance to provide specialised clinical care for patients, including those who have experienced trauma, cardiac events or strokes. Working in conjunction with the Ministry of Health, hospitals and LHD’s, Ambulance has developed specific protocols to provide high quality, evidenced-based care that consists of treatment at the scene, and transporting the patient direct to centres that can provide the high level of ongoing care needed by the patient.

4.1 **Health Matrix**

It is understood that via the “Matrix” system, Health aims to match the clinical needs of the patient to the destination hospital. At the staff workshop, Ambulance paramedics cited a number of examples where the Matrix did not correctly identify services available after hours at the hospital. The Matrix is currently updated on a six monthly basis however hospitals appear to make changes to operational arrangements more regularly. There may also be an issue around the communication arrangements with paramedic when advising changes to the matrix.

**Recommendation 10**

- a) That the Health Matrix be reviewed on a more regular basis to ensure it contains current information, including hospital after hours services,
- b) The communication arrangements within Ambulance advising of changes to the Matrix be re-assessed, and
- c) That this be a standing item for discussion at the meetings proposed under Recommendation 7 (opportunities to improve operating environment).

Ambulance has adopted a number of strategies, which are aimed at available hospital admissions. These include:

4.2 **Clinical Assessment and Referral (CARE)/Low Acuity Pathways (LAP)**

The emergency care role includes providing treatment at the scene and referral to other health providers where this is assessed as appropriate. CARE was implemented in the latter part of 2007 to provide non-transport alternatives (including self care with advice and referral) to patients identified as low risk and for whom transport to an Emergency Department is not necessarily the best care option.

CARE provides a structured assessment of patients against evidence based criteria, providing non-transport alternatives for low risk patients who have the capacity and competence to express a preference. CARE recognises that Ambulance is often seen as point of entry to health care, not just a form of transport to an ED.

In the past, paramedics were only able to offer transport to hospital. Where patients expressed reluctance or were unwilling to go to hospital there was no risk mitigation strategy to address these circumstances. Aims of the program include providing appropriate care options, rather than transport to an ED, and to manage demand and reduce pressure on EDs.

Between December 2007 and July 2010 a total of 822 paramedics completed CARE training and were authorised to implement the 14 CARE pathways for low acuity patients. Training included a focus on enhanced patient assessment and history taking as well as medico-legal issues including documentation and consent.
From January 2011, the Clinical Assessment and Referral (CARE) program became standard practice and was integrated into core curriculum as Low Acuity Patient (LAP) pathways and protocols. Treatment which does not require transport is guided by protocols under thirteen LAP protocols. Protocol P5 is now called "P5 - Non Transport Recommended". As from 16 March 2012 - 1,916 paramedics had completed their scheduled LAP training. By 30 June 2012 ALL P1 paramedics will have completed LAP training.

The patient safety and clinical risk management principles of the CARE program, above, including the decision making algorithm and pathways were incorporated into paramedic recertification in 2009/10 and this continues in 2011/12. Ultimately the LAP protocol will be delivered as part of the trainee curriculum.

4.3 Extended Care Paramedic (ECP)
The ECP program commenced as a pilot in 2007, with the aim of providing more appropriate, acceptable and efficient pre-hospital care by Ambulance.

ECPs are deployed in non-transport vehicles to P1 (hot) and P2 (cold) responses and assess clinical need and determine the most appropriate pathway for a patient. They may offer immediate care and alternatives to EDs for low acuity patients, such as GP referral and self-care advice. Deploying an ECP may, but not always, result in non-transport.

ECPs can manage a wide range of minor illnesses and injuries. They are trained in wound care, catheterisations, replacing gastric tubes and immobilisation of upper limb injuries. In addition to standard Ambulance pharmacology, ECPs may administer Amethocaine, paracetamol, ibuprofen and oxycodone for pain relief, ADT vaccine for tetanus prone wounds, antibiotics for mammal bites, Prednisone and hydrocortisone for asthma and Telfast for allergies.

*Relevant data for ECP program covers the period December 2007 to December 2010*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total responses:</td>
<td>31,696</td>
</tr>
<tr>
<td>Patient contact:</td>
<td>26,086 (82.3%)</td>
</tr>
<tr>
<td>Non-transport:</td>
<td>12,520 (39.5%)</td>
</tr>
<tr>
<td>- Subsequent Ambulance call:</td>
<td>131</td>
</tr>
<tr>
<td>- Subsequent ED visit:</td>
<td>465</td>
</tr>
<tr>
<td>Referrals:</td>
<td>6,022 (19.0%)</td>
</tr>
</tbody>
</table>

To date there are 70 paramedics who have completed the ECP training course and a further 12 paramedics have been recruited and commence training 16 April 2012. Of the 70 trained ECPs, 48 are currently available for rotation through the dedicated ECP modules (30 roster positions) in the Hunter, Central Coast, Illawarra and Sydney.

Some ECPs work as part of double crew at their substantive stations and others are rostered to the ECP module.

Access Economics conducted an economic evaluation of the ECP program in 2010. Under the scenarios modelled, the program is cost saving in the areas studied. It noted that ECP vehicles are not as expensive to set up and better cost savings result from ECPs as single responders rather than as part of a double crew, due to a higher non-transport rate. *Attachment 10 refers*

4723 patients who received ECP care were followed up. 97% reported they were very satisfied with ECP care. Health care providers who responded to a survey confirmed patients had no adverse outcomes. Adverse event rates are low, and where they occur appropriate changes are made to the exclusion pathway.
4.4 Paramedic Connect

Paramedic connect is a collaboration between Ambulance and Local Health Districts (LHDs) to improve access to health services in rural and remote areas. It increases paramedic engagement at health facilities and reflects a shift in the role of paramedics as clinicians responsive to community needs that interact in a systemised way with health partners.

A pilot was undertaken in the community of Hillston in 2007 which identified a range of benefits including increased worker satisfaction and retention and enhanced recognition of paramedics as health care providers in rural areas.

Activities for Paramedic Connect include:

- **Health Promotion** – providing information and education to the community on health issues and preparing for health emergencies.
- **Primary Health Care** - managing low acuity and chronic health needs for patients in their homes with drop in visits, post-operative observations, medications management and patient monitoring.
- **Emergency Care** – supporting local EDs by providing a continuity of care for patients who have been transported by Ambulance.

Paramedic Connect is designed to use paramedics more effectively to improve health outcomes and improve access to services. Often small towns are challenged by a lack of available and accessible health professionals. Paramedic Connect highlights the adaptability of paramedics and their skills in the management of acute patients.

Paramedic Connect allows paramedics to feel more valued as health professionals and exposes them to new elements of health not traditionally within the Ambulance experiences, such as chronic disease management and palliative care. Through a wider understanding of the health needs of their towns, paramedics can more fully participate in providing health care and collaborate with other health professionals. Likewise, by being more active, establishing new professional goals and having a greater impact on the health of their towns, paramedics are hopefully more likely to want to practice in small rural locations which affects paramedic retention and satisfaction.

Finally, Paramedic Connect supports the Service’s core role of emergency response by supporting community engagement with Ambulance. The goal here is to have paramedics recognised as the key health professionals in the town for emergency and unscheduled healthcare and break down social and cultural barriers to Ambulance use by helping communities better understand the role and capacity of paramedics.

Nine communities are now online with Paramedic Connect including: Ardlethan, Balranald, Barham, Batlow, Berrigan, ColeambaIly, Hay, Hillston, and Jerilderie. Stations have adopted a range of undertakings from the Paramedic Connect suite of activities. These activities include Health Promotion (9 sites), ED Support (6 sites), Inter-hospital Transfer Support (3 sites), Community Health Support (4 sites), and a range of other activities unique to each station’s local community.

Despite these being activities which have been performed “unofficially” for some time, staff in both LHD’s and Ambulance expressed concern about the changes. These have largely been resolved through the implementation of business rules and good clinical governance which provides a sound framework for the initiative.

It should be noted that there are currently no recurrent funds allocated to Paramedic Connect. About $97,000 was expended on employing a project officer for a six month period. Currently, planning for Paramedic Connect in the New England Zone is taking place and an initial review indicates that nine stations are potentially suitable for a full range of Paramedic Connect activities. A Paramedic with an interest and some spare capacity is assisting with the project.
Following discussions at the workshops held with Health and Ambulance staff, I make further comment on this care model under ‘Meeting future demand in rural and remote communities’.

4.5 Cardiac and stroke reperfusion strategies
These strategies are aimed at by-passing EDs so patients are transferred directly to specialist care. In regards to stroke, paramedics are trained in a standardised assessment tool that recognises stroke victims that are amenable to thrombolytic therapy. These patients are transferred to an appropriate hospital with access to 24/7 neurology, CT and acute stroke thrombolysis. A Stroke Services Project Manager has recently been appointed to oversee the strategy.

Similarly, the Cardiac Care program aims to improve early detection and access to safe reperfusion therapy for patients who are having ST Segment Elevation Myocardial Infarction (STEMI). There are two aspects to the process:

- Pre-hospital assessment for primary angioplasty following Ambulance pre-notification is available at 10 facilities in Sydney and Newcastle.
- Pre-hospital thrombolysis, via 12 lead ECGs transmitting readings to cardiologists via a web-based application. If a STEMI is confirmed thrombolysis and anti-coagulation therapy may be administered as close to system onset as possible.

It is anticipated the Cardiac Care program will be rolled out across the State by June 2014.


5. Non-Emergency Patient Transport (NEPT)

5.1 Background

In 1982 a committee of inquiry was commissioned by the then Minister for Health to examine the NSW Ambulance Service. A component of the inquiry addressed transportation of patients with

Recommendation 74:

‘Hospitals should be allowed and in fact encouraged to arrange transport by the most efficient means available, consistent with the patient’s medical condition’

The then Minister, prior to approving the recommendations distributed the report and called for responses to the recommendations. The outcome resulted in the Minister modifying this recommendation to read:

‘Adequate guidelines should be prepared to indicate those patients and conditions that normally require transport by Ambulance. In particular, hospitals should not establish for the purpose of inter-hospital transport their own separate transport system for patients who require stretcher transport or whose medical conditions require the use of an Ambulance type vehicle or Ambulance attendance.’

The Department of Health NSW Ambulance Service Transport Guidelines were established in September 1983 and to date I can find no record that they have been withdrawn. I am advised that Ambulance still work to these guidelines. Refer attachment 11.

Ambulance has a fleet of emergency vehicles and since 1998 have also been operating a Non-Emergency Patient Transport (NEPT) service. Hospitals and more recently LHD’s also operate a Health Transport Unit (HTU).

The 2008 Ambulance Review conducted by the Department of Premier and Cabinet found that patient transport services provided by AHS’s and individual hospitals are to some extent, competing with NEPT.

Arising from the DPC Review, the Department of Health commissioned Ernst & Young to review Non-Emergency transport. In their report (April 2009; section 4.2.3.1, pg. 51) it is noted:

All AHS’s have developed their own fleet of vehicles because they believe they are able to provide transports (particularly for inter-facility transfers) at a lower cost than Ambulance. Given the number of transports undertaken and the cost of those transports; this may be the case.

However the comparison does not take into account:

• The cross subsidies between NEPT and emergency patient transport within Ambulance (i.e. the charge for NEPT service provision to AHS’s for NEPT may not reflect the true cost of NEPT provision for Ambulance);
• The shorter hours operating hours of AHS’s. The use of Ambulance to undertake transports out of hours in penalty rates and overtime costs for Ambulance; and
• Differences in the extent to which it is possible for AHS and Ambulance to achieve efficiencies. AHS’s have potentially greater scope to reap efficiencies to the extent that they only operate on limited routes (eg inter-facility transports) over limited time periods. By contrast Ambulance undertake a far greater proportion of transports between residences and hospitals where vehicles may be driving without patients loaded for more of the time.

Attachment 12 refers

In responding to the Terms of Reference - Operational Effectiveness opportunities to improve coverage and responsiveness of Ambulance services, both emergency and non-emergency; it is necessary to examine both the NEPT and the HTU transport systems.
Ambulance Service of NSW Non-Emergency Patient Transport Service (NEPT)

NEPT has been operating as part of the Ambulance since 1998, with significant increases to staffing in recent years due to growing demand and its associated impact on emergency service delivery. The provision of NEPT services has always been focused on two core objectives:

1. To improve emergency Ambulance response times by minimising the non-emergency demand on the emergency tier; and
2. To provide quality, timely and affordable inter-hospital, appointment and discharge transports to those people, who without NEPT, may not be able to access appropriate healthcare.

NEPT staff are predominately deployed across the Sydney Metropolitan region. Outside of the Sydney Basin, NEPT staff operate from the Hunter, Central Coast and Illawarra. The current staff level is 220 FTE with Patient Transport Officers (PTO) employed under the Operational Ambulance Officers (State) Award. Trainee PTO’s attract a salary of $43,673pa and Officers receive $45,620pa and work a 38 hour week. NEPT have approximately 90 vehicles which have a unit capital cost of leasing and fit out of $51,000 compared to a unit cost for an emergency vehicle of $106,000.

The cost of Ambulance non-emergency patient transport for the year ended June 2011 is detailed on attachment 13.

Paramedics have a clinical qualification obtained through the Ambulance education centre under the three year VET pathway or are degree qualified and have a one year internship, whilst transport officers (PTO’s) have a Cert 3 qualification. The paramedics salary scale is detailed on attachment 14.

Following the enhancement of resources in 2010/11 PTO’s undertake approximately 90% of all NEPT movements in Response Codes 5, 6 and 7 within the Sydney Metropolitan Area. However, in rural areas, predominately because of availability, emergency Ambulances undertake most of the NEPT work.

In 2008/09 there were 243,490 NEPT movements. NSW Ambulance Service provided 51% of these movements with Health providing 49%.

73% of NEPT relates to admissions and discharges from patients to and from hospitals or to and from home. Of this 52% is to and from aged care facilities. The remaining 27% of NEPT is inter-facility transport (Code R3).

NSW Ambulance operates under an operational Response Codes and Incidents framework. A copy of the Codes and number of incidents against each Response Code for the period 2010-2011 is detailed below:
## AMBULANCE OPERATIONAL RESPONSE CODES AND INCIDENTS, 2010-11

<table>
<thead>
<tr>
<th>Response Code</th>
<th>Response Category</th>
<th>Response Mode</th>
<th>Response Guidelines</th>
<th>2010-11 incidents</th>
<th>% of total incidents</th>
</tr>
</thead>
</table>
| 1A            | Emergency Immediate Response             | Hot           | · Closest and most timely approved Ambulance resource.  
                   · Minimum of three (3) officers  
                   · Highest Clinical Skill should form part of the response | 6,542             | 0.69%                |
| 1B            | Emergency Immediate Response             | Hot           | · Most timely Ambulance response  
                   · Highest Clinical Skill where available | 106,567           | 11.29%               |
| 1C            | Emergency Immediate Response             | Hot           | · Most timely Ambulance response | 382,024           | 40.47%               |
| 1CE           | Emergency Immediate Response             | Hot           | · Dispatch ECP resource in the first instance, if it is the closest response.  
                   · If no ECP resource available, dispatch most timely approved Ambulance resource | 19,100            | 2.02%                |
| 2A            | Emergency 30 Minute Response             | Cold          | · Ambulance to be at patient location within thirty (30) minutes of call.  
                   · Consider ECP | 36,511            | 3.87%                |
| 2B            | Emergency 60 Minute Response             | Cold          | · Ambulance to be at patient location within sixty (60) minutes of call.  
                   · Consider ECP | 3,092             | 0.33%                |
| 2C            | Emergency 90 Minute Response             | Cold          | · Ambulance to be at patient location within ninety (90) minutes of call.  
                   · Consider ECP | 2,931             | 0.31%                |
| 2AH           | Emergency Health Access Coordination(HAC) Eligible | Cold          | H suffix incidents will be transferred to the HAC for secondary triage, with the exception of calls from Doctors, Police, Fire, Interstate Ambulance Services, Schools, and 4th Party medical response/alarm companies. | 66,348            | 7.03%                |
| 2BH           | Emergency Health Access Coordination(HAC) Eligible | Cold          | For E suffix responses, consider ECPs as first response where timeframes can be met. | 16,054            | 1.70%                |
| 2CH           | Emergency Health Access Coordination(HAC) Eligible | Cold          | See guidelines for HAC and ECP cases. | 22,933            | 2.43%                |
| 2AHE          | Emergency HAC and ECP Eligible           | Cold          | Medical calls to transport a patient to a Health facility within an agreed time as determined by the Medical Practitioner / Nurse for admission, including Hospital to Hospital transfers | 90,440            | 9.58%                |
| 2BHE          | Emergency HAC and ECP Eligible           | Cold          | Time critical prearranged response to and or from an airport/ heliport | 15,659            | 1.66%                |
| 2CHE          | Emergency HAC and ECP Eligible           | Cold          | Medical / treatment appointments, eg: Scans, Dialysis, X-Ray etc. | 48,786            | 5.17%                |
| R3            | Priority Medical                         | Cold          | Time critical prearranged response to and or from an airport/ heliport | 56,971            | 6.04%                |
| R4            | Priority Aeromedical                     | Cold          | Discharge / Interfacility convalescent / Palliative care transfer | 60,101            | 6.37%                |
| R5            | Routine Appointments                     | Cold          | Event Standby | 9,661             | 1.02%                |
| R6            | Post Appointments                        | Cold          | Major incidents as per service policy and to those events that require separation from other incidents | 227               | 0.02%                |

| Total         |                                       |               | 943,947                | 100.00%           |
5.3 Triaging emergency and non-emergency calls
When a triple zero call is made to an Ambulance Control Centre, the call is triaged resulting in a response code. The code determines the priority that Ambulance gives to the call and the timeframe for attendance. All calls are accepted and the Control Centre determines what calls fall into which emergency priority.

NEPT bookings are also received by the Control Centre and are assigned a response code depending on the time-frame or the type of transport requested. If it is an emergency, paramedics attend; if it relates to a booking for transportation which is not an emergency, Patient Transport Officers attend.

In simple terms, Response Codes 1 through to 2C result in an Ambulance paramedic emergency crew attending; response Codes 2AH to 2CHE are also attended by an Ambulance paramedic but may not result in transport to an ED; Response Code R3 relates to transporting a patient to a health facility including inter-hospital transfer; R4 relates to aero medical whilst NEPT is predominately assigned to respond to Codes R5, R6 and R7 at the time the Control Centre receives the call.

The area of contention between LHD’s and Ambulance predominately relates to Code R3 and it is this that led initially to Area Health Services and more recently LHD’s running a patient transport service particularly for inter-hospital transfers.

At the workshops, it was agreed that part of the problem is the response guidelines in that they leave open when a transport requires an Ambulance paramedic emergency crew or can be assigned to a NEPT.

Recommendation 11
The Ambulance Guidelines relating to response Code 2A to include medical calls to transport a patient to a Health facility within 30 minutes as determined by the Medical Practitioner/Nurse for admissions, including hospital to hospital transfers.

Code R3 would remain as is so as to ensure flexibility and the exercise of clinical judgement by medical practitioner.

5.4 Ambulance Electronic Booking System (EBS)
NSW Ambulance introduced an on line patient transport booking system in 2005. Ambulance developed the Electronic Booking System (EBS) to allow customers to request Non-Emergency Patient Transport (NEPT) online, reducing the number of calls to and the need for customers to call 131 233 for NEPT requests. EBS is a fast, secure and convenient method of service that interfaces directly with the Ambulance Computer Aided Dispatch system.

The benefits of using EBS are:

- Reduced call waiting and handling time
- Visibility of patient booking status and access to real time updates on requests
- Flexibility to enter and manage requests at a time convenient to users.
- Generic “read only” access can be provided to allow other staff members to check patient pick up times and request progress
NEPT transports that can be booked through EBS include:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatments</td>
<td>Patients with an appointment or pickup time for a treatment</td>
<td>Renal Dialysis, Radiotherapy, Scans. Dr. Appointments</td>
</tr>
<tr>
<td>After treatments</td>
<td>Patients post treatment from Accident &amp; Emergency facilities</td>
<td>Return transport after treatment or appointment (e.g. after Renal Dialysis, Scans)</td>
</tr>
<tr>
<td></td>
<td>Patients post GP’s appointments, Dialysis, Radiotherapy or clinics</td>
<td></td>
</tr>
<tr>
<td>Discharge</td>
<td>Transports out of hospital wards to Nursing Homes and private residences</td>
<td>Discharges, Palliative of care transfer</td>
</tr>
<tr>
<td></td>
<td>Patients being discharge to a non-medical facility or lower grade hospital</td>
<td>Inter-hospital transfers from major to minor hospital transfers</td>
</tr>
</tbody>
</table>

In March 2012 there were 11,284 incidents entered through EBS. This is 53.9% of all R4-R8 Ambulance workload. By the entering of these bookings through EBS, call takers were available to handle triple zero and time critical medical bookings.

Ambulance staff also use EBS to enter all sport and special events bookings that require Ambulance attendance.

5.5 Lack of Triage
All bookings for NEPT are accepted irrespective of capacity to deliver the service through the NEPT resource. Furthermore, at the time of booking NEPT, no allowances are made in transport mode for a person who may need a stretcher, is wheelchair mobile or can walk; a vehicle is sent irrespective. In the case where NEPT demand outstrips supply, or there is no patient transport service, emergency Ambulance vehicles and fully qualified paramedic staff carry out the transport function.

This approach creates a problem in two ways. In accepting every booking for NEPT once the availability of NEPT is exhausted it falls to emergency crews to meet non-emergency patient transport. The situation regularly arises whereby a fully qualified paramedic emergency crew is handling a non-emergency and an emergency arises.

This results in another crew possibly from another location having to respond. This in turn creates a domino effect complicating the dispatch function at the Control Centre. Response times are impacted upon and resources are used inefficiently i.e. paramedic clinical skills are being used to attend non-emergencies and fully equipped emergency vehicles are in use when not needed.

**Recommendation 12**
A demand management system be implemented so that at the time of booking a NEPT service, the transport mode needed to meet the patient’s needs is identified.

In adopting the above recommendation, data should be collected over a three to six month period to establish; total demand for NEPT, the type of transport required including when non-stretcher transport is needed, and the number of times emergency crews (by location) are required to offset NEPT demand. This data could be used to provide information about where an opportunity exists to contract other providers to meet unmet NEPT demand.

**Recommendation 13**
Data be collected and analysed with a view to contracting out excess demand for the provision of NEPT services.
5.6 Hours of Operation
NEPT operates between the hours of 6am and 10pm Monday-Friday with a limited service being available on weekends. As previously mentioned, NEPT predominately operates across the Sydney Region, Hunter, Central Coast and the Illawarra. Previous work undertaken by Ambulance indicates that a number of centres in regional and rural NSW have demand for NEPT. These include but are not limited to: Tweed Heads, Lismore, Coffs Harbour, Port Macquarie, Taree, Armidale, Maitland, Bathurst, Orange, Wagga Wagga and Goulburn.

Recommendation 14
Based on the analysis of demand already undertaken by Ambulance, action be taken to procure external contractors for the provision of NEPT work at the identified regional locations in order to free up emergency vehicles. An evaluation of cost benefit and improved response times be developed to help inform the recommendation 13.

The timeframe to achieve the intended outcomes of contracting out excess demand & regional/rural coverage is by January 2013.

5.7 Local Health District Transport Units
Health’s (LHD’s) only pay NSW Ambulance Service for Code R3 –“Medical calls to transport a patient to a health facility within an agreed time as determined by the Medical Practitioner/Nurse for admission, including hospital to hospital transfers”. Code R3 patients are, according to the existing transport guidelines, to be transported by Ambulance emergency vehicles and paramedic crews.

Under the previous Department of Health structure, a number of Area Health Services (AHS’s) set up their own transport service. These are referred to as Health Transport Units (HTU). This has occurred predominately because:
   a) inter hospital transfers could be done at a lower cost to the hospital than the rate charged by Ambulance
   b) the timeliness of response by Ambulance did not always meet the needs of the hospital.

Currently, there is not a great deal of data available to the Ministry of Health from LHD’s on the operation of HTUs. However, from information provided to me by the Ministry of Health, it is estimated that across the LHD’s approximately 311 FTE staff are employed under the Patient Transport Officer (Hospital) Health Employees (State Award). Trainee PTO’s attract a salary of $43,313pa and officers salary of $45,254pa and work a 38 hour week. It is estimated that HTU has 150 vehicles operating but the type, fit out and cost of the vehicle(s) is not available.

In 2010/11 the HTU attracted 300,000 bookings and made 165,000 patient movements. Unit Costs provided to me are in two selected LHDs (HNE & SSW ) only; but show:

- HNE cost per booking/scheduling $9.30
- SSW cost per booking/scheduling $10.30
- HNE Per vehicle per Day $611.45
- SSW Per vehicle per Day $790.88

I am advised that a patient transport pilot utilising the services of a private contractor (Health Transport Unit) has been operating in the SSW LHD. I am advised that this pilot has stalled because of a range of concerns raised by both the HSU and a private hospital. However the data and performance report from this pilot should be used when considering Recommendations 13 and 14.

5.8 Proposed HTU Booking System.
I am advised that the then Department of Health and more recently the Ministry of Health have been progressing work on reforming non-emergency transport arrangements. Stage one relates to the transport arrangements operating in LHD’s and stage 2 will incorporate Ambulance. Health and
Ambulance have representation on this project. Health Support Services (HSS) are auspicing the project. Attachment 15 refers

A brief outline of the background to the project is:

- In 2011 NSW Health entered into a contract with the Optima Corporation LTD for the provision of an IT solution for non-emergency patient transport booking, scheduling and dispatch. The Optima NET IT solution will underpin the overall NEPT reform program and is being implemented initially in the Hunter New England LHD followed by Ambulance and then across the state.
- Business requirements for OptimaNet have been developed in consultation with Health Transport Unit managers and the design document which specifies configuration of the new system has been completed. HSS has finalised design and budget for the end-state hardware. Funds have been allocated, hardware purchased and installed in HNE Data Centre and South West Data Centre to implement the OptimaNet System.
- Draft Service Level Agreements (SLA) have been developed along with a new pricing paper and standard KPI's for the SLAs, Reporting requirements are being scoped and billing processes in Ambulance and the HNE are being documented.
6. **The need for reform in NEPT**

At the various workshops held involving Health and Ambulance staff it was clearly recognised that there is an urgent need to reform the NEPT arrangements operating in LHD’s and Ambulance. All agreed the current system(s) between LHD’s and NEPT resulting in inefficiencies in NEPT bookings, scheduling and dispatch and in the overall provision of NEPT services: A range of other points were also made including:

- Cross subsidies between NEPT and emergency transport within Ambulance which may not reflect the true cost of NEPT transport
- LHD’s ‘cherry pick’ – or choose not to carry out transports out of hours, which results in Ambulance incurring penalty rates and overtime.
- Ambulance costings need to take into account patient transport to and from hospital. LHD’s do not.
- When NEPT is fully booked this results in the poor use of paramedic clinical skill sets and expensive equipment remaining idle.
- There are no agreed standards applying to the two transport systems.
- ‘Dead legs’ occur i.e. empty vehicles travelling one way when the one vehicle could pick up on one leg and transport back another patient.
- Patients wait longer periods of time for transportation home from hospital.
- Using emergency vehicles when NEPT is over booked aids the perception that Ambulance travel is free.

6.1 **A Way Forward in reforming NEPT**

Victoria has contracted out non-emergency patient transport to the private sector and their experience should be used to inform the future provision of NEPT in NSW. The lessons learnt and the changes that needed to be made along the way should be taken into account.

Recommendation 13 relates to contracting out NEPT services to the private sector where excess demand exists. Recommendation 14 relates to contracting out NEPT services to regional locations which do not currently have an NEPT service. Both recommendations can be progressed relatively quickly and, providing they are properly project managed as recommended below, and resources allocated for this to occur, contracts could be operational for the commencement of 2013.

However, I caution against contracting out existing NEPT transport services, be they currently operating by LHD’s or Ambulance until work is progressed to understand fully the following factors:

- The number and location of staff who currently provide NEPT services
- The type and suitability of the vehicle fleet which currently exists.
- The demand, by location for the provision of NEPT services.
- An understanding of the true costs associated with the provision of the existing service(s)
- The need to market test NEPT against a privately run service.
- Certainty around IT as it relates not only to bookings but communications should an NEPT become an emergency
- Identification and establishment of standards; training, equipment, infection control
- Provision of services to mental health
- The development of KPI’s which any private provider must meet and can be evaluated against.
- The development of a suitable pricing regime and process to follow up ‘bad debts’
- Industrial negotiations.
- Branding of the Service. (The word Ambulance should not be used)

A number of these points also relate to progressing recommendations 13 and 14 however work already done by HSS should be utilised to compress this timeframe. The need for ‘buy in’ from current players should not be underestimated. LHD’s and hospital boards will want to ensure patient care is not compromised and the budget impact is fully assessed and given recognition. Ambulance will
require similar assurance around patient care, budget impact and in respect to protecting emergency response capability.

Paramedics are health clinicians. Workshop discussions confirmed that at the clinical level good relations and respect exists between hospitals and Ambulance. However, there is a perception that inefficiencies are caused not by “us” but by “them”. Depending on whether you are from Health or from Ambulance dictates who is us and who is them.

**Recommendation 15**

Appropriate representatives from the Ministry of Health, LHD’s and Ambulance be seconded to a project team to progress the work done by HSS and to develop a model for a single NEPT service. A project director be appointed whose task it will be to oversee the development of the project plan including charting milestones, chairing meetings and reporting back at agreed intervals to HSS.

I believe, providing the project team is resourced appropriately the Ministry of Health should be in a position to recommend to government the degree to which NEPT might be contracted out by March 2013 with implementation of the government’s decision from the 2013/14 financial year.
7. Finance

7.1 Background
In 2005 NSW Health commissioned PWC to review the Ambulance Service of NSW Funding model. A report was tabled in May 2005 and it contains the comment:

“**A combination of rising demand and a large number of fee exempt patients contribute to a heavy reliance on Government funding. Therefore, there is a clear need to reform current revenue arrangements in order to ensure sustainable Government funding levels meet future demand. These ongoing concerns have provided the impetus for a number of Ambulance service reviews that have generally focused on improving cost recovery and efficiency, whilst still maintaining or improving service performance (pg 6)**”.

The NSW Ambulance Service covers all urban areas and the vast majority of rural areas of NSW, with a combination of road and air ambulance services. The Chief Executive reports directly to the Director General of the NSW Ministry of Health.

As at June 2011, the Ambulance Service resources included:
- 226 road Ambulance stations (46 in Sydney)
- 45 volunteer locations
- Approx 1400 road vehicles, 5 fixed wing aircraft and 9 helicopters
- Employs a total staff of approx. 4000 FTE
- Operate 4 Ambulance Control Centres which handle triple zero calls and coordinate emergency and non-emergency response

The NSW Treasury provides consolidated fund appropriations to NSW Ministry of Health to meet both recurrent and capital expenditures of the Ministry. The Ministry subsequently determines the size of the appropriation to the Service. Treasury may provide one-off funds for a particular initiative via the Ministry.

7.2 2010-11 Funding Streams

<table>
<thead>
<tr>
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<th>$000</th>
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<tbody>
<tr>
<td>Government contributions</td>
<td>464,503</td>
</tr>
<tr>
<td>*Patient Fees recovered</td>
<td>19,016</td>
</tr>
<tr>
<td>Dept’ Veteran Affairs</td>
<td>18,188</td>
</tr>
<tr>
<td>Motor Vehicle Accidents Authority</td>
<td>33,613</td>
</tr>
<tr>
<td>Inter Hospital transport</td>
<td>88,210</td>
</tr>
<tr>
<td>Other revenue</td>
<td>9,718</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$633,248</strong></td>
</tr>
</tbody>
</table>

* In 2010-11 bad debts totalled $22,798,000

7.3 Ambulance Fees

Exemptions
As is the case with other jurisdictions, residents of NSW who are pensioners, health care card holders and veterans with an accepted war related injury are exempt from Ambulance service fees.

FEES
Effective 1 July 2011 NSW residents requiring road, fixed wing aircraft or helicopter or a combination of these, from the accident scene, illness or injury to a public hospital or other destination nominated by the Ambulance Service of NSW will be charged a call out fee of $320 plus an additional charge of $2.89 per kilometre or part thereof.
The current fees charged are based on an IPART Determination in 2005.

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<thead>
<tr>
<th></th>
<th>ROAD</th>
<th>FIXED WING</th>
<th>HELICOPER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emergency</td>
<td>Non Emergency</td>
<td>Emergency</td>
</tr>
<tr>
<td><strong>Call Out</strong></td>
<td>$320</td>
<td>$252</td>
<td>$320</td>
</tr>
<tr>
<td><strong>Variable Rate</strong></td>
<td>$2.89</td>
<td>$1.56</td>
<td>$2.89</td>
</tr>
<tr>
<td><strong>Maximum Charge</strong></td>
<td>$5248</td>
<td>$5248</td>
<td>$5248</td>
</tr>
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A table showing the charging rates comparisons between jurisdictions is attachment 16. Please note these date from 2009. Since that time some changes have been made to charging arrangements in some jurisdictions.

At the workshops, participants raised the issue of the frequency of aged care facilities requesting paramedics to either attend or transport the patient to a hospital for routine treatment for which a registered nurse has the qualifications and training to perform eg changing a catheter. Aged Care operators are required to have a registered nurse on duty and residents of aged care facilities pay for routine health treatments by nursing staff employed at the facility as either part of their pension or as part of the fees they pay.

No data was available as to the frequency of these events but paramedics expressed the view that this was not uncommon. The Commonwealth is responsible for meeting the needs of the aged including monitoring the standards and performance of aged care facilities. If data confirms the practice described above, it then represents a cost transfer from the Commonwealth to the State.

**Recommendation 16**

Data be collected over the next 12 months to determine the frequency of paramedics being called to perform routine services at aged care facilities and/or transport of patients to hospitals for such services. If the data confirms this practice consideration be given to addressing any cost transfer at the appropriate Commonwealth/State forum.

7.4 Infrastructure

By any measure the capital and infrastructure of Ambulance requires urgent attention and it is only a matter of time before this situation becomes intolerable to both the public (response times) and to staff (state of buildings and equipment).

In October 2010 the Sydney Infrastructure Reform Strategy – Business Case was prepared with a view to ‘implement a Station and Standby operating model and a construction program which will address the current infrastructure constraints, enhance existing health services and provide a sustainable base for the delivery of high quality emergency Ambulance services to the Sydney community.’ Attachment 17 refers. It is understood that the status of this strategy is that it has undergone the “gateway process”, has been endorsed and is on the forward plan.

The regional and rural areas have problems similar to that of Sydney.

**Recommendation 17(a)**

An Infrastructure Reform Strategy for the regional and rural areas be developed.

Ambulance Headquarters, located at Rozelle, is run down and in urgent need of upgrade. The building(s) are now 60 years old and with buildings(s) designed not conducive to contemporary management and administration. It is a former hospital with long corridors, numerous small rooms peeling paint, limited air conditioning and little or no staff amenity.

It is understood the Ministry of Health’s lease at North Sydney expires in or around 2014 and relocation is currently under consideration. Assuming it is possible to make Rozelle HQ fit for purpose it will involve substantial outlay and disruption.
Recommendation 17(b)  
A joint location should be considered to resolve the future accommodation needs of both the Ministry of Health and Ambulance HQ.

7.5 Debt Recovery in Ambulance

There are two problems associated with debt recovery for Ambulance. Firstly, many NSW residents believe that because Ambulance is part of Health, it is a free service and/or is covered by Medicare. Secondly, the average bill is around $300 to $400 and those who are not exempt and refuse to pay, despite receiving an account, follow up letters containing threat of legal action, they elect not to pay. As the amount in question is relatively small and relates to an individual, it is not cost effective for Ambulance to take legal action to recover the outstanding monies.

Another factor is the person receiving the account may not have called the Ambulance and does not feel they have a responsibility to pay the account.

Ambulance follows Treasury Guidelines in following up debt and uses. Australian Receivables Limited (ARL) to provide a debt collection service. In the 2010/11 financial year, there were 113,000 accounts representing $43M referred to ARL for debt collection. As part of the service ARL recovered $6.1M or 14.24% of this. ARL receive a 9% commission on amounts collected and were paid a debt collection fee(s) of $1.054M.

Contact was made with The NSW Office of State Revenue to investigate whether it was possible to utilise the services of the State Debt Recovery Office with a view to imposing sanctions on those people who fall outside the exemption criteria. OSR confirmed the rates charged by ARL were, based on other collection agency fees, reasonable. OSR advised that it is not currently within their remit to recover debt. Their charter is to recover the non-payment of fines however they plan to submit to government a recommendation that legislation be enacted to allow for the recovery of debt.

Until the Strategic Review Finance workshop was held I was not aware that the Ministry of Health had also held discussions with OSR. Attachment 18 refers.

7.6 Ambulance Savings Strategy

As is the case with other government agencies Ambulance is required to offset the cost of salary increases which are outside of the Treasury funded 2.5%. Ambulance has an MOU with the HSU on how this is to be realised. Attachment 19 refers.

At the Finance workshop the savings strategies associated with implementing the MOU were confirmed as being on track. However, as is the case with a number of MOU’s agreed between other government departments and their respective Industrial Associations issues arise covering the interpretations of the MOU. This has required resolution by the Industrial Relations Commission.

In addition to the above, it is understood that Health has been set an efficiency target of $3million to be achieved through higher recovery of bad debt.

A suggestion from the Workshop was that Ambulance vehicles could be used to display information and that when bills are issued advice as to insurance could be included.

Recommendation 18
That a public awareness campaign is developed to educate the public on the costs of Ambulance transport and the cost of insurance.

7.7 Introduction of a Levy

NB: Should a decision be made to release my ‘Strategic Review’ report, NSW Treasury will need to agree with the release of this section.
NSW Treasury is in the process of looking at the feasibility of removing the current levy which forms part of household insurance costs to a levy on property for funding fire and emergency services. Some early thinking and modelling has been done but and it has not been presented to government for consideration.

As such, no decision has been made to adopt a levy and, no agreement been reached to its implementation. It is purely a concept which may or may not be progressed. At the present time Ambulance costs are not proposed to be part of any levy.

Any decision as to whether or not to include Ambulance in any future levy needs to take into account the following:

- If a levy is introduced and includes Ambulance, the current perception that Ambulance is a free service is addressed and savings in the administration of accounts and pursuing debts will result. However, it should be noted that when a levy was introduced in Queensland it resulted in an increase in the use of Ambulances and this has been confirmed in research undertaken by the Australian Health Review (2011.35.63-69).
- If Ambulance is not included there is a risk that the level of bad debt will increase because the public who call triple zero will argue it is an emergency number and therefore are covered by the levy paid.

The decision as to whether a levy be introduced and whether it includes Ambulance is obviously a decision for government. Arguments can be mounted for both cases, however if a levy is introduced and does not include Ambulance the implementation of Recommendation 18 becomes even more important.

**Recommendation 19**
Ambulance, the Ministry of Health, and NSW Treasury should investigate the impact of a levy and undertake a cost benefit analysis. If a levy is not supported Ambulance and NSW Treasury should examine the current fees regime and fee exemptions and concessions policy together with the cost benefit of the strategies adopted by Ambulance in expanding models of care against savings in presentations to ED.
8. Responsibility for the provision of health services to the aged

8.1 National Health Agreement

In 2008-09 there were 243,490 NEPT movements; Ambulance provided 51% and Health 49%. 73% of NEPT relates to admissions and discharges from patients to and from hospitals or to and from home. Of this, 52% is to and from aged care facilities.

52% of all admittance and discharges from hospital carried out, NEPT & HTU movements are to and from aged care facilities. Additionally, paramedics are providing services to residents in aged care facilities. The costs of these are not recovered from the facility but are an impost on the resident who is invariably exempt from Ambulance charges. Refer to recommendation 16.

Excerpts from the National Health Reform Agreement:

Clause 6: This Agreement acknowledges the Commonwealth’s lead role in funding and delivering GP and primary health care and aged care, and that the Commonwealth will work in partnership with the States to enable patients to receive the care they need when and where they need it- and in so doing, taking pressure off public hospitals.

Schedule F (F5): The Commonwealth will take full funding, policy, management and delivery responsibility for a consistent and unified aged care system covering basic home care through to residential care.

F7 states: In giving effect to these responsibilities, the Commonwealth will assume:

a) From 1 July 2011, funding and policy responsibility, and from 1 July 2012, operational responsibility for basic community care services for people aged 65 years and over (50 years and over for Indigenous Australians).

In reading the National Health Reform Agreement, I can find no reference to Ambulance services. I am uncertain as to whether Ambulance was specifically excluded and a joint understanding between the Commonwealth and the States is that the States continue with the provision of Ambulance services and the meeting of all associated costs for people aged 65 years and over.

In discussion with officers from both the Ministry of Health and Department of Premier and Cabinet, no record of any agreement was reached. If this is the situation, a case can be mounted that the cost of Ambulance services to the aged is a Commonwealth responsibility. This should be further clarified and if this is the case it is suggested that it be progressed at a CAF meeting.

8.2 Other Savings

There are a number of recommendations which if implemented will lead to savings. Some savings to the Health Budget, some to the Ambulance budget. But it is important that a savings to one budget holder does not result in a cost to the other. Initiatives taken by Ambulance around avoidable presentations to emergency departments (example ECP and Paramedic Connect) have a positive impact on the Health budget but represent a cost in dollars and time to Ambulance. This is an important consideration and recommendation 19 relates.

Savings which can be progressed as a result of this report include recommendations 3, 4, 5, 8, 12-15, and 16.

With the establishment of the shared services model and the implementation of the proposed Ambulance Structure, other savings may result.

9.1 Structure and Governance
Ambulance Service of NSW operates under the Health Service Act 1997. It employs over 4,000 people; with approximately 90% being operational staff involved in front line delivery of services. This includes paramedics providing specialised care such as intensive care and extended care paramedics, clinical training officers, retrieval doctors, flight nurses, patient transport officers and staff in control centres taking Triple Zero calls and dispatching Ambulance resources. Specialised work areas are counter disaster and special operations. The remaining 10 per cent of the workforce are support staff.

The Ambulance Service also has an Advisory Council which meets on a tri-monthly basis. Role, function, membership and subcommittee structure is detailed in attachment 20.

The current organisation chart for the Ambulance Service of NSW is detailed on attachment 21.

9.2 Governance arrangements between Health and Ambulance
NSW Ambulance is a state wide service and the changes in Health have impacted on Ambulance. It is opportune that the Minister requested a ‘Strategic Review’ at this point in time because it allows NSW Ambulance to be better aligned to the changes in Health generally.

From the outset I wish to stress that in discussions with Ambulance staff at whatever level, there has been very little negativity. The staff have looked at issues seriously and with a view to finding solutions and approached this ‘Strategic Review’ positively. Workshop participants have viewed this as an opportunity to address issues which will improve capacity to provide the best service possible.

Over the past 18 months there have been a number of significant structural changes in how Health operates in NSW. The signing of the National Health Reform Agreement, the abolition of Area Health Services, the creation of LHD’s, recruitment of CEO’s and Boards together with the abolition of the Department of Health and the creation of the Ministry of Health have all required a great deal of work, time and effort. These factors, together with a change in government and in a number of cases health personnel, have meant that there is a different way of doing business in Health. Communications and reporting channels also have changed to meet this new approach but it is questionable as to how well this is understood.

Attachment 22 shows NSW Health’s new organisational structure. At workshops and in discussion with Ambulance personnel and some health personnel, there was confusion as to where Ambulance actually fits. The word Ambulance does not appear on the organisation chart. Different views were expressed including - It is not “local” as in LHD, it is state-wide; should it be a Pillar; should it be identified separately etc. The confusion is also evidenced in the Local Health District CE’s, EA’s and Chairs contact list -14 March 2012 (attachment 23) which does not include Ambulance.

I appreciate that since taking up Office, the Minister has visited many sections of Ambulance; has travelled with an emergency paramedic crew and experienced firsthand how well an emergency is handled, and, when visiting hospitals makes a point of speaking to paramedics who are in attendance.

Similarly the executive of the Ministry of Health recognise the importance of Ambulance but a perception exists that below this level, Ambulance is often an afterthought. I appreciate that this, when looking at the significant changes which have occurred across Health, is a small matter in the scheme of things but to Ambulance personnel it is significant.

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Ambulance Service of NSW: Supporting Paramedics- the key to patient care
Recommendation 20

That attachment 22 is reviewed to incorporate Ambulance as a separate but direct reporting line to the Director General (refer attachment 22b for a suggested organisational chart) and attachment 23 be updated to include Ambulance.

The benefits of changes which have occurred in the Health organisational structure, personnel and reporting lines has also, most likely simply because of timing, brought with it a level of confusion within Ambulance. Simply put, this confusion exists as to, at what point does Ambulance involve Health and who in Health needs to be involved. The reverse scenario also applies. Examples include media and government relations, IT, workforce strategies, models of care, changes to operational procedures, infrastructure and assets, service planning, emergency management etc.

In conducting this ‘Strategic Review’ I requested advice as to what internal committees exist within Ambulance and what committees exist which have both Health and Ambulance representation. A sample of these is detailed below:

<table>
<thead>
<tr>
<th>Internal</th>
<th>Including Health or External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue Management Working Group</td>
<td>Finance Directors Meeting</td>
</tr>
<tr>
<td>Transition to Tertiary Project</td>
<td>Performance Meetings</td>
</tr>
<tr>
<td>NEPT Project</td>
<td>Health Services Performance Improvement</td>
</tr>
<tr>
<td>Professional Conduct and IR</td>
<td>State Property Authority Justice/Emergency Services Cluster Asset Management Group</td>
</tr>
<tr>
<td>Major Projects Executive Committee</td>
<td>Directors of Clinical Governance</td>
</tr>
<tr>
<td>Honours and Awards</td>
<td>State Records Authority Digital Records Committee</td>
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<tr>
<td>Audit and Risk Management</td>
<td>NSW Trauma System Monitoring Committee</td>
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<td>ECP Safety Committee</td>
<td>Sepsis Advisory Group</td>
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<tr>
<td>Divisional Clinical Quality Committee</td>
<td>Cardiac Research Sub Committee</td>
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<td>Data Integrity Group</td>
<td>Cardiology Network</td>
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<td>Response Grid Review Committee</td>
<td>Suicide Prevention Ministerial Advisory Committee</td>
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<tr>
<td>Medication and Management</td>
<td>Critical Care Rural Taskforce</td>
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<tr>
<td>Clinical Governance Committee</td>
<td>Clinical Excellence Commission RCA Review Committees</td>
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<td>Allegations Review Group</td>
<td>WorkCover Working Together Senior Officers Working Party</td>
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<td>E Rostering</td>
<td>Cardiac Services Committee</td>
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<td>Advanced Care</td>
<td>Mental Health Senior Officers Group</td>
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<td>IM&amp;T</td>
<td>Mental Health Priority Taskforce</td>
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<tr>
<td>Planning Committee</td>
<td>Statewide Reperfusion Steering Committee</td>
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<tr>
<td>Capital and Maintenance</td>
<td>Stroke Steering Committee</td>
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Recommendation 21

(a) A small working group chaired by the Director, Business Improvement review the number, type, frequency and purpose of internal committees operating within Ambulance and a report containing recommendations be submitted to the Chief Executive,

(b) A working group chaired by a nominee of the Director General of the Ministry of Health with appropriate representation from both the Ministry and Ambulance determine what joint committees need to exist and the reporting lines to be followed, and

(c) A review be conducted of what inter-agency and external committees require health and/or Ambulance representation.
If it accepted that as a result of the health reforms that the alignment between Health and Ambulance can be improved, strategies need to be adopted to ensure the impact on Ambulance is considered and visa versa Ambulance considers the implications on health/LHDs. In preparing a Briefing Note to the Minister, the Director General or the Chief Executive of Ambulance, respective staff follow a template. Included in the template is a section titled Impact of Recommendations – on patient; on regional NSW; on finances.

**Recommendation 22**
The briefing template be modified to include under “Impact of Recommendations” two additional matters; “Impact on Health System”, which Ambulance must complete, and “Impact on Ambulance Service” which LHDs and the Ministry of Health must complete.

9.3 Governance arrangements within Ambulance
Approximately 12 months ago the Operations division within Ambulance underwent an organisational restructure. At workshops, participants were generally positive about the improvements which have resulted but believed that red tape could be reduced through more delegations being handed down to the station level. Basically it is claimed there exists multiple handling in a number of matters.

**Recommendation 23**
That the delegations held by the GM Operations, Directors Operations, Deputy Director Operations, Zone Manager, Duty Operations Manager and Station Officer be reviewed to ensure delegations are being exercised at the appropriate level.

Given that the new operations structure has only been operating for approximately 12 months it is premature to review its efficiency and effectiveness at this time.

**Recommendation 24**
The operations directorate structure be reviewed after a further 12 months to ensure its effectiveness and whether further efficiencies can be gained.

9.4 The Chief Executive
Ambulance is headed by a Chief Executive who reports to the Director General, Ministry of Health. The Chief Executive is not only responsible for the efficient and effective performance of Ambulance but is a member of the State Emergency Management Committee (SEMC) where, in partnership with other agencies, is responsible for the response phase to any natural or man-made emergency. The Ministry of Health’s role in an emergency predominately relates to the recovery phase.

When carrying out the role as head of the NSW Ambulance Service it is expected that at times the Chief Executive wear a uniform e.g. SEMC, State funerals, some media related activities. On such occasions he is not referred to as the Chief Executive but always as Commissioner and when signing/replying to some correspondence it is also appropriate that at times he sign off as Commissioner. The Ambulance uniform staff refer to him as Commissioner.

For comparison purposes a similar situation exists within the Ministry of Health i.e. the dual role of the Deputy Director General who is also the Chief Health Officer.

It is accepted, as evidenced by the two previous appointments to the position of Chief Executive, Ambulance, it is not necessary to come from the uniform ranks to lead NSW Ambulance. To restrict the appointment to only uniform staff could limit the opportunity of recruiting the best person for the position. However for practical and operational reasons:

**Recommendation 25**
That consideration is given to amending the title “Chief Executive” to “Chief Executive and Commissioner, Ambulance Service of NSW and by making any necessary amendments to Part 5A of the Health Services Act 1997.
9.5 Acting arrangements
A number of positions in Ambulance have not been permanently filled with people acting for considerable lengths of time. Attachment 24 details the key positions. When this situation exists (outside of relief whilst the incumbent is on leave or relates to project work) this has a negative impact on the organisation. The person acting is uncertain as to their future and may tend to perform the role of ‘caretaker’ rather than manage effectively, staff under the supervision of the person acting may respond differently and the longer the situation remains the greater the rumour mill that the person who is acting is thought not to have the confidence of their supervisor which in turn affects behaviour.

Recommendation 26
(a) The Ministry of Health, in concert with the Chief Executive of Ambulance take immediate steps to identify and recruit for permanent appointment to those positions which are required and funded, and
(b) The Director General delegate to the Chief Executive, Ambulance the authority to recruit to permanent positions those staff necessary for the efficient and effective operation of the Ambulance services subject to budget constraints.

9.6 Awards
Three different awards cover staff who work in Ambulance i.e. the Operational Ambulance Officers (State)Award; the Operational Ambulance Managers (State) Award and the Health Services Managers Award. Staff who work at headquarters are generally employed under the Health Services Managers Award. Some time ago a decision was made that if a member of staff elects to take up work in a particular area, the award they work under relates to that which is applicable to the area they are working in.

Periodically, headquarters requires the expertise of staff who work under the operations award(s) predominately for project work but in some cases as a development opportunity. As staff employed under the operation(s) award attracts better conditions (leave and salary because of shift, call out and overtime) than those in headquarters, they are reluctant to take a secondment and forfeit conditions. This is understandable because of the impact on their personal financial commitments etc.

However, this creates a difficulty for Ambulance because their operational knowledge and expertise is often critical to the success of the project. Ambulance has attempted to address this problem by offering operations staff a higher level of position which attracts a salary nearer to that which they are currently earning. The administration processes behind this is cumbersome and time consuming.

Recommendation 27
Ambulance confer with the Ministry of Health to determine an appropriate change to existing policy which ensures that any secondments or relief arrangements does not financially disadvantage the employee.
10. Proposed Organisational Structure

In meeting with Ambulance staff and based on comments at workshops and on the findings of past reviews, the current organisation structure for Ambulance Headquarters could be better aligned.

Detailed in attachment 25 is the current and realigned organisation structure which will improve communication lines, groups like functions with like and provides improved capacity for Ambulance to meet the challenges ahead. The shaded areas are highlighted for future consideration under proposed shared service arrangements being implemented across Health.

The key changes are:

(a) The current position of Executive Services by its very nature requires working closely with media and government, corporate and external communications and protocol. These should be amalgamated.

(b) Ambulance has many projects and initiatives occurring across the organisation. All are aimed, in the long term, to improve Ambulance business. It doesn’t matter if the business model relates to models of care, the identification of efficiencies, implementing government objectives or change management more broadly. Each needs to be project managed, driven and led. Any new initiative needs a mechanism to ensure
   - the needs of all stakeholders are considered
   - its impact on other parts of the organisation are understood
   - is costed correctly
   - is delivered on time

Ambulance does not currently have this capacity. Many excellent initiatives have been identified and are being developed but they are not “joined up” and Ambulance has no single point where the Chief Executive can capture the current status of those initiatives.

Similarly, when the Chief Executive wishes to progress a new initiative he assigns the matter to a particular directorate who may or may not have the project management skills. Also, as pointed out previously (refer recommendation 20) it is important that the Ministry of Health and Ambulance are clear on what each are doing, their interdependencies and contact points.

The recommendation is that a “Business Improvement Directorate” would facilitate this and bring together a number of units located across Ambulance. The Business Improvement unit will also be responsible for the Ambulance Strategic Plan and matters related to Government’s State Plan. It is not suggested that this Directorate will have the expertise to run every project; it will be a coordination point which will apply project management skills and capture the right data to progress.

(c) The Chief Executive currently has eight direct reports. The structure can be simplified so as to reduce this to six and improve alignment.

(d) The McClelland Review into the Workforce unit makes a series of recommendations and these are currently under consideration. At a higher level, workforce strategy needs to align with Clinical and Planning with the HR process work remaining with Operations support.

(e) Other minor realignments.

Aligning Clinical and Service Planning and transferring the strategic arm of workforce planning to this new directorate creates an opportunity for a training and development plan to be developed which reflects Ambulance’s future direction. The plan will identify the staff skill set required to meet both the clinical and the management skills required in the future.
10.1 Changes to Positions
The above changes will allow the Chief Executive to have an Executive Board comprising himself and the three General Managers and a senior leadership group comprising the immediate level below. Actions to be taken to implement the proposed new organisation structure can be summarised as follows:

**Existing Positions requiring new Position Descriptions and possible job evaluation.**
- Director Control Centres (to include the System Support Unit for CAD Data)
- CFO (to accommodate a new reporting lines and to remove the Operation Information Unit)
- Director Workforce (removal of strategic workforce planning)
- Exec. Director Clinical Governance (new reporting line)
- Exec. Director Service Development and Planning (new reporting line)

**New positions requiring Position Descriptions, job evaluation and recruitment**
- GM Operational Support
- Director Business Improvement
- Director Executive Services and Public Affairs
- GM Clinical and Planning

The net result is the addition of one position (GM Clinical and Planning). There should only be a small, if any, financial impact because a number of other positions, owing to changes in span of control and responsibility that, once evaluated are likely to result in a lower salary.

**Recommendation 28**
The proposed organisation structure detailed in attachment 25 be implemented.