

The New Zealand Ambulance Service Strategy

***The first line of mobile emergency
intervention in the continuum of
health care***

The New Zealand Ambulance Service Strategy (the Strategy)

Ambulance services are trusted and respected for helping people in their moment of critical need. People working in the service aim to provide a high standard of care to those living in urban and rural communities throughout New Zealand. Their interventions have a positive impact on many peoples' lives and the communities they live in. However, there are a number of challenges for these services in continuing and improving their ability to make a real difference to the health of New Zealanders. This Strategy builds on the positive elements that already exist in the New Zealand Ambulance Service and sets an ambitious vision that would see the New Zealand Ambulance Service as ***the first line of mobile emergency intervention in the continuum of health care.***

The Strategy has three key goals to be achieved by 2020:

- **Strategic Leadership:** ensure that the ambulance sector has clearly defined roles in the emergency and health sectors
- **Community Resilience:** deliver a long-term plan for meeting community emergency health needs
- **Seamless Delivery:** integrate ambulance services within the wider health sector.

Ambulance Services

Ambulance services are part of the first line in the continuum of health care. They respond to medical emergencies and accidents, and 'treat and transport' or 'treat and leave' patients.

The primary role for New Zealand ambulance agencies is to meet emergency pre-hospital care needs, including telephone triage, dispatch and communications activities to support the emergency work. To be fully effective, the handover from the pre-hospital care phase of treatment to other health care providers needs to be seamless. In addition, most organisations also provide patient transfer services as a complementary use of ambulance skills and resources.

Beyond the emergency role, the service has the potential to provide an out-of-hospital clinical care service in addition to the pre-hospital clinical care. This may enhance access to health services for rural communities.

In New Zealand approximately 900 full time equivalent paid ambulance officers, supported by 2,600 volunteers, from 210 locations, respond to over 400,000 calls in any one year. These officers range from fully trained advanced paramedics with many years experience, to volunteers who dedicate themselves to the service, but who may have only very limited training. The three Emergency Ambulance Communications Centres (EACCs) are staffed by approximately 140 call takers and dispatchers. The ambulance sector providers have adapted over the years to new challenges and technologies, such as the introduction of new communications centres.

There are many stakeholders for ambulance services. New Zealand communities are committed to supporting their local services and have a strong interest in ensuring that ambulance services continue to be provided in their communities. Every day, about 1,100 people rely on this service to treat and/or safely deliver them to healthcare facilities around New Zealand. The Government and ACC also have an interest in ensuring that the needs of individuals and communities for ambulance service are met.

Why does New Zealand need an Ambulance Service Strategy?

Although individuals, communities and providers have together made a considerable effort to provide and grow a quality service, the delivery of ambulance services is variable and is significantly reliant on community goodwill, and the sector's 'best endeavours' to meet quality requirements.

The funders have not taken a cohesive national approach when purchasing ambulance services until recently, and issues arising within the sector have often been dealt with in an ad hoc manner by each agency independently. Funding streams and contract terms differ, and providers report that the different approaches inhibit longer term planning and investment by the sector, particularly the air ambulance sector. A lack of guaranteed income may impact on the stability of some providers in more remote and rural areas.

The sector is now working collaboratively to address a number of issues associated with inconsistencies in service delivery. The Strategy aims to provide leadership for the sector to ensure a cohesive and consistent approach between emergency ambulance providers, with greater national consistency in training, clinical guidelines and oversight and levels of practice.

There are a number of issues within the sector which need to be addressed from a strategic overarching perspective, in collaboration with the sector. These include:

- While there are standards, they are not compulsory nor are they linked to a monitoring regime. This has led to inconsistent performance in both operational and clinical performance.
- Challenges to reach agreement within the sector on necessary changes
- Divergent approaches by the funding agencies (MoH and ACC) to purchasing ambulance services
- Increasing costs to the Government and ACC, without the availability of the information necessary to monitor the quality of services purchased
- Lack of clarity regarding the role of ambulance in the health and emergency sectors
- Impacts of changes in the rest of the Health sector on ambulance
- Lack of recognition of paramedics as health professionals
- Inconsistent clinical standards and crewing among providers
- A high reliance on volunteers and increasing difficulty in recruiting and retention of those volunteers
- Lack of a single "ambulance" voice in emergency and disaster forums

In order for these issues to be addressed systematically, the ambulance sector needs strong cohesive leadership and direction. This Strategy responds to this need and provides a clear direction for the sector going forward.

Going into the future, the Government and ACC seek an ambulance sector where:

- Service expectations are aligned to patient outcomes using a sound funding rationale
- There is community pride and confidence in the service
- Patient outcomes are improved as a result of more co-ordinated care.

There are a number of ways of delivering the vision and its goals. Currently options for doing so are limited because some of the essential building blocks need development. In particular, there is currently poor information on what services are required, and the extent to which expectations are being met. Some far reaching options, such as nationalisation, devolution to District Health Boards, integration with other emergency services, and other similar models adopted internationally, may have some merit. However this Strategy recognises the uniqueness of the New Zealand system which has served us well, in particular, the community participation and provider leadership; therefore, at this stage, the Strategy seeks to build on the strengths of the current system. Equally, the strategy recognises that many in the ambulance community have identified the need for greater leadership and the need to periodically re-examine this assumption.

To operate effectively, leadership is required to:

- Collaborate to set a cohesive strategic direction
- Agree on service expectations
- Hold providers accountable for service delivery
- Align community and funder expectations
- Assure capacity to respond to mass casualties
- Sustain the workforce
- Adopt an integrated health and emergency sector approach
- Prioritise interventions
- Evaluate the impacts on patient outcomes

There are opportunities to improve and better utilise ambulance services, for example:

- Exploring ways to fully utilise ambulance capacity for health promotion, to enhance primary care and to reduce demand on hospital emergency departments
- Professionalise the workforce and increase the numbers of paid personnel including support for greater numbers of higher skilled paramedics
- Mandate ambulance standards

The Strategy has 10 initiatives for change in no order of priority:

- **Initiative 1:** Establish a unit that is accountable to, and under the direction of, the funders to progress the Ambulance Service Strategy, advise the funders, and administer Health and ACC policy providing strategic leadership to the sector.
- **Initiative 2:** Develop mandated transparent, sustainable funding model(s) that link external drivers to agreed service expectations.
- **Initiative 3:** Develop outcome performance indicators to monitor the contracted performance of providers.
- **Initiative 4:** Develop a framework to facilitate effective consultation with the community on long-term planning for the required quantity, locations and funding for the ambulance service.
- **Initiative 5:** Improve the sustainability of the paid and volunteer workforce and investigate alternative service models.
- **Initiative 6:** Improve the integration of the ambulance sector into the New Zealand emergency management planning system.

- **Initiative 7:** Improve the level and extent of clinical expertise, develop procedures for utilising consistent protocols for a given condition regardless of setting, and extending the role of the paramedic
- **Initiative 8:** Introduce sector-wide information capability for evaluating health outcomes.
- **Initiative 9:** Improve ambulance service configurations and deployment.
- **Initiative 10:** Ensure that response and resolution of call-out is clinically appropriate for each patient

These initiatives are shown in the learning and growth perspective row at the bottom of Diagram 1, a strategic map which outlines key elements of the Strategic Plan for Ambulance Services to 2020.

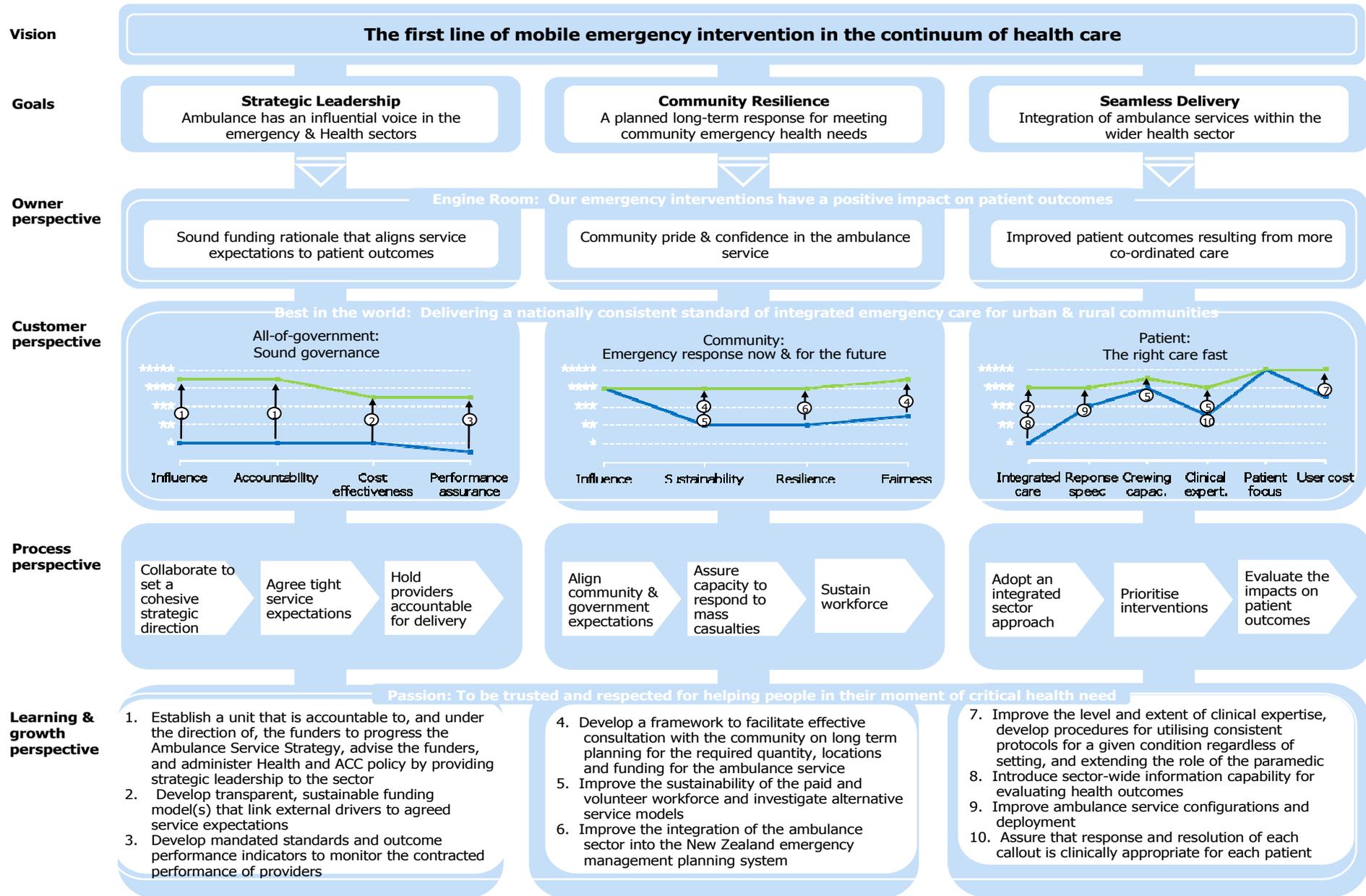
Scope of the Ambulance Service Strategy

The Ambulance Service Strategy is currently focused on emergency response in both urban and rural settings, though the strategy recognises that ambulances and their related activities are used for a variety of purposes, including:

- 1 Emergency ambulance response
- 2 Urgent responses that are not life-threatening
- 3 Inter-hospital transfers
- 4 Support activities for the sector, such as the Emergency Ambulance Communications Centres
- 5 Alternate uses of existing capacity

Action 3 of Initiative 2 recognises that inter-hospital transfers are critical to certain providers

Diagram one: Strategic map



Key

- Blue line: "Today"
- Green line: "Tomorrow"
- ⊙: See corresponding number below for related initiative for change

New Zealand Ambulance Service Strategy
High Level Action Plan

Initiative	Short Description	Actions	2009	2010	2011	2012-2015	2015-2020
1	Establish a unit to progress Health and ACC policy	Establish the accountable strategic leadership function to manage investment in the sector by Health and ACC					
2	Funding model and processes	<p>Improve alignment of ACC and Health funding, including, for example, funding in bulk or by transport</p> <p>Identify required funding to achieve desired performance expectations</p> <p>Explore incorporating DHB-funded inter-hospital transfers into a nationally coordinated activity</p>					
3	Mandatory standards development, implementation and monitoring	<p>Develop new and adapt existing processes to provide for the establishment of mandatory comprehensive <i>operating</i> performance expectations</p> <p>Develop new and adapt existing processes to provide for the establishment of mandatory comprehensive <i>clinical</i> performance expectations</p> <p>Develop outcome based performance indicators for the ambulance service and provide performance assurance to Government and communities</p>					
4	Consultation with community on long term planning	<p>Develop a framework to facilitate effective consultation with the community on long-term planning</p> <p>Review funder/provider relationship to assess the desired arrangement</p>					
5	Improve the stability of the paid and volunteer workforce and investigate alternative service models	<p>Evaluate options for rural service delivery, including expanding the availability of Advanced Life Support paramedics in rural communities</p> <p>Develop criteria for success in rural communities</p> <p>Develop a strategy for attracting and retaining volunteers</p> <p>Investigate and trial alternative methods of crewing ambulances to achieve full crewing wherever possible</p>					
6	Integrate with Emergency Management planning system	<p>Determine and move towards the preferred capacity and capability for ambulance response to mass casualty and civil defence events</p> <p>Encourage integration between emergency services</p>					
7	Health sector linkages, consistent protocols, and extend role of paramedic	<p>Establish formal links to the primary health care sector</p> <p>Increase and standardise the level of ambulance workforce skill</p> <p>Extend the role of the paramedic</p>					
8	Information capability to evaluate patient outcomes	Improve IT capabilities for ambulance services across the sector					
9	Improve ambulance service configuration and deployment	Review the configuration of ambulance services					
10	Strengthen triage systems and alternate resolution of call-outs	<p>Identify mechanisms to support ambulance staff to resolve a patient's condition by treating at home or transporting to the most appropriate facility, including medical centres or after-hours clinics</p> <p>Improve clinical decision-making support within Emergency Ambulance Communications Centres</p>					

Initiatives for Change

Strategic Leadership: Ensure that the ambulance sector has clearly defined roles in the emergency and health sectors

<p>Initiative 1: Establish a unit that is accountable to, and under the direction of, the funders to progress the Ambulance Service Strategy, advise the funders, and administer Health and ACC policy providing strategic leadership to the sector</p>	<p>Objective: To have a central function accountable to the funders (MoH and ACC) with responsibility for progressing Health and ACC policy in consultation with stakeholders</p>
	<p>Action 1: Establish the strategic leadership function accountable to, and at the direction of, the funders to manage investment in the sector</p> <ul style="list-style-type: none"> • Confirm the integrated funding structure to implement the funders' policy through provider contracts • Develop implementation plan to resource required people, systems and infrastructure • Establish governance and management structure to: <ul style="list-style-type: none"> • assure that priorities reflect the overall strategy; and, • provide advice to the funders.
<p>Initiative 2: Develop transparent, sustainable funding model(s) that link external drivers to agreed service expectations</p>	<p>Objective: A consistent agreed basis for funding providers</p>
	<p>Action 1: Improve alignment of ACC and MoH funding</p> <ul style="list-style-type: none"> • Identify transparent, sustainable funding models for consideration by funders • Identify and modify payment procedures that are inconsistent with agreed principles, differ among funders or discourage desired provider behaviour • Assess impact of alternate funding streams on sector behaviour, such as part charges, community contributions, transfers, and other sources of funds
	<p>Action 2: Identify required funding to achieve desired performance expectations</p> <ul style="list-style-type: none"> • Consider excluding some types of ambulance service from MoH and ACC funding arrangements • Develop systems to assure that existing funding results in desired outcomes
<p>Action 3: Explore incorporating DHB-funded inter-hospital transfers into a nationally co-ordinated activity</p> <ul style="list-style-type: none"> • Integrate DHB-funded transfers with the emergency ambulance funding scheme • Develop agreed set of protocols for determining appropriate ambulance to use for each transfer and co-ordination of the ground component of air transfers 	

Initiative 3: Develop mandated outcome performance indicators to monitor the contracted performance of providers	Objective: To ensure that consistency in service delivery and value for money is achieved
	Action 1: Develop new and adapt existing processes to provide for the establishment of mandatory comprehensive <i>operating</i> performance expectations <ul style="list-style-type: none"> • Develop structure and process to regularly review, update and mandate existing standards • Mandate the Standard NZS 8156 • Phase out the use of 'best endeavours' clauses in contracts • Develop capability to monitor and assess performance in achieving operating standards
	Action 2: Develop new and adapt existing processes to provide for the establishment of mandatory comprehensive <i>clinical</i> performance expectations <ul style="list-style-type: none"> • Adapt existing clinical advisory board to provide for mandatory standards, national clinical governance framework and Crown participation and reporting • Upgrade clinical audit procedures to provide a robust process to routinely identify required changes to existing standards, training procedures or staff performance • Establish international links for audit and accreditation
	Action 3: Develop outcome-based performance indicators for the ambulance service and provide performance assurance to Crown, funders and communities <ul style="list-style-type: none"> • Differentiate performance indicators for unique operating environments, including rural and urban settings • Ensure technology capability for reporting • Develop and adapt existing audit and quality assurance processes to support sector-wide decision making • Publicly report performance outcomes • Ensure the funders have the capability for responding to outcome performance failure

Community Resilience: Deliver a long-term plan for meeting community emergency health needs

<p>Initiative 4: Develop a framework to facilitate effective consultation with the community on long-term planning for the required quantity, locations and funding for the ambulance service</p>	<p>Objective: To provide for dialogue among communities, providers, funders and the Crown to determine which organisations should be providing ambulance service, from which funding sources and to set performance expectations.</p> <hr/> <p>Action 1: Develop a framework to facilitate effective consultation with the community on long-term planning.</p> <ul style="list-style-type: none"> • Develop a draft prioritisation framework in consultation with key stakeholders, including the community • Release the framework for use within communities when prioritising and evaluating initiatives such as the appropriate siting of resources • Develop process for engaging with communities in which changes are contemplated within the availability of ambulance resources • Assure engagement processes include relevant affected population groups, such as Maori or other ethnicities, health status such as the disabled and other relevant groups <hr/> <p>Action 2: Review funder/provider relationship to assess the desired arrangement that:</p> <ul style="list-style-type: none"> • Addresses potential administrative duplication • Maximises shared resource and emergency cover • Maximises utilisation of assets • Easily rolls out effective innovation • Addresses the balance between national consistency and local needs
<p>Initiative 5: Improve the stability of the paid and volunteer workforce and investigate alternative service models</p>	<p>Objective: To have a framework for ensuring that the correct mix of training levels and sufficient available people to deliver a consistent standard of care nationwide making best and appropriate use of paid and volunteer staff</p> <hr/> <p>Action 1: Evaluate options for rural service delivery, including expanding the availability of Advanced Life Support paramedics in rural communities</p> <ul style="list-style-type: none"> • Develop criteria for success in rural communities • Engage rural communities and primary health providers to evaluate best options for additional uses of these staff, including co-location with primary care medical centres and providing training/operating back-up for rural volunteers • Trial selected options

	<p>Action 2: Develop a strategy for attracting and retaining volunteers</p> <ul style="list-style-type: none"> • Provide reimbursement for loss of earnings to volunteers for time required to secure necessary training • Undertake international research and introduce incentives to encourage the public to undertake voluntary ambulance work and access training opportunities • Assure Maori and less visible groups are included in outreach
	<p>Action 3: Investigate and trial alternative methods of crewing ambulances to achieve full crewing wherever possible</p> <ul style="list-style-type: none"> • Evaluate effectiveness of existing co-response models utilising alternative staffing and response methods to complement ambulance officers/paramedics, such as PRIME doctors, nurses and firefighters • Trial different use of volunteers as driver only with minimal medical training to complement ambulance officers • Assure that required ambulance resource are available for deployment by having an appropriate mix of paid and volunteer staff for each station

<p>Initiative 6: Improve the integration of the ambulance sector into the New Zealand emergency management planning system</p>	<p>Objective: Confirm the ambulance sector's contribution to large-scale incidents with other emergency providers</p>
	<p>Action 1: Determine and move towards the preferred capacity and capability for ambulance response to mass casualty and civil defence events</p> <ul style="list-style-type: none"> • Determine the current resilience capacity and capability of ambulance services to respond to mass casualty, infectious disease or civil defence incidents (including ongoing evaluation against civil defence exercises) • Regular reporting on the resilience capability of the sector to other emergency management planning organisations and the public
	<p>Action 2: Encourage integration between emergency services</p> <ul style="list-style-type: none"> • Ensure ambulance sector representation at emergency operations centres and Emergency Management Groups/Co-ordinating Executive Groups • Examine the current level of interaction between emergency services with a view to improve integration • Encourage whole-of-government initiatives that impact on ambulance services such as co-ordinated dispatch of other emergency services and inter-operable radio communication

Seamless Delivery: Integrate ambulance services within the wider health sector

Initiative 7: Improve the level and extent of clinical expertise, develop procedures for utilising consistent protocols for a given condition regardless of setting, and extending the role of the paramedic	Objective: To assure clinical reliability of the patient care experience
	Action 1: Establish formal links to the primary health care sector <ul style="list-style-type: none"> • Establish an ambulance sector National Clinical Advisory Group, with among others links to the Primary Response In Medical Emergency programme • Facilitate ambulance sector representation on the New Zealand Primary Health Care Advisory Council • Consider options to be involved with the Joint Ministry/DHB Primary Health Care Work Programme, to integrate policy work and sector representatives
	Action 2: Increase and standardise the level of ambulance workforce skill <ul style="list-style-type: none"> • Standardise clinical competency levels and education of ambulance officers and paramedics to achieve national consistency • Enable the inclusion of ambulance officers under the Health Practitioners Competence Assurance Act • Identify clear career pathways for paramedics to encourage further study • Encourage links between ambulance sector and Emergency Departments to facilitate good decision making and transport to nearest place of definitive care
	Action 3: Extend the role of the paramedic <ul style="list-style-type: none"> • Identify opportunities to utilise paramedics in primary health care, health promotion and injury prevention • Determine how opportunities might be realised in the context of the Government's Primary Health Care Strategy
Initiative 8: Introduce sector-wide information capability for evaluating health outcomes	Objective: To establish the ongoing basis for sharing knowledge across health and emergency providers
	Action 1: Improve IT capabilities for ambulance services across the sector <ul style="list-style-type: none"> • Implement electronic patient reporting for each patient encounter • Determine whether ambulance sector information systems can be linked to primary and secondary care patient information systems
Initiative 9: Improve ambulance service configurations and deployment.	Objective: Improve the ability to respond to and sustain service cost effectiveness in the long term
	Action 1: Review the configuration of ambulance services <ul style="list-style-type: none"> • Consider acquiring configuration modelling software • Implement mobile data terminals in all ambulances

Initiative 10: Ensure that response and resolution of call-out is clinically appropriate for each patient	Objective: Develop framework for determining whether transport is required and to which facility that accurately reflects the patient's condition
	Action 1: Identify mechanisms to support ambulance staff to resolve a patient's condition by treating at scene or transporting to the most appropriate facility, including medical centres or after-hours clinics <ul style="list-style-type: none"> • Develop linkage with primary care providers and PHOs to provide for alternate disposition • Develop programme for ambulance staff to allow for direct referral to appropriate follow-up care
	Action 2: Improve clinical decision-making support within Emergency Ambulance Communications Centres <ul style="list-style-type: none"> • Use technology and clinical expertise to increase capabilities within the system • Build linkages to other telephone-based health advice services to divert low acuity calls for alternate disposition • Consider adding physicians to the Emergency Ambulance Communications Centres to assist with real-time decision making