MINISTRY OF HEALTH
MANATŪ HAUORA

# Regulating the paramedic workforce under the Health Practitioners Competence Assurance Act 2003

Consultation Document

# Contents

# 1 Executive Summary

Ambulance New Zealand is proposing that the paramedic workforce be regulated under the Health Practitioners Competence Assurance (HPCA) Act 2003. The paramedic workforce consists of at least 1,000 individuals who practise at the level of a Paramedic or Intensive Care Paramedic for St John, Wellington Free Ambulance, and non-government funded ambulance providers.

Regulating new health professions under the HPCA Act is reserved for professions that pose a high risk of harm to the public. The paramedic workforce poses a risk of harm as they practise without direct supervision, perform a range of medical and surgical interventions, and make clinical judgements. However, evidence from published reports indicates that the paramedic workforce may only be causing a low frequency of harm to the public.

The risk of harm of the paramedic workforce can be minimised by ensuring the workforce is appropriately qualified and competent to practise. Under the existing regulatory framework, St John and Wellington Free Ambulance follow high industry standards to minimise clinical risk in their workforce. However, there is no contractual or legislative mandate for non-government funded ambulance providers to ensure the competency and safety of their workforce. Paramedics may require increased regulatory oversight, especially if they are to manage more patients in the community and become a key referral mechanism for other health providers.

Ambulance New Zealand proposes that a new responsible authority, the Paramedic Council, be established under the HPCA Act to oversee the paramedic workforce and set standards for their practice. The Paramedic Council would receive operational support from the Nursing Council of New Zealand's Registrar and secretariat staff.

Regulating the paramedic workforce under the HPCA Act would increase public safety by:

- assigning the proposed Paramedic Council to set the parameters of practice, qualifications and competencies required for the paramedic workforce
- providing a publicly accessible register of who is appropriately qualified and safe to provide paramedic-level care
- requiring the paramedic workforce to maintain their competencies in order to receive an annual practising certificate (APC).

The Ministry of Health (the Ministry) is seeking feedback on whether the paramedic workforce meets the criteria for regulation under the HPCA Act. The criteria includes an assessment of the existing regulatory mechanisms, and the practicality of paramedic regulation under the HPCA Act. The Ministry also requires feedback on whether the benefits of regulation outweigh the negative impacts of regulation. The feedback provided from this consultation document will be used in advice to the Minister of Health so he can make a decision on Ambulance New Zealand's proposal.

# 2 Introduction

You are invited to comment on Ambulance New Zealand's proposal. To assist you in providing comment, this consultation document:

- provides background information about the HPCA Act and ambulance workforce
- explains the criteria for assessing new health professions for regulation under the HPCA Act
- describes the risks of harm of the paramedic workforce
- outlines how the paramedic workforce is currently regulated
- discusses the implications for the paramedic workforce and wider ambulance workforce if Paramedics were included under the HPCA Act
- asks specific questions about Ambulance New Zealand's proposal.

Please note that all correspondence and submissions on this matter may be the subject of a request under the Official Information Act 1982 (OIA). If there is any part of your correspondence that you consider could properly be withheld under the OIA, please include comment to that effect and give reasons why you would want it withheld.

# 3 The HPCA Act

The purpose of the HPCA Act is "*to protect the health and safety of members of the public by providing for mechanisms to ensure that health practitioners are competent and fit to practise their professions*". In order to protect the public, the HPCA Act establishes responsible authorities (RAs) to oversee the safety of registered health practitioners.

An RA consists of a governance board/council that is supported by a registrar and secretariat team. There are 16 RAs that oversee 22 health professions. Some RAs oversee two or more professions, and some RAs share a registrar and secretariat services with other RAs.

RAs are responsible for identifying the parameters of practice for registered practitioners and the qualifications and competencies required for registration. RAs are required, through the issuing of APCs, to certify that the practitioner is competent to practise within their scope of practice.

The HPCA Act does not prohibit non-registered people from carrying out the activities of a registered profession. However, only health practitioners who are registered under the HPCA Act are allowed to use the title associated with the profession or scope of practice. This system leaves the public free to choose a registered health practitioner or choose an unregistered health provider who does not have an assurance of competence.

Since the HPCA Act came into force in 2003, two new health professions have been included under the Act — psychotherapy (in 2007) and anaesthetic technology (in 2011). Under the HPCA Act, the Governor General has the power, on the Minister of Health's recommendation, to:

- designate health services of a particular kind as a health profession
- establish a RA to regulate the new health profession or assign the new health profession to an existing RA.

Before making such a recommendation, the HPCA Act requires the Minister of Health to consult with any interested organisations and be satisfied that:

- the provision of the health services concerned pose a risk of harm to the public, or that it is otherwise in the public interest to regulate the profession
- there is agreement on the qualifications, standards, and competencies required for the health profession.

# 4 Proposal for regulation

## 4.1 Ambulance workforce

Ambulance New Zealand is proposing that the ambulance workforce who practise as Paramedics or Intensive Care Paramedics be regulated under the HPCA Act. Paramedics and Intensive Care Paramedics are the two advanced practice levels in the ambulance workforce. There are four primary ambulance practice levels described in Table 1. For the purposes of this document, Paramedics and Intensive Care Paramedics are referred to as 'the paramedic workforce'. The paramedic workforce consists of at least 1,000 ambulance officers —23 percent of the total St John and Wellington Free Ambulance workforce (see Table 1).

**Table 1: Description and size of St John and Wellington Free Ambulance workforce**

*Source: St John and the National Ambulance Sector Office*

*Key: Not included in proposal for regulation* ☐ *Included in proposal for regulation* ■

| | | Practice level | Size of workforce[1] | Proportion of workforce |
|---|---|---|---|---|
| Ambulance workforce | | 1. **First Responders** are vocationally trained in pre-hospital emergency care and advanced first aid. In rural communities, they are volunteers who can provide basic life support measures until an ambulance arrives. | 2168 | 48% |
| | | 2. **Emergency Medical Technicians** have a National Diploma in Ambulance Practice. Their knowledge and skills builds on the first response capability. They are allowed to administer basic life-saving prescription medicines to patients | 1319 | 29% |
| | Paramedic workforce | 3. **Paramedics** have a Bachelor of Health Science in Paramedicine. They can provide a variety of treatments for most life-threatening emergencies, and can administer a range of intramuscular and intravenous medications to patients. | 734 | 16% |
| | | 4. **Intensive Care Paramedics** hold a Post Graduate Certificate with a paramedic specialty. They can administer an extended range of medications and perform a range of invasive medical procedures. | 297 | 7% |

The remaining 77 percent of the ambulance workforce at St John and Wellington Free Ambulance are First Responders and Emergency Medical Technicians. They are not being considered for regulation under the HPCA Act as they provide pre-hospital emergency care that is of lower risk than the paramedic workforce (see Appendix One for a discussion about whether they should be regulated under the HPCA Act).

St John and Wellington Free Ambulance are not the only employers of the ambulance workforce. There are at least 12 non-government funded ambulance providers in New Zealand that offer aero-medical services, non-emergency medical transport, and/or first-aid cover for events and industry settings[2]. Therefore, Ambulance New Zealand's proposal could also apply

[1] Includes employed, casual and volunteer staff, but not staff working in support and operations management.

[2] Non-government funded ambulance providers were found on the New Zealand Companies Register website (www.companiesoffice.govt.nz/companies) and New Zealand Charities Register website (www.register.charities.govt.nz/CharitiesRegister/Search).

to ambulance officers working for non-government funded ambulance providers and practising at the level of a Paramedic or above.

# 4.2 Proposal to establish a Paramedic Council

Ambulance New Zealand has engaged with the Nursing Council of New Zealand (the Nursing Council) to develop a governance proposal for regulating the paramedic workforce under the HPCA Act. Ambulance New Zealand proposes that a new RA, the Paramedic Council, be established to ensure the registered paramedic workforce is competent and fit to practise.

The Paramedic Council would consist of three health practitioners and two lay people, who would be appointed by the Minister of Health. The Paramedic Council would have overall responsibility for:

- describing the paramedic workforce in terms of one or more scopes of practice
- setting the qualifications required for Paramedics to be able to perform the tasks in the scope of practice
- accrediting and monitoring education programmes
- registering and issuing annual practising certificates (APCs) to health practitioners who have shown continuing competence
- reviewing a paramedic's competence to perform the tasks outlined in the scope of practice
- recognise programmes that help Paramedics maintain their competence
- receiving and acting on information about the competence or health of individual Paramedics
- establishing professional conduct committees to investigate Paramedics in certain circumstances
- setting standards of clinical competence, cultural competence and ethical conduct
- promoting the education and training of the paramedic workforce.

The specific qualifications and standards of practise required for the registered paramedic workforce are not specified in Ambulance New Zealand's proposal as these standards would be set by the proposed Paramedic Council.

The Nursing Council's secretariat team would provide operational support to the Paramedic Council, with the Nursing Council Registrar also being the Registrar of the Paramedic Council. Some of the Paramedic Council's responsibilities could be delegated to the Nursing Council's Registrar and existing committees, with paramedic expertise called upon if required.

The Paramedic Council would be allowed under the HPCA Act to set fees to provide sufficient revenue to cover its operating costs. Based on cost estimates provided by the Nursing Council Registrar, Ambulance New Zealand proposes the following fee set out in Table 2.

**Table 2: Proposed regulatory fees for the registered paramedic workforce.**

| Type of fee | Cost | Rationale |
|---|---|---|
| **Registration**<br>One-off cost to apply to be on the Paramedic | **$0** | Registration would be free in the first year as Ambulance New Zealand would provide funds and arrange for seconded staff to establish the paramedic regulatory framework. The Paramedic Council would then |

| | | |
|---|---|---|
| Council Register | | approve the regulatory framework and may decide in the future to set a registration fee to recover the costs of assessing subsequent applications. |
| **APC**<br>Ongoing yearly cost to apply for an APC. | **$425** | Ambulance New Zealand's proposed APC fee is based on the estimated costs to operate the Paramedic Council for approximately 1,000 registered Paramedics. |

# 5 Criteria for regulating new professions

## 5.1 Two-tier criteria

In order for the paramedic workforce to be regulated by a newly established Paramedic Council, the profession must meet the criteria for regulation under the HPCA Act. The Ministry uses a two-tier set of criteria[3] to assess new health professions for regulation.

- The primary criteria consider whether the profession meets requirements stated under the HPCA Act for regulation.
- The secondary criteria focus on the practicalities of regulating a new health profession and whether regulation is the most appropriate means to protect the public.

In early 2016, the Ministry assessed Ambulance New Zealand's proposal and convened an expert panel for advice about whether the proposal met the criteria for regulation. The expert panel agreed that there is a case for the paramedic workforce to be considered for regulation (see Appendix Two for the list of expert panel members).

## 5.2 Primary criteria

### 5.2.1 Delivering a health service as defined under the HPCA Act

The HPCA Act defines a health service as "assessing, improving, protecting or managing the physical or mental health of individuals or groups of individuals (section 5 of the HPCA Act)". The Ministry considers that the paramedic workforce (and wider ambulance workforce) meets this definition as they assess, stabilise and transport sick and injured people to an emergency department (ED).

The ambulance sector is expanding its traditional ambulance transport model to meet the needs of an increasing and ageing New Zealand population. Demand for emergency ambulance services is increasing by 4-5 percent a year, and a growing proportion of 111 calls for ambulance services are for non-urgent cases. As a result, the ambulance sector is implementing a new model of care that involves giving the paramedic workforce increasing responsibility to either:

- treat patients at the scene
- refer or transport patients to alternative health providers (such as after-hours clinics, integrated family health centres, general practice surgeries, or rest home hospitals)

[3] The Ministry also uses a set of guiding questions to interpret the criteria for regulation, which can be found on the Ministry's website (http://www.health.govt.nz/system/files/documents/pages/20160719_apply_for_regulation.doc).

- transport patients to an ED.

St John and Wellington Free Ambulance have demonstrated that the paramedic workforce can treat unwell patients in the home through their Urgent Community Care service (UCC)[4]. The UCC service involves dispatching an 'Extended Care Paramedic' (ECP) to respond to urgent low acuity calls. ECPs are a specialist practice level for Paramedics and Intensive Care Paramedics. They are trained to provide a medical model of assessment and manage a greater number of patients in the community.

The ECP model of care aligns to the 'one team' theme of the 2016 New Zealand Health Strategy, which emphasises collaboration across the health sector so there are safe referral pathways and health interventions closer to home. Paramedics are often the first health professionals to see patients in acute conditions. Therefore, they can potentially manage more patients in the community and become a key referral mechanism for other health providers.

## 5.2.2 Risk of harm to the health and safety of the public

There is potential under the traditional and new ambulance model of care that the paramedic workforce can harm members of the public. This is one of the reasons why the paramedic workforce is being considered for regulation under the HPCA Act.

The paramedic workforce (and wider ambulance workforce) operate in an environment where a number of factors could increase the risk they make errors of clinical judgement (see Table 3). A key contributing risk factor is that the paramedic workforce work unsupervised, and may not have the support or resources to diagnose patients at the scene or at home, compared to an ED.

**Table 3: Contributing factors to prehospital adverse events.**

*Adapted from Price R, Bendall JC, Patterson JA, Middleton PM. 2012. What causes adverse events in prehospital care? A human-factors approach. Emergency Medicine Journal. 30, 583–588.*

| Patient factors | Paramedic factors | Environmental factors | Organisational factors |
|---|---|---|---|
| Deteriorating patient | Uncertainty – diagnosis | Remote/rural | Poor caller data |
| Decreased level of consciousness | Uncertainty – change in patient condition | Conflicting history from bystanders | Adaptation from low to high acuity work |
| On initial presentation, patient seemed well | Uncertainty – panic | End of shift | Communication breakdown |
| Unusual signs and symptoms | Communication breakdown | Lack of room, poor light or if outdoors, extreme weather | Inaccurate triage of call priority |
| Multiple comorbidities | Frustration | Difficult bystanders | Staff not supported with the appropriate equipment or medications |
| Poor history from patient | Use of rarely needed skills/knowledge | Lack of resources to diagnose patient | Staff not getting required rest breaks at work |

St John and Wellington Free Ambulance have established a 'delegated scope of practice' for their four ambulance practice levels that defines the parameters of care, procedures and

[4] St John provides a UCC service in Horowhenua and Wellington Free Ambulance provides a UCC service in Porirua and Kapati Coast.

medications that can be provide under each practice level. The paramedic workforce's delegated scope of practice is expanding — they can perform a range of medical and surgical procedures and provide a variety of prescription-only medications in order to treat patients in life-threatening situations. Appendix Three lists the range of clinical procedures and medications that can be provided by Paramedics and Intensive Care Paramedics. These clinical procedures and medications can also be provided by some doctors and nurses.

The procedures performed by the paramedic workforce are high risk. Tables 4 and 5 describes these high risk procedures and the clinical consequences if these procedures are not performed competently. As discussed in Chapter 5.3, there are a number of regulatory mechanisms that can minimise the risk that the paramedic workforce harms patients when performing these procedures.

**Table 4: High risk interventions practised at the Paramedic level**

*Adapted by the National Ambulance Sector Office from Paramedic Australasia's 2011 submission to the Australian Ministers Advisory Council*

| Intervention | Potential clinical consequences |
|---|---|
| **Administration of a range of parenteral medication & drugs**<br>Some of the medications that can have significant side effects are: pain reliefs (such as morphine), fentanyl, benzodiazepine (such as midazolam) and thrombolytics (such as tenecteplase). | • Possible wrong drug or treatment.<br>• Possible wrong dose.<br>• Risk of accidental sedation<br>• Possible overdose<br>• Significant bleeding from thrombolytics. |
| **IV Cannulation**<br>An IV cannula is placed into the vein of a patient to administer medication or fluids | • Possible damage to surrounding structures in the limbs or the neck if a Jugular IV inserted.<br>• Inflammation or infection at the site.<br>• Catheter shear and risk of causing foreign body embolus.<br>• Infiltration / extravasation from the catheter not being correctly sited or the vein rupturing. |
| **Manual defibrillation**<br>Deciphering a cardiac rhythm and deciding the intervening treatment | • Inaccurate identification of a rhythm and inadvertently defibrillating a patient.<br>• Incorrectly interpretation and applying the wrong treatment regime.<br>• Safety – can inadvertently defibrillate others involved in the patients care if they are touching the patient at the time the shock is delivered. |

**Table 5: High risk interventions practised at the Intensive Care Paramedic level**

*Adapted by the National Ambulance Sector Office from Paramedic Australasia's 2011 submission to the Australian Ministers Advisory Council*

| Intervention | Potential clinical consequences |
|---|---|
| **Sedation and paralysis pre-intubation**<br>Administration of powerful drugs to maintain a patient unconscious and completely paralysed | • Profound hypotension (low blood pressure) leading to multiple organ damage, particularly brain damage or death.<br>• Prolonged hyperthermia (high body temperature) leading to organ damage.<br>• Undetected extubation: prolonged hypoxia leading to brain damage or death.<br>• Arrhythmia from pharmacological agents. |
| **Decompression of tension pneumothorax**<br>Insertion of a finger or large needle deep into the patient's chest to allow a collapsed lung to | • Possible damage to heart or major blood vessels in the chest.<br>• Collapsed lung (pneumothorax). Collapsed lung that |

| | |
|---|---|
| re-inflate and for the patient's heart to pump effectively | fills with large amounts of blood (haemothorax).<br>● Possible death of patient. |
| **Cricothyroidotomy**<br>Cutting an opening into the patient's trachea (windpipe) so a small tube can be inserted to allow a patient to be ventilated (breathe artificially) | ● Unable to execute procedure: prolonged hypoxia leading to brain damage or death.<br>● Surgical damage to surrounding organs leading to loss of blood and other complications.<br>● Aspiration of blood into the lungs.<br>● Insertion of tube into the wrong space. |
| **Rapid sequence intubation**<br>Administration of powerful drugs to render a patient unconscious and completely paralysed | ● Problematic sedation.<br>● Unable to intubate patient: prolonged hypoxia leading to brain damage or death.<br>● Profound hypotension (low blood pressure) leading to multiple organ damage, particularly brain damage or death.<br>● Prolonged hyperthermia (high body temperature) leading to organ damage.<br>● Unable to execute failed intubation drill: prolonged hypoxia leading to brain damage or death.<br>● Arrhythmia as a result of administering induction agents. |

Although the practice of the paramedic workforce has risks, there are few known events of the paramedic workforce causing significant harm. There is no published information that shows whether the paramedic workforce are incorrectly performing an invasive procedure or making an unsafe decision not to transport a patient to an ED.

The Ministry has examined recorded serious adverse events, complaints to the Health and Disability Commissioner (HDC), coroner cases, and Court convictions. According to these sources of information, relatively few individuals from the ambulance workforce have harmed members of the public. When harm has occurred, the harm has been severe and due to an ambulance officer taking either advantage of their patient's trust, or making unsafe decisions about clinical care.

The majority of the complaints made to St John and Wellington Free Ambulance are about the attitude and communication of their ambulance officers. It is possible, based on the number of complaints[5] received by St John and Wellington Free Ambulance, that at least 10 percent of their ambulance workforce may be causing an incident or complaint in a given year. However, it is not known how many complaints are made to non-government funded ambulance providers as these providers do not report complaint information to the Ministry.

The HDC advised that it received two complaints about ambulance officers[6] in the 2014/15 and 2015/16 financial year. As shown in Table 6, it appears that the ambulance workforce, in general, has the lowest rate of complaints made to the HDC compared to health professions regulated under the HPCA Act.

The low frequency of reported patient harm by the paramedic workforce and wider ambulance workforce is a reflection of the very high standard of care that St John and Wellington Free Ambulance provide. On the other hand, the following factors may be influencing the reporting of patient harm:

[5] In January 2014 to September 2015, Wellington Free Ambulance received 29 complaints and, St John received 1,150 complaints.

[6] The Ministry could not match the HDC's complaints data to a particular ambulance practise level.

- there is no national standard for investigating adverse events involving the ambulance workforce
- the ambulance workforce may be hesitant to self-report adverse events
- patients may not know how to make a complaint about a member of the ambulance workforce
- patients are often not conscious of the care they receive from ambulance officers.

**Table 6: Rate of HDC complaints per 1,000 health professionals.**

*Source: Complaint information provided by the Office of the Health and Disability Commissioner. Workforce information provided by Health Workforce New Zealand*

| Health profession | Size of workforce | HDC Complaints in 2014/15 | | HDC Complaints in 2015/16 | |
|---|---|---|---|---|---|
| | | Number | Rate of complaints per 1,000 health professionals | Number | Rate of complaints per 1,000 health professionals |
| Medical Practitioners | 14,677 | 712 | 48.5 | 715 | 48.7 |
| Dentists | 2,236 | 55 | 24.6 | 59 | 26.4 |
| Midwives | 3,100 | 82 | 26.5 | 80 | 25.8 |
| Psychologists | 2,527 | 37 | 14.6 | 57 | 22.6 |
| Podiatrists | 399 | 9 | 22.6 | 8 | 20.5 |
| Chiropractors | 546 | 9 | 16.5 | 11 | 20.1 |
| Osteopaths | 432 | 2 | 4.6 | 4 | 9.3 |
| Pharmacists | 3,577 | 9 | 2.5 | 22 | 6.2 |
| Psychotherapists | 525 | 4 | 7.6 | 3 | 5.7 |
| Occupational Therapists | 2,294 | 8 | 3.5 | 7 | 3.1 |
| Dietitians | 660 | 0 | 0.0 | 1 | 1.5 |
| Nurses | 53,922 | 88 | 1.6 | 77 | 1.4 |
| Physiotherapists | 4,703 | 23 | 4.9 | 3 | 0.6 |
| *Ambulance officers*[7] | 4,518 | 2 | 0.4 | 2 | 0.4 |

**Consultation questions**

- Do you agree that the paramedic workforce provides a health service as defined under the HPCA Act, and poses a risk of harm to the health and safety of the public?
- Do you agree with the consultation document's description of the nature and severity of the risk of harm posed by the paramedic workforce? If not, please provide comment.
- Do you consider there is a high frequency of harm being caused by the practice of the paramedic workforce? Please provide comment about your answer.
- Are you aware of any instances of harm to patients being caused by the paramedic workforce? If so, please provide further information.
- If you are a non-government funded ambulance provider, does your workforce practise high-risk interventions? Please provide comment about your answer. *Refer to Tables 4 and 5 (page 10) of the consultation document*

## 5.2.3 Public interest in regulating the paramedic workforce

The HPCA Act acknowledges that, in some scenarios, there may be public interest in regulating a health profession even if they do not meet the definition of a health service or pose a risk of harm to the public. The paramedic workforce fulfils the former two criteria. However, as summarised in Table 7, there may also be public interest in regulating the paramedic workforce.

**Table 7: Guidelines for considering public interest in regulating a new health profession**

[7] Size of the ambulance officer workforce includes the total St John and Wellington Free Ambulance workforce but not ambulance officers who work for non-government funded ambulance providers.

**under the HPCA Act and the Ministry's assessment of the paramedic workforce**

| There is public interest in regulating the health services of a health profession if they: | Meets the guideline? | Reason |
|---|---|---|
| • are practising without the supervision or support are of peers, and other regulated health practitioners | Yes | The clinical skills and judgement required from the paramedic workforce are similar to doctors and nurses, but the profession typically practises without direct supervision. |
| • are highly mobile, locum or work on short tenure | Yes | The paramedic workforce are highly mobile. |
| • provide health services to vulnerable or isolated individuals | Yes | The paramedic workforce treats individuals who are unconscious or unable to make decisions about their treatment. |
| • are not guided by a strong professional or employer code of conduct | Partially | There is a voluntary industry standard that provides a professional code of conduct for ambulance officers (see Table 8). |
| • subject to such a large numbers of complaints about the quality of services that oversight of competence from an independent body is required. | No | The paramedic workforce are not subject to large numbers of complaints to the HDC. |
| • have short training and educational requirements, with no extended period through which the ethos and values that underpin safe practice can be absorbed. | No | St John and Wellington Free Ambulance have high minimum educational requirements for the paramedic workforce. |

**Consultation questions**

- Do you consider that, under the Ministry's guidelines, it is in the public's interest to regulate the paramedic workforce under the HPCA Act?

# 5.3 Secondary criteria

## 5.3.1 Effectiveness of existing regulatory mechanisms and consideration of alternatives

The paramedic workforce and wider ambulance workforce is regulated by a range of mechanisms. The criteria for assessing new health professions for regulation under the HPCA Act require an assessment of the existing regulatory mechanisms and an assessment of other regulatory options.

As summarised in Table 8, there are limits with how the regulatory mechanisms in the ambulance sector address the risks of harm of the paramedic workforce. A major limit is that there is no consistent standard or independent body for monitoring the competency of the paramedic workforce. Under the existing regulatory environment, the onus is on the ambulance provider to ensure its workforce is competent and fit to practise.

**Table 8: Summary of existing mechanisms for managing risks of harm of the paramedic workforce and wider ambulance workforce**

| Existing mechanism | Limit |
|---|---|
| ***Non-regulatory –*** *Clinical Procedures and Guidelines Manual*<br>St John and Wellington Free Ambulance have developed a Clinical Procedures and Guidelines Manual for ambulance officers to follow. The manual is updated regularly and provides guidance on treatment and referral decisions. | A limit with the Clinical Procedures and Guidelines Manual is that it is not able to provide guidance on every condition and circumstance. |
| ***Non-regulatory –*** *Ambulance Clinical Control Centres*<br>The Ambulance Clinical Control Centres at St John and Wellington Free operate a Clinical Desk Service that provides clinical advice to call takers, dispatchers, and ambulance officers in the field. | The availability of Clinical Desks limits when ambulance officers can seek clinical advice. |
| ***Self-regulation -*** *the Ambulance Standard*<br>Under the New Zealand Standard for Ambulance and Paramedical Services NZS 8156:2008 (the Ambulance Standard), ambulance providers should:<br>● ensure ambulance officers are appropriately qualified and trained to work within their delegated scope of practice<br>● review ambulance officer's core competencies at least every two years and specific competencies under Medicines (Standing Order) Regulations every year<br>● have a continuing clinical education programme to ensure that ambulance officers maintain clinical competence. | A limit of this industry regulatory mechanism is that non-government funded ambulance providers do not have to comply with the Ambulance Standard.<br><br>Another limit is that the Ambulance Standard places responsibility on the ambulance provider to maintain the clinical competencies of the paramedic workforce. This can create inconsistencies with how continuing competencies are assessed and how clinical education is provided amongst ambulance providers. |
| ***Self-regulation -*** *employer regulation*<br>St John and Wellington Free Ambulance fulfil similar functions to an RA in that they regulate their workforce by:<br>● setting the minimum qualification required for entry into the paramedic workforce<br>● setting and restricting the procedures and medications that ambulance officers can perform according to their delegated scope of practice<br>● undertaking pre-employment criminal, driving and medical checks of ambulance officers<br>● investigating and acting upon reported issues of misconduct and clinical competence. | A limit of employer regulation is that it relies on employers to ensure their ambulance workforce is competent and fit to practise. There is a risk under this regulatory environment that employees are not provided with, or choose not to complete, continuing clinical education programmes.<br><br>Another limit is that ambulance providers and the ambulance workforce do not have an independent body to refer to for support when there issues concerning the competence and professional conduct of individuals. |
| ***Co-regulation -*** *Government funding contract for emergency road ambulance services*<br>Under the Government contract for funding, St John and Wellington Free Ambulance are required to:<br>● be certified as compliant against the Ambulance Standard<br>● inform NASO of adverse events that result in harm or death to a patient<br>● have clinical governance systems to oversee the safety and competency of their ambulance workforce. | A limit with this regulatory mechanism is that it only applies to ambulance services that have a funding contract with the Government. There are a number of smaller ambulance providers that do not receive Government funding and are not obliged to comply with the industry and Government requirements for clinical safety and oversight. |

| | |
|---|---|
| ***Co-regulation -*** *Health and Disability Commissioner (HDC) Act 1994*<br>Ambulance officers must uphold the Code of Health and Disability Service Consumers' Rights (the Code) in their capacity as health providers, including the duty to provide consumers with services of an appropriate standard of care (Right 4 of the Code). | The HDC Act can only provide retrospective protection to the public from ambulance officers that do not meet the Code. |
| **Existing mechanism** | **Limit** |
| ***Co-regulation -*** *Medicines (Standing Order) Regulations 2002.*<br>Medical Practitioners who act as Medical Directors have legal responsibility to ensure ambulance officers are competent to safely administer and supply medications to patients under Standing Orders. | A limit with this legislative mechanism is that it is not practical for Medical Directors to immediately provide all ambulance officers with advice about complex decisions. |
| ***Co-regulation –*** *Land Transport Rule Operator Licensing 2007 (the Land Transport Rule)*<br>The Rule references the Ambulance Standard and details the requirements for gaining and keeping a licence to operate a vehicle to take passengers | The Land Transport Rule does not place conditions or standards on the provision of ambulance services. |

## 5.3.2 Alternative to regulation under the HPCA Act

### *5.3.2.1 Self-regulation – register of persons*

Some health workforces that are not regulated under the HPCA Act have established their own register to provide the public with a means of finding qualified health providers. Clinical physiologists have a Clinical Physiology Registration Board and a publicly-accessible register. The New Zealand Association of Counsellors also provides a register for members of the public to find a counsellor in their area.

Therefore, an alternative regulatory mechanism would be to establish a register of the

**Consultation questions**

- Do you consider that the existing mechanisms regulating the paramedic workforce are effectively addressing the risks of harm of the paramedic practice? Please provide comment about your answer.
- Can the existing regulatory mechanisms regulating the paramedic workforce be strengthened without regulating the paramedic workforce under the HPCA Act? Please provide comment about your answer.

paramedic workforce that the ambulance sector and/or public can access. A publicly accessible register would be especially important if the paramedic workforce becomes more involved in community health care. Establishing a register would be a simpler form of regulation compared to the HPCA Act as it would not involve a responsible authority or require the paramedic workforce to apply for practising certificates every year. The advantages and disadvantages of establishing a register of the paramedic workforce is summarised in Table 9.

**Table 9: Advantages and disadvantages of establishing a register of paramedics suitable/unsuitable to paramedic practice.**

| | Advantages | Disadvantages |
|---|---|---|
| Register of paramedics unsuited to | • Targets the very small proportion of Paramedics who are unsuited to practise | • Imposes a negative presentation on the paramedic workforce.<br>• Unsuitable people may continue to |

| | | |
|---|---|---|
| paramedic practice. | • Lowers the cost burden by focusing on a small proportion of Paramedics. | practise until they are identified and placed on the register.<br>• May undermine the paramedic culture as it shifts towards greater transparency and continuous improvement.<br>• Unclear whether public should have access to the register.<br>• Unclear who would fund, establish, and maintain the register. |
| Register of paramedic names & qualifications | • Provides a simple indicator to consumers and employers that the individual is appropriately qualified.<br>• Would cover individuals who work in non-government funded or government funded ambulance providers.<br>• May be less costly to administer compared to regulation under the HPCA Act. | • A register was trialled unsuccessfully by Ambulance New Zealand.<br>• Does not record whether Paramedics are maintaining their competencies.<br>• Requires funding, resource, and buy-in from all stakeholders to implement and maintain.<br>• Unclear who would fund, establish, and maintain the register. |

**Consultation questions**

- Should the ambulance sector consider implementing a register of paramedics suitable/unsuitable to practise instead of regulation under the HPCA Act?
- Are there other regulatory mechanisms that could be established to minimise the risks of harm of the paramedic workforce? Please provide comment about your answer.

## 5.3.3 Determining whether regulation under the HPCA Act is possible

In order for a new health workforce to be regulated under the HPCA Act, section 116 of Act requires that there must be agreement on qualifications, standards, and competencies. The paramedic workforce potentially meets this requirement as:

- pre-hospital emergency care is a discrete area of activity
- the Ambulance Standard provides standards for conduct, performance and ethics
- St John and Wellington Free Ambulance both agree that the minimum qualification required to practice as a paramedic is a Bachelor of Health Sciences in Paramedicine
- St John and Wellington Free Ambulance have established clear pathways for volunteers and paramedicine degree graduates to develop a career as a paramedic.

**Consultation questions**

- Do you agree that regulation under the HPCA Act is possible for the paramedic workforce? Please provide comment about your answer.

**Consultation questions**

- Do you agree that regulation under the HPCA Act is possible for the paramedic workforce?

## 5.3.4 Determining whether regulation under the HPCA Act is practical

In order for the HCPA Act to be considered a viable regulatory mechanism, there needs to be evidence that implementation of the HPCA Act is practical. The Ministry requires feedback on whether the paramedic workforce and ambulance sector will welcome regulation under the HPCA. This feedback is important as there are a number of requirements that individual members of the paramedic workforce would have to comply with if they choose to become a registered health practitioner (see Appendix Four).

Additionally, the paramedic workforce would be required to pay the associated regulatory fees to fund the Paramedic Council's operation. The regulatory fees may fluctuate over time. For example, the APC fee could decrease if there are more than 1,000 registered and practising Paramedics. The APC may increase if the Paramedic Council has to deal with a higher than expected number of competency and disciplinary hearings. The Paramedic Council would be required to consult with relevant stakeholders on any changes to its regulatory fees.

The paramedic workforce would also have the option of paying for professional indemnity insurance. This insurance is used to cover the costs of:

- legal representation during disciplinary and competency proceedings before the Professional Conduct Committee, Paramedic Council, and/or the Health Practitioners Disciplinary Tribunal (HPDT), Coroner, HDC
- claims of negligence or error which may lead to injury, death or damage, or exemplary damages.

**Consultation questions**

- If you are an ambulance organisation or ambulance provider, do you consider that the paramedic workforce:
  - understands the individual responsibilities required under the HPCA Act? *Refer to Appendix Four of the consultation document for the list of individual responsibilities.*
  - is prepared to pay the estimated annual practising certificate fee (and other regulatory fees) set by the proposed Paramedic Council?
  - understands the purpose of obtaining professional indemnity insurance?

## 5.3.5 Benefits vs. negative impact of regulation

Regulation under the HPCA Act would have a substantial impact on the paramedic workforce and wider public. Regulation will bring a number of benefits, such as increased oversight and accountability over the paramedic workforce. On the other hand, regulation would impose an additional cost to the paramedic workforce and wider ambulance sector.

The Ministry requires feedback about whether the benefits of regulation outweigh the negative impacts of regulation (outlined in Tables 10 and 11). Consideration of costs and benefits will play a major role in determining whether there is a case for imposing additional regulatory measures on the ambulance sector.

**Table 10: Negative impacts of regulating the paramedic workforce under the HPCA Act.**

| Negative impacts to the paramedic workforce | Negative impacts to the health sector |
|---|---|
| • Costs of professional indemnity insurance.<br>• Potential costs to individuals who are subject to a Competence Review or Professional Conduct Committee review by the Paramedic Council, or investigation by the HPDT<br>• The potential loss of volunteers who are unable to maintain their competencies to practise and/or unable to afford the APC fees.<br>• Future one-off registration fees and ongoing and | • Potential impact of regulatory costs on funding for ambulance services (this could also occur if the ambulance sector was to strengthen its self-regulation).<br>• Cost to the ambulance service provider to implement continuing competency programmes that are up to the standard set by the RA.<br>• Cost to the education sector to meet specific accreditation requirements set by the RA. |

| | |
|---|---|
| fluctuating APC fees to regulate the paramedic workforce. | |

**Table 11: Benefits of regulating the paramedic workforce under the HPCA Act.**

| Benefits to the paramedic workforce | Benefits to the health sector and public |
|---|---|
| • Consistent standards of training, scopes of practice, code of conduct and maintenance of competencies.<br>• Provides for an independent body to assess issues of professional behaviour and competence.<br>• Standardised entry requirements for overseas Paramedics seeking employment in New Zealand.<br>• Increases the opportunities for Paramedics to seek employment in roles that require expertise as a registered health practitioner.<br>• Restriction of the use of the paramedic title, which will provide the public with increased assurance over the safety of ambulance services and avoid confusion over who is qualified and competent to practise as a paramedic.<br>• Allow a Quality Assurance Activity (QAA) to be undertaken to assess and improve the health services provided by the paramedic workforce[8].<br>• Registered members of the paramedic workforce will be allowed to practise in urban search and rescue operations in countries that require registration and certification.<br>• Allowing for a consistent approach to how the paramedic workforce delegates tasks and gives direction to lower ambulance practise levels..<br>• Establishing consistent assessment of overseas paramedic qualifications. | • Consumers will have the choice to inspect the register to ensure the paramedic is registered and competent to practise, should Paramedics play a role in primary health care.<br>• A preventive mechanism for managing the risks of harm of the paramedic workforce, and potentially the ambulance sector's new models of care.<br>• Quality and safety assurance for other health professions, district health boards and primary health organisations that the paramedic workforce is meeting appropriate standards of competence<br>• Quality and safety assurance for private industries (e.g. ships, film industry, mines) employing Paramedics<br>• Regulatory alignment with Australia, which is implementing national registration of its paramedic workforce, and with the United Kingdom, which has a registered paramedic workforce<br>• Provides the health sector with statistical information about the paramedic workforce, which will aid in workforce planning and service delivery<br>• Increased transparency about the safety and competency of the paramedic workforce.<br>• Able to employ a registered health practitioner with paramedic skills and knowledge. |

**Consultation questions**

- Do you have anything to add to the consultation document's list of benefits and negative impacts of regulating the paramedic workforce under the HPCA Act?
- Do you consider that the benefits to the public in regulating the paramedic workforce outweigh the negative impact of regulation? Please provide comment about your answer.

[8] More information about QAAs can be found on the Ministry's website (www.health.govt.nz/publication/protected-quality-assurance-activities-under-health-practitioners-competence-assurance-act-2003).

# 6 Next steps

There are a number of steps to be completed as part of the process for considering the paramedic workforce for regulation under the HPCA Act (see Table 12). Stakeholder feedback about Ambulance New Zealand's proposal will be used in:

- the Ministry's advice to the Minister of Health for a decision on whether to regulate the paramedic workforce under the HPCA Act
- advice to Cabinet, if the Minister of Health decides that the paramedic workforce should be regulated and seeks Cabinet agreement
- a Regulatory Impact Statement, which will be released to the public. The RIS will provide information about the status quo, regulatory alternatives, potential impacts and costs and benefits of regulation.

The Ministry aims to provide its advice to the Minister of Health and Cabinet by mid-2017. If the Government decides to include the paramedic workforce under the HPCA Act, implementation could begin in mid-2018 or 2019.

**Table 12. Process for considering new health professions for regulation under the HPCA Act**

| Assessment process | Progress of Ambulance New Zealand's proposal |
|---|---|
| 1. The professional body meet with the Ministry to discuss issues when considering applying. | ✓ |
| 2. The Ministry receives an application from the professional body. | ✓ |
| 3. The Ministry undertakes a preliminary assessment of the application and seeks further information if required. | ✓ |
| 4. If the Ministry accepts that the application makes a robust case, it convenes an expert panel to consider the application. | ✓ |
| 5. Discussions may be held between the professional body and existing responsible authorities to seek agreement on shared governance and/or administration of the new profession. | |
| 6. Subject to the Minister of Health's agreement, the Ministry undertakes a consultation process and analyses submissions. | *In progress* |
| 7. The Ministry provides advice to the Minister regarding whether the profession should be regulated. | |
| 8. If the Minister agrees the profession should be regulated, the Minister seeks agreement from Cabinet. | |
| 9. Subject to Cabinet's agreement, an Order in Council is prepared by the Parliamentary Counsel Office. The Order in Council is then considered by Cabinet. | |
| 10. The Minister recommends to the Governor-General that the profession is designated under the Act. The Order in Council is signed by the Governor-General. | |

# Appendix One

## Discussion about whether to regulate First Responders and/or Emergency Medical Technicians

First Responders and Emergency Medical Technicians represent 77 pecent of the St John and Wellington Free Ambulance workforce. They attend the lowest amount of calls as they predominately work in low workload areas. Ambulance officers who practise as First Responders or Emergency Medical Technicians have shorter periods of training, but they can make decisions that impact on patient health and wellbeing.

However, Ambulance New Zealand decided not to include First Responders and Emergency Medical Technicians in its application for regulation under the HPCA Act as

- the autonomy of First Responders and Emergency Medical Technicians to make clinical decisions is limited by their delegated scope of practise, which is narrower than the paramedic workforce's and does not include high risk clinical interventions
- they are primarily a volunteer workforce, who will likely find it difficult to complete continuous professional development while balancing other commitments. First Responders are the primary voluntary workforce that serve our rural and remote communities and they often are the person who makes up the second crew member. There is significant concern that if this group were to be regulated, then New Zealand could lose an important part of its current ambulance service.

If Paramedics are regulated under the HPCA Act, the proposed Paramedic Council could also consider regulating First Responders and/or Emergency Medical Technicians in the future. This could be achieved by the Paramedic Council introducing a new scopes of practice under section 11 of the HPCA Act, as long as the activities in the new scope of practice were consistent with the Paramedic Council's definition of the paramedic workforce under the HPCA Act. Section 14 of the HPCA Act would require the Paramedic Council to consult with affected parties before a new scope of practice was added.

# Appendix Two

## Members of the Expert Panel who assessed Ambulance New Zealand's proposal

Dr Iwona Stolarek is the Clinical Lead at the Health Quality and Safety Commission. Dr Stolarek oversees the national reportable events policy and reporting of adverse events by district health boards (DHBs).

Dr Kathryn Holloway was the former Dean of Faculty of Health, Whitireia Polytechnic, and is now the Director of the Graduate School of Nursing, Midwifery and Health at Victoria University of Wellington. Dr Holloway is also a current board member of the Nursing Council of New Zealand. Dr Holloway has expertise in nursing education and workforce development. Dr Kathryn has expertise in nursing education and workforce development.

Helen Pocknall is the Deputy Chair of the Health Workforce New Zealand Board and was the former Executive Director of Nursing and Midwifery at Wairarapa and Hutt Valley DHBs. Ms Pocknall has clinical leadership experience in hospital, primary and community settings.

Gillian Grew was former Chief Advisor of Services at the Ministry of Health. Ms Grew is an expert in the regulatory mechanisms that are designed to improve the safety and quality of clinical services.

The Exert Panel also received advice from a former paramedic with 10 years paramedic experience and who now works for the National Ambulance Sector Office (a business unit jointly owned by the Ministry of Health and the Accident Compensation Corporation).

# Appendix Three

## Clinical procedures and medications that can be provided under the Emergency Medical Technician (EMT), Paramedic, and Intensive Care Paramedic (ICP) delegated scope of practice [9]

*Source: St John Clinical Procedures and Guidelines Comprehensive edition 2016 – 2018*

| Skill | EMT | Paramedic | ICP |
|---|---|---|---|
| Adrenaline IM, IN, nebulised and topical | ✔ | ✔ | ✔ |
| Entonox inhaled | ✔ | ✔ | ✔ |
| Glucagon IM | ✔ | ✔ | ✔ |
| GTN SL | ✔ | ✔ | ✔ |
| Ibuprofen PO | ✔ | ✔ | ✔ |
| Ipratropium nebulised | ✔ | ✔ | ✔ |
| Laryngeal mask airway | ✔ | ✔ | ✔ |
| Laryngoscopy (airway obstruction) | ✔ | ✔ | ✔ |
| Loratadine PO | ✔ | ✔ | ✔ |
| Methoxyflurane inhaled | ✔ | ✔ | ✔ |
| Ondansetron PO | ✔ | ✔ | ✔ |
| Paracetamol PO | ✔ | ✔ | ✔ |
| Prednisone PO | ✔ | ✔ | ✔ |
| PEEP | ✔ | ✔ | ✔ |
| Salbutamol nebulised | ✔ | ✔ | ✔ |
| Tramadol PO | ✔ | ✔ | ✔ |
| Urinary catheter troubleshooting | ✔ | ✔ | ✔ |
| Adrenaline IV (cardiac arrest only) | | ✔ | ✔ |
| Amiodarone IV (cardiac arrest only) | | ✔ | ✔ |
| Amoxicillin/clavulanic acid IM or IV | | ✔ | ✔ |
| Clopidogrel PO | | ✔ | ✔ |
| Enoxaparin SC | | ✔ | ✔ |
| Fentanyl IN and IV | | ✔ | ✔ |
| Gentamicin IV | | ✔ | ✔ |
| Glucose IV | | ✔ | ✔ |
| Heparin IV | | ✔ | ✔ |
| IV cannulation | | ✔ | ✔ |
| 1% lignocaine SC | | ✔ | ✔ |
| Manual defibrillation | | ✔ | ✔ |
| Metoprolol IV | | ✔ | ✔ |

| Skill |
|---|
| Midazo (seizur |
| Midazo |
| Morph |
| Naloxo |
| Olanza |
| Ondan |
| Oxytoc |
| 0.9% s |
| Synchr |
| Tenect |
| Valpro |
| Adeno |
| Adrena |
| Amiod |
| Atropi |
| Calciu |
| Chest |
| Cricoth |
| Endotr |
| Finger |
| IO acce |
| Ketami |
| 1% lign |
| Magne |
| Midazo |
| Pacing |
| Rocuro |
| 8.4 % s |
| Suxam (RSI en |

[9] Emergency Medical Technicians, Paramedics and Intensive Care Paramedics require a Medical Practitioner to issue an 'authority to practice' (under Medicines (Standing Orders) Regulations 2002) so they can legally supply and administer prescription medicines to patients

| Skill | EMT | Paramedic | ICP |
|---|---|---|---|
| Midazolam IM (seizures or agitated delirium only) | | ✔ | ✔ |
| Midazolam IV (seizures only) | | ✔ | ✔ |
| Morphine IM and IV | | ✔ | ✔ |
| Naloxone IM and IV | | ✔ | ✔ |
| Olanzapine PO | | ✔ | ✔ |
| Ondansetron IM and IV | | ✔ | ✔ |
| Oxytocin IM | | ✔ | ✔ |
| 0.9% sodium chloride IV | | ✔ | ✔ |
| Synchronised cardioversion | | ✔ | ✔ |
| Tenecteplase IV | | ✔ | ✔ |
| Valproate IV | | ✔ | ✔ |
| Adenosine IV | | | ✔ |
| Adrenaline (all routes) | | | ✔ |
| Amiodarone IV | | | ✔ |
| Atropine IV | | | ✔ |
| Calcium chloride IV | | | ✔ |
| Chest decompression (needle) | | | ✔ |
| Cricothyroidotomy | | | ✔ |
| Endotracheal intubation | | | ✔ |
| Finger thoracostomy | | | ✔ |
| IO access | | | ✔ |
| Ketamine (all routes) | | | ✔ |
| 1% lignocaine (all routes) | | | ✔ |
| Magnesium IV | | | ✔ |
| Midazolam IV | | | ✔ |
| Pacing | | | ✔ |
| Rocuronium IV | | | ✔ |
| 8.4 % sodium bicarbonate IV | | | ✔ |
| Suxamethonium IV (RSI endorsed personnel only) | | | ✔ |

# Appendix Four

## Responsibilities of individual Paramedics under the HPCA Act

*Registration*

To become a registered paramedic, individuals will need to have the appropriate qualifications recognised by the Paramedic Council. Additionally, Paramedics would need to meet the following criteria to be 'fit for registration' under the HPCA Act:

- able to communicate effectively so they can practice safely and the public is protected
- able to communicate in, and understand, English to a level which is sufficient to protect the health and safety of the public
- have no mental or physical condition that could affect their ability to practice
- be of good character and a 'fit and proper' person
- have no convictions for criminal offences, offences that relate to their role as an ambulance officer, or have been found guilty in civil or disciplinary proceedings in any country
- have no criminal or disciplinary investigation underway in any country
- be able to provide evidence that they continue to be competent to practice.

*Scopes of practice*

A scope of practice outlines the tasks that can be performed under that scope. Any practitioner registered under the HPCA Act will be required to be registered in a specific scope of practice. Registered health practitioners are not permitted to practise outside their scopes of practice.
Annual practicing certificates

Registered Paramedics would be required to apply every year for an Annual Practicing Certificate (APC) to ensure their skills and knowledge are up to date. As part of the APC application, Paramedics would need to declare:

- how many hours they have worked
- the ongoing learning and professional development (continuing competence) they have completed
- that they are fit to practise.

*Continuing competence*

Under the HPCA Act, the Paramedic Council would be required to recertify a certain proportion of its registered Paramedics. The recertification audit process would involve the practitioner providing evidence that they have met the continuning competence requirements as declared in their APC.

Employers and health professionals can notify the Paramedic Council that a registered paramedic was not practising at the required level of competency. The Paramedic Council may then require the paramedic to complete additional education or work under supervision for a period of time. If the Paramedic Council had serious concerns

about the paramedic's competency, it could suspend the practitioner until an education programme had been completed.

*Complaints*

If the Paramedic Council received a complaint from a patient about the care they received from a registered practitioner, it would refer the matter to HDC. The HDC may refer the complaint back to the Paramedic Council for further action. If the Paramedic Council received a complaint that a practitioner had not acted appropriately or within the required standard of practice, the Paramedic Council may set up a professional conduct committee to investigate the matter.

The professional conduct committee may then refer the case to the Health Practitioners Disciplinary Tribunal (the Tribunal) if the case was considered serious. The Tribunal was established under the HPCA Act to be an independent body that hears and determines disciplinary proceedings brought against health practitioners. The HPCA Act includes rights of appeal to the District Court on many of the decisions of the Paramedic Council and a person may appeal to the High Court on the decisions of the Tribunal.