

Title	Demonstrate knowledge of pharmacology in an ambulance context		
Level	4	Credits	5

Purpose	<p>This unit standard is intended for people who are working in an ambulance context, and who are responsible for developing management plans for patients, making appropriate decisions, and who need to be able to do this independently.</p> <p>People credited with this unit standard are able to demonstrate knowledge of:</p> <ul style="list-style-type: none"> – pharmacokinetics for the purpose of administration in an ambulance context; – pharmacodynamics for the purpose of administration in an ambulance context; and – administering pharmaceuticals to a patient for a range of commonly seen medical and trauma conditions in an ambulance context.
----------------	---

Classification	Emergency Services > Ambulance
-----------------------	--------------------------------

Available grade	Achieved
------------------------	----------

Prerequisites	Unit 29323, <i>Gather and record information to support patient assessment</i> , or demonstrate equivalent knowledge and skills.
----------------------	--

Guidance Information

1 Definitions

Ambulance context – situations where emergency care is delivered in a variety of out-of-hospital environments. Out-of-hospital environments refer to any situation in which people require medical assistance outside of a controlled medical environment, such as a medical centre. These out-of-hospital environments include situations both in and away from an ambulance vehicle.

Best practice – for the purposes of this standard, a clinical technique or methodology that has proven to be most effective at delivering a desired outcome and is actively promoted across the ambulance and/or emergency care sector.

Clinical procedures and guidelines – the written procedures particular to each ambulance service and endorsed by Ambulance New Zealand.

Standing orders – written instructions issued by a medical practitioner that authorise individuals engaged in the delivery of health services to supply and administer certain medicines without a prescription in circumstances specified in the instruction.

2 References

Health and Disability Commissioner (Code of Health and Disability Services Consumers' Rights) Regulations 1996;
and all subsequent amendments and replacements.

3 Range

Performance in relation to the outcomes in this unit standard is to comply with current clinical procedures and guidelines and/or standing orders and/or current best practice and be appropriate to the patient's condition.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of pharmacokinetics for the purpose of administration in an ambulance context.

Performance criteria

1.1 Describe routes of introduction of pharmaceuticals into the body.

1.2 Describe life-cycle characteristics of pharmaceuticals in the body according to their function and effects.

Range includes but is not limited to – metabolism, elimination, therapeutic effect, half-life, toxic dose.

1.3 Describe factors influencing pharmacokinetics according to patient presentation and health.

Range includes but is not limited to – age, body weight, disease processes.

Outcome 2

Demonstrate knowledge of pharmacodynamics for the purpose of administration in an ambulance context.

Performance criteria

2.1 Describe general classifications of drugs according to their use for treatment.

Range includes but is not limited to – cardiovascular, respiratory, analgesics.

2.2 Describe concepts of pharmacodynamics according to the effects on the body.

Range includes but is not limited to – site of action, mechanism of action at the level of the organ, transportation, desired effects, side-effects, toxicity.

Outcome 3

Demonstrate knowledge of administering pharmaceuticals to a patient for a range of commonly seen medical and trauma conditions in an ambulance context.

Performance criteria

3.1 Describe pharmaceutical administration to a patient according to purpose and content.

Range includes but is not limited to – route of administration, indications, contraindications, dose of medication, medication checks.

Planned review date	31 December 2021
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 August 2008	31 December 2019
Review	2	5 May 2016	N/A
Revision	3	25 July 2019	N/A

Consent and Moderation Requirements (CMR) reference	0121
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.