Protocol for the clinical handover of ambulance patients in the ED

health

June 2014

Standardised clinical handover of ambulance patients arriving in the ED impacts positively on:

- **patient outcomes and safety**
- **timely and high quality care**
- **paramedic and ED staff collaboration**
- **paramedic availability to meet community needs.**

Purpose

The purpose of this protocol is to outline a standardised clinical handover process to ensure the safe, timely, and structured exchange of information during handover of ambulance patients in the emergency department (ED).

Clinical handover refers to "*the transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or permanent basis.*"[1]

Clinical handover is a separate and distinct process from triage. This is outlined in further detail below.

Background

In July 2013, the Minister for Health commissioned an Ambulance Transfer Taskforce to develop policy directives on the roles and responsibilities for health services and Ambulance Victoria (AV) on the transfer of ambulance patients into the ED.

The Taskforce recommended a number of improvements to support quality and timely handover of ambulance patients, including the development of a standardised handover protocol for patients arriving by ambulance into the ED.

A working group was established in March 2014 to develop the standardised handover protocol. Representation on the working group included ED nurse unit manager, triage nurse, ED Directors, nurse educators and AV paramedics.

As a result of this process, a state-wide standardised process for clinical handover by ambulance paramedics to ED clinicians has been developed in Victoria to achieve effective, high quality communication of relevant clinical information when responsibility for patient care is transferred.

Who should use this document?

This document is to be used by ED clinicians and ambulance paramedics as a protocol for the clinical handover of patients arriving by ambulance in the ED. Health service and AV executive staff are responsible for ensuring this protocol is applied at each respective health service.

Case for change

Clinical handover is a high risk area for patient safety. Failures in clinical handover have been identified as a major preventable cause of patient harm.

Research into handover practice suggests clinical handover should be more complete and concise, utilise effective communication, and structured according to a handover tool in order to provide high quality patient care and reduce adverse events.[2]

In 2013, the National Safety and Quality Health Service standards identified the need for established systems and strategies for clinical handover.

A standard clinical handover process improves patient safety as critical information is more likely to be transferred and acted upon.

[1] Australian Commission on Safety and Quality in Health Care (ACSQHC). National Safety and Quality Health Service Standards. Sydney, 2012.

[2] Dawson, King and Grantham, et al, Improving the hospital clinical handover between paramedics and emergency department staff in the deteriorating patient, *Emergency Medicine Australasia* (2013) 25, 393–405.

Information transfer - triage vs. clinical handover

Triage is the process of rapid patient assessment on arrival to ED to determine their clinical acuity and an appropriate treatment space allocation. Triage is a separate and distinct process to clinical handover, with different objectives.

Although there is some overlap in information required at triage with that required for clinical handover, in most cases the detail required for triage is substantially less.

The Emergency Triage Education Kit[3] (ETEK) provides a nationally consistent approach to the educational preparation of emergency clinicians for the triage role, and promotes the consistent application of the Australasian Triage Scale (ATS).

Triage should continue to occur according to ETEK specifications.

It is recognised that in some circumstances (e.g. when a patient is triaged to the waiting room), clinical handover will occur in the triage location. In these cases, the additional information can be given to the responsible clinician once the request for clinical handover has been made.

Key clinical handover principles

It is widely recognised that clinical handover efficiency and effectiveness can be improved with a standardised model of delivery. Health services may already have some formal or informal standardised handover process in use.

The following are considered key principles for effective clinical handover of ambulance patients in Victoria:

- **Appropriate environment**

  The health service clinician is responsible for providing an appropriate environment for handover. The area should preserve patient confidentiality and limit non-critical interruptions to communication during handover.

- **Staff availability**

  Health services should ensure appropriate staff are available to receive clinical handover.

  The clinician receiving handover should be clearly identifiable and prepared to receive the handover uninterrupted. This is particularly important in the case of trauma or time criticality when multiple clinicians may be in the receiving area.

- **Agreement**

  Health services should establish processes which clearly outline roles and responsibilities of the receiving clinician and ensure agreement of clinical handover.

  At the point of agreed handover time, the receiving clinician accepts full responsibility for the patient.

  Receiving clinicians should take the opportunity to ask clarifying questions as part of the standardised handover.

- **Concise**

  Clinical handover information should be timely, accurate and completed only once and use an easily understood language with minimal accepted abbreviations.

- **Consistent structure and content**

  All handovers are to have a consistent structure to guide the content and flow of information in a manner that suits the clinical context and contain a minimum standard of information.

It is recommended that clinical handover content reflect the IMIST-AMBO handover model explored in further detail below.

Clinical handover protocol

Ambulance paramedics and hospital staff have a shared responsibility for ensuring effective, high quality communication of relevant clinical information at clinical handover.

Model of clinical handover

Many models of clinical handover (sometimes referred to as structured handover tools) exist in Victoria, nationally, and internationally.

The IMIST-AMBO model was selected by the sector working group for use by Victorian health services and AV when communicating clinical handover of ambulance patients in the ED.

The IMIST-AMBO model should be followed during clinical handover of ambulance patients in the ED irrespective of IT systems in place at health services.

[3] Gerdtz M, Considine J, Sands N, Stewart C, Crellin D, Pollock W, Tchernomoroff R, Knight K & Charles A (2007) Emergency Triage Education Kit. Australian Government Department of Health and Ageing, Canberra

The model includes:

- **I** – Identification
- **M** – Mechanism of injury / Medical complaint
- **I** – Injuries / Information related to the complaint
- **S** – Signs
- **T** – Treatment and Trends
- **A** – Allergies
- **M** – Medication
- **B** – Background history
- **O** – Other information

Further information is included at Attachments 1, 2 and 3 in the Appendix.

Ambulance handover complete

From July 2014, 'ambulance handover complete' will be recorded in the Victorian Emergency Minimum Dataset (VEMD) which will be used to calculate and report ambulance patient transfer times. Ambulance paramedics and hospital staff have a shared responsibility for collecting and recording this time stamp.

Definitions and detailed case studies for 'ambulance handover complete' are available in the VEMD manual 2014-15 at: http://www.health.vic.gov.au/hdss/vemd/index.htm

Mutual agreement of 'ambulance handover complete'

On completion of clinical handover, the ED clinician and ambulance paramedic must mutually agree on the time 'ambulance handover complete' occurs. Handover is considered complete when:

- Clinical handover has been finalised, and
- The patient has been moved from the ambulance stretcher to the hospital bed, care area or waiting room.

The agreed 'ambulance handover complete' time is entered into the Victorian Ambulance Clinical Information System (VACIS) and the ED information system for reporting into the VEMD.

Health services will need to establish processes clearly outlining mutual agreement and recording of the 'ambulance handover complete' timestamp as part of this process.

Key clinical handover responsibilities

The following table outlines the shared responsibility between ambulance paramedics and emergency staff in ensuring effective, high quality communication of relevant clinical information when patient care responsibility is transferred.

Ambulance paramedics are asked to:

- Review handover details pre-arrival
- Remain with the patient during handover
- Reach agreement with the ED clinician on 'ambulance handover complete'.
- Enter agreed time in VACIS.

Hospital staff are asked to:

- Ensure staff are available for handover
- Provide a suitable handover environment
- Agree on 'ambulance handover complete' time
- Acknowledge and accept responsibility for the patient
- Enter agreed time in VEMD.

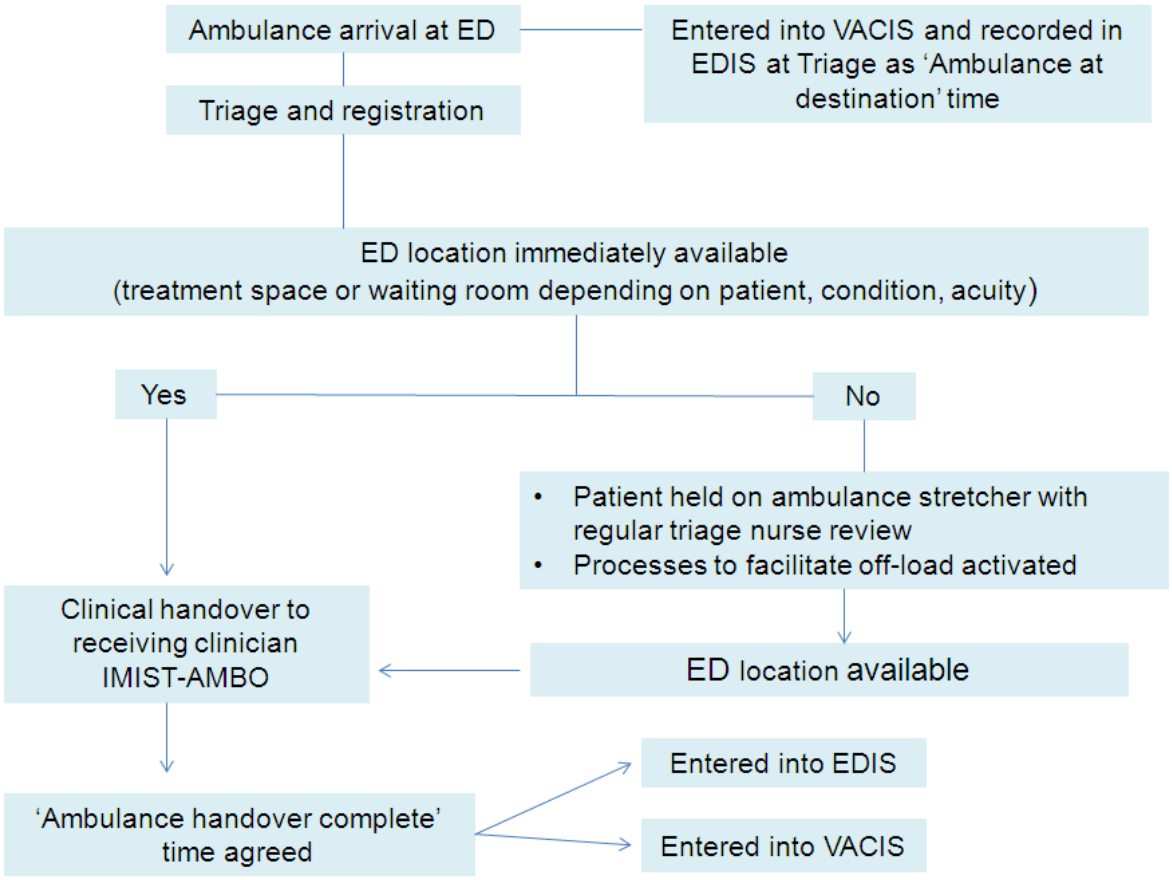
Health service chief executives are asked to:

- Ensure an environment exists to receive ambulance patients immediately on arrival to the ED.

Health service managers, executive directors, and other senior management are asked to:

- Provide organisational governance and leadership in relation to effective clinical handover
- Develop, implement and monitor local processes that support effective clinical handover
- Ensure full implementation of this policy locally.

Clinical handover process map



Supporting documentation

- Attachment 1 – IMIST-AMBO Handover Protocol
- Attachment 2 – Common handover models: ISBAR and IMIST-AMBO – Working together
- Attachment 3 - Standardised handover protocol – Factsheet
- Attachment 4 - VEMD manual – Concept and derived item definitions – 2014/15

Acknowledgements

The Victorian Department of Health would like to acknowledge the valuable work of New South Wales Health and New South Wales Ambulance in developing the IMIST-AMBO handover model.

NSW Health and NSW Ambulance have approved the use of the model for clinical handover in the Protocol for the clinical handover of ambulance patients in the ED for the Victorian Health system.

IMIST-AMBO Handover Protocol

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June 2014

Using IMIST-AMBO during clinical handover

The IMIST-AMBO model was selected by a Standardised Handover Protocol working group, compromising of sector representation, for use by health services and Ambulance Victoria (AV) when communicating clinical handover of ambulance patients in the ED.

The model includes:

I – Identification (e.g. patient's name, age, sex)

M – Mechanism of injury or Medical complaint (e.g. presenting problem, how it happened)

I – Injuries or Information related to the complaint (e.g. symptoms and/or injuries)

S – Signs (e.g. vital signs, such as HR, RR, BP, Temp, BGL, GCS, etc.)

T – Treatment and Trends (e.g. treatment administered and patient's response to treatment, trends in vital signs)

A – Allergies

M – Medications (e.g. patient's regular medications)

B – Background history (e.g. patient's medical history)

O – Other information (e.g. social, scene, relatives present, EAR result).

Ambulance paramedics are asked to:

- Review handover details pre-arrival
- Remain with the patient during handover
- Reach agreement with the ED clinician on 'ambulance handover complete'
- Enter agreed time in VACIS.

Hospital staff are asked to:

- Ensure staff are available for handover
- Provide a suitable handover environment
- Agree on 'ambulance handover complete' time
- Acknowledge and accept responsibility for the patient
- Enter agreed time in VEMD.

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Common handover models: ISBAR and IMIST-AMBO - Working together

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Clinical handover models – ISBAR and IMIST-AMBO

ISBAR and IMIST-AMBO are common tools to aid the safe transfer of patient information in clinical handover.

The Department of Health *Protocol for the clinical handover of ambulance patients in the emergency department* (2014) supports the use of the IMIST-AMBO model by Victorian health services and Ambulance Victoria when communicating handover of ambulance patients. ISBAR is considered a valuable structured tool for handover in non-ambulance settings.

This table below looks at both models of clinical handover and explores key differences and similarities.

Component	ISBAR		IMIST-AMBO	
Part 1 Relate similarly across both models, although each performs a different function.	**Introduction**	Can include introduction of the clinician and the patient.	**Identification**	Introduction of the patient, including the patient's name and age.
Part 2 Relates to the explanation of what has occurred for this handover to be taking place.	**Situation**	Asks the person handing over to explain the immediate situation of the patient, including chief complaint and patient stability.	**Mechanism of injury or Medical complaint**	Asks the person handing over to give a specific explanation of the patient's presenting problem and why they have been transported to hospital.
Part 3 Broader focus in ISBAR compared to IMIST-AMBO	**Background**	Defined as including the date of admission, diagnosis, treatment and test results up to this point in the patient's hospital journey.	**Injuries or Information relating to the complaint**	Information relating to injuries or present complaint related information.
Part 4 Focusses on the provision of clinical assessments and recording of vital signs	**Assessment**	Requires the person handing over to give a clinical assessment of the patient's condition.	**Signs**	Looks at assessment of the patient, however, quite specifically requires detailing of the patient's vital signs and GCS.
Part 5 Focusses on transfer of responsibility and accountability for patient care	**Recommendation**	Person handing over provides an outline of recommendations and risk (patient and occupational health and safety). Point of transition of responsibility and accountability for patient care.	**Treatment and trends**	Identifies the treatment that was required and how the patient's condition has changed. Point of transition of responsibility and accountability for patient care.
Part 6 Applies only in IMIST-AMBO	-	-	**AMBO**	Further components of IMIST-AMBO include: • Allergies • Medications • Background, and • Other issues.

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Safe Clinical Handover

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Factsheet - Information to assist handover of ambulance patients in the ED

Clinical handover of ambulance patients

Victoria is introducing a state-wide standardised process for the clinical handover of ambulance patients to the emergency department (ED).

Objective

- To create standardised high level principles for handover
- To ensure safe, timely and high quality care for all ambulance patient transfers
- To ensure effective transfer of responsibility from paramedics to health service staff.

Case for change

Clinical handover is a high risk area for patient safety. In 2013, the *National Safety and Quality Health Service* (NSQHS) standards identified the need for established systems and strategies for clinical handover.

The following are considered key principles for handover:

Handover principles

- Appropriate environment
- Staff availability
- Agreement
- Concise
- Consistent structure and content

Model of clinical handover

The IMIST-AMBO model was selected by a Standardised Handover Protocol working group, compromising of sector representation, for use by health services and Ambulance Victoria (AV) when communicating clinical handover of ambulance patients in the ED.

This includes:

- **I** – Identification
- **M** – Mechanism of injury / Medical complaint
- **I** – Injuries / Information related to the complaint
- **S** – Signs
- **T** – Treatment and Trends
- **A** – Allergies
- **M** – Medication
- **B** – Background history
- **O** – Other information

Ambulance handover complete

Completion of handover requires mutual agreement between the ED clinician and ambulance paramedic on the 'ambulance handover complete' time. This occurs when:

- Handover has been finalised, and
- The patient has been moved from the ambulance stretcher to the hospital bed, care area or waiting room.

The agreed 'ambulance handover complete' time is entered into Victorian Ambulance Clinical Information System (VACIS) and the ED information system for reporting into the Victorian Emergency Minimum Dataset (VEMD).

Health services will need to establish processes clearly outlining mutual agreement and recording of the 'ambulance handover complete' timestamp.

Who should use this document

This document is to be used by ED clinicians and ambulance paramedics to improve clinical handover for patients arriving by ambulance in the ED.

What can be done to improve clinical handover?

A number of steps can be undertaken to ensure an effective clinical handover processes and limit variability of practice.

This includes:

- Establishing and maintaining structured and documented processes for clinical handover, including policy, procedures and protocols, and tools and guides for localised use
- Regular monitoring and evaluation of clinical handover processes, tools and guides
- Establishing a supportive culture which values clinical handover
- Provision of training to all relevant staff in clinician handover processes.

Clinical handover is a separate and distinct process from triage. Triage should continue to occur according to Emergency Triage Education Kit specifications.