

Advanced Life Support Patient Care Standards

Summary of Changes

Version 3.4

The following changes have been made to Appendix 6 between version 3.3 and 3.4:

- The title has been changed from “Provincial Maintenance of Certification Policy” to “Certification Standard”, as it now includes requirements and processes related to all aspects of obtaining and maintaining certification.
- The Maintenance of Certification requirements have been updated. For example, the requirement to work for a minimum of 144 scheduled hours in the previous 12 months has been updated to providing patient care to a minimum of ten (10) patients per year. It also includes the completion of a minimum number of CME hours per year based on the paramedic’s level of practice.
- The Clarification of Terms section has been changed to Definitions and includes a more extensive list of terms that have a specific meaning in the context of the Certification Standard. In order to fully understand the content of this document it is first imperative to read and fully understand the defined terms that are being referenced.
- The Guidelines for Patient Care Reviews section has been changed to a process titled Responding to a Patient Care Concern. It should be noted that Patient Care Concern is a defined term which incorporates the defined terms Minor Omission/Commission, Major Omission/Commission and Critical Omission/Commission. In order to fully understand the process of Responding to a Patient Care Concern it is first imperative to read and fully understand the defined terms that are being referenced.
- The Patient Care Deficiency Classifications section which includes the description of a Minor Omission/Commission, a Major Omission/Commission and a Critical Omission/Commission has been removed and the description of these terms has been moved to the Definitions section.
- The Remedial Program Options section has been replaced by a more detailed description of a Remediation process and the term Remediation has been defined in the Definitions section.
- The Guidelines for Decertification Reviews has been replaced by a section titled Paramedic Practice Review Committee (PPRC). This section clearly defines the process of conducting an independent review of issues related to paramedic practice and results in a consensus recommendation being made to the Medical Director.

In addition to these changes and updates, new sections have been added which describe other processes and requirements regarding a paramedic's certification. These include:

- the processes of Certification, Consolidation, Deactivation and Decertification; and
- the requirements for New Certification and Cross Certification.

Version 4.0

The following changes have been made between version 3.4 and version 4.0:

General Updates

- Reformatted document to meet the requirements of the *Living Standard Project*
- Minor wording revisions and house-keeping edits (e.g. spelling and formatting)
- To maintain consistency with terminology used in Appendix 6 - Certification Standard, the term “certification” and “certified” was removed and/or replaced with “authorization” and “authorized”, where applicable
- Updated word numbers to numerical format (e.g. “first” to “1st”)
- Reformatted the Indications section in some medical directives, as applicable, for better readability
- Updated Heart Rate (“HR”) values under Conditions from “/min” to “bpm”
- Reformatted the Mandatory Provincial Patch Point boxes
- Reversed the order of AED and Manual defibrillation Treatment tables in all PCP medical directives
- Ensured consistent wording in all AED and Manual defibrillation Treatment tables
- Updated Treatment tables with “if available” to “if available and authorized” to clarify the requirement for auxiliary skills within Core Medical Directives
- Added “if not using ” to Treatment tables where applicable to clarify the requirement when an alternative treatment is available
- Replaced the word “shock” with “defibrillation” as applicable
- Removed all references to epinephrine auto-injectors
- Ensured consistent wording of fluid bolus Conditions, Age parameters and Contraindications in multiple medical directives, as applicable
- Ensured consistent dosing, number of doses and max dosing for midazolam and morphine
- Updated the Indications statement in all special event medical directives from “large numbers” to “large numbers of people “
- Replaced “Termination of Resuscitation” with “TOR”, where applicable
- Replaced “appropriate hospital” with “appropriate facility”, where applicable

- Updated references of “ER” (Emergency Room) to “ED” (Emergency Department)
- Added “ and interpretation” where ECG acquisition is mentioned as applicable
- alternative to manual defibrillation” in the AED Defibrillation Treatment box, where applicable
- Moved ETCO2 (Non-waveform device) as the first choice for secondary confirmation devices to indicate that it is the preferred method

Preamble

- Updated various sections of the preamble
 - ◆ Removed the Acknowledgements page
 - ◆ Updated the language in the Levels of Paramedics section to be consistent with the *Ambulance Act* and added the terms “qualification” and “certification” which have been utilized in the revised Appendix 6 - Certification Standard
 - ◆ Updated the Purpose of the Standards section and removed the Summary section
 - ◆ Updated the Format of the ALS PCS section including updating the name of Appendix 6 to the “Certification Standard”
 - ◆ Updated the Use of the Medical Directives by Paramedics section to be more and concise
 - ◆ Removed the Regional Base Hospital Compliance with CPSO Policy section as it is not required to explain this relationship in this document.
 - ◆ Renamed the ALS PCS Paramedic Skill Set section to Auxiliary Medical Directive as the information regarding the Core Medical Directives is previously mentioned
 - ◆ Updated and renamed the “Consent to Treatment & Capacity Assessment” section to “Consent to Treatment in Non-Emergency Situations” and added the “Consent to Treatment in Emergency Situations” section to make a clear distinction between Non-Emergency and Emergency consent situations.
 - ◆ Updated the Refusal of Treatment section to remove the specific reference in the BLS PCS
 - ◆ Updated the Intravenous (IV) Access and Therapy by Primary Care Paramedics section of the Preamble with more clear and consistent language
 - ◆ Removed the Controlled Substances section and moved the statement regarding storage of controlled substances to the *Provincial Equipment Standards for Ontario Ambulance Services*
 - ◆ Updated the Research section to align with the language in the revised BLS PCS
 - ◆ Updated and added terms to the Commonly Used Abbreviations where required

Appendix 1 – PCP Core Medical Directives

- **Medical Cardiac Arrest Medical Directive**
 - ◆ Updated the Clinical Considerations
 - ◆ Placeholder page added for Defibrillation Joule Settings, which can be addressed at a local level
- **Trauma Cardiac Arrest Medical Directive**
 - ◆ Updated the Dosing interval in the AED and Manual defibrillation Treatment table from “2 min” to “N/A”
 - ◆ Updated the Treatment flowchart based on AHA 2015 Guideline changes
- **Hypothermia Cardiac Arrest Medical Directive**
 - ◆ Removed “with pediatric attenuator if available” from the AED defibrillation Treatment table because it is already listed as an option in the table
 - ◆ Updated the Clinical Considerations with the transport note which was under the Treatment section
- **Foreign Body Airway Obstruction Cardiac Arrest Medical Directive**
 - ◆ Updated the Clinical Considerations with the cardiac arrest and transport notes which were under the Treatment section
- **Neonatal Resuscitation Medical Directive**
 - ◆ Updated the Indications from “severe cardio-respiratory distress” to “neonatal patient”
 - ◆ Updated the “Age” Condition for Resuscitation from “newborn or <30 days of age” to “<30 days of age”
 - ◆ Updated the Other Condition for Resuscitation from “Less than full term, or meconium, or poor APGAR score” to “N/A”
 - ◆ Replaced the Contraindications for Resuscitation with “N/A”
 - ◆ Updated Treatment flowchart based on AHA 2015 Guideline changes
 - ◆ Added Clinical Considerations based on AHA 2015 Guideline changes
- **Return of Spontaneous Circulation (ROSC) Medical Directive**
 - ◆ Removed all references to Therapeutic Hypothermia
 - ◆ Removed the “Consider rapid transport” note under the Treatment section
 - ◆ Updated the titrate oxygenation value for optimizing ventilation and oxygenation Treatment from “ $\geq 94\%$ ” to “94-98%”

- ◆ Updated the Age range in the Treatment table for fluid bolus from “<12 years” to “≥2 years to <12 years”
- ◆ Updated the Clinical Considerations
- **Cardiac Ischemia Medical Directive**
 - ◆ Updated the Treatment table for nitroglycerin to include options for STEMI positive patients
 - ◆ Updated the Clinical Considerations
- **Acute Cardiogenic Pulmonary Edema**
 - ◆ Updated the “Other” Condition for nitroglycerin to “N/A” so the patient can still be eligible for the medication even if they don’t meet the “Other” condition
 - ◆ Updated the SBP range in the Treatment table for nitroglycerin from “100” to “≥100” mmHg for consistency
- **Cardiogenic Shock Medical Directive**
 - ◆ Added “12-lead” to the STEMI-positive Indication
 - ◆ Updated the “Other” Condition for fluid bolus
 - ◆ Updated the Max. volume in the Treatment table for fluid bolus from “10 ml/kg” to “1,000 ml”
- **Hypoglycemia Medical Directive**
 - ◆ Separated the treatment for dextrose and glucagon into two tables
 - ◆ Added D10W concentration to the Treatment table for dextrose
- **Moderate to Severe Allergic Reaction Medical Directive**
 - ◆ Removed the “Weight” consideration from the epinephrine Treatment table as this was only applicable for auto-injectors and these have been removed from the table
 - ◆ Updated the Dosing interval from “N/A” to “Minimum 5 minutes” in the Treatment table for epinephrine
- **Croup Medical Directive**
 - ◆ Changed “8” to “<8” in the higher Age range in the epinephrine Treatment table
- **Adult Analgesia Medical Directive**
 - ◆ Updated the “Other” Condition for all medications

- **Opioid Toxicity Medical Directive**
 - ◆ Updated the “Respiratory Rate” Condition for naloxone to include breaths/min
 - ◆ Removed the Mandatory Provincial Patch Point
 - ◆ Updated the Dosing interval for all administration routes
 - ◆ Updated the Max. # of doses from “1” to “3” in the Treatment table for naloxone for all administration routes
 - ◆ Updated Clinical Considerations
- **Home Dialysis Emergency Disconnect Medical Directive**
 - ◆ Moved from Auxiliary into Core Medical Directives
- **Suspected Adrenal Crisis Medical Directive**
 - ◆ New directive added
- **Endotracheal and Tracheostomy Suctioning Medical Directive**
 - ◆ New directive added

Appendix 2 – ACP Core Medical Directives

- **Medical Cardiac Arrest Medical Directive**
 - ◆ Added a new Treatment table for administering epinephrine via the IM route
 - ◆ Removed the opening note in the existing Treatment table for epinephrine and added it to the new IM route Treatment table for epinephrine
 - ◆ Added “CVAD” access to the Mandatory Provincial Patch Point
 - ◆ Updated the Clinical Considerations
 - ◆ Placeholder page added for Defibrillation Joule Settings, which can be addressed at a local level
- **Trauma Cardiac Arrest Medical Directive**
 - ◆ Updated the “Other” Condition for Trauma TOR
 - ◆ Treatment flowchart updated based on AHA 2015 Guideline changes
- **Hypothermia Cardiac Arrest Medical Directive**
 - ◆ Updated the Clinical Considerations with the transport note which was under the Treatment section
- **Foreign Body Airway Obstruction Cardiac Arrest Medical Directive**
 - ◆ Updated the Clinical Considerations with the cardiac arrest and transport notes which were under the Treatment section

- **Neonatal Resuscitation Medical Directive**
 - ◆ Updated the Indications from “severe cardio-respiratory distress” to “neonatal patient”
 - ◆ Updated the “Age” Condition for Resuscitation from “newborn or <30 days of age” to “<30 days of age”
 - ◆ Replaced the Contraindications for Resuscitation with “N/A”
 - ◆ Updated Treatment flowchart based on AHA 2015 Guideline changes
 - ◆ Added Clinical Considerations based on AHA 2015 Guideline changes

- **Return of Spontaneous Circulation (ROSC) Medical Directive**
 - ◆ Removed all references to Therapeutic Hypothermia
 - ◆ Update the “Age” Condition for dopamine from “≥18 years” to “≥8 years”
 - ◆ Removed the “Consider rapid transport” note under the Treatment section
 - ◆ Updated the titrate oxygenation value for optimizing ventilation and oxygenation Treatment from “≥94%” to “94-98%”
 - ◆ Added “IO” and “CVAD” to the Route for fluid bolus
 - ◆ Added the Age range in the Treatment table for dopamine
 - ◆ Updated the Clinical Considerations
 - ◆ Added a “Single Strength” Dopamine Dosing Chart

- **Cardiac Ischemia Medical Directive**
 - ◆ Updated the “Other” Condition for morphine from “N/A” to “Severe pain (≥7/10 on pain scale)”
 - ◆ Removed “Injury to the head or chest or abdomen or pelvis” from the Contraindications for morphine
 - ◆ Updated the Treatment table for nitroglycerin to include options for STEMI positive and STEMI negative
 - ◆ Updated the Clinical Considerations

- **Acute Cardiogenic Pulmonary Edema**
 - ◆ Updated the “Other” Condition for nitroglycerin to “N/A” so the patient can still be eligible for the medication even if they don’t meet the “Other” condition
 - ◆ Updated the SBP range for nitroglycerin from “100” to “≥100” mmHg for consistency

- **Cardiogenic Shock Medical Directive**
 - ◆ Added “12-lead” to the STEMI-positive Indication
 - ◆ Updated the “Other” Condition for fluid bolus
 - ◆ Added “IO” and “CVAD” to the Route for fluid bolus
 - ◆ Updated the Max. volume in the Treatment table for fluid bolus from “10 ml/kg” to “1,000 ml”
 - ◆ Updated the SBP of “90-110 mmHg” to “ ≥ 90 to < 110 mmHg” in the Note below the dopamine Treatment table for dopamine

- **Symptomatic Bradycardia Medical Directive**
 - ◆ Updated the SBP of “90-110 mmHg” to “ ≥ 90 to < 110 mmHg” in the Note below the dopamine Treatment table for dopamine
 - ◆ Updated the Clinical Considerations by removing the paragraph regarding dopamine infusion

- **Intravenous and Fluid Therapy Medical Directive**
 - ◆ Updated “IV” to “IV Cannulation” as applicable
 - ◆ Updated the Clinical Considerations

- **Hypoglycemia Medical Directive**
 - ◆ Updated glucometry Treatment note from “Perform” to “Consider”
 - ◆ Add a separate Treatment table for dextrose D10W (pre-mixed)
 - ◆ Added a separate treatment table for glucagon

- **Opioid Toxicity Medical Directive**
 - ◆ Added “Inability to adequately ventilate” to the Indications
 - ◆ Updated the “Respiratory Rate” Condition for naloxone to include breaths/min
 - ◆ Removed the Mandatory Provincial Patch Point
 - ◆ Updated the Dosing interval for all administration routes
 - ◆ Updated the Max. # of doses from “1” to “3” in the Treatment table for naloxone for all administration routes
 - ◆ Updated the Clinical Considerations

- **Orotracheal Intubation Medical Directive**
 - ◆ Updated the Indications
 - ◆ Updated the Treatment table for orotracheal tube placement
 - ◆ Updated the Clinical Considerations

- **Moderate to Severe Allergic Reaction Medical Directive**
 - ◆ Removed the “Weight” consideration from the epinephrine Treatment box as this was only applicable for auto-injectors
 - ◆ Updated the Dosing interval from “N/A” to “Minimum 5 minutes” and the Max. number of doses from “1” to “2” in the Treatment table for epinephrine
- **Adult Analgesia Medical Directive**
 - ◆ Updated the “Other” Condition for all medications
- **Hyperkalemia Medical Directive**
 - ◆ Updated the Indications
 - ◆ Updated the Contraindications for Calcium gluconate
 - ◆ Added “Consider 12-lead ECG acquisition and interpretation” before and after Treatment tables.
 - ◆ Removed “Record ECG before and after treatment” in the Mandatory Provincial Patch Point
 - ◆ Added “CVAD” to the Route under the Treatment table for calcium gluconate
 - ◆ Updated the Clinical Considerations
- **Combative Patient Medical Directive**
 - ◆ Moved from Auxiliary into Core Medical Directives
 - ◆ Updated the term “i.e.” to “e.g.” in the “Other” Condition for midazolam
- **Home Dialysis Emergency Disconnect Medical Directive**
 - ◆ Moved from Auxiliary into Core Medical Directives
- **Suspected Adrenal Crisis Medical Directive**
 - ◆ New directive added
- **Endotracheal and Tracheostomy Suctioning Medical Directive**
 - ◆ New directive added

Appendix 3 – PCP Auxiliary

- **Intravenous and Fluid Therapy Medical Directive**
 - ◆ Updated “IV” to “IV Cannulation” where applicable
 - ◆ Updated Infusion interval from “Immediate” to “N/A” in the Treatment table for fluid bolus
 - ◆ Updated Max. volume in the Treatment table for fluid bolus

- **Supraglottic Airway Medical Directive - Auxiliary**
 - ◆ Updated the Indications
 - ◆ Updated the airway insertion note under the Treatment section
 - ◆ Updated the Treatment table for supraglottic airway placement
 - ◆ Updated the Clinical Considerations
- **Nausea/Vomiting Medical Directive - Auxiliary**
 - ◆ Updated the language under the Clinical Considerations to be consistent with the changes made to the Intravenous (IV) Access and Therapy by Primary Care Paramedics section
- **Home Dialysis Emergency Disconnect Medical Directive - Auxiliary**
 - ◆ Moved from Auxiliary into Core Medical Directives

Appendix 4 – ACP Auxiliary

- **Adult Intraosseous Medical Directive – Auxiliary**
 - ◆ Updated the Contraindications for IO
- **Nasotracheal Intubation Medical Directive – Auxiliary**
 - ◆ Updated the “Other “Conditions for xylometazoline from “Nasotracheal Intubation” to “N/A”
 - ◆ Updated the “Other “Conditions for lidocaine spray from “Nasotracheal Intubation” to “gag reflex”
 - ◆ Removed “for nasotracheal intubation” from the opening statement in the Treatment table for xylometazoline
 - ◆ Removed “for awake nasotracheal intubation” from the opening statement in the Treatment table for topical lidocaine spray
 - ◆ Updated the Treatment table for nasotracheal tube placement
 - ◆ Updated the Clinical Considerations
- **Supraglottic Airway Medical Directive – Auxiliary**
 - ◆ Updated Indications
 - ◆ Updated the airway insertion note under the Treatment section
 - ◆ Updated the Treatment table for supraglottic airway placement
 - ◆ Updated the Clinical Considerations

- **Cricothyrotomy Medical Directive - Auxiliary**
 - ◆ Updated the Treatment table for cricothyrotomy tube placement
 - ◆ Updated the Clinical Considerations
- **Nausea/Vomiting Medical Directive - Auxiliary**
 - ◆ Removed the <25 kg Weight range from the Treatment table for dimenhydrinate
- **Combative Patient Medical Directive - Auxiliary**
 - ◆ Moved from Auxiliary into Core Medical Directives
- **Procedural Sedation Medical Directive - Auxiliary**
 - ◆ Updated “Respiratory Rate” Condition from “≥8” to “≥10” per minute
- **Minor Abrasions Medical Directive – Auxiliary - Special Event**
 - ◆ Updated the Contraindications for Topical Antibiotic to be consistent with the PCP directive
- **Home Dialysis Emergency Disconnect Medical Directive - Auxiliary**
 - ◆ Moved from Auxiliary into Core Medical Directives

Appendix 5 – Chemical Exposure Medical Directives

- No changes

Appendix 6 – Certification Standard

- No changes