



Policies & Procedures Guidelines in Intensive Care Unit

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in

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السياسات و الإجراءات و المبادئ الأساسية في وحدة العناية المركزة

مقال مقدم

كتوتنة جزئية لمتطلبات الحصول على درجة الماجستير في تخصص العناية المركزة

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Summary

There is growing interest in the use of evidence-based clinical practice guidelines as a means of reducing inappropriate care in the intensive care unit, and making more effective use of health care resources. Moreover a standardized approach to management is desirable for optimal patient care and safety of the patients and to improve the communication and understanding between members of the ICU team and associated specialties.

Critical care protocols should be used to inform healthcare staff by providing guidance on what is thought to be the best option regarding a specific aspect of care or the consensus on how a given situation is usually best tackled. But they cannot and should not be used in an attempt to replace expert decision-making which weighs up all the aspects of each individual situation.

The manual outlines various **Protocols**, which represent a standard approach to practice within the Unit. These have been derived from the available literature and clinical experience, **Guidelines** designed to assist in clinical management are included but patient management will ultimately depend upon the clinical situation.

Among these protocols are the ICU admission criteria protocols which should select patients who are likely to benefit from ICU care, also the discharge protocols which direct the patient to the next level of care.

As the Mechanical ventilation is a commonly used technique in the intensive care unit (ICU), Adult Respiratory Ventilator Protocol (RVP) has been developed for patients requiring invasive positive pressure ventilation and is based on a goal orientated respiratory expectations with a detailed algorithm for weaning protocols and guidelines for diagnosis and management of ventilator associated pneumonia which is one of the hazards of mechanical ventilation.

Also, will find comprehensive guidelines for most techniques and procedures performed in intensive care which should be mastered by all critical care physicians, these have been included, along with detailed instructions and indications.

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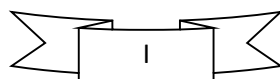
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List of abbreviations

- ☞ **µg:** *Microgram.*
- ☞ **A/C:** *Assisted – Control.*
- ☞ **A/P:** *Assessment and plan.*
- ☞ **ABG:** *Arterial blood gases.*
- ☞ **ACE I:** *Angiotensin-converting enzyme inhibitors.*
- ☞ **ACLS:** *Advanced cardiac life support.*
- ☞ **Alb:** *Albumin.*
- ☞ **ALT:** *Alanin aminotransferase.*
- ☞ **APACHE:** *Acute Physiologic and Chronic Health Evaluation.*
- ☞ **APRV:** *Airway pressure release ventilation.*
- ☞ **ARBS:** *Angiotensin II receptors blockers.*
- ☞ **ARF:** *Acute respiratory failure.*
- ☞ **ASA:** *Acetylsalicylic Acid (Aspirin).*
- ☞ **AST:** *Aspartate aminotransferase.*
- ☞ **BE:** *Base excess.*
- ☞ **BID:** *Twice a day (on prescription).*
- ☞ **BIPAP:** *Bi-level positive airway pressure.*
- ☞ **BM:** *Bowel motion.*
- ☞ **BP MED.:** *Blood pressure medications.*
- ☞ **BP:** *Blood pressure.*
- ☞ **BS:** *Bowel sounds.*
- ☞ **BSA:** *Body surface area.*
- ☞ **Ca:** *Calcium.*
- ☞ **CBC:** *Complete blood count.*
- ☞ **CCB:** *Calcium channel blockers.*
- ☞ **CDC:** *Centers for Disease Control and Prevention.*
- ☞ **CI:** *Cardiac index.*
- ☞ **CK-MB:** *Creatine phosphokinase MB isoenzyme.*
- ☞ **CO:** *Cardiac output.*
- ☞ **COPD:** *chronic obstructive pulmonary disease.*
- ☞ **CPAP:** *Continuous positive airway pressure.*
- ☞ **CPIS:** *Clinical Pulmonary Infection Score.*
- ☞ **CPK:** *Creatine phosphokinase.*
- ☞ **CRBSIs:** *Catheter-related bloodstream infections.*
- ☞ **CRRT:** *Continuous Renal Replacement Therapy.*
- ☞ **Cryo:** *Cryoprecipitate.*
- ☞ **CT:** *Computerized topography.*



List of abbreviations

- ☞ **CVS:** *Cardiovascular system.*
- ☞ **CXR:** *Chest X-ray.*
- ☞ **DC:** *Discontinued.*
- ☞ **DNR:** *Do not resusetate.*
- ☞ **DVT:** *Deep venous thrombosis.*
- ☞ **E:** *Eye examination.*
- ☞ **ECG:** *Electrocardiogram.*
- ☞ **EN:** *Enteral nutrition.*
- ☞ **ET:** *Endotracheal tube.*
- ☞ **FFP:** *Fresh frozen plasma.*
- ☞ **FiO₂:** *Fractional Concentration of Oxygen in Inspired Gas.*
- ☞ **GCS:** *Glasgow coma scale.*
- ☞ **GIT:** *Gastro intestinal tract.*
- ☞ **GP:** *Glycoprotein.*
- ☞ **GRV:** *Gastric residual volume.*
- ☞ **GTN:** *Glyceryl trinitrate.*
- ☞ **GU:** *Genitourinary.*
- ☞ **HCO₃:** *Bicarbonate.*
- ☞ **Hem:** *Hemoglobin.*
- ☞ **HR:** *Heart rate.*
- ☞ **I/E:** *Inspiratory and expiratory ratio.*
- ☞ **I/O:** *Input and output.*
- ☞ **ICP:** *Intracranial pressure.*
- ☞ **ICU:** *Intensive care unit.*
- ☞ **ID:** *Infection data.*
- ☞ **INR:** *International normalized ratio.*
- ☞ **IP:** *Inspiratory pressure.*
- ☞ **IT:** *Inspiratory time.*
- ☞ **IU:** *International unit.*
- ☞ **IVF:** *Intra venous fluids.*
- ☞ **Lact:** *Lactate.*
- ☞ **LDH:** *Lactate dehydrogenase.*
- ☞ **LFT:** *Livet function tests.*
- ☞ **LLA:** *Lipid lowering agents.*
- ☞ **M:** *Movement assessment on the Glasgow coma scale.*
- ☞ **MAP:** *Mean arterial pressure.*
- ☞ **MD:** *Doctoral degree for physicians.*

List of abbreviations

- ☞ **MDR:** Multi-drug resistance.
- ☞ **mEq/L:** Milliequivalent per liter.
- ☞ **mg/dl:** Milligram per deciliter.
- ☞ **Mg:** Magnesium.
- ☞ **mg:** Milligram
- ☞ **MgSO₄:** Magnesium sulfate.
- ☞ **MRI:** Magnetic Resonance Imaging.
- ☞ **MRSA:** Methicillin-resistant *Staphylococcus aureus*.
- ☞ **MSSA:** Methicillin-sensitive *Staphylococcus aureus*.
- ☞ **MV:** Mechanical ventilation.
- ☞ **NC:** Nasal cannula.
- ☞ **NG:** Nasogastric.
- ☞ **NIV:** Non-invasive ventilation.
- ☞ **NPO:** Nothing per oral, nothing by mouth.
- ☞ **NRM:** Non-rebreathing face mask.
- ☞ **NS:** Normal saline.
- ☞ **o.d.:** One Daily, Once Daily.
- ☞ **P:** Pulse.
- ☞ **PA Cath.:** Pulmonary artery catheter.
- ☞ **PAC/CVC:** Pulmonary artery catheter / Central venous catheter.
- ☞ **PaCO₂:** Partial Pressure of Carbon Dioxide in Arterial Blood.
- ☞ **PAP:** Pulmonary Artery/Arterial pressure.
- ☞ **PCM:** protein-calorie malnutrition.
- ☞ **PCV:** Pressure Control Ventilation.
- ☞ **PE:** Physical Examination.
- ☞ **PEEP:** Positive End Expiration Pressure.
- ☞ **PEG:** Percutaneous endoscopic gastrostomy.
- ☞ **PEJ:** Percutaneous endoscopy jejunostomy.
- ☞ **PH:** Potential Hydrogen - A Measure of Acidity and Alkalinity.
- ☞ **PLTs:** Platelets.
- ☞ **PO:** By Mouth, Orally.
- ☞ **PO₂:** Partial Pressure of Oxygen.
- ☞ **PO₄:** Phosphorus.
- ☞ **PRN:** when necessary (from "pro re nata," for an occasion that has arisen, as circumstances require, as needed).
- ☞ **PRVC:** Pressure regulated volume controlled.
- ☞ **PS/PC:** Pressure support/ pressure controlled.

List of abbreviations

- ☞ **PT:** *Prothrombin Time.*
- ☞ **PTT:** *Partial Thromboplastin Time.*
- ☞ **PV:** *Pressure ventilation.*
- ☞ **QD:** *once a day (from "quaque die," once a day).*
- ☞ **R/A:** *Room air.*
- ☞ **RBCs:** *Red blood cells.*
- ☞ **RCP:** *Respiratory care practitioner.*
- ☞ **Reg.:** *Regular.*
- ☞ **RN:** *Registered nurse.*
- ☞ **RR:** *Respiratory rate.*
- ☞ **RT:** *Respiratory therapist.*
- ☞ **RVP:** *Respiratory ventilator protocol.*
- ☞ **SBP:** *Systolic blood pressure.*
- ☞ **SBT:** *Spontaneous breathing trials.*
- ☞ **SC:** *Subcutaneous.*
- ☞ **SIMV:** *Synchronized Intermittent Mandatory Ventilation.*
- ☞ **SOAP:** *Subjective Objective Assessment Plan.*
- ☞ **SpO₂:** *Oxygen Saturation via Pulse Oximetry.*
- ☞ **STAT:** *The Latin word statim, "immediately."*
- ☞ **SVO₂:** *Venous Oxygen Saturation.*
- ☞ **SVR:** *Systemic vascular resistance.*
- ☞ **TEE:** *Transesophageal echocardiography.*
- ☞ **TEN:** *Total enteral nutrition.*
- ☞ **TF:** *Total fluid.*
- ☞ **TFT:** *Thyroid function tests.*
- ☞ **TPN:** *Total parenteral nutrition.*
- ☞ **UF:** *Unfractionated.*
- ☞ **UO:** *Urine output.*
- ☞ **V:** *Verbal assessment.*
- ☞ **VAP:** *Ventilator associated pneumonia.*
- ☞ **VBG:** *Venous blood gases.*
- ☞ **Venturi M.:** *Venturi mask.*
- ☞ **VIGILEO:** *The Vigileo monitor allows for the continuous monitoring of essential hemodynamic information such as CO, SV and SVR.*
- ☞ **VV:** *Volume ventilation.*

Introduction

An I.C.U is a specially staffed & equipped area of a hospital dedicated to the management of patient with life- threatening illnesses, injuries or complications, As outlined , the I.C.U is not just a word but a department with dedicated medical , nursing and allied health staff , that must operates with a pre-defined polices & procedures. **(R.M.H., 2010).**

A standardized approach to management is desirable for optimal patient care and safety of the patients and to improve the communication and understanding between members of the ICU team and associated specialties. **(Martin et al., 2006).**

Critical care protocols should be used to inform healthcare staff by providing guidance on what is thought to be the best option regarding a specific aspect of care or the consensus on how a given situation is usually best tackled.

The purpose of preparing a policy or a procedure document for I.C.U is to provide a framework and references for all clinical staff members in I.C.U in order to improve the quality. **(Darlene., 2009).**

A policy is a statement of a mandatory course or methods established by the staff members in I.C.U while procedures are steps or actions to implement a function. **(Martin et al., 2006).**

Polices for I.C.U should be formulated and standardized to be to be unambiguous, periodically reviewed and familiarized by all staff members.

The manual outlines various ***Protocols***, which represent a standard approach to practice within the Unit. These have been derived from the available literature and clinical experience, ***Guidelines*** designed to assist in clinical management are included but patient management will ultimately depend upon the clinical situation. (Mandorah., 2010).

The Aim of the Work

This study aims to discuss the importance of developing documented policies and procedure in the intensive care unit and to develop the basic principles of work within the unit and to ensure its quality with an explanation of these procedures and policies.

Chapter 1

Administrative policies & procedures