



Crumlin | Temple Street | Tallaght | Connolly

Children's Health Ireland (CHI) Nursing Practice Guideline on Immediate Post-Operative Observations and Care

Area of use:	All of organisation <input checked="" type="checkbox"/>	CHI at Connolly <input type="checkbox"/>	CHI at Crumlin <input checked="" type="checkbox"/>
		CHI at Tallaght <input type="checkbox"/>	CHI at Temple Street <input checked="" type="checkbox"/>
Lead author & title:	Rosemary Clerkin Clinical Nurse Education Facilitator, CHI Crumlin Fionnuala O Neill NPDC, CHI		
Approved by & title:	Nursing Documentation Approval Committee		
Version:	Version 1	Approval date:	October 2023
Reference:	CHINPGIPOOC-RC-FON-10-2023	Revision due:	October 2026
Version History			
Version:	Date approved:	Summary of changes:	Author:
Please note practice variation			
None			

CONTENTS

1.0	Introduction.....	3
2.0	Purpose of the guideline.....	3
3.0	Applicable to.....	3
4.0	Guideline Procedure	3
5.0	Communication and training.....	12
6.0	Monitoring and Evaluation.....	12
7.0	Stakeholder involvement.....	13
8.0	Monitoring and Evaluation.....	13
9.0	References.....	13

1.0 Introduction

The term vital signs is used to describe the collection of a cluster of physical measurements such as pulse, respiratory rate blood pressure. Observations refer to the physical assessment of a patient which in addition to vital signs includes a review of wounds, drains and pain. The taking of observations or vital signs forms an essential part of nursing care of a child following surgical intervention to establish whether an intervention is required to prevent the child's deterioration. (Churpek et al, 2017).

2.0 Purpose of the guideline

The purpose of this guideline is to give clear guidance to nursing staff on the observations to be performed on a child post-surgery/general anaesthesia. This will highlight to the nurse when/if the patient is returning to normal observations following a surgical procedure/general anaesthesia. These observations are compared to the pre procedural observations carried out on the patient. Post-operative observations are recorded using Paediatric Early Warning System (PEWs).

This guideline will provide guidance to staff on the nursing care and management of infants and children in the immediate post-operative period following surgical intervention and transfer to the ward from the recovery room. The nursing care that is given during the postoperative period is directed towards the prevention of complications that may arise following surgery and anaesthesia (Lister, 2021).

3.0 Applicable to

All nursing staff, registered, post registration and undergraduate.

4.0 Guideline Procedure

Collecting an infant or child from the operating theatre is an important action and requires the nurse to pay close attention to the child's condition/appearance and observations recorded. The nurse **should not** depend on the readings of the monitor, an assessment should be made using the A, B, C, D, E, as detailed below.

Within the child's healthcare record are the pre procedural observations that have been taken on admission and prior to their trip to the operating theatre. These serve as a reference for the normal/baseline vital signs which can be used for comparison during this period. Observations commence in the post-operative period in the recovery room, any deviations from normal will be made clear to you prior to taking the patient to the ward.

Action	Rationale and reference
Preparing the bed space prior to the child's arrival to ward post-surgical intervention.	It is important to prepare a <u>safe</u> bed space for the child post-operatively as this is a high-risk time post-surgery and anaesthetic (Lister, 2021)
Prepare bed space Check the oxygen and suction is in working order with access to Ambu-bag	Ensure all equipment is in working order and has the appropriate consumable attached in case it is required.
Electric post op bed where possible (air mattress ordered if required)	This will allow you to elevate head or base of bed as required based on patient need.
Make post op bed with clean linen	Fresh clean linen for comfort and reduce risk of infection
Position bed in the middle of room for clear safe access	This allows staff to access the patient and the equipment on both sides of the bed if required.
Oxygen Saturations (SPO2) monitor in room alongside BP monitor Intravenous (IV) stand & pump(s) in room	Collect equipment needed to monitor the child's vital signs following surgery. The availability of equipment must be in working order and be appropriate for the child being cared for (Ball et al., 2015). IV stands will be required to hang IV fluids if required.
Chest drain clamps x 2 available with the child nursed with a chest drain at all times Low pressure suction set up if required	To reduce risk of lung collapse if chest drain should Ensure low pressure suction is a written instruction by surgeon caring for the child (CHI, 2023).
Keep parents / guardians updated if child is having a long procedure in Theatre	This will help to reduce anxiety for the parents/guardians.
When the child is ready for collection, contact parents to wait in theatre reception when you go to collect child in the recovery room.	This will facilitate a nursing handover in the recovery room. Some children will be upset coming out of anaesthetic, if appropriate it may be worthwhile having the parent present.
Collecting the child from the Recovery Room	
Identify the patient using Positive Patient Identification (PPI)	Ensure correct child is being transferred from theatre. (CHI, 2023) It is important to ascertain the patient's airway status post operatively.
Decontaminate hands prior to assessment	As per infection prevention and control guidance.
Introduce yourself to the child	To allay any fears the child may have and to ensure parents know who you are.

<p>Airway – Is the infant or child breathing without assistance, during your assessment does their airway appear patent – Can they answer you in a normal voice</p> <p>Breathing Breathing assessment will indicate the patient ability to adequately ventilate. Respiratory rate, rhythm and work of breathing. Assessing the child’s</p> <ul style="list-style-type: none"> – Use of accessory muscles- is the breathing regular, no increased work of breathing, does not show signs of rapid breathing or difficulty. <p>Ensure the patient’s airway is patent, assess respiratory effort and O2 Saturations in Room Air</p> <p>Check the vital signs are within normal limits and the last set of observations are recorded on the patient’s PEWS chart.</p>	<p>A patent airway is the first assessment that you will make visually to ensure the child is awake and breathing on their own without airway obstruction. In a conscious patient asking a question and receiving a normal response indicates that they have normal breathing and brain perfusion.(Bickley, 2016).</p> <p>Please be aware normal limits for the child’s age as per Advanced Paediatric Life Support (APLS) guidelines (2021) and PEWS Guideline CHI (2020) Consider medication given or infusing as it may influence vital signs.</p> <p>(Bickley, 2016)</p>
<p>Circulation Look at colour- of skin and mucous membrane Capillary refill if required Palpate pulse Heart auscultation Blood pressure</p>	<p>Unless there is an underlying cardiac defect skin colour should be pink indicating normal perfusion. (Bickley, 2016). Pallor may indicate anaemia.</p>
<p>Disability- Level of consciousness using AVPU. Determine how responsive the patient is prior to transferring from the recovery room. Alert Voice responsive Pain responsive Unresponsive</p>	<p>If the patient is not alert enough they may need to spend more time in the recovery room. As the person collecting them from recovery you make a decision that you are or are not happy to transfer them to the wards based on your assessment.</p>
<p>Exposure</p> <ul style="list-style-type: none"> • Skin exposure temperature may be low or high. See detail below regarding temperature. • Is there a wound, assess the wound to ensure dressing intact and no bleeding evident. 	
<p>Pain – check analgesics administered and prescribed. Assess pain levels.</p>	<p>It is important to be able to plan the child’s pain management regime to maintain comfort. Be familiar with the Pain Ladder CHI (2021) Be familiar with the appropriate pain assessment tools for children of all age groups. Recognition and assessment of acute pain in children Assessment RCN (2009)</p>

<p>Wound and drain status check. Check wound for bleeding and check the dressing status. If the child has a drain check it is draining and the volume drained.</p>	<p>Consider the surgery the child has had; this will influence the requirement for drains (Ball et al., 2015)</p>
<p>If Nasogastric Tube (NGT) is in situ, is it for free drainage or to be clamped and released later? If Replogle in situ – is it on free drainage/ aspirates - Replacements to be given? Chest drain, ensure Low Pressure Suction, how many cm of water is documented in surgical notes. Record drainage.</p>	<p>It is essential to be aware of the surgical instructions on the yellow sheet to be fully informed of what nursing care is required for the child post operatively. Check drainage level to ascertain drainage already and identify further losses. Refer to guideline for surgical decompression or post Tracheosophageal Fistula and Oesophageal Atresia (CHI 2023)</p>
<p>Check Urine output intra/Post operatively – if catheter in situ check it is draining, if dripping stent in situ visually check it is dripping continuously into nappy.</p>	<p>To ensure the catheter is draining This is to ensure stent is patent</p>
<p>Hydration Fluids. analgesia & antibiotics prescribed as indicated</p>	<p>To facilitate uninterrupted care to the patient and maintain comfort, administered as prescribed.</p>
<p>Ensure IV cannula flushed if not attached to an infusion</p>	<p>Unused cannula must be flushed in Recovery due to the risk of induction agents present in the line. If not performed there is a risk the child could have loss of Consciousness (LOC) on the ward when flushed and compromised airway, breathing and circulation.</p>
<p>If prescribed check opioid pump and prescription – read syringe level prior to discharge from recovery.</p>	<p>This is to ascertain the baseline level, correct prescription and promote safe care.</p>
<p>If patient is nursed on an epidural or wound block, ensure motor and sensory observations are assessed and documented</p>	<p>This will ensure safe care for the child. Be familiar with the local guidelines on the management of an epidural.</p>
<p>It is important the child is as comfortable – they should be seen by anaesthetics prior to transfer if ongoing discomfort</p>	<p>It is important alleviate discomfort while anaesthetic team is close by. This ensures safe and comfortable transfer of the child to the ward. To alleviate anxiety (Hockenberry & Wilson 2015)</p>
<p>On return to the ward</p>	
<p>Full set of PEWS observations, be sure to continue the observations as required and outlined by the surgeon. Observations are • Temperature</p>	<p>This assessment is important to ascertain the child’s condition after transfer to the ward (Ball et al.,2015)</p>

<ul style="list-style-type: none"> • Pulse (take a radial pulse or auscultate using a stethoscope for 1 minute), • Respirations (count for one minute) • Blood pressure as a baseline and as ordered • Oxygen saturations with observations or continuous • <p>Record on the PEWs chart and escalate as required</p>	<p>Regular observations must be carried out to monitor the child’s condition as per post-operative guidelines and surgeon’s instructions.</p> <p>To ensure appropriate escalation if score is outside the norm.</p>
<p>Ensure all equipment used to perform observations are in working order and are serviced as required by the clinical engineering department</p>	<p>This will ensure the equipment functions when and if required (HSE 2010).</p>
<p>Identify the child using Positive Patient Identification, check the child’s identity band and check with the parent the child’s name if present.</p>	<p>To ensure you have the correct patient having the observations. (CHI, 2023)</p>
<p>Vital signs regime will start in the Recovery Room and will look like this – see below.</p> <ul style="list-style-type: none"> • ¼ hourly for 2 hours • ½ hourly for 2 hours • 1 hourly for 2 hours • 4 hourly when stable <p>All children should be evaluated based on specific need for</p> <ol style="list-style-type: none"> 1. Blood glucose? 2. Blood pressure? 3. Neurological Observations? 4. Neurovascular Observations? 5. Is this child on a Morphine Infusion? PCA/NCA? 6. Has the child an Epidural infusion? 	<p>Observation frequency will be determined by the surgery and the surgeon’s instructions on the post-operative sheet. Following the frequency of observations as requested, when the timeline is reached consider the child’s status prior to commencement on normal observations.</p> <p>Put in guideline link</p> <p>https://media.childrenshealthireland.ie/documents/neurovascular-assessment-guideline-2021_rNSPPUJ.pdf</p> <p>https://media.childrenshealthireland.ie/documents/neurovascular-assessment-2021_RTP1v10.pdf</p> <p>https://media.childrenshealthireland.ie/documents/CHI_SOP_for_Patient_-_Nurse_Controlled_Analgesia_070623_002.pdf</p>
<p>Temperature-</p> <ol style="list-style-type: none"> 1. Use the most appropriate means of recording the child’s temperature. Smaller infants may require infant devices, infant tympanic or thermometer. Tympanic measurement of temperature is the most widely used means of checking temperature in children, oral means of checking temperature runs the risk of the child biting the device. Tympanic measurement is less invasive than other means and is less stressful for the child, and yields results in less than 20 seconds. 2. A high temperature usually indicates inflammation or infection. It is wise to have the child assessed by a doctor. If the temperature is raised appropriate action needs to be taken, a high temperature will impact on the other vital signs. It may also make the child feel uncomfortable. A low temperature could indicate Sepsis. 	<p>(Kiekkas et al, 2016). (Lister, 2021)</p> <p>Inform the doctor and administer antipyretics as prescribed. If blood cultures are required administer antipyretics when complete. Other investigation may be required, please discuss with the medical team.</p>

<p>3. Following the administration of antipyretics 30 minutes to an hour recheck the child’s temperature and continue to check it as required until it is back to normal level.</p> <p>4. Record in the PEWS chart.</p>	<p>It is wise to consider checking the temperature regularly.</p> <p>Document in the child’s PEWS chart and healthcare record and inform the nursing taking over from your shift as monitoring will need to continue until temperature settles.</p>
<p>Pulse-</p> <p>1. The pulse (Heart rate) is a pressure wave that is transmitted through the arterial tree with each heart beat following the alternating expansion and recoil of arteries during each cardiac cycle. The pulse rate can be influenced by several factors including age, temperature, medication, medical history, stress and electrolytes.</p> <p>2. Concern about a child’s rate should be escalated to the doctor. Be aware of what pulse rate should be expected for the child, the child may have a diagnosis that effects the pulse rate.</p> <p>3. Check the child’s pulse with the frequency required. Apply fingers to radial pulse or use a stethoscope to auscultate the chest and listen to the heart beat for a full minute.</p> <p>4. Record on the PEWS chart as required.</p>	<p>(Marieb and Hoehn, 2018)</p> <p>(Wilkinson et al, 2017)</p> <p>To ensure the child is assessed and any treatment commenced. If the pulse is not within normal range other investigations may be required or a cardiac monitor may be requested. A blood pressure may be indicated. Some children with cardiac defects may have an altered pulse rate.</p> <p>Taking a pulse from an oxygen saturation machine is not an assessment of pulse. Document in the child’s healthcare record and inform the nursing taking over from your shift.</p>
<p>Respirations-</p> <p>The major function of the respiratory system is to supply the cells of the body with oxygen and to remove carbon dioxide allowing the cells to function effectively.</p> <p>If the child is awake speak to them and ask them a question. If they answer with a normal voice it suggests a patent airway. Respiration is the most important indicator for a deteriorating patient and is usually the sign that something is not right. Assess the child’s respirations with the frequency outlined. Any deviations from normal need to be assessed by a doctor- PEWS will assist with this.</p> <p>Assess the child’s</p> <ol style="list-style-type: none"> 1. Skin colour, (be aware some children with congenital heart defect may be cyanosed in colour, always check their normal baseline) 2. Use of accessory muscles, 3. Rate, 4. Rhythm and 5. Depth of respirations. 6. Noise 	<p>(Tortora and Derrickson, 2017)</p> <p>(Wilkinson et al 2017)</p> <p>Keep in mind the effects of Pain, fear, temperature and medications that can have an impact on the child’s respiratory rate.</p>

<p>7. Work of Breathing – reporting and recording same if there is any deviation from normal.</p> <p>8. Record on the PEWs chart as required.</p>	<p>Document in the child’s healthcare record and inform the nursing taking over from your shift. (NMBI, 2015)</p>
<p>Pulse Oximetry-</p> <p>1. Pulse Oximetry is device that measures the amount of Haemoglobin in the tissue capillaries. The probe consists of two light emitting diodes – one red and one Infra –red with a photodetector on the other side. The device projects light through the tissues to the detector and measures oxygen in the blood which is symbolised as SPO2 and shown as a number on the monitor for example 98%.</p> <p>2. In some situations postoperatively the doctor may request pulse oximetry for a period of time. This needs to be explained to the child and parent.</p> <p>3. Pulse oximetry is not a replacement for checking the child’s pulse. Visual assessment of the child is always required. – reporting and recording same if there is any deviation from normal.</p> <p>4. Record on the PEWs chart as required</p>	<p>(Blows, 2018)</p> <p>To ensure child and parental understanding.</p> <p>Document in the child’s healthcare record and inform the nursing taking over from your shift.</p>
<p>Blood pressure-</p> <p>1. Is defined as the force of blood inside the blood vessels against the vessel walls.</p> <p>2. Following surgical intervention a child’s blood pressure may be low or high for a variety of reasons, it is essential that blood pressure is checked to ensure it is within normal range. The frequency of blood pressure check will be based on the doctor’s instructions.</p> <p>3. In the event that the child becomes unwell always check the blood pressure as part of the assessment. – reporting and recording same if there is any deviation from normal.</p> <p>4. Record on the PEWs chart as required</p>	<p>(Marieb and Hoehn, 2018)</p> <p>Document in the child’s healthcare record and inform the nursing taking over from your shift. (NMBI,2015).</p>
<p>Blood Glucose monitoring</p>	<p>Monitor Blood Glucose as required or requested, report and record results and deviations. See CHI NPC Blood Glucose Monitoring Guidelines (2023).</p>
<p>Neurological Observations</p>	<p>Monitor Neurological observations as requested by the Medical team- report and record deviations. See CHI NPC Neurological Observations Guidelines (2023).</p>
<p>Neurovascular Observations</p>	<p>Monitor and record Neurological Observations as requested by the medical team, report and record any deviations. See CHI NPC Guidelines on Neurovascular Observations (2021) https://media.childrenshealthireland.ie/docume</p>

	<p>nts/neurovascular-assessment-guideline-2021_rNSPPUJ.pdf https://media.childrenshealthireland.ie/documents/neurovascular-assessment-2021_RTP1vI0.pdf</p>
Epidural	Children nursed on an epidural will require observations as per Epidural guideline OLCHC (2008).
Morphine infusion	Children cared for on a morphine infusion will have hourly respirations and if younger than 12 months will have continuous O2Sa monitoring or apnoea monitoring. (CHI, 2023)
Patient/Nurse Controlled analgesia	See CHI guideline on the care and management of PCA/NCA CHI, 2023.
<p>Pain Management</p> <p>Pain assessment</p> <p>Regular pain assessment using the age-appropriate pain assessment tool</p> <p>Regular analgesia as prescribed</p> <p>Liaise with the pain specialist team if required</p> <p>Patient may be nursed on an epidural, ensure epidural assessment is performed regularly as per epidural guidelines</p> <p>If the child is receiving an opioid – ensure a PRN antiemetic and laxative is prescribed</p> <p>Age-appropriate Pain Tools</p> <ul style="list-style-type: none"> • FLACC <5yrs • Faces Pain Scale 5 – 13years old • Verbal rating >13years old • Numerical scale • Visual Analogue Scale 	<p>Pain is a subjective experience and patients should receive effective and empathetic care to relieve their pain (AfPP, 2017)</p> <p>To ascertain pain score safely and act appropriately to alleviate pain using non pharmacological and non-pharmacological methods.</p> <p>Assessing the epidural level is important to ascertain the level and maintain safe care. The nurse must have epidural competencies passed prior to caring for a child with an epidural.</p> <p>To reduce risk of emesis</p> <p>As per local guidelines</p>
<p>Wound assessment to be carried out with observations along with pressure area care. Check dressing site for bleeding/ooze. Observe for redness, swelling, ooze, pain, dehiscing ->wound swab.</p> <p>Always check wound when performing observations</p> <p>Do not disturb dressing unless evidence of fresh blood/ discharge.</p> <p>Give wound care advice as appropriate to parents.</p>	<p>Most wound closures have dissolvable sutures please take note of post-surgical instructions in post-operative note.</p> <p>If there is signs of bleeding report and record, apply pressure to wound if appropriate.</p> <p>As per CHI information for parent’s leaflets. Check post-operative notes and follow specific instructions https://www.olhc.ie/Children-</p>

<p>Check pressure areas Keep skin clean and dry</p>	<p>Family/Parent-Patient-Information-leaflets/Parent-Patient-Information-Leaflets.html</p> <p>Those signs later post op may indicate signs of infection</p> <p>There is increased risk of pressure areas post-surgery Ball et al.,(2015)</p>
<p>If on an opioid infusion or epidural they will require continuous O2sats monitoring.</p>	<p>Please refer to appropriate CHI Guidelines on morphine infusions and epidural infusions</p>
<p>IV fluids to be commenced if required and prescribed- 100% maintenance unless otherwise prescribed.</p>	<p>Be cautious, assess the patient's hydration status throughout. Monitor urinary output to ensure hydration, record and report.</p>
<p>Administer medication as prescribed.</p>	<p>To maintain comfort and healing (Hockenberry & Wilson 2015)</p>
<p>Monitor urine output: infant 2mls/kg, child > 1ml/kg/hr, adolescent >0.5ml/kg/hr</p>	<p>Reduced urinary output is a symptom of dehydration, sepsis and renal failure. Urinary retention can occur due to analgesia or epidural blocks. Urinary output should be monitored on all post-operative patients.</p> <p>This guide is important to consider when monitoring urinary output. As the infant has an immature renal system the expected urinary output is of higher volume. https://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Our-Lady-s-Ward-Surgical-Orientation-Booklet-2018.pdf</p>
<p>Fluid Balance</p> <p>Intravenous fluid intake for a child is prescribed according to the child's weight. To calculate the fluid requirements for a child for 24 hours: The following formula is a guide</p> <ul style="list-style-type: none"> • First 10 kgs of body weight 100mls/kg • Next 10 kgs of body weight 50mls/kg • Every kg thereafter 20mls/kg 	<p>Ensure accurate weight is recorded and adhere to the formula to guide fluid requirements.</p>
<p>Fasting</p> <p>After consultation with the team, generally when the patient is alert and orientated post anaesthetic they may start with clear fluids and progress as tolerated to light diet. CHECK POST-OP NOTES.</p> <p>Ensure correct fasting / diet sign on patient door and that patient and family are aware of same</p>	<p>Please read post-operative instructions to ensure safe patient care.</p> <p>Peristalsis must return prior to introducing fluids to prevent the risk of paralytic ileus (Hockenberry & Wilson 2015)</p>

<p>Depending on the surgery if the bowel was handled, the patient must remain fasting until bowel sounds are heard by the surgeon on review and this must be documented Blood Sugar monitoring as required Ensure oral hygiene is maintained.</p>	<p>To ensure blood sugars are maintained between 4–7mmols. (CHI, 2023)</p>
<p>Elimination Urinary Output expected</p> <ul style="list-style-type: none"> • Infant 2ml/kg/hour • Child: 1ml/kg/hour • Child > 12years: 0.5mls/kg/hour <p>Document fluid balance every hour and check iv site. Complete the Peripheral Venous Catheter Care Bundle.</p>	<p>This guide is important to consider when monitoring urinary output. As the infant has an immature renal system the expected urinary output is of higher volume. https://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Our-Lady-s-Ward-Surgical-Orientation-Booklet-2018.pdf</p>
<p>Documentation of care Holistic care is guided by the Activities of Living Based on the Nottingham Model of Care adapted from Roper Logan and Tierney model of care Ensure all relevant care plans are included <i>Involve parent / patient/guardian in the care planning process</i> Record PEWs scores and act appropriately Strict fluid balance – intake & output monitoring Commence appropriate care bundles – IVC, PICC, CVC, Urinary catheter Update nursing evaluation</p>	<p>To ensure comfort and freshness Documentation of care is part of our professional duty. NMBI (2015) Smith (1995) PEWS Guideline CHI (2020) Royal College of Physicians in Ireland / Health Service Executive (2014) <i>Prevention of intravascular Catheter-related Infection in Ireland</i>. Dublin: HSE Health Protection Surveillance Centre. https://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Our-Lady-s-Ward-Surgical-Orientation-Booklet-2018.pdf</p>

5.0 COMMUNICATION AND TRAINING

All registered nurses will have access to this document and will be included as part of the ward orientation on wards caring for children post-surgical interventions. This document will be used as part of the ward induction process. Staff will be made aware of the document.

6.0 Monitoring and Evaluation

This procedure shall be reviewed and updated at least every three years by the Author in order to determine its effectiveness and appropriateness. It shall be assessed and amended as necessary during this period to reflect any changes in best practice, law, substantial organisational change and professional or academic change.

In order to ensure the effectiveness of this policy and procedure the Author shall complete an audit annually to review and monitor compliance with this policy and procedure. The Author must further provide a systematic process for the reporting and investigation of compliance breaches, or potential breaches, to enable proactive prevention in the future.

7.0 Stakeholder involvement

Name	Grade	Location
Katie Morris	Clinical Education Facilitator	CHI Crumlin
Warren O’ Brien	NPDC	CHI Crumlin
Siobhan Gilboy	NPDC	CHI Temple Street
Siobhan O Connor	NPDC	CHI Tallaght
Jennifer Phelan	CNM 3	Sáolta group
CHI NPC reviewed and approved at the October 2023 meeting		

8.0 Monitoring and Evaluation

Monitoring of compliance is an important aspect of procedural documents. Quality care metrics will capture the effectiveness of this PPPG

9.0 References and Bibliography

- Bickley, L. (2016) *Bates Guide to Physical Examination and History Taking*, 12th edition, Philadelphia, Wolter Kluwer.
- Children’s Health Ireland, Crumlin (2020) *Paediatric Early Warning System (PEWS) A Guideline for Medical and Nursing staff*. Crumlin Dublin 12.
- Children’s Health Ireland (2023) *NPG on Chest Drain Management*. CHI, Dublin, Ireland.
- Children’s Health Ireland (2023) *Nursing Practice Guideline on Patient Identification*, CHI, Dublin.
- Children’s Health Ireland (2023) *Nursing Practice Guideline on Neurovascular Assessment*. CHI, Dublin
- Health Service Executive (2011) *HSE Standards & Recommended Practices for Healthcare Records Management*. Dublin: Health Service Executive.
- Health Service Executive (2013) *National Consent Policy*. Dublin: Health Service Executive
- Health Services Execute (2010) *Medical Devices / Equipment Management Policy (Incorporating the Medical Devices and Equipment Management Standard)*. Dublin: Health Service Executive.
- Kiekkas, P. (2016). *Fever Effects and treatment in Critical care; Literature review*. Australian Critical Care 26 (3) 130-135.
- Lister, S. (2021) *The Royal Marsden Manual of Clinical Nursing Procedures*. NHS Foundation Trust, UK.

Marieb E. & Hoehn, K. (2018) *Human Anatomy and Physiology*, 10th edition, Harlow, Pearson.

Nursing & Midwifery Board of Ireland (2015) *Recording Clinical Practice*. 2nd Ed. Dublin: NMBI.

Nursing & Midwifery Board of Ireland (2015) *Scope of Nursing and Midwifery Practice Framework*. Dublin: Nursing & Midwifery Board of Ireland.

Nursing & Midwifery Board of Ireland (2020) *Guidance to Nurses and Midwives on Medication Management*. Dublin: Nursing & Midwifery Board of Ireland.

Nursing & Midwifery Board of Ireland (2021) *Code of Professional Conduct and Ethics for Registered Nurses and Registered Midwives*. Dublin: Nursing & Midwifery Board of Ireland.

Royal College of Physicians in Ireland / Health Service Executive (2015) *Guidelines for hand hygiene in Ireland Healthcare settings: Update of 2005 guidelines*. Dublin: HSE Health Protection Surveillance Centre.

Wilkinson et Al (2017) *Oxford Handbook of Clinical Medicine*, 10th ed. Oxford: Oxford University Press.