Physical Assessment: Postoperative Patient

Site Applicability

PHC Acute Care: Surgery Program

Practice Level

Basic Skill for the following professions within their scope of practice:

- RN, LPN, NP

Need to Know

Comprehensive physical assessment, as outlined in this guideline, is the responsibility of all nurses. By recording and comparing physical observations a nurse is able to identify problems early and reduce the likelihood of a critical event. During assessments staff will introduce themselves to the patient, explain the procedure, follow principles of asepsis and safety, and finally ensure patient's privacy and dignity.

Professional Standards require nurses to document timely and appropriate reports of their assessments, decisions about patient status, plans, interventions and outcomes. It is the nurses' responsibility to notify the most responsible physician of any abnormal finding, concerns or issues.

This guideline is to be used in conjunction with surgery specific pathways or surgery specific standards when applicable. Refer to specific monitoring requirements for patients being followed by Acute Pain Service (APS) or Anesthesiology (MSJ). This guideline is intended for postoperative patients that are deemed appropriate for care in a ward setting.

Assessment Frequency

For purpose of clarification, components of a comprehensive physical assessment are described as vital signs, head to toe assessment and surgery specific assessments.

Vital Signs (Blood pressure, heart rate, temperature, respiratory rate, oxygen saturation, oxygen therapy, Pasero Opioid Sedation Scale (POSS), and pain assessment)

- On admission or transfer to ward
- Q4H x 48 hours, then Q8H x 48hours, then BID until discharge or as ordered by physician/NP
- With any change in patient status
- Before or after administering medications requiring vital sign assessment

Head to Toe Assessment

- On admission or transfer to ward
- At the beginning of each shift
- With any changes in patient status

Surgery Specific Assessments

- On admission or transfer to the ward
- At the beginning of each shift
- With any changes in patient status
- As outlined in any surgery specific pathways or standards

Rounding

Unless clinical indication warrants more frequent assessment or further investigation, patients are to be assessed at least every hour by conducting intentional rounding. Assess for **P**ain, **P**ersonal needs, **P**roximity, and **P**ositioning during intentional hourly rounding.

Four Ps for Hourly Rounding/Intentional Rounding	
Pain	How is your pain?
Personal Needs	Do you need to use the toilet?
Proximity	Do you have everything you need close by? (e. g. water, mobility aide, call bell, etc.)
Positioning	Are you comfortable?
Always inform your patient when you will return	

Head to Toe Assessment

System	Criteria and Directives
Safety	• Universal Falls Precautions (SAFE step) • Call bell within reach • Bed brakes on • Side rails in appropriate position • Bed in lowest position • Bed/chair alarm on, if appropriate • Falls risk signage at bedside, if appropriate • NPO signage, if appropriate • Suction – Suction to flow meter (in working condition), suction canister lining with lid, connector tubing and Yankauer. • Air flow meter in working condition. • Oxygen – Oxygen flow meter (in working condition) with nipple adaptor, nasal prongs, simple mask, oxygen extension tubing • Additional bedside safety equipment may apply e.g.. Chest Tubes , Thyroidectomy/Parathyroidectomy, Wired Jaw or Trach Care.
Pain	• Assess pain intensity with each vital signs and PRN as outlined in o Pain, Postoperative Patient Care and in related care standards for patients receiving o IV Ketamine infusions, o IV lidocaine infusions, o IV Patient Controlled Analgesia (PCA), o Perineural Anesthesia: Patient Controlled Analgesia (PCPA) and Epidural Analgesia. Follow all assessment and monitoring parameters outlined in related care standards appropriate to patient. • Perform a comprehensive pain assessment at least Qshift and PRN using the mnemonic **OPQRST**. • Assess pain intensity using a validated self-reporting pain assessment tool see Appendix A: Self-Reporting Pain Scales: o Numeric Rating Scale o Faces Pain Scale • If patient is unable to self-report pain intensity, use the Pain Assessment in Advanced Dementia (PAINAD) tool to assess presence of pain and evaluate effectiveness of interventions. • Assess sedation level if on opioids for pain using the Pasero Opioid-Induced Sedation Scale (POSS), see Appendix B.

<table>
<tr>
<td>Neurological System</td>
<td>

Level of Consciousness (LOC), using Glasgow Coma Scale (GCS)

<table>
<tr><th>Best Eye Response</th><th>Best Verbal Response</th><th>Best Motor Response</th></tr>
<tr>
<td>4 Spontaneous
3 To speech
2 To pain
1 No response
(Record “C” if eyes closed by swelling)</td>
<td>5 Orientated
4 Confused
3 Inappropriate words
2 Incomprehensible sounds
1 No response</td>
<td>6 Obeys commands
5 Localizes to pain
4 Withdraws from pain
3 Abnormal flexion
2 Abnormal extension
1 No response</td>
</tr>
</table>

Complete Confusion Assessment Method (CAM) screen as outlined in Delirium Assessment and Care (Acute Care).
Neurological vital signs, if appropriate

Muscle strength and symmetry of limb strength
Pupil reaction and size
Any neurological deficits

</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>

Inspect:

Respirations – rate, depth, dyspnea, cough or presence of sputum
Chest expansion – symmetry and quality
Use of accessory muscles

Auscultate anterior and posterior lung fields for quality and location of any adventitious sounds.
Assess oxygen saturation (SpO_2), oxygen requirements and delivery method using the Oxygen Therapy protocol.
Presence and location of pleural chest tube; assess for air leak, amount and nature of drainage. See Chest Tubes: Patient Assessment and Interventions.
See Tracheostomy Care for assessment and care management for any patient with a tracheostomy.

</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>

Assess heart rate – regularity and quality.
Presence, location and degree of edema (i.e. +1, +2, etc.).
Palpate and inspect capillary refill for 3 seconds.
Presence of chest discomfort or other symptoms suggesting cardiac ischemia as per Chest Pain Management (Outside Critical Care).
Perform detailed neurovascular assessment for orthopedic, plastics (free flaps) and vascular surgery patients:

Presence and quality of peripheral pulses: brachial, radial, dorsalis pedis, posterior tibial (i.e. weak, Doppler, bounding, etc.).
Colour, warmth, movement, sensation (CWMS) of extremities.
Pain to extremity/extremities.
Compare assessment to contra-lateral limb.
Surgery specific swelling. Notify physician immediately if compartment syndrome suspected (uncontrolled or persistent pain despite analgesia or splitting of slab).

</td>
</tr>
</table>

Gastrointestinal System	• Diet type, appetite and how well patient is tolerating diet.
	• Progress oral intake as per surgical pathway or physician's orders as tolerated.
	• Presence of nausea and/or vomiting, interventions and effectiveness.
	• Bowel function – most recent bowel movement, quality, quantity and passing flatus.
	• Abdomen – auscultate for presence and quality of bowel sounds, assess for distension, softness, rigidness, tenderness.
	• Nasogastric (NG) tube , if present:
	  ○ Assess large bore NG tube output for colour, character and amount.
	  ○ Ensure NG tube is connected to appropriate suction amount and type (e.g. low continuous) or clamped off as per physician orders.
	  ○ Ensure NG tube is secured to nasal bridge with securement device and pinned to gown to avoid inadvertent dislodgement.
	  ○ Refer to physicians orders for NG replacement orders.
	• For supplemental nutrition via enteral feeding tubes refer to Tube Feeding: Small Bore (Entriflex).
	• New Stoma, if present, assess:
	  ○ Appearance of stoma including location, size, height, colour (check for necrosis by looking for dusky, purple or black areas).
	  ○ Amount, consistency and type of output.
	  ○ Presence of rod (loop ostomy).
	  ○ Assess for leakage from under the pouching system – change if leakage present.
	For further direction refer to Ostomy, Assessment and Management.
	• Notify physician if:
	  ○ Increased abdominal distension
	  ○ Uncontrolled nausea/vomiting
	  ○ Sudden increase or new onset abdominal pain

Genitourinary System	• Assess volume, colour and quality of urine output.
	• Assess for urinary retention, palpate bladder for distension. If patient has not voided within 6 hours of surgery or catheter removal perform bladder scan. Continue to assess Q6H until patient voiding quantity sufficient.
	• Assess for signs and symptoms of urinary tract infection (e.g. frequency, urgency, odour, retention, burning sensation when voiding, etc.)
	• If appropriate to surgery assess genital area for edema, bleeding or discharge.
	• Urinary catheter:
	  ○ Assess catheter type, size, patency and ensure secured with stabilization device.
	  ○ Notify physician for urine output less than 30mL/hr for 2 consecutive hours.
	  ○ Assess continued need for catheter. Refer to Urinary Catheters: Management for the Prevention of UTI.

	○ Regular catheter care is required BID and PRN to minimize risk of UTI. ○ When catheter discontinued continue to record intake and output for 24 hours. Refer to Voiding Trials following Reconstructive Gynecology Surgery if appropriate. • New Stoma, if present, assess: ○ Appearance of stoma including location, size, height, colour (check for necrosis by looking for dusky, purple or black areas). ○ Amount, consistency and type of output. ○ Presence of stent(s). ○ Assess for leakage from under the pouching system – change if leakage present. For further direction refer to Ostomy, Assessment and Management. • Continuous bladder irrigation (CBI), if ordered: ○ Ambulation as per physician orders. ○ Assess catheter type, size, patency and ensure secured to upper thigh. ○ Assess characteristics of outflow: viscosity, colour, presence of clots. ○ Normal saline is typical irrigation solution, review physician orders for exceptions. ○ Monitor inflow and outflow of irrigation fluid, report discrepancies (i.e. returns less than expected) to physician. When discrepancies are noted assess for outflow obstruction (bladder distension, severe discomfort, bypassing of fluid) and/or bladder perforation. If outflow obstruction suspected review physician's order for urinary catheters: manual irrigation. ○ Adjust inflow in relation to returns, the clearer the returns the slower the inflow rate whereas the more evidence of bleeding or clots the faster the inflow rate. Frequency of monitoring also increases with a faster inflow rate. ○ A physician's order is required to discontinue continuous bladder irrigation.
Integumentary System	• Inspect – colour, temperature, turgor, moisture, ecchymosis, integrity. • Braden Scale completion within 24 hours of admission and with any change in patient condition. Refer to Braden Scale for Predicting Pressure Ulcer Risk in Adults • Presence and nature of wounds, lesions or incisions. Complete Wound Assessment and Documentation Flowsheet for all complex wounds.
Musculoskeletal	• Inspect – any obvious signs of musculoskeletal abnormalities (e.g. gait, posture) • Range of motion (ROM) – any abnormalities noted during normal care activities; assess ROM appropriate for type of surgery. • Mobility – perform 'Quick Mobility Screen' (e.g. patient's ability to bridge and roll) prior to transferring patient; assess type of assist required (e.g. no assist required or type of mobility aid required) • PT/OT referral as needed.

Psychosocial	• Nature of interactions with others • Mood and affect • Family and social support • Participation in care planning

Surgical Dressing	• Assess dressing with each vital sign assessment.
	• Review physician's order for dressing directives.
	• Assess and document site, type, integrity, any evidence of bleeding/hematoma, presence of packing.
	• If surgical dressing present:
	  ○ Shadowing with (sero) sanguineous drainage: mark boundaries of drainage on dressing.
	  ○ Not intact or leaking: Reinforce with dry dressing
	  ○ Wet/saturated: change dressing, unless contraindicated by physician's orders.
	• Incision may be left open to air if no drainage and not contraindicated by physician's orders.
	• If incision is visible assess incision for redness, swelling, edge approximation, skin integrity and skin closure devices (e.g.. steri-strips, staples, sutures, etc.).
	• Negative Pressure Wound Therapy monitor at minimum every 2 hours see Vacuum Assisted Closure (VAC) Therapy for further directions. Document all dressing changes on the Wound Assessment and Documentation Flowsheet.

Surgical Drains	• Assess and document site, type, patency and security of drainage tube – when more than one drain insitu, number and label drains for accuracy and consistency. • Assess and document volume, colour, consistency and odour (if applicable) of drainage. Record in output fluid balance at minimum once a shift (Q12H). • Ensure drain is connected to proper device and activated (unless otherwise ordered) e.g. Hemovac, Jackson-Pratt, etc. • If irrigation of drain is ordered by physician or nurse practitioner refer to either Hemovac Surgical Drainage Catheters: Management and Procedure for Irrigation or Drains; Percutaneous: Management, Irrigation and Aspiration depending on the drain type. • For larger than expected volume of drainage notify physician or review physician's order as to when to notify physician.

Equipment	• IV Therapy
	  ○ Type and location of line (e.g. PIV, CVC/PICC). Note external length, IV line saline locked or TKVO.
	  ○ Dressing, patency, swelling or redness, drainage around site.
	  ○ IV tubing dated and not expired.
	  ○ Correct medication infusing: drug, concentration, dose and rate.
	• Assess all other patient specific equipment. (e.g. CPAP)

Interventions

- Plan and implement nursing interventions for identified problems, e.g. regular toileting, encouraging fluids for prevention of UTI; Dysphagia screening, regular mouth care, proper positioning for prevention of aspiration pneumonia; use of universal falls precautions and other interventions for prevention of falls; regular turning, proper hydration and nutrition and regular mobilization for prevention of pressure injuries.
- Report and document any significant changes in condition or any deviation from written parameters to the responsible member of the health care team.
- Refer to specific pathways and protocols (e.g. Bowel Surgery, Transurethral Prostatic Resection, Fractured Hip, Breast Reconstruction clinical pathways and Thyroidectomy/Parathyroidectomy, Fractured Limb, Neuro-Vascular Assessment practice guidelines) for specific interventions.
- Evaluate and document effectiveness of interventions according to identified goals or expected outcomes.

Documentation

Document all assessments and interventions in the appropriate section of the Cerner Electronic Health Record Interactive View & I&O:

Patient and Family Education

Contact and use an interpreter when required.

- Explain the purpose and timing of assessments and interventions required (including allied health) with the patient. Review therapeutic regime such as diet, medication, activity and any limitations.
- Provide patient and family with relevant educational materials as appropriate, education materials can be found on the PHEM web site here.
- Ensure patients and families understand information provided to them and have had an opportunity to ask questions.
- Explain signs and symptoms of potential complications; encourage deep breathing and splinted coughing as well as leg exercises while patient is in bed.
- Encourage personal care and hygiene; explore bathing and showering options based on dressing type and surgery. Explore health promotion with patient such as nicotine replacement therapy.
- Initiate discharge planning and teaching as soon as possible with patient and family. Provide applicable handouts as well as follow up plans, appointments, and other health related services to patient and family members when appropriate.

Documentation of education provided to patients and families is important.

Related Documents

1. Elsevier Skills Online Reference (use Chrome)
2. B-00-12-10100 - Bladder Scanner Use
3. B-00-12-10065 - Blood/Blood Product Administration
4. B-00-13-10149 - Braden Scale for Predicting Pressure Ulcer Risk in Adults

5. BD-00-12-40078 – Braden Risk and Skin Assessment (Adult) VCH-PHC
6. B-00-13-10032 - Chest Pain Management (Outside Critical Care)
7. BD-00-07-40011 - Chest Tubes and Chest Drainage Systems: Patient Assessment and Interventions
8. B-00-13-10065 - Delirium Assessment and Care (Acute Care)
9. B-00-12-10047 – Urinary Catheters: Discontinuing Continuous Bladder Irrigation
10. B-00-13-10003 - Epidural Analgesia
11. B-00-13-10007 - Fractured Limb: Care of Patient
12. B-00-12-10129 - Hemovac Surgical Drainage Catheters: Management and Procedure for Irrigation (revision pending)
13. BD-00-13-40096 - Hypoglycemia, Management in Adults
14. B-00-13-10047 - Ketamine Low Dose Intravenous Infusion
15. B-00-13-10171 - Lidocaine Intravenous Low Dose Infusion Orders: Post Operative Pain Management
16. B-00-13-10059 - Managing Unsettled/Challenging Behaviours: Least Restrain Approach/PHC Non-Residential Sites
17. B-00-12-10021 - Neuro-Vascular Assessment (CWMS)
18. BD-00-07-40050 - Ostomy, Assessment and Management of
19. B-00-13-10019 - Oxygen Therapy, Acute Care
20. B-00-13-10010 - Pain, Postoperative: Patient Care
21. B-00-13-10012 - PCA (Patient Controlled Analgesia): Patient Care
22. BD-00-12-40053 – Drains; Percutaneous – management, Irrigation and Aspiration
23. B-00-13-10116 - Perineural Anesthesia: Patient Controlled Analgesia (PCPA)
24. B-00-13-10018 - PACU: Post Anesthetic Patient in Phase I
25. BD-00-12-40060 - Sequential Compression Devices (SCDs) & Thromboembolic Deterrent Stockings (TEDs), Application and Management of
26. B-00-13-10002 - Thyroidectomy/Parathyroidectomy (revision pending)
27. B-00-07-10034 - Tracheostomy Care: Nursing and Respiratory Therapy
28. B-00-13-10045 - Tube Feeding: Small Bore (Entriflex)
29. B-00-12-10099 - Urinary Catheterization, Procedure
30. B-00-13-10121 - Urinary Catheters: Management for the Prevention of UTI
31. B-00-12-10130 - Urinary Catheters: Manual Irrigation
32. B-00-12-10056 - Vacuum Assisted Closure (VAC) Therapy; Negative Pressure Would Therapy (NPWT)
33. B-00-12-10097 - Voiding Trials following Reconstructive Gynecology Surgery

References

1. Cooney, M.F. (2016). Postoperative Pain Management: Clinical Practice Guidelines. *Journal of PeriAnesthesia Nursing31(5)*, 445-451.
2. Jarvis, C. (2016). Physical Examination & Health Assessment (7th ed.). St. Louis, MO: Elsevier.
3. Paul, I., Day, R. & Williams, B. (2015). *Brunner & Suddarth's Canadian Textbook of Medical-Surgical Nursing* (3rd ed.). Philadelphia, PA: Wolters Kluwer.
4. Professional Practice (PHC, VCH, PHSA). (2018). *Physical Assessment: Adult Inpatient*. Vancouver, BC.
5. Stacy, K.M. (2018). Clinical Skills, Assessment: Focused – CE. *Elsevier Performance Manager*. Retrieved September 19, 2018 from https://lms.elsevierperformancemanager.com/ContentArea/NursingSkills/GetNursingSkills

Persons and Groups Consulted:

Clinical Nurse Specialist Surgery Program

Clinical Nurse Specialist Acute and Chronic Pain Program

Developed By

Nurse Educator PACU SPH

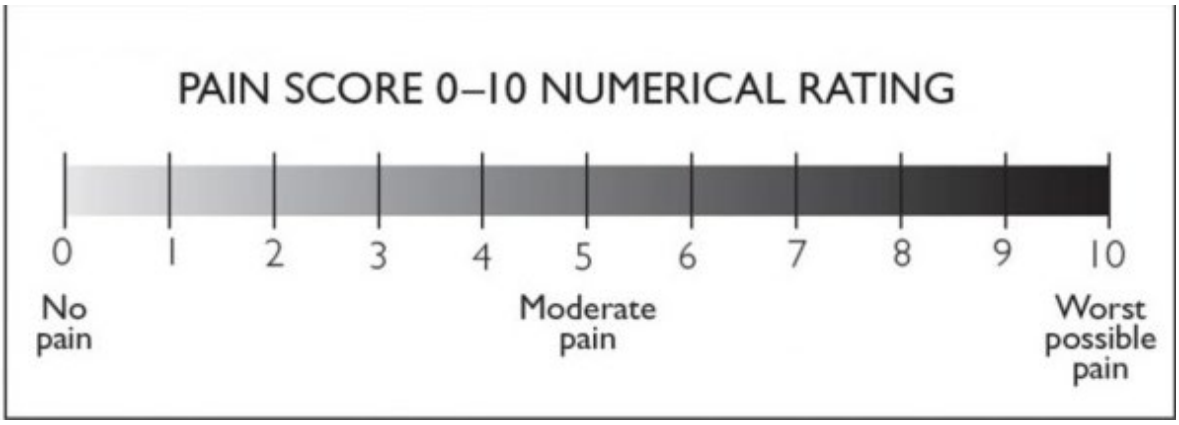
Nurse Educators SPH Surgery Program

Nurse Educator MSJ Surgery Program

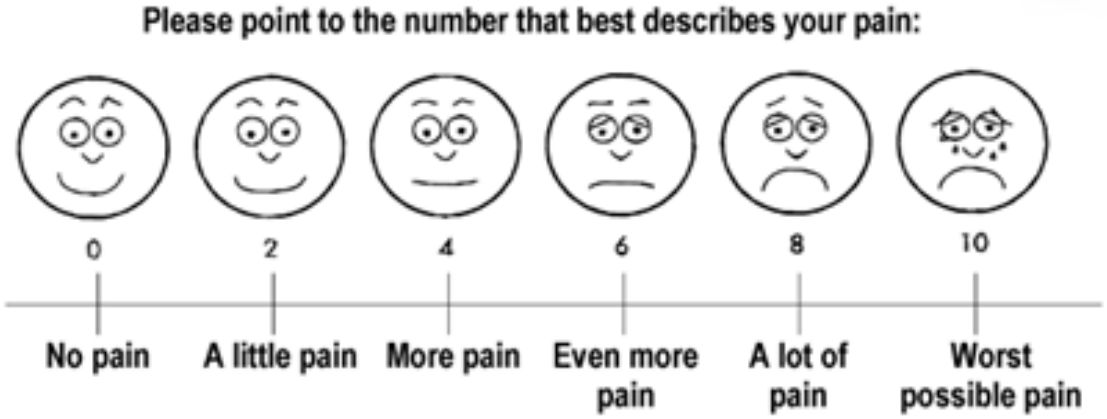
Initial Effective Date:	16-JAN-2019
Posted Date:	19-JAN-2023
Last Revised:	22-APR-2021
Last Reviewed:	19-JAN-2023 (links only)
Approved By:	PHC
	Professional Practice Standards Committee
Owners:	PHC
	Surgery

Appendix A: Self Reporting Pain Scales

Numeric Rating Scale:



Faces Pain Scale:



Note: Faces Pain Scale available in 22 languages on SCM

Appendix B: Pasero Opioid Induced Sedation Scale

Pasero Opioid-Induced Sedation Scale		
Score	**Meaning of Score**	
S	Asleep, easy to rouse	Acceptable ***NOTE:** During the first 24 hours after surgery and/or after initiation of an opioid or 24 hours after an opioid increase, patient must be woken for assessment. S score is not acceptable during this time period.
1	Awake & Alert	Acceptable
2	Slightly drowsy, easily roused	Acceptable
3	Frequently drowsy, rousable, falls asleep during conversation	Unacceptable – Monitor Respiratory Rate(RR) and sedation, notify MD(APS/Anesthesia). Stop/hold opioid until sedation below 3 and RR status satisfactory
4	Somnolent, minimal or no response to verbal/physical stimulation	Unacceptable – Stop opioid. Give Naloxone. Notify MD(APS/Anesthesia) STAT. Monitor patient closely until sedation below 3 and RR status satisfactory.