



NON-HOSPITAL MEDICAL AND SURGICAL FACILITIES
ACCREDITATION PROGRAM

Accreditation Standards

Post-anesthesia Care

September 21, 2018



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INTRODUCTION

Post-anesthesia care involves three phases for care (phase I, phase II and extended observation) that progress from a high-level of care involving continuous monitoring to a less frequent level of monitoring. Phase I, phase II and extended observation levels of care may be located within a single post-anesthesia care unit/area (PACU) or may be located in a physically separate area of the facility.

If different levels of care (i.e. phase I and phase II) take place in the same physical location (i.e. single PACU area), the nurse qualifications and nurse-to-patient ratios observed shall be in accordance with the highest level of care required by any patient (i.e. phase I patient) receiving care.

If any level of care occurs in a physically separate area of the facility (e.g. extended observation, overnight stay), then each area must be staffed with a minimum of two nurses with the appropriate qualifications at all times when a patient is receiving care in that area.

Post-anesthesia care area(s) must ensure that all patients are observable by the nurse at all times.

PACU1.0 POST-ANESTHESIA CARE

PACU1.1 PACU staffing supports safe patient care.	
PACU1.1.1	<p>M Two registered nurses are present in the PACU at all times when a patient is receiving care.</p> <p><i>Guidance: This minimum staffing requirement is observed at all times even when there may be only one patient in the PACU. The need for additional staff should be based upon but not limited to: number of patients; patient age; patient acuity; type of anesthesia administered; and consensus between the medical director and charge nurse/nurse manager regarding the staffing levels needed to provide safe patient care.</i></p>
PACU1.1.2	<p>M Two registered nurses, both competent in post-anesthesia care, are present in the PACU at all times when the patient is receiving phase I level of care.</p> <p><i>Guidance: Competency in post-anesthesia care is acquired by completing a recognized nursing specialty program (i.e. post-secondary educational institution program) in critical care or post-anesthesia recovery or by having the equivalent in education and experience (i.e. formal hospital training program, specialty certification).</i></p>

PACU1.1.3	M	Two registered nurses, one whom is competent in post-anesthesia care, are present in the PACU at all times when the patient is receiving phase II level of care. <i>Guidance: The second RN is not required to have completed a recognized nursing specialty program in critical care or post-anesthesia recovery or have the equivalent in education and experience.</i>
PACU1.1.4	M	The anesthesiologist is immediately available while the patient is intubated and is in attendance for extubation.
PACU1.1.5	M	The most responsible physician remains at the facility until the patient meets minimum discharge score requirements for transfer to extended observation/overnight stay level of care or discharge home. <i>Guidance: The most responsible physician may be the anesthesiologist, surgeon or medical director.</i>
PACU1.2		Nurse-to-adult patient ratios supports safe patient care.
PACU1.2.1	M	One-to-one (1:1) nurse to patient ratios are observed upon admission to phase I.
PACU1.2.2	M	One-to-one (1:1) nurse to patient ratios are observed for patients who have not met critical elements. <i>Guidance: At minimum, a 1:1 ratio is observed when the patient is physiologically unstable, requires complex care (e.g. patient with artificial airway) or any time the patient's status has regressed requiring a higher level of care.</i>
PACU1.2.3	M	One-to-two (1:2) nurse to patient ratios are observed for stable patients. <i>Guidance: At minimum, a 1:2 ratio is observed for conscious, stable patients requiring phase I or phase II level of care. One-to-three (1:3) nurse to patient ratios may be observed for patients that are close to meeting phase II discharge criteria.</i>
PACU1.3		Nurse-to-pediatric patient ratios supports safe care of patients over eight years of age.
PACU1.3.1	M	One-to-one (1:1) nurse to patient ratios are observed upon admission to phase I.
PACU1.3.2	M	One-to-one (1:1) nurse to patient ratios are observed for patients who have not met critical elements. <i>Guidance: At minimum, a 1:1 ratio is observed when the patient is physiologically unstable, requires complex care (e.g. patient with artificial airway) or any time the patient's status has regressed requiring a higher level of care.</i>
PACU1.3.3	M	One-to-two (1:2) nurse to patient ratios are observed for stable patients. <i>Guidance: At minimum, a 1:2 ratio is observed for conscious, stable patients requiring phase I or phase II level of care. One-to-three (1:3) nurse to patient ratios may be observed for patients that are close to meeting phase II discharge criteria.</i>
PACU1.4		Nurse-to-pediatric patient ratios supports safe care of patients eight years of age or younger when family or support staff is not present.
PACU1.4.1	M	One-to-one (1:1) nurse to patient ratios are observed upon admission to phase I.
PACU1.4.2	M	One-to-one (1:1) nurse to patient ratios are observed for patients who have not met critical elements. <i>Guidance: At minimum, a 1:1 ratio is observed when the patient is physiologically unstable, requires complex care (e.g. patient with artificial airway) or any time the patient's status has regressed requiring a higher level of care.</i>

PACU1.4.3	M	One-to-one (1:1) nurse to patient ratios are observed for stable patients requiring phase I care. <i>Guidance: At minimum, a 1:1 ratio is observed for conscious, stable patients requiring phase I level of care when family or support staff (e.g. a care aid) is not present at the bedside in addition to the post-anesthesia care nurse.</i>
PACU1.4.4	M	One-to-two (1:2) nurse to patient ratios are observed for stable patients requiring phase II care. <i>Guidance: At minimum, a 1:2 ratio is observed for conscious, stable patients requiring phase II level of care when family or support staff (e.g. a care aid) is not present at the bedside in addition to the post-anesthesia care nurse.</i>
PACU1.5		Nurse-to-pediatric patient ratios supports safe care of patients eight years of age or younger when family or support staff is present.
PACU1.5.1	M	One-to-one (1:1) nurse to patient ratios are observed upon admission to phase I.
PACU1.5.2	M	One-to-one (1:1) nurse to patient ratios are observed for patients who have not met critical elements. <i>Guidance: At minimum, a 1:1 ratio is observed when the patient is physiologically unstable, requires complex care (e.g. patient with artificial airway) or any time the patient's status has regressed requiring a higher level of care.</i>
PACU1.5.3	M	One-to-two (1:2) nurse to patient ratios are observed for stable patients requiring phase I care. <i>Guidance: At minimum, a 1:2 ratio is observed for conscious, stable patients requiring phase I when family or support staff (e.g. a care aid) is present at the bedside in addition to the post-anesthesia care nurse.</i>
PACU1.5.4	M	One-to-three (1:3) nurse to patient ratios are observed for stable patients requiring phase II care. <i>Guidance: At minimum, a 1:3 ratio is observed for conscious, stable patients requiring phase II level of care when family or support staff (e.g. a care aid) is present at the bedside in addition to the post-anesthesia care nurse.</i>
PACU1.6		The PACU is appropriately equipped. <i>Guidance: Bed/stretcherspace is used for both phase I and phase II patients are equipped.</i>
PACU1.6.1	M	Each phase I bed/stretcherspace is equipped with cardiac monitoring.
PACU1.6.2	M	Each phase I bed/stretcherspace is equipped with blood pressure monitoring.
PACU1.6.3	M	Each phase I bed/stretcherspace is equipped with pulse oximetry.
PACU1.6.4	M	Each phase I bed/stretcherspace is equipped with suction equipment. <i>Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters.</i>
PACU1.6.5	M	Each phase I bed/stretcherspace is equipped with oxygen equipment. <i>Guidance: Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways.</i>
PACU1.6.6	M	Each phase I bed/stretcherspace is equipped with a bag-valve-mask device.
PACU1.6.7	M	Each phase I bed/stretcherspace is equipped with artificial airways. <i>Guidance: Various types and sizes of artificial airways.</i>
PACU1.6.8	M	Each phase II bed/stretcherspace is equipped with vital signs monitoring equipment.

PACU1.6.9	M	Each phase II bed/stretcherspace is equipped with suction equipment. <i>Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters.</i>
PACU1.6.10	M	Each phase II bed/stretcherspace is equipped with oxygen equipment. <i>Guidance: Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways.</i>
PACU1.6.11	M	Temperature monitoring equipment is readily available in the PACU.
PACU1.6.12	M	Clinical support supplies are readily available in the PACU. <i>Guidance: Clinical support supplies include but are not limited to oral airways, nasal airways, stethoscope, intravenous (IV) catheters and solutions, medications, thermoregulation methods (e.g. convective warming devices, warmed blankets), otoscope, ophthalmoscope.</i>
PACU1.7		Patient assessment, monitoring and healthcare team communication supports the delivery of safe phase I and phase II levels of care.
PACU1.7.1	M	The patient is accompanied from the OR to the PACU by the OR RN and the anesthesiologist. <i>Guidance: Transferring a patient from the OR to the PACU includes direct verbal communication between the anesthesiologist and the PACU nurse accepting the patient.</i>
PACU1.7.2	M	Hand-off communication includes patient name and age.
PACU1.7.3	M	Hand-off communication includes procedure performed.
PACU1.7.4	M	Hand-off communication includes type of anesthesia/sedation.
PACU1.7.5	M	Hand-off communication includes pertinent medical history.
PACU1.7.6	M	Hand-off communication includes medications given.
PACU1.7.7	M	Hand-off communication includes allergy status.
PACU1.7.8	M	Hand-off communication includes perioperative course. <i>Guidance: Communication includes information about the perioperative course including vital signs, any complications, unusual or adverse events.</i>
PACU1.7.9	M	Hand-off communication includes drains, dressings and operative site.
PACU1.7.10	M	Hand-off communication includes fluid balance. <i>Guidance: Fluid balance includes fluids administered and estimated blood/fluid loss.</i>
PACU1.7.11	M	Post-operative orders are written and patient specific. <i>Guidance: Pre-printed orders, if used, are made patient specific by adding the name of the patient, making any necessary changes to the pre-printed order set to reflect the individual needs of the patient and signed by the physician.</i>

PACU1.7.12	M	<p>A systems assessment of the patient is performed upon admission to phase I level of care and the patient's status is continually monitored.</p> <p><i>Guidance: The patient is assessed and continually monitored in accordance with the National Association of PeriAnesthesia Nurses of Canada (NAPAN) Standards for Practice which includes but is not limited to: respiratory – airway patency, airway adjuncts, respiratory rate, breath sounds, oxygen therapy, continuous pulse oximetry monitoring; cardiovascular – continuous cardiac monitoring, blood pressure, pulse rate and regularity; neurological/neurovascular/neuromuscular – level of consciousness, neuromuscular function, neurovascular assessment of distal pulse, sensation, colour, temperature, capillary refill and movement (vascular surgery, limb surgery, back surgery, IV regional anesthetic and axillary nerve blocks), dermatome sensory level (spinal/epidural anesthesia); on admission and as clinically indicated – pain, nausea and vomiting (assessment, management and response to treatment); intake and output – intravenous therapy including location of line(s), condition of IV site(s) and the amount, type and rate of solution(s) infusing, output from tube(s), catheter(s), drain(s) and voiding, as indicated; surgical site, dressings and drains – condition of visible incisions and dressings, drainage tube(s), catheter(s) and drain(s) including type, patency, security, drainage and installations.</i></p>
PACU1.7.13	M	<p>Vital signs are measured upon arrival to PACU and every 15 minutes at a minimum during phase I level of care.</p> <p><i>Guidance: The following is assessed: oxygen saturation with continuous pulse oximetry monitoring; respiratory rate; heart rate including rhythm and interpretation with continuous cardiac monitoring and blood pressure.</i></p>
PACU1.7.14	M	<p>Temperature is monitored and warming measures implemented to maintain normothermia.</p> <p><i>Guidance: In accordance with the National Association of PeriAnesthesia Nurses of Canada (NAPAN) Standards for Practice temperature is measured on admission and every 15 minutes until normothermic, then as clinically indicated and at discharge from PACU. Prevention of unintended perianesthesia hypothermia (UPH) and maintenance of normothermia are key priorities in the prevention of surgical site infection. The following should be considered when maintaining perianesthesia normothermia: identify risk factors for UPH, measure temperature on arrival to phase I and at minimum every 15 minutes until patient is normothermic and use appropriate techniques to prevent and correct hypothermia.</i></p>
PACU1.7.15	M	<p>Patients with obstructive sleep apnea (OSA) or suspected OSA risk are continuously monitored in accordance with the facility's OSA protocol.</p>
PACU1.7.16	M	<p>Readiness for transfer to phase II level of care is based upon an objective discharge scoring system.</p> <p><i>Guidance: Post-anesthesia discharge scoring system/discharge criteria are used continually to assess client readiness for transfer to the next level of care. Examples of discharge scoring systems include: aldrete; modified aldrete; bromage; post-anesthetic discharge scoring system (PADSS). Based upon the professional judgement of the anesthesiologist, the patient may be fast-tracked directly from the anesthesia phase (operating/procedure room) to phase II level of care. The anesthesiologist documents the status of the patient during the final stages of anesthesia to ensure that the fast-track criteria is met (i.e. White's Criteria for Fast Tracking from the OR to Bypass Phase I). Patients who do not meet fast-tracking criteria are admitted to phase I level of care.</i></p>

PACU1.7.17	M	A systems assessment of the patient is performed upon admission to phase II level of care and the patient's status is continually monitored. <i>Guidance: The patient is assessed and continually monitored in accordance with the National Association of PeriAnesthesia Nurses of Canada (NAPAN) Standards for Practice which includes but is not limited to: respiratory – respiratory rate, breath sounds, oxygen therapy, oxygen saturation; cardiovascular – blood pressure, pulse rate and regularity; neurological/neurovascular/neuromuscular – level of consciousness, neuromuscular function, neurovascular assessment of distal pulse, sensation, colour, temperature, capillary refill and movement (vascular surgery, limb surgery, back surgery, IV regional anesthetic and axillary nerve blocks), dermatome sensory level (spinal/epidural anesthesia); on admission and as clinically indicated – pain, nausea and vomiting (assessment, management and response to treatment); intake and output – intravenous therapy including location of line(s), condition of IV site(s) and the amount, type and rate of solution(s) infusing, output from tube(s), catheter(s), drain(s) and voiding, as indicated; surgical site, dressings and drains – condition of visible incisions and dressings, drainage tube(s), catheter(s) and drain(s) including type, patency, security, drainage and installations.</i>
PACU1.7.18	M	Vital signs are measured upon transfer to phase II level of care and every 30 minutes at a minimum during phase II level of care. <i>Guidance: The following is assessed: respiratory rate; oxygen saturation; blood pressure; pulse rate and regularity.</i>
PACU1.7.19	M	Readiness for discharge home or transfer to extended observation/overnight stay level of care is based upon an objective discharge scoring system. <i>Guidance: A post-anesthesia discharge scoring system/discharge criteria are used continually to assess client readiness for transfer to the next level of care. Examples of discharge scoring systems include: aldrete; modified aldrete; bromage, post-anesthetic discharge scoring system (PADSS).</i>

PACU2.0 EXTENDED OBSERVATION

Guidance: Extended observation is considered a post-anesthesia "level of care," just as phase I and phase II are considered post-anesthesia levels of care. Patients that meet discharge criteria from phase II may proceed to an extended observation area, overnight stay area or be discharged home directly from phase II recovery. Some facilities have extended observation areas/rooms adjacent to their PACU that are equipped with recliners/chairs where discharge instructions are reviewed with patients and where patients wait for their transportation home. Extended observation level of care is considered equivalent to the level of care provided on a medical/surgical in-patient unit.

PACU2.1	Extended observation staffing supports safe patient care.	
PACU2.1.1	M	Two nurses are present in the extended observation area at all times when a patient is receiving care. <i>Guidance: The minimum compliment of nursing staff for one to five patients must be one registered nurse (RN) plus one RN or one licensed practical nurse (LPN). The decision of assigning the second nurse as a registered nurse (RN) or a licensed practical nurse (LPN) should depend on patient acuity and the facility's administrator and charge-nurse's determination of staffing needs to provide safe patient care. Staffing levels are based upon, but not limited to, patient needs and safety requirements. At a minimum, two nurses must be present in the extended observation area at all times. Extra staff may be needed to ensure these minimum staffing levels are maintained at all times (e.g. a care aid, unregulated staff member to accompany daycare patients to safety meet their ride home).</i>

PACU2.1.2	M	Nurses present in the extended observation area are appropriately qualified for the level of care being provided. <i>Guidance: Registered nurse qualifications include critical care or post-anesthesia recovery certification and/or equivalent experience or current acute surgical ward experience. Licensed practical nurse qualifications include current acute surgical ward experience. If extended observation takes place in the same area where patients in phase I and phase II are receiving care, then the higher nurse qualifications shall be observed.</i>
PACU2.1.3	M	Nurse-to-adult patient ratios observed meet the minimum requirements. <i>Guidance: A total of two nurses (one registered nurse (RN) plus one RN or licensed practical nurse (LPN)) are present when one to five patients are receiving extended observation level of care. A total of three nurses (two RNs plus 1 RN or LPN) are present when six to ten patients are receiving extended observation level of care. If extended observation takes place in the same area where patients in phase I and phase II are receiving care, then higher nurse-to-adult patients ratios shall be observed in accordance with phase I and phase II requirements.</i>
PACU2.2		The extended observation area is appropriately equipped.
PACU2.2.1	M	The extended observation area is equipped with vital sign monitoring equipment. <i>Guidance: Vital sign monitoring equipment includes blood pressure cuffs, stethoscope, sphygmomanometers, oxygen saturation probes, mechanical devices for measurement, temperature monitoring equipment.</i>
PACU2.2.2	M	The extended observation area is equipped with suction equipment. <i>Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters.</i>
PACU2.2.3	M	The extended observation area is equipped with oxygen equipment. <i>Guidance: Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways.</i>
PACU2.2.4	M	The extended observation area is equipped with a call bell system.
PACU2.3		Patient assessment, monitoring and health-care team communication supports the delivery of safe extended observation level of care.
PACU2.3.1	M	The patient is accompanied from the PACU to the extended observation area by an RN.
PACU2.3.2	M	Hand-off communication content is standardized. <i>Guidance: The hand-off communication content follows a standardized sequence and includes but is not limited to: patient name and age; procedure performed; type of anesthesia/sedation; pertinent medical history; allergy status; perioperative course including any complications, unusual or adverse events; post-anesthesia course including vital signs, drains, dressings, operative site and medications given; fluid balance including fluids administered and estimated blood/fluid loss; post-operative plan.</i>
PACU2.3.3	M	Patients are assessed and monitored, at minimum, in accordance with established post-operative care plans.

PACU3.0 POLICIES AND PROCEDURES

PACU3.1	Policies and procedures contain all the information necessary for the safety of patients, staff and visitors. <i>Intent: Policies and procedures ensure that activities/procedures are performed consistently and accurately by all personnel within the non-hospital facility.</i>
PACU3.1.1	M There is policy and procedures for safe post-anesthesia/post-procedure patient care. <i>Guidance: Post-anesthesia/post-procedure policy and procedures outline phases of care including frequency of assessment, staff qualifications, minimum staffing levels, nurse-to-patient ratios, discharge criteria from all phases of care including, if indicated, fast-track and transfer of care (handover) communication.</i>



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REFERENCES

- American Society of PeriAnesthesia Nurses (ASPN). 2017-2018 Perianesthesia nursing standards, practice recommendations and interpretive statements. Cherry Hill, NJ: American Society of PeriAnesthesia Nurses; 2016.
- Apfelbaum JL, Silverstein JH, Chung FF, Connis RT, Fillmore RB, Hunt SE, et al.; American Society of Anesthesiologists Task Force on Postanesthetic Care. Practice guidelines for postanesthetic care: an updated report by the American Society of Anesthesiologists Task Force on Postanesthetic Care. *Anesthesiology* [Internet]. 2013 Feb [cited 2018 May 4];118(2):291-307. Available from: <http://anesthesiology.pubs.asahq.org/article.aspx?articleid=1918686>
- Association of periOperative Registered Nurses (AORN). Guidelines for perioperative practice 2018 edition. Denver. Co: AORN; 2018. Guideline for team communication; p. 745-72.
- College of Physician & Surgeons of Alberta, Non-Hospital Surgical Facility Task Force. Non-hospital surgical facility [Internet]. Edmonton: College of Physician & Surgeons of Alberta; 1997 [revised 2016 Mar v23; cited 2018 May 4]. 62 p. (Standards & guidelines). Available from: http://cpsa.ca/wp-content/uploads/2015/03/NHSF_Standards.pdf
- Dobson G, Chong M, Chow L, Flexman A, Kurrek M, Laflamme C, et al. Guidelines to the practice of anesthesia - revised edition 2018.
- Can J Anaesth [Internet]. 2018 [cited 2018 May 4];Jan;65(1):76-104. Available from: http://www.cas.ca/English/Page/Files/97_Guidelines-2018.pdf
- Ead H. From Aldrete to PADSS: Reviewing discharge criteria after ambulatory surgery. *J Perianesth Nurs* [Internet]. 2006 Aug [cited 2018 May 4];21(4):259-67. Available from: [http://www.jopan.org/article/S1089-9472\(06\)00201-2/pdf](http://www.jopan.org/article/S1089-9472(06)00201-2/pdf)
- Institute for Safe Medication Practices Canada. Operating room medication safety checklist: version 2. Toronto: Institute for Safe Medication Practices Canada; 2009. 34 p.
- National Association of PeriAnesthesia Nurses of Canada. Standards for practice. 3rd ed. Oakville, ON: National Association of PeriAnesthesia Nurses of Canada; 2014.

National Association of PeriAnesthesia Nurses of Canada. Standards for practice. 4th ed. Oakville, ON: National Association of PeriAnesthesia Nurses of Canada; 2018. 77 p.

Swart P, Chung F, Fleetham J. An order-based approach to facilitate postoperative decision-making for patients with sleep apnea. *Can J Anaesth.* 2013 Mar;60(3):321-4.