

# ***Exam Blueprint and Specialty Competencies***

## **Introduction – Blueprint for the PeriAnesthesia Nursing Certification Exam**

The primary function of the blueprint for the CNA PeriAnesthesia Nursing Certification Exam is to describe how the exam is to be developed. Specifically, this blueprint provides explicit instructions and guidelines on how the competencies are to be expressed within the exam in order for accurate decisions to be made on the candidates' competence in PeriAnesthesia nursing.

The blueprint has two major components: (1) the content area to be measured and (2) the explicit guidelines on how this content is to be measured. The content area consists of the list of competencies (i.e., the competencies expected of fully competent practising PeriAnesthesia nurses with at least two years of experience), and the guidelines are expressed as structural and contextual variables. The blueprint also includes a summary chart that summarizes the exam guidelines.

### **Description of Domain**

The CNA PeriAnesthesia Nursing Exam is a criterion-referenced exam.<sup>1</sup> A fundamental component of a criterion-referenced approach to testing is the comprehensive description of the content area being measured. In the case of the PeriAnesthesia Nursing Certification Exam, the content consists of the competencies of a fully competent practising PeriAnesthesia nurse with at least two years of experience.

This section describes the competencies, how they have been grouped and how they are to be sampled for creating an exam.

### **Developing the List of Competencies**

A working group of highly experienced PeriAnesthesia nurses from various regions in Canada created the current list of competencies during a five-day meeting. The final list of competencies was approved by the PeriAnesthesia Nursing Certification Exam Committee.

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<sup>1</sup> Criterion-referenced exam: An exam that measures a candidate's command of a specified content or skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard or as a mastery of defined domain (e.g., percentage correct and mastery scores), independently of the results obtained by other candidates (Brown, 1983).

## **Assumptions**

### **PeriAnesthesia Nursing Environment**

1. The PeriAnesthesia nursing environment is one in which the client will soon be, presently is or has just recently been under the influence of sedation, analgesia, anesthetic agents and/or techniques for the purposes of undergoing surgery. Surgery is defined as surgical procedures or therapeutic/diagnostic interventions.
2. The PeriAnesthesia nursing environment refers to all PeriAnesthesia phases within the PeriAnesthesia health cycle that affect the PeriAnesthesia client. These are as follows:
  - a) Preoperative/Admission Phase
  - b) Day of Surgery Phase
  - c) Anesthesia Phase and Pharmacology
  - d) PostAnesthesia Phase I
  - e) PostAnesthesia Phase II
  - f) Extended Observation Phase
3. The PeriAnesthesia nursing environment is characterized by complexity, unpredictability, interprofessional team collaboration, use of technology and ethical challenges.
4. The PeriAnesthesia nursing environment occurs in a variety of capacities and settings that promote safe, efficient, effective health-care delivery including the following:
  - a) preoperative/admission clinics
  - b) day of surgery units
  - c) ambulatory care settings
  - d) inpatient settings
  - e) postanesthesia care units
  - f) regional/epidural/spinal anesthesia treatment units
  - g) intensive care units
  - h) emergency departments
  - i) labour and delivery suites
  - j) operating rooms
  - k) special procedure areas (e.g., endoscopy suites, interventional radiology)
  - l) pain management services
  - m) physician and dental offices
  - n) free-standing surgical centres or clinics
  - o) independent surgical sites
5. The PeriAnesthesia nursing environment is one in which holistic PeriAnesthesia nursing care is provided through the collaborative practice of members of an interprofessional team and community partners to meet the physiological/physical, cognitive, psychosocial cultural and religious/spiritual needs of the client.

### **The PeriAnesthesia Client**

1. The PeriAnesthesia client refers to someone who receives surgery, sedation, analgesia and/or anesthetic agents and techniques within the PeriAnesthesia environment.
2. The PeriAnesthesia client's needs include, but are not limited to, physiological/physical, cognitive, psychosocial, cultural and religious/spiritual factors.
3. The PeriAnesthesia client often has multiple, complex comorbidities of increasing acuteness and chronicity. These comorbidities will influence client needs that will vary in proportion to the acuity of the surgery and the type of anesthetic technique used.
4. The PeriAnesthesia client's individual plan of care and delivery of service are influenced by the client's language, culture, religious/spiritual beliefs, self-concept, growth and developmental stages and client/family-centred care.
5. The PeriAnesthesia client identifies family as those people providing support, whether or not there is a biological relationship, and who are active participants in the client's PeriAnesthesia care.

### **The PeriAnesthesia Nurse**

1. The PeriAnesthesia nurse is a registered nurse who provides individualized family-centered, evidence-based care that includes the nursing process, decision-making, analysis, critical thinking and inquiry to identify and respond in a timely manner to rapidly changing client's conditions.
2. The PeriAnesthesia nurse reviews the health cycle to identify problems or risks that may result from the administration of sedation/analgesia or anesthetic agents/techniques, and/or from surgery.
3. The PeriAnesthesia nurse advocates for ethical, safe, quality care environments which will promote the best possible client outcomes.
4. The PeriAnesthesia nurse continuously adapts to a technologically evolving health-care system while making efficient use of internal and external resources.
5. The PeriAnesthesia nurse maintains competence through continuing education, research, skill and professional development.
6. The PeriAnesthesia nurse is a leader in PeriAnesthesia nursing care and pivotal member of the interprofessional team, who coordinates and provides timely assessment, care, education, discharge and follow-up for the client.
7. The PeriAnesthesia nurse has a professional responsibility and accountability to guide, mentor and share experiences with nurses, students and other interprofessional team members.
8. The PeriAnesthesia nurse utilizes specialized knowledge-base to develop strategies regarding the following:
  - a) sedation/analgesia, anesthetic agents/techniques and surgery.
  - b) physiological/physical and psychological responses to sedation/analgesia, anesthetic agents/techniques and surgery
  - c) postoperative nausea and vomiting (PONV), pain, comfort

- d) the vulnerability of clients subjected to sedation/analgesia, anesthetic agents/techniques and surgery
- e) the principles of medical, surgical, interventional radiology and critical care nursing, and all other nursing specialties that are integrated into PeriAnesthesia nursing practice

### Competency Categories

The competencies are classified under a six-category scheme commonly used to organize PeriAnesthesia nursing.

Some of the competencies lend themselves to one or more of the categories; therefore, these six categories should be viewed simply as an organizing framework. Also, it should be recognized that the competency statements vary in scope, with some representing global behaviours and others more discrete and specific nursing behaviours.

### Percentage of Competencies in Each Group

The following table presents the number and the percentage of competencies in each category.

**Table 1: Percentage of Competencies in Each Group**

| Category                          | Number of competencies | Percentage of the total number of competencies |
|-----------------------------------|------------------------|--|
| Preoperative/Admission Phase      | 29                     | 15.6%  |
| Day of Surgery Phase              | 19                     | 10.2%  |
| Anesthesia Phase and Pharmacology | 39                     | 21%  |
| PostAnesthesia Phase I            | 37                     | 20%  |
| PostAnesthesia Phase II           | 39                     | 21%  |
| Extended Observation Phase        | 23                     | 12.4%  |

### Competency Sampling

Using the grouping and the guideline that the PeriAnesthesia Nursing Certification Exam will consist of approximately 165 questions, the categories have been given the following weights in the total examination.

Table 2: Competency Sampling

| Categories                        | Approximate weights in the total examination |
|-----------------------------------|--|
| Preoperative/Admission Phase      | 11-15%                                       |
| Day of Surgery Phase              | 11-15%                                       |
| Anesthesia Phase and Pharmacology | 15-20%                                       |
| PostAnesthesia Phase I            | 35-45%                                       |
| PostAnesthesia Phase II           | 12-15%                                       |
| Extended Observation Phase        | 5-9%   |

## Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the PeriAnesthesia Nursing Certification Exam. This section presents the guidelines for two types of variables: structural and contextual.

**Structural Variables:** Structural variables include those characteristics that determine the general appearance and design of the exam. They define the length of the exam, the format and presentation of the exam questions (e.g., multiple-choice format) and special functions of exam questions (e.g., case-based or independent questions).

**Contextual Variables:** Contextual variables specify the nursing contexts in which the exam questions will be set (e.g., client culture, client health situation and health-care environment).

## Structural Variables

**Exam Length:** The exam consists of approximately 165 multiple-choice questions.

**Question Presentation:** The multiple-choice questions are presented in one of two formats: case-based or independent. Case-based questions are a set of approximately four questions associated with a brief health-care scenario (i.e., a description of the client's health-care situation). Independent questions stand alone. In the PeriAnesthesia Nursing Certification Exam, 65 to 70 per cent of the questions are presented as independent questions and 30 to 35 per cent are presented within cases.

**Taxonomy for Questions:** To ensure that competencies are measured at different levels of cognitive ability, each question on the PeriAnesthesia Nursing Certification

Exam is aimed at one of three levels: knowledge/comprehension, application and critical thinking.<sup>2</sup>

**1. Knowledge/Comprehension**

This level combines the ability to recall previously learned material and to understand its meaning. It includes such mental abilities as knowing and understanding definitions, facts and principles and interpreting data (e.g., knowing the effects of certain drugs or interpreting data appearing on a client’s record).

**2. Application**

This level refers to the ability to apply knowledge and learning to new or practical situation. It includes applying rules, methods, principles and theories in providing care to clients (e.g., applying nursing principles to the care of clients).

**3. Critical Thinking**

The third level of the taxonomy deals with higher-level thinking processes. It includes the abilities to judge the relevance of data, to deal with abstraction and to solve problems (e.g., identifying priorities of care or evaluating the effectiveness of interventions). The PeriAnesthesia nurse with at least two years of experience should be able to identify cause-and-effect relationships, distinguish between relevant and irrelevant data, formulate valid conclusions and make judgments concerning the needs of clients.

The following table presents the distribution of questions for each level of cognitive ability.

**Table 3: Distribution of Questions for Each Level of Cognitive Ability**

| Cognitive Ability Level | Percentage of questions on PeriAnesthesia Nursing Exam |
|-------------------------|--|
| Knowledge/Comprehension | 30-35%   |
| Application             | 30-40%   |
| Critical Thinking       | 30-35%   |

**Contextual Variables**

**Client Culture:** Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.

<sup>2</sup> These levels are adapted from the taxonomy of cognitive abilities developed in Bloom (1956).

**Client Health Situation:** In the development of the PeriAnesthesia Nursing Certification Exam, the client is viewed holistically. The client health situations presented reflect a cross section of the most common health situations encountered by PeriAnesthesia nurses.

**Health-Care Environment:** The PeriAnesthesia nursing environment occurs in a variety of capacities and settings that promote safe, efficient, effective health-care delivery including the following: preoperative/admission clinics, day of surgery units, ambulatory care settings, inpatient settings, postanesthesia care units, regional/epidural/spinal anesthesia treatment units, intensive care units, emergency departments, labour and delivery suites, operating rooms, special procedure areas (e.g., endoscopy suites, interventional radiology), pain management services, physician and dental offices, free-standing surgical centres or clinics and independent surgical sites.

## Conclusions

The blueprint for the PeriAnesthesia Nursing Certification Exam is the product of a collaborative effort between CNA, ASI and a number of PeriAnesthesia nurses across Canada. Their work has resulted in a compilation of the competencies required of practising PeriAnesthesia nurses and has helped determine how those competencies will be measured on the PeriAnesthesia Nursing Certification Exam. A summary of these guidelines can be found in the summary chart PeriAnesthesia Nursing Certification Development Guidelines.

PeriAnesthesia nursing practice will continue to evolve. As this occurs, the blueprint may require revision so that it accurately reflects current practices. CNA will ensure that such revision takes place in a timely manner and will communicate any changes in updated editions of this document.

# Summary Chart

## PeriAnesthesia Nursing Exam Development Guidelines

| <b>STRUCTURAL VARIABLES</b>           |   |
|---------------------------------------|---|
| Exam Length and Format                | Approximately 165 multiple-choice questions   |
| Question Presentation                 | Independent questions: 65-70% of questions<br>Case-based questions: 30-35% of questions   |
| Category                              | Preoperative/Admission Phase (29 competencies) 11-15% of questions<br>Day of Surgery Phase (19 competencies) 11-15% of questions<br>Anesthesia Phase and Pharmacology (39 competencies) 15-20% of questions<br>PostAnesthesia Phase I (37 competencies) 35-45% of questions<br>PostAnesthesia Phase II (39 competencies) 12-15% of questions<br>Extended Observation Phase (23 competencies) 5-9% of questions  |
| Cognitive Ability Levels of Questions | Knowledge/Comprehension 30-35% of questions<br>Application 30-40% of questions<br>Critical Thinking 30-35% of questions   |
| <b>CONTEXTUAL VARIABLES</b>           |   |
| Client Culture                        | Questions measuring awareness, sensitivity, and respect for different cultural values, beliefs and practices, without introducing stereotypes, are included on the exam.  |
| Client Health Situation               | In the development of the PeriAnesthesia Nursing Certification Exam, the client is viewed holistically. The client health situations presented reflect a cross section of the most common health situations encountered by PeriAnesthesia nurses.   |
| Health-Care Environment               | The PeriAnesthesia nursing environment occurs in a variety of capacities and settings that promote safe, efficient, effective health-care delivery including the following: preoperative/admission clinics, day of surgery units, ambulatory care settings, inpatient settings, postanesthesia care units, regional/epidural/spinal anesthesia treatment units, intensive care units, emergency departments, labour and delivery suites, operating rooms, special procedure areas (e.g., endoscopy suites, interventional radiology), pain management services, physician and dental offices, free-standing surgical centres or clinics and independent surgical sites. |

# The PeriAnesthesia Nursing Exam

## List of Competencies

### I. Preoperative/Admission Phase (29 competencies)

*The Preoperative/Admission Phase occurs prior to the PeriAnesthesia client receiving surgery, sedation/analgesia and anesthetic agents/techniques. The PeriAnesthesia nurse focuses on preparing the client physiologically/physically, cognitively, psychosocially, spiritually/religiously and culturally for the surgery and subsequent PeriAnesthesia environment phases.*

#### **The PeriAnesthesia nurse:**

- 1.1 Assesses the client's risks for surgery and/or anesthetic agents by using interview techniques and reviewing the health record and diagnostic tests, taking the following into consideration:
  - a) respiratory risks
  - b) cardiovascular risks and/or hemodynamic risks
  - c) hepatic risks
  - d) renal risks
  - e) gastrointestinal risks
  - f) genitourinary risks
  - g) neurological/neuromuscular risks
  - h) psychosocial/cultural/religious/spiritual risks
  - i) pre-existing comorbidities
  - j) congenital conditions
  - k) surgical risks from all other systems (e.g., endocrine, hematology, immunology, integumentary)
  - l) abnormal/normal diagnostic results
  - m) allergies (e.g., latex, medications, environmental)
  - n) history of perioperative and PeriAnesthesia complications of client and family (e.g., malignant hyperthermia, bleeding disorders)
  - o) infection control (e.g., antibiotic resistant organisms)
  - p) age (e.g., elderly, pediatrics)
  - q) legal considerations (e.g., consent, advance directives, guardianship)
  
- 1.2 Evaluates the client's needs as they relate to surgery, sedation, analgesia and all other anesthetic agents and techniques, taking the following into consideration:
  - a) physical needs (e.g., mobility/safety/assistive devices)
  - b) physiological needs (e.g., nutrition, pre-procedural medications, optimization for surgery)
  - c) cognitive needs (e.g., translation, teaching, support)
  - d) psychosocial needs (e.g., language/culture/religion/spiritual/concept of health status, support groups, community services)

- 1.3 Educates the client about the surgical experience, by using the nursing diagnosis and through assessment and observations of the client's physiological/physical condition and lifestyle choices, regarding the following:
- a) surgery (e.g., fasting instructions, preoperative preparations and medications, anticipation of events on the date of the surgery, surgery-specific expectations and postoperative preparation and care)
  - b) anesthesia protocols and procedures (e.g., preparation, processes and effects of types and techniques of anesthetic agents prior to, during and following administration)
  - c) pain assessment (e.g., PQRS [provocation, quality, radiation, severity, time pain started/ amount of time pain lasted] of client symptoms, use of appropriate validated pain scales)
  - d) pain management including all modalities (e.g., intravenous patient-controlled analgesia [IV PCA], epidural, regional anesthesia, complementary and alternative medicines)
  - e) infection prevention and control practices: antibiotic resistant organism testing, skin preparation, isolation practices
- 1.4 Coordinates client care with interprofessional team (e.g., referrals, consultations, other diagnostic testing, teaching).
- 1.5 Follows up and adjusts surgical plan of care based on consultations, diagnostic findings and outcomes as required.
- 1.6 Completes transfer communication to the Day of Surgery Phase.

## II. Day of Surgery Phase (19 competencies)

*The Day of Surgery Phase occurs immediately prior to the PeriAnesthesia client receiving surgery, sedation/analgesia and anesthetic agents/techniques. The PeriAnesthesia nurse focuses on validating existing physiological/physical, cognitive, psychosocial, religious/spiritual and cultural needs.*

### ***The PeriAnesthesia nurse:***

- 2.1 Validates existing assessment findings related to the previous identified risks and needs, and highlights changes since the Preoperative/Admission Phase including the following:
- a) physical status (e.g., mobility, sensory deficit)
  - b) physiological status (e.g., n.p.o., medications, additional comorbidities, pain, complementary and alternative medicines, normothermia, diagnostic testing, allergies, infection prevention and control)
  - c) cognitive status (e.g., knowledge of planned surgery, surgical site, type and understanding of directions)
  - d) psychosocial status (e.g., anxiety)
  - e) language/family/culture/spiritual/religious/concept of health status (e.g., need for translation, family crisis)
  - f) legal considerations (e.g., consent, advance directives, guardianship)
  - g) discharge plan (e.g., escort, transportation requirements, home support, postoperative care, referrals)

- 2.2 Constructs an updated nursing plan of care based on information gathered to prepare client for surgery and transition to the anesthesia phase.
- 2.3 Provides immediate education for the client on the updated nursing plan of care when existing information differs from data collected prior to the day of surgery.
- 2.4 Implements interventions related to the updated nursing plan of care including the following:
  - a) referrals to interprofessional team
  - b) diagnostic testing (e.g., phlebotomy, electrocardiogram [ECG])
  - c) surgical site infection (SSI) bundle (e.g., perioperative antimicrobial coverage, appropriate hair removal, maintenance of perioperative glucose control, perioperative normothermia)
  - d) venous thromboembolism (VTE) prophylaxis (e.g., anticoagulation therapy)
  - e) medication administration and reconciliation (e.g., pain management including multimodal)
  - f) equipment-related (e.g., bariatric support equipment, ventilatory assistance, infusion pump)
  - g) infection prevention and control
  - h) psychological support (e.g., client advocacy, guided imagery, spiritual support, distraction)
  - i) safety measures (e.g., client identification, surgical site marking)
- 2.5 Transitions the client to the Anesthesia Phase (e.g., communication, transportation).

### III. Anesthesia Phase and Pharmacology (39 competencies)

*The Anesthesia Phase occurs when the client receives sedation/analgesia and/or anesthetic agents/techniques. The PeriAnesthesia nurse administers or assists other interprofessional team members in the administration of the sedation/analgesia and/or anesthetic agents/techniques and monitors the PeriAnesthesia client for immediate or delayed responses to the sedation/analgesia and/or anesthetic agents/techniques by objective assessment data collection.*

#### ***The PeriAnesthesia nurse:***

- 3.1 Integrates client data received at transfer of care from the Day of Surgery phase.
- 3.2 Explains the pharmacokinetics of anesthetic agents (induction, maintenance and reversal) and adjuncts including the following:
  - a) inhalation agents (i.e., non-volatile, volatile)
  - b) muscle relaxants
    - i. neuromuscular blocking agents (i.e., non-depolarizing, depolarizing)
    - ii. spasmolytics (e.g., dantrolene)
  - c) regional anesthesia
    - i. neuraxial anesthesia (e.g., spinal, epidural)
    - ii. local anesthesia
    - iii. peripheral nerve blocks
    - iv. sympathetic nerve blocks

- d) intravenous agents (e.g., propofol)
  - e) reversal agents (e.g., anticholinergics, anticholinesterases)
- 3.3 Explains the pharmacokinetics of medications including the following:
- a) topical anesthetic
  - b) analgesia (e.g., opioids, NSAIDs)
  - c) anxiolytics/sedatives (e.g., benzodiazepines)
  - d) antiemetics
  - e) vasopressors and positive inotropes
  - f) antihypertensives
  - g) antiarrhythmics
  - h) anticonvulsants (e.g., Neurontin)
  - i) anticoagulants
  - j) steroids
  - k) hypoglycemics
  - l) reversal agents
  - m) antacids/H2 antagonists/proton pump inhibitors
  - n) electrolytes
- 3.4 Assists with the preparation and implementation of anesthetic procedures including the following:
- a) general anesthetics
  - b) regional blocks
  - c) neuraxial blocks
  - d) sedation
  - e) other procedures (e.g., electroconvulsive therapy, dressing changes, cardioversion, blood patches)
  - f) other considerations (e.g., surgical safety checklist, positioning, client advocacy, legal, infection prevention and control [IPAC], referrals to interprofessional team member, congenital conditions/comorbidity)
- 3.5 Provides ongoing observation and monitoring of the client and interpretation of the data during the above anesthetic procedures including the following:
- a) physiological/physical status
    - i. respiratory including airway management
    - ii. hemodynamic (e.g., electrocardiogram [ECG], vital signs, fluid maintenance)
    - iii. surgical site infection
    - iv. safety (e.g., positioning, infection prevention and control)
    - v. comfort measures (e.g., pain, nausea)
  - b) psychosocial status (e.g., family, cultural consideration, anxiety, coping, anesthesia awareness)

- 3.6 Implements nursing interventions to manage client's urgent and emergent complications during the anesthesia phase related to treatment of the following:
- airway compromise/complications (e.g., obstruction, laryngospasm/bronchospasm, aspiration, difficult airway, respiratory arrest, obstructive sleep apnea, pulmonary emboli, somnolence)
  - hemorrhage (e.g., disseminated intravascular coagulation, lacerated blood vessel)
  - cardiac event (e.g., arrhythmias, cardiac arrest, acute coronary syndrome)
  - shock (e.g., hypovolemic, septic, cardiogenic)
  - allergic reactions (e.g., latex, medications, environment)
  - seizure/stroke
  - toxicity
  - malignant hyperthermia
  - compromised thermoregulation (e.g., hypothermia)
  - surgical-specific complications
- 3.7 Transitions the client to PostAnesthesia Phase I (e.g., communication and transportation).

#### IV. PostAnesthesia Phase I (37 competencies)

*PostAnesthesia Phase I occurs directly after the surgery and administration of sedation, analgesia and/or anesthetic agents/techniques. The PeriAnesthesia nurse focuses on care and life-sustaining interventions for the client based on subjective client data and objective nursing assessment data.*

##### ***The PeriAnesthesia nurse:***

- 4.1 Integrates client data received at transfer of care from the anesthesia phase.
- 4.2 Assesses client's initial physiological/physical condition (e.g., airway patency, vital signs, safety, level of consciousness [LOC], surgical site, and invasive lines).
- 4.3 Implements monitoring and supports client's needs using medical technology based on the client's presentation.
- 4.4 Performs ongoing assessment and management of client in PostAnesthesia Phase I including the following:
- airway patency and respiratory status
  - hemodynamic (e.g., ECG, vital signs, temperature, fluid maintenance)
  - neurological function (e.g., level of consciousness and alterations from preanesthetic state)
  - pain
  - postoperative nausea and vomiting (PONV)
  - cardiovascular status
  - level of emotional comfort (e.g., anesthesia awareness, postoperative emergence delirium)
  - position of the client
  - neurovascular/neuromuscular signs

- j) invasive lines (e.g., location of line(s), condition of IV site(s), and the amount, type and rate of solution(s) infusing, medications)
  - k) medication administration as per list in Anesthesia Phase
  - l) surgical site assessment (e.g., type and amount of drainage, drainage devices, condition of surgical site and management of anticipated/unanticipated events)
  - m) safety
  - n) surgical-specific considerations
  - o) infection prevention and control
  - p) discharge readiness at admission and ongoing
  - q) referrals to interprofessional team
- 4.5 Implements nursing interventions to manage client's urgent and emergent complications during PostAnesthesia Phase I related to treatment of the following:
- a) airway compromise/complications (e.g., obstruction, laryngospasm/bronchospasm, aspiration, difficult airway, respiratory arrest, obstructive sleep apnea, pulmonary emboli, somnolence)
  - b) hemorrhage (e.g., disseminated intravascular coagulation, lacerated blood vessels)
  - c) cardiac event (e.g., arrhythmias, cardiac arrest, acute coronary syndrome)
  - d) shock (e.g., hypovolemic, septic, cardiogenic)
  - e) allergic reactions (e.g., latex, medications, environment)
  - f) seizure/stroke
  - g) toxicity
  - h) malignant hyperthermia
  - i) compromised thermoregulation (e.g., hypothermia)
  - j) surgical-specific complications
- 4.6 Assesses client's physiological/physical transition readiness using discharge criteria, the following taking into consideration:
- a) pain
  - b) oxygenation/ventilation vital signs (e.g., temperature)
  - c) hydration (e.g., postoperative nausea and vomiting, voiding, hypovolemia, hypervolemia)
  - d) mobility
  - e) level of consciousness
  - f) surgical site
- 4.7 Transitions the client to the PostAnesthesia Phase II (e.g., communication, transportation).

## V. PostAnesthesia Phase II (39 competencies)

*The PostAnesthesia Phase II occurs directly after Phase I and includes inpatient settings or day surgery/discharge settings. The PeriAnesthesia nurse focuses on potential requirements for life-sustaining interventions and providing care for immediate physical/comfort and psychological needs based on subjective client data and objective nursing assessment data.*

### ***The PeriAnesthesia nurse:***

- 5.1 Integrates client data received at transfer of care from PostAnesthesia Phase I.
- 5.2 Assesses client's ongoing physiological/physical condition (e.g., respiratory status, vital signs, safety, level of consciousness, surgical site and invasive lines).
- 5.3 Continues monitoring and supports client needs using medical technology and/or psychosocial intervention based on the client's presentation.
- 5.4 Performs ongoing assessment and management of the client in PostAnesthesia Phase II including the following:
  - a) airway patency and respiratory status
  - b) hemodynamic (e.g., ECG, vital signs, temperature, fluid maintenance)
  - c) neurological function (e.g., level of consciousness and alterations from preanesthetic state)
  - d) pain
  - e) postoperative nausea and vomiting
  - f) cardiovascular status
  - g) level of emotional comfort
  - h) position of the client
  - i) neurovascular/neuromuscular signs
  - j) invasive lines (e.g., location of line(s), condition of IV site(s), and the amount, type and rate of solution(s) infusing, medications)
  - k) surgical site assessment (e.g., type and amount of drainage, drainage devices, condition of surgical site and management of unanticipated events)
  - l) safety
  - m) surgical-specific considerations
  - n) infection prevention and control
  - o) discharge readiness at admission and ongoing
  - p) referrals to interprofessional team
- 5.5 Implements nursing interventions to manage client's urgent and emergent complications during the PostAnesthesia Phase II related to treatment of the following:
  - a) physiological/physical complications (e.g., respiratory, cardiovascular, infections, surgical-specific)
  - b) psychological complications (e.g., delirium, anxiety, anesthesia awareness)
  - c) safety (e.g., falls, inability to mobilize)

- 5.6 Identifies psychosocial priorities for discharge, taking the following into consideration:
- a) client readiness (e.g., coping mechanisms, cultural/spiritual/religious beliefs, socio-economic status)
  - b) optimal therapeutic environment conducive to discharge
  - c) resources (e.g., equipment, escort, transportation requirements, support groups, contact numbers)
  - d) referrals (e.g., home care, physiotherapy, occupational therapy, follow-up appointments, rehabilitation or other support facilities)
- 5.7 Selects nursing interventions for discharge planning and client education, taking the following into consideration:
- a) client readiness (e.g., cognitive functioning, growth and developmental stages, physical limitations, safety)
  - b) instructional content (e.g., pain management, postoperative nausea and vomiting, surgical site expectation, activities of daily living [ADLs], infection prevention and control, safety)
  - c) available resources (e.g., supplies, instructional materials, demonstrations)
  - d) referrals (e.g., support systems, home care, rehabilitation and other support facilities, follow-up appointments)
  - e) optimal therapeutic environment conducive to education
- 5.8 Assesses client's physiological/physical transition readiness using discharge criteria, taking the following into consideration:
- a) pain
  - b) oxygenation/ventilation
  - c) vital signs (e.g., temperature)
  - d) hydration (e.g., postoperative nausea and vomiting, voiding)
  - e) mobility
  - f) level of consciousness
  - g) surgical site
- 5.9 Transitions the client to the Extended Observation Phase (e.g., communication, transportation).

## VI. Extended Observation Phase (23 competencies)

*The Extended Observation Phase focuses on preparing the client for self-care in 1) the home, 2) an inpatient setting or 3) extended care environment. The PeriAnesthesia nurse focuses on providing care to a client who requires ongoing nursing care, observation or interventions after discharge from PostAnesthesia Phase II.*

### ***The PeriAnesthesia nurse:***

- 6.1 Integrates data received at transfer of care from PostAnesthesia Phase II.
- 6.2 Assesses optimal postanesthesia outcomes and instructions on management of anticipated/unanticipated events of the client in a hospital/other extended-care facilities setting including the following:
  - a) physiological/physical (e.g., respiratory status, vital signs, safety, level of consciousness, surgical site, invasive lines)
  - b) psychosocial
- 6.3 Assesses optimal postanesthesia outcomes and provide instructions on management of anticipated/unanticipated events of the client at home (e.g., family support, access to health-care services, contact number).
- 6.4 Implements nursing interventions to address anticipated/unanticipated events related to surgical recovery including the following:
  - a) physiological/physical complications (e.g., persistent or increasing surgical site discomfort, nausea and vomiting, fever, infection, headaches, bleeding, urinary retention, regional anesthesia issues)
  - b) psychological complications (e.g., surgical course-related delirium, anxiety, anesthesia awareness)
  - c) safety-related complications (e.g., issues with mobilization/limitations, medications, legal considerations, infection prevention and control)
- 6.5 Identifies psychosocial priorities for clients for discharge from hospital/other extended-care facilities, taking the following into consideration:
  - a) client readiness (e.g., coping mechanisms, cultural/spiritual/religious beliefs, socio-economic status)
  - b) optimal therapeutic environment conducive to discharge
  - c) resources (e.g., equipment, escort, transportation requirements, support groups, contact numbers)
  - d) referrals (e.g., home care, physiotherapy, occupational therapy, follow-up appointments, other support facilities)
- 6.6 Selects nursing interventions for clients for discharge from hospital/other extended-care facilities, taking the following into consideration:
  - a) client readiness (e.g., cognitive functioning, growth and development stages, physical limitations, safety)
  - b) instructional content (e.g., pain management, postoperative nausea and vomiting, surgical site expectation, activities of daily livings [ADLs], infection prevention and control, safety)

- c) available resources (e.g., supplies, instructional materials, demonstrations)
  - d) referrals (e.g., support systems, home care, rehabilitation and other support facilities, follow-up appointments)
- 6.7 Assesses client's physiological/physical discharge readiness using discharge criteria, taking the following into consideration:
- a) pain
  - b) oxygenation/ventilation
  - c) vital signs (e.g., temperature)
  - d) hydration (e.g., postoperative nausea and vomiting, voiding)
  - e) mobility
  - f) level of consciousness
  - g) surgical site
- 6.8 Discharges client to self-care or extended-care facility (e.g., documentation, discharge summary).