

Exam Blueprint and Specialty Competencies

Introduction – Blueprint for the Medical-Surgical Nursing for LPNs/RPNS Certification Exam

The primary function of the blueprint for the CNA Medical-Surgical Nursing for LPNs/RPNS 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 medical-surgical nursing for LPNs/RPNS.

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 licensed or registered medical-surgical practical 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 Medical-Surgical Nursing for LPNs/RPNS Certification Exam is a criterion-referenced exam.¹ 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 Medical-Surgical Nursing for LPNs/RPNS Certification Exam, the content consists of the competencies of a fully competent practising licensed or registered medical-surgical practical 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

The final list of competencies was updated and approved by the Medical-Surgical Nursing for LPNs/RPNS Certification Exam Committee.

¹ 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

In developing the set of competencies for licensed or registered practical medical-surgical nurses, the following assumptions, based on current national standards for nursing practice, were made:

The Practice Environment

- The medical-surgical environment is challenging, complex, ethically demanding, culturally diverse, technological and ever-changing.
- The care of medical-surgical clients is driven by best practice standards and the efficient utilization of internal and external resources.
- The medical-surgical environment is the cornerstone for teaching, acquisition and consolidation of nursing knowledge, skills and critical thinking.
- The medical-surgical nurse practises in a variety of capacities and settings in an environment that promotes safe, efficient and effective health-care services.
- Medical-surgical care is provided at the primary, secondary and tertiary levels in community, acute, chronic and long-term/continuing care settings. Examples include inpatient and outpatient settings, day surgeries, adult medical clinics, primary health clinics, community clinics, pre-admission clinics and military assignments.
- Holistic medical-surgical care is best provided through the collaborative practice of members of an interprofessional team and community partners to meet the physical, emotional, social, spiritual and cultural needs of clients and their families.

Client

- The medical-surgical client varies in age, race, gender, language, religion, education, culture, socio-economic background, sexual orientation and identity.
- The medical-surgical client often has multiple complex comorbidities of increasing acuity and chronicity, and may have needs that vary from ambulatory to total care across the adult lifespan.
- The medical-surgical client and their family collaborate as part of the health-care team.

Family

- The family is defined by the client and may participate in care.

Licensed or Registered Medical-Surgical Practical Nurse

- The medical-surgical practical nurse is a leader and pivotal member of the interprofessional health-care team who facilitates timely assessment, care, treatment, education, discharge and follow-up.
- The medical-surgical practical nurse has primary responsibility for prioritizing, organizing and coordinating the care of multiple clients with ever-changing, complex, multi-system issues.
- The medical-surgical practical nurse has responsibility for encouraging health promotion and illness prevention.
- The medical-surgical practical nurse provides evidence-informed care while maintaining professional competence through ongoing education, research and skill development.
- The medical-surgical practical nurse strives to achieve a smooth transition of clients and families along the health-care continuum and within the health-care system.
- The medical-surgical practical nurse respects the client's rights to their perception of the health problem and self-determination of care, while understanding the impact of the determinants of health.
- The medical-surgical practical nurse facilitates the client's and family's ability to cope with stressors related to illness and the environment, and promotes access to appropriate and available resources.
- The medical-surgical practical nurse advocates for inclusive, ethical, safe, quality care environments promoting the best possible client outcomes.
- The medical-surgical practical nurse has professional accountability to guide, mentor and share experiences with nurses, students and other health-care providers.
- The medical-surgical practical nurse continuously adapts in a technologically advancing health-care system.

Health

- Health is a personal concept viewed within the context of the client's personal, cultural, religious and ethical value systems.
- Health is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity.
- Health behaviours are directed toward promotion, prevention, maintenance, rehabilitation, restoration or palliation.
- Vital signs include temperature, heart rate, respiratory rate, blood pressure, oxygen saturation and perception of pain.
- Pain is what the client says it is.

Competency Categories

The competencies are classified under a twelve-category scheme commonly used to organize medical-surgical nursing for LPNs/RPNs.

Some of the competencies lend themselves to one or more of the categories; therefore, these twelve 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.

Competency Sampling

Using the grouping and the guideline that the Medical-Surgical Nursing for LPNs/RPNs Certification Exam will consist of approximately 165 questions, the categories have been given the following weights in the total examination.

Table 1: Competency Sampling

Categories	Approximate weights in the total examination
Neurological System	8-12%
Eye, Ear, Nose and Throat (EENT) System	3-7%
Cardiovascular System	8-12%
Respiratory System	8-12%
Gastrointestinal System	6-10%
Genitourinary and Reproductive systems	6-10%
Musculoskeletal and Integumentary Systems	5-9%
Immunological, Hematological and Endocrinological Systems	6-10%
Infectious Diseases	5-9%
Pain	9-13%
Mental Health	6-10%
Professional, Legal and Ethical Issues	5-9%

Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the Medical-Surgical Nursing for LPNs/RPNs 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 Medical-Surgical Nursing for LPNs/RPNS Certification Exam, 60 to 75 per cent of the questions are presented as independent questions and 25 to 40 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 Medical-Surgical Nursing for LPNs/RPNS Certification Exam is aimed at one of three levels: knowledge/comprehension, application and critical thinking.²

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 licensed or registered medical-surgical practical nurse with at least two years of experience should be able to identify cause-and-effect

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

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 2: Distribution of Questions for Each Level of Cognitive Ability

Cognitive Ability Level	Percentage of questions on Medical-Surgical Nursing for LPNs/RPNs Exam
Knowledge/Comprehension	10-25%
Application	50-65%
Critical Thinking	20-35%

Contextual Variables

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

Client Health Situation: In the development of the Medical-Surgical Nursing for LPNs/RPNs Certification Exam, the client is viewed holistically. The client health situations presented also reflect a cross-section of health situations encountered by licensed or registered medical-surgical practical nurses.

Health-Care Environment: Medical-surgical nursing for LPNs/RPNs is practised in the primary, secondary and tertiary levels in community, acute, chronic and long-term/continuing care settings. However, medical-surgical nursing for LPNs/RPNs can also be practised in other settings. Therefore, for the purposes of the Medical-Surgical Nursing for LPNs/RPNs Certification Exam, the health-care environment is specified only where it is required for clarity or in order to provide guidance to the examinee.

Conclusions

The blueprint for the Medical-Surgical Nursing for LPNs/RPNs Certification Exam is the product of a collaborative effort between CNA, YAS and a number of medical-surgical nurses across Canada. Their work has resulted in a compilation of the competencies required of practising licensed or registered practical medical-surgical nurses and has helped determine how those competencies will be measured on the Medical-Surgical Nursing for LPNs/RPNs Certification Exam. A summary of these guidelines can be found in the summary chart Medical-Surgical Nursing for LPNs/RPNs Certification Development Guidelines.

Medical-surgical nursing for LPNs/RPNs 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

Medical-Surgical Nursing for LPNs/RPNs Exam Development Guidelines

Structural Variables		
Exam Length and Format	Approximately 165 objective questions	
Question Presentation	60-75% independent questions 25-40% case-based questions	
Cognitive Ability Levels of Questions	Knowledge/Comprehension	10-25% of questions
	Application	50-65% of questions
	Critical Thinking	20-35% of questions
Competency Categories	Neurological System	8-12% of questions
	Eye, Ear, Nose and Throat (EENT) System	3-7% of questions
	Cardiovascular System	8-12% of questions
	Respiratory System	8-12% of questions
	Gastrointestinal System	6-10% of questions
	Genitourinary and Reproductive Systems	6-10% of questions
	Musculoskeletal and Integumentary Systems	5-9% of questions
	Immunological, Hematological and Endocrinological Systems	6-10% of questions
	Infectious Diseases	5-9% of questions
	Pain	9-13% of questions
	Mental Health	6-10% of questions
	Professional, Legal and Ethical Competencies	5-9% of questions
Contextual Variables		
Client Age and Gender	In the development of the Medical-Surgical Nursing for LPNs/RPNs Certification Exam, questions will include only adult clients. The age of the client will be determined by the presented health situations. The questions will represent all genders and identities.	
Client Culture	Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.	
Client Health Situation	In the development of the Medical-Surgical Nursing for LPNs/RPNs Certification Exam, the client is viewed holistically. The client health situations presented also reflect a cross-section of health situations encountered by medical surgical licensed or registered practical nurses.	
Health-Care Environment	Medical-surgical nursing for LPNs/RPNs is practised in the primary, secondary and tertiary levels in community, acute, chronic and long-term/continuing care settings. However, medical-surgical nursing for LPNs/RPNs can also be practised in other settings. Therefore, for the purposes of the Medical-Surgical Nursing for LPNs/RPNs Certification Exam, the health-care environment is specified only where it is required for clarity or in order to provide guidance to the examinee.	

The Medical-Surgical Nursing for LPNs/RPNs Certification Exam

List of Competencies

Neurological System

The Licensed or Registered medical-surgical practical nurse:

- 1.1 Recognizes clinical presentation of and cares for clients with:
 - a) neuromuscular diseases (e.g., Parkinson's, ALS, MS);
 - b) altered levels of consciousness (e.g., postoperative delirium, sepsis);
 - c) cerebrovascular incidences (e.g., transient ischemic attacks, cerebrovascular accidents);
 - d) seizures/status epilepticus;
 - e) spinal cord injuries;
 - f) head injuries (e.g., concussions, hematomas);
 - g) headaches (e.g., cluster, tension, migraines); and
 - h) cancers (e.g., brain, spinal cord, non-malignant).
- 1.2 Cares for clients with or undergoing:
 - a) lumbar punctures;
 - b) diagnostics (e.g., MRI, CT, angiograms, EEG); and
 - c) neurological surgeries (e.g., craniotomies, discectomies, shunts).
- 1.3 Assesses the neurological system for subtle changes using:
 - a) trending of vital signs;
 - b) motor sensory assessments;
 - c) cognitive screenings;
 - d) laboratory results; and
 - e) information obtained from the client and family.
- 1.4 Determines the appropriate nursing diagnosis for clients with neurological needs.
- 1.5 Plans appropriate interventions to manage and monitor neurological status by:
 - a) monitoring fluid and electrolyte balances;
 - b) administering and monitoring pharmacological agents;
 - c) implementing non-pharmacological strategies;
 - d) providing a safe client environment (e.g., fall risk prevention, seizure precautions, behavioural management); and
 - e) addressing the client's/family's psychosocial needs (e.g., body image, sexuality).
- 1.6 Recognizes and manages actual and potential neurological complications (e.g., bleeding/hemorrhage, headaches, seizures, anxiety, depression, withdrawal).
- 1.7 Evaluates interventions for clients with neurological care needs (e.g., adapting the plan, communicating/documenting the plan).

- 1.8 Develops an individualized teaching plan for clients with neurological care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, safety, health promotion, community resources).

Eye, Ear, Nose and Throat (EENT) System

The Licensed or Registered medical-surgical practical nurse:

- 2.1 Recognizes clinical presentation of and cares for clients with:
- a) inflammatory and infectious processes (e.g., stomatitis, pharyngitis, epiglottitis, sinusitis);
 - b) hearing impairment (e.g., sensorineural, conductive);
 - c) visual impairment (e.g., macular degeneration, cataracts, glaucoma);
 - d) facial trauma (e.g., fractures, reconstructions);
 - e) epistaxis; and
 - f) cancers (e.g., oral-pharyngeal, thyroid, esophageal).
- 2.2 Cares for clients with or undergoing:
- a) incision and drainage;
 - b) nasal packing;
 - c) swallowing assessments;
 - d) eye surgery (e.g., cataracts, glaucoma); and
 - e) neck and throat surgery (e.g., tonsillectomy, thyroidectomy, tracheotomy).
- 2.3 Assesses the EENT system using:
- a) trending of vital signs;
 - b) physical assessments; and
 - c) laboratory results.
- 2.4 Determines the appropriate nursing diagnosis for clients with EENT needs.
- 2.5 Plans appropriate interventions to manage and monitor EENT status by:
- a) maintaining adequate airway;
 - b) optimizing oxygenation;
 - c) monitoring fluid and electrolyte balances;
 - d) providing nutritional support and monitoring;
 - e) administering and monitoring pharmacological agents;
 - f) implementing non-pharmacological strategies;
 - g) providing a safe client environment (e.g., wire cutters, tracheostomy tray, fall risk prevention);
 - h) addressing impaired communication (e.g., oral, visual, auditory); and
 - i) addressing the client's/family's psychosocial needs (e.g., body image).
- 2.6 Recognizes and manages EENT complications (e.g., bleeding/hemorrhage, airway patency).
- 2.7 Evaluates interventions for clients with EENT care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 2.8 Develops an individualized teaching plan for clients with EENT care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, health promotion, community resources).

Cardiovascular System

The Licensed or Registered medical-surgical practical nurse:

- 3.1 Recognizes clinical presentation of and cares for clients with:
 - a) heart failure (e.g., pulmonary edema);
 - b) venous thromboembolism;
 - c) acute coronary syndromes;
 - d) heart conduction disturbances;
 - e) infectious and inflammatory processes (e.g., endocarditis, pericarditis, systemic sepsis);
 - f) hypertension/hypotension;
 - g) shock;
 - h) vascular diseases; and
 - i) cardiac arrest.
- 3.2 Cares for clients with or undergoing:
 - a) vascular access devices;
 - b) diagnostic tests (e.g., exercise tolerance test, non-stress test, electrocardiograms);
 - c) pacemaker;
 - d) angiograms, angioplasty and cardioversion; and
 - e) vascular surgery (e.g., femoral popliteal bypass, stenting, CABG).
- 3.3 Assesses the cardiovascular system using:
 - a) trending of vital signs;
 - b) weight gain/loss;
 - c) cardiac and vascular assessments;
 - d) laboratory results; and
 - e) cardiac equipment (e.g., resuscitation, telemetry, ECGs).
- 3.4 Determines the appropriate nursing diagnosis for clients with cardiovascular needs.
- 3.5 Plans appropriate interventions to manage and monitor cardiovascular status by:
 - a) monitoring fluid and electrolyte balances;
 - b) administering and monitoring pharmacological agents;
 - c) implementing non-pharmacological strategies;
 - d) providing a safe client environment (e.g., fall risk prevention); and
 - e) addressing the client's/family's psychosocial needs (e.g., sexuality).
- 3.6 Recognizes and manages actual or potential cardiovascular complications (e.g., embolisms, bleeding/hemorrhage, shock).
- 3.7 Evaluates interventions for clients with cardiovascular care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 3.8 Develops an individualized teaching plan for clients with cardiovascular care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, safety, health promotion, community resources).

Respiratory System

The Licensed or Registered medical-surgical practical nurse:

- 4.1 Recognizes clinical presentation of and cares for clients with:
 - a) partial and complete airway obstruction (e.g., foreign bodies, mucus plugs);
 - b) restrictive lung diseases (e.g., pneumonia);
 - c) obstructive lung diseases (e.g., COPD, emphysema, asthma);
 - d) interstitial lung diseases (e.g., cystic fibrosis);
 - e) pulmonary emboli;
 - f) atelectasis and pleural effusion;
 - g) hemo/pneumothorax and empyema;
 - h) dyspnea and tachypnea;
 - i) sleep apnea; and
 - j) cancers (e.g., lung, esophageal).
- 4.2 Cares for clients with or undergoing:
 - a) chest tube (e.g., insertion, removal, maintenance);
 - b) pleurocentesis;
 - c) pleurodesis;
 - d) diagnostic tests (e.g., bronchoscopy, pulmonary function test); and
 - e) surgery (e.g., lobectomy, tracheostomy, pneumonectomy, thoracotomy).
- 4.3 Assesses the respiratory system using:
 - a) trending of vital signs;
 - b) fluid balance;
 - c) physical assessments; and
 - d) laboratory results.
- 4.4 Determines the appropriate nursing diagnosis for clients with respiratory needs.
- 4.5 Plans appropriate interventions to manage and monitor respiratory status by:
 - a) maintaining adequate airways;
 - b) managing non-invasive positive pressure ventilation devices (e.g., CPAP, Bi-PAP);
 - c) optimizing gaseous exchange (e.g., positioning, mobilizing, pain management, oxygen delivery and titration, suctioning);
 - d) administering and monitoring pharmacological agents;
 - e) monitoring fluid and electrolyte balances;
 - f) implementing non-pharmacological strategies;
 - g) providing a safe client environment (e.g., fall risk prevention); and
 - h) addressing the client's/family's psychosocial needs.
- 4.6 Recognizes and manages actual or potential respiratory complications (e.g., embolisms, bleeding/hemorrhage, infection).
- 4.7 Evaluates interventions for clients with respiratory care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 4.8 Develops an individualized teaching plan for clients with respiratory care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, safety, health promotion, community resources).

Gastrointestinal System

The Licensed or Registered medical-surgical practical nurse:

- 5.1 Recognizes clinical presentation of and cares for clients with:
 - a) mechanical gastrointestinal disorders (e.g., bowel obstruction, constipation, diarrhea, hernia, dysphagia, ischemia);
 - b) gastrointestinal and dietary disorders (e.g., pancreatitis, GERD, appendicitis, pernicious anemia);
 - c) liver diseases (e.g., cirrhosis, hepatic failure);
 - d) inflammatory bowel diseases (e.g., Crohn's disease, ulcerative colitis, diverticulitis);
 - e) irritable bowel syndrome;
 - f) gallbladder diseases (e.g., cholelithiasis, cholecystitis);
 - g) gastrointestinal bleeds (e.g., esophageal varices, peptic ulcers, upper and lower bleeds); and
 - h) cancers (e.g., bowel, pancreatic).
- 5.2 Cares for clients with or undergoing:
 - a) diagnostic imaging (e.g., upper and lower GI series);
 - b) scopes;
 - c) insertion of enteral feeding tubes (e.g., PEG);
 - d) paracentesis; and
 - e) surgery (e.g., ostomies, resections, bariatric).
- 5.3 Assesses the gastrointestinal system using:
 - a) trending of vital signs;
 - b) fluid balance;
 - c) weight gain/loss;
 - d) abdominal assessments;
 - e) nutritional assessments; and
 - f) laboratory results.
- 5.4 Determines the appropriate nursing diagnosis for clients with gastrointestinal needs.
- 5.5 Plans appropriate interventions to manage and monitor gastrointestinal health and function by:
 - a) managing nasogastric tubes, rectal tubes, drains and ostomies;
 - b) performing physical assessments;
 - c) administering and monitoring pharmacological agents;
 - d) implementing non-pharmacological strategies;
 - e) providing and monitoring nutritional support (e.g., total parenteral nutrition, enteral feeding, therapeutic diets);
 - f) monitoring fluid and electrolyte balances;
 - g) providing a safe client environment (e.g., fall risk prevention, safe patient handling); and
 - h) addressing the client's/family's psychosocial needs (e.g., body image, sexuality).
- 5.6 Recognizes and manages actual or potential gastrointestinal complications (e.g., obstructions, paralytic ileus, wound dehiscence/evisceration, perforation).
- 5.7 Evaluates interventions for clients with gastrointestinal care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).

- 5.8 Develops an individualized teaching plan for clients with gastrointestinal care needs (e.g., the client's readiness to learn, evaluating the client's understanding, dietary teaching, discharge planning, safety, health promotion, community resources).

Genitourinary and Reproductive Systems

The Licensed or Registered medical-surgical practical nurse:

- 6.1 Recognizes clinical presentation of and cares for clients with:
- a) acute/chronic renal failure (e.g., rhabdomyolysis);
 - b) infections (e.g., UTI, glomerulonephritis, pyelonephritis, prostatitis, cystitis);
 - c) incontinence, urinary retention and obstruction;
 - d) benign prostatic hypertrophy;
 - e) prolapse;
 - f) urolithiasis; and
 - g) cancers (e.g., renal, prostate, ovarian, breast).
- 6.2 Cares for clients with or undergoing:
- a) diagnostic imaging/procedure;
 - b) urinary diversions (e.g., drainage systems);
 - c) dialysis (e.g., peritoneal, hemodialysis);
 - d) nephrectomy and kidney transplant/donation;
 - e) male-specific surgical procedures (e.g., TURP);
 - f) female-specific surgical procedures (e.g., hysterectomy);
 - g) gender reassignment surgery; and
 - h) reconstructions (e.g., breast, urologic).
- 6.3 Assesses the genitourinary and/or reproductive systems using:
- a) trending of vital signs;
 - b) fluid balance;
 - c) urine/vaginal flow characteristics;
 - d) tube and drain assessments;
 - e) voiding patterns; and
 - f) laboratory results.
- 6.4 Determines the appropriate nursing diagnosis for clients with genitourinary and reproductive needs.
- 6.5 Plans appropriate interventions to manage and monitor genitourinary and/or reproductive status by:
- a) optimizing genitourinary function (e.g., early catheter removal, bladder training);
 - b) assessing the effects of nephrotoxic agents or delayed clearance (e.g., diuretics, vasopressors, antibiotics, radiographic dyes);
 - c) maintaining continuous bladder irrigation;
 - d) administering and monitoring pharmacological agents;
 - e) implementing non-pharmacological strategies;
 - f) monitoring fluid and electrolyte balances;
 - g) providing a safe client environment (e.g., fall risk prevention, infection control); and
 - h) addressing the client's/family's psychosocial needs (e.g., body image, sexuality, incontinence).

- 6.6 Recognizes and manages actual or potential genitourinary and/or reproductive complications (e.g., bleeding/hemorrhage, shock, infection).
- 6.7 Evaluates interventions for clients with genitourinary and/or reproductive care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 6.8 Develops an individualized teaching plan for clients with genitourinary and/or reproductive care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, safety, health promotion, community resources).

Musculoskeletal and Integumentary Systems

The Licensed or Registered medical-surgical practical nurse:

- 7.1 Recognizes clinical presentation of and cares for clients with:
 - a) osteoarthritis;
 - b) pathological, traumatic and surgical fractures;
 - c) muscle, soft tissue and ligament injuries;
 - d) infections (e.g., necrotizing fasciitis, cellulitis, osteomyelitis, abscesses, sepsis);
 - e) skin conditions (e.g., psoriasis, dermatitis, eczema);
 - f) ulcers (e.g., pressure, venous, arterial, diabetic); and
 - g) cancers (e.g., skin, bone).
- 7.2 Cares for clients with or undergoing:
 - a) joint replacements and revisions;
 - b) casts/braces (e.g., backslabs, splints);
 - c) internal/external fixations (e.g., traction, pinning, plating, fusions);
 - d) amputations;
 - e) wounds (e.g., surgical wounds, skin grafts, pressure ulcers, burns); and
 - f) biopsies.
- 7.3 Assesses the musculoskeletal and integumentary system using:
 - a) trending of vital signs;
 - b) neurological/vascular assessments;
 - c) physical assessments;
 - d) mobility assessments;
 - e) risk factor assessments (e.g., wound assessment tools); and
 - f) laboratory results.
- 7.4 Determines the appropriate nursing diagnosis for clients with musculoskeletal and integumentary needs.
- 7.5 Plans appropriate interventions to manage and monitor musculoskeletal and integumentary status by:
 - a) administering and monitoring pharmacological agents;
 - b) implementing non-pharmacological strategies;
 - c) monitoring fluid and electrolyte balances;
 - d) managing changes in neurovascular assessment;
 - e) managing assistive devices (e.g., braces, walkers, prostheses);
 - f) promoting healthy skin (e.g., pressure redistribution strategies);

- g) managing wounds (e.g., negative pressure therapy, wound care principles);
 - h) promoting optimal nutrition;
 - i) providing a safe client environment (e.g., fall risk prevention, safe patient handling); and
 - j) addressing the client's/family's psychosocial needs (e.g., body image, sexuality).
- 7.6 Manages actual or potential musculoskeletal and integumentary complications (e.g., embolisms, bleeding/hemorrhage, infection, compartment syndrome, wound dehiscence).
- 7.7 Evaluates interventions for clients with musculoskeletal and integumentary care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 7.8 Develops an individualized teaching plan for clients with musculoskeletal and integumentary care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, safety, health promotion, community resources).

Immunological, Hematological and Endocrinological Systems

The Licensed or Registered medical-surgical practical nurse:

- 8.1 Recognizes clinical presentation of and cares for clients with:
- a) diabetes;
 - b) thyroid conditions;
 - c) adrenal gland conditions;
 - d) blood dyscrasia;
 - e) immunosuppression;
 - f) autoimmune disorders; and
 - g) cancers (e.g., leukemia, lymphoma).
- 8.2 Cares for clients with or undergoing:
- a) thyroidectomy;
 - b) pancreatectomy;
 - c) anti-neoplastic agents;
 - d) bone marrow aspirate;
 - e) blood and blood product transfusion;
 - f) hormone therapy; and
 - g) immunosuppressant therapy.
- 8.3 Assesses the immunological, hematological and endocrinological systems using:
- a) trending of vital signs;
 - b) physical assessments;
 - c) fluid balance;
 - d) weight gain/loss;
 - e) nutritional assessments;
 - f) neurological/vascular assessments; and
 - g) laboratory results.
- 8.4 Determines the appropriate nursing diagnosis for clients with immunological, hematological and endocrinological needs.

- 8.5 Plans appropriate interventions to manage and monitor hematological and endocrinological status by:
 - a) managing blood glucose levels;
 - b) administering blood and blood products;
 - c) administering and monitoring pharmacological agents;
 - d) implementing non-pharmacological strategies;
 - e) promoting optimal nutrition;
 - f) initiating precautions (e.g., isolation);
 - g) providing and promoting a safe client environment (e.g., fall risk prevention); and
 - h) addressing the client's/family's psychosocial needs (e.g., body image, sexuality).
- 8.6 Recognizes and manages actual or potential immunological, hematological and endocrinological complications (e.g., allergies, bleeding/hemorrhage, septic shock, infection).
- 8.7 Evaluates interventions for clients with immunological, hematological and endocrinological care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 8.8 Develops an individualized teaching plan for clients with immunological, hematological and endocrinological care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, medication regimens, health promotion, community resources).

Infectious Diseases

The Licensed or Registered medical-surgical practical nurse:

- 9.1 Recognizes clinical presentation of and cares for clients with:
 - a) drug-resistant organisms;
 - b) non-communicable infections;
 - c) communicable infections;
 - d) severe respiratory infection;
 - e) systemic inflammatory response syndrome;
 - f) emerging infections; and
 - g) sexually transmitted infections.
- 9.2 Cares for clients with or undergoing:
 - a) diagnostic tests;
 - b) wounds; and
 - c) infection control precautions.
- 9.3 Assesses client risk factors related to infectious diseases (e.g., social determinants of health).
- 9.4 Determines the appropriate nursing diagnosis for clients with infectious disease care needs.
- 9.5 Plans appropriate interventions to manage and monitor clients with infectious disease by:
 - a) initiating and maintaining isolation precautions for the nurse and/or family;
 - b) notifying an Infection Prevention and Control Practitioner and/or a public health agency;
 - c) collecting specimens;
 - d) administering and monitoring pharmacological agents;
 - e) implementing non-pharmacological strategies;

- f) providing a safe client environment (e.g., personal protective equipment (PPE), fall risk prevention);
 - g) managing the psychosocial implications of living with communicable disease; and
 - h) addressing the client's/family's psychosocial needs (e.g., precautionary measures).
- 9.6 Recognizes and manages actual or potential complications related to infectious diseases (e.g., allergies, systemic complications, shock).
- 9.7 Evaluates interventions for clients with infectious disease care needs (e.g., recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 9.8 Develops an individualized teaching plan for clients with infectious disease care needs (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, medication regimens, health promotion, community resources).

Pain

The Licensed or Registered medical-surgical practical nurse:

- 10.1 Recognizes clinical presentation of and cares for clients with acute or chronic:
- a) neuropathic pain (e.g., trigeminal pain, phantom limb);
 - b) visceral pain (e.g., referred pain);
 - c) somatic pain (e.g., sprains, lacerations); and
 - d) psychogenic pain (e.g., emotional distress).
- 10.2 Cares for clients with or undergoing:
- a) patient-controlled analgesia (PCA);
 - b) nerve blocks;
 - c) epidurals; and
 - d) intrathecal.
- 10.3 Assesses pain (e.g., functional limitations, physical examinations, psychosocial evaluations, pain scales, vital signs, pain history, pain management, subjective health status).
- 10.4 Determines the appropriate nursing diagnosis for clients with pain care needs by:
- a) considering interactions between prescribed medications and substances; and
 - b) safely administering, monitoring and counselling regarding pharmacological therapies (e.g., opioid agonist therapies, anti-craving medication, relapse prevention medication, abstinence support).
- 10.5 Plans appropriate interventions to manage and monitor clients dealing with pain by:
- a) implementing and reassessing pain management regimens (e.g., breakthrough, mode of delivery);
 - b) administering adjuvant therapies (e.g., tricyclic antidepressants, anticonvulsants, sedatives);
 - c) implementing non-pharmacological therapies (e.g., relaxation, deep breathing, massage);
 - d) managing and monitoring side effects (e.g., constipation, nausea);
 - e) delivering appropriate pain control interventions for clients who use substances; and
 - f) addressing the client's/family's psychosocial needs (e.g., palliative/end-of-life care, cultural care, spiritual care).
- 10.6 Recognizes and manages actual or potential complications related to pain (e.g., allergies/sensitivities, respiratory distress).

- 10.7 Evaluates interventions for clients with pain care needs (e.g., age-related medication considerations, recognizing subtle changes, adapting the plan, communicating/documenting the plan).
- 10.8 Develops an individualized teaching plan for clients experiencing pain (e.g., the client's readiness to learn, evaluating the client's understanding, discharge planning, elimination, medication regimens, end-of-life care, health promotion, community resources).

Mental Health

The Licensed or Registered medical-surgical practical nurse:

- 11.1 Recognizes clinical presentation of and cares for clients with:
 - a) pre-existing mental health conditions;
 - b) delirium;
 - c) dementia;
 - d) depression; and
 - e) substance dependency (e.g., alcohol, nicotine, cannabis, illicit drugs, prescription drugs).
- 11.2 Assesses the mental health of clients using:
 - a) trending of vital signs;
 - b) screening tools;
 - c) medication history; and
 - d) laboratory results.
- 11.3 Determines the appropriate nursing diagnosis for clients with mental health care needs.
- 11.4 Plans appropriate interventions to manage and monitor mental health status by:
 - a) utilizing behaviour management techniques;
 - b) promoting the client's independence and capabilities;
 - c) providing a safe client environment (e.g., crisis intervention, environmental modifications, constant care, minimizing risk factors, least restraints);
 - d) administering and monitoring pharmacological agents;
 - e) implementing non-pharmacological agents to manage underlying cause of behaviours (e.g., therapeutic communication, complementary therapies, family involvement, visualization, relaxation techniques, support groups); and
 - f) addressing the client's/family's psychosocial needs.
- 11.5 Recognizes and manages actual or potential complications related to mental health (e.g., safety, withdrawal, seizures, suicide, violence/aggression).
- 11.6 Routinely screens all clients for substance use to identify problematic use and opportunities to provide intervention (e.g., harm reduction, education, treatment).
- 11.7 Evaluates interventions for clients with mental health care needs (e.g., age-related medication considerations, recognizing subtle changes, adapting the plan, communicating/documenting the plan).

- 11.8 Develops an individualized teaching plan for clients with mental health care needs (e.g., the client's and/or family's readiness to learn, evaluating the client's understanding, discharge planning, medication regimens, health promotion, community support).

Professional, Legal and Ethical Competencies

The Licensed or Registered medical-surgical practical nurse:

- 12.1 Ensures client confidentiality and privacy (e.g., electronic health records, social media, over-capacity facilities).
- 12.2 Demonstrates accountability in nursing practice.
- 12.3 Prioritizes nursing care and adapts to varying or unexpected situations (e.g., staff shortages, skill mix changes, client acuity/intensity, working with unregulated health workers).
- 12.4 Provides interprofessional care (e.g., collaboration, communication, advocacy).
- 12.5 Approaches conflict situations in a constructive and collaborative manner and reports appropriately (e.g., violence, family conflict, abuse, aggression, neglect).
- 12.6 Recognizes ethical issues and seeks assistance in addressing them (e.g., refusal of blood products, patient's right to refuse, withdrawal of treatment, culturally congruent care, advance health-care directives).
- 12.7 Respects the person's values, beliefs and decisions related to MAiD even if they are different than the nurse's own.
- 12.8 Understands that MAiD may have a personal impact affecting their practice and takes steps to seek support as needed.
- 12.9 Understands that symptoms have culture-specific meanings and that clients from diverse backgrounds will describe their symptoms differently, have different ideas of what might have caused them, have different acceptance, and have different ideas about what kind of treatment to seek.
- 12.10 Recognizes the value of Indigenous healing practices and uses them in treating Indigenous clients in collaboration with Indigenous healers and Elders when requested by Indigenous clients.
- 12.11 Participates in professional development.