NURSING COMPETENCIES

for Licensed Practical Nurses in Manitoba

September 2026

College of Licensed Practical Nurses of Manitoba

ACKNOWLEDGMENT

The College of Licensed Practical Nurses of Manitoba would like to acknowledge the dedication, passion, and commitment of all those who contributed their knowledge, insight, and expertise in the development of the Nursing Competencies for Licensed Practical Nurses in Manitoba.

TERRITORIAL ACKNOWLEDGEMENT

The CLPNM acknowledges that we regulate the practical nursing profession in the traditional territories of the Anishinaabeg (Ojibwe), Ininew (Cree), Anisininew, Dakota, Dene, Inuit, and Red River Métis. Read our full Territorial Acknowledgement

REVISION HISTORY

This document was first published in 2016. Updates to the document were made in 2019, 2021, 2022 and 2026. Some revisions were clarifications. Others adjusted the competencies in response to changes in practice and availability of educational opportunities for LPNs.

CONTACT INFORMATION

College of Licensed Practical Nurses of Manitoba
463 St. Anne's Road
Winnipeg, Manitoba
R2M 3C9

Telephone: 204-663-1212
Toll Free: 1-877-663-1212
Web: www.clpnm.ca

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PURPOSE

This document serves as a reference for Licensed Practical Nurses (LPNs), the public, employers, and other stakeholders about the Practical Nursing profession's scope of practice in Manitoba.

The term "scope of practice" refers to the outer range of activities that members of a regulated profession are educated and legally authorized to provide. The legal authority for the practical nursing profession's scope of practice is found in Manitoba's Licensed Practical Nurses Act (the LPN Act).

Section 2 of the LPN Act states:

> The practice of practical nursing is the provision of nursing services for the purpose of assessing and treating health conditions, promoting health, preventing illness, and assisting individuals, families, and groups to achieve an optimal state of health.

While this scope of practice statement appears broad, readers must be aware that the practice of the profession is guided, always, by the Standards of Practice, the Code of Ethics and the practice directions of the College of Licensed Practical Nurses of Manitoba (CLPNM). All LPNs are accountable for adhering to their professional standards, which exist to ensure that LPN practice is carried out in a manner that serves and protects the public interest.

HOW TO INTERPRET THIS DOCUMENT

This document sets out a range of competencies that fall within the scope of the profession. It must not be interpreted in isolation of other documents that guide and establish limits on LPN practice, nor should it be interpreted as a guide to any one LPN's individual competence. As per the Standards of Practice of Manitoba's practical nursing profession, LPNs must only engage in practical nursing to the extent that they are competent to do so.

All beginning practitioners will demonstrate the entry-level competencies of the profession, which are set out in the Entry-Level Competencies for the Licensed Practical Nurse in Manitoba, 2022. Beyond those, the competencies of each individual LPN will fall within the outer boundaries of their professional scope of practice and will vary based on the individual's post-basic education and training, employer policies, and experience.

Before carrying out any nursing activity described in this document, LPNs must self-assess and accept responsibility for ensuring they have acquired the comprehensive knowledge, judgment and skill needed to perform the activity safely and in the client's best interest. Readers who require further information on how to determine appropriate roles for LPNs should refer to Determining Appropriate LPN Practice: A Guide to Decision-Making.

Readers are also advised that, while this document generally describes both the theoretical knowledge and nursing competencies of the practical nursing profession in Manitoba, it does not provide an exhaustive list of all the competencies that may fall within the full scope of the profession. Health care is dynamic, and as new techniques, technology, and training opportunities arise, an individual LPN's knowledge base and skills may grow to include competencies not listed, while still remaining consistent with the scope of practice statement of the profession.

All competencies listed in this document are transferable across diverse practice settings and provide the foundation for reasonable and prudent nursing practice. Many of them are also identified as "reserved acts" in section 4 of Manitoba's Regulated Health Professions Act (RHPA). Although the profession is moving towards the RHPA, at the time of publishing, the practical nursing profession continues to be regulated under the LPN Act. Once the profession has completed its transition to the RHPA, the Nursing Competencies may need to be revised for clarity and consistency with the language in the RHPA. Readers reviewing a printed version of this document are encouraged to check the CLPNM website for updates.

BACKGROUND

Contemporary nursing requires that the LPN possess the theoretical and practical knowledge for a variety of roles and responsibilities. Scientific advances, technological developments, socio-cultural values, ethics, population and demographic changes, political forces, and economic pressures all affect the role of the LPN in Manitoba. As well, practice settings continue to change rapidly, and new opportunities and challenges continue to emerge. Whatever the setting, the LPN actively participates in the health care team to ensure the best care and services for each client.

The formal education, experience, and ongoing professional development of LPNs enable them to provide health care services to the full extent of the scope of practice and their individual competencies. The context of practice, as described below, provides the frame of reference for the practice of the LPN.

THE PRACTICE SETTING

The LPN has a broad range of skills and knowledge for providing nursing care in a variety of health care settings including unpredictable, complex, and unfamiliar environments. These settings include, but are not limited to:

- hospitals
- emergency departments and operating rooms
- dialysis
- obstetrics and gynecology
- intensive care
- pediatrics
- public health

- home care
- community health centres
- community nursing agencies
- private practices and clinics
- personal care homes
- occupational health
- physicians' offices
- adult day care centres and private homes
- schools, childcare centres, and children's camps
- correctional facilities, and
- First Nations health centres.

THE CLIENT

The client is the person or persons with whom the LPN is engaged in a professional therapeutic relationship. The client is a partner in their health care delivery and the nurse-client relationship is essential to establishing and reaching the client's health care goals. LPNs care for clients of all ages across the lifespan, whose health care needs vary in complexity, within environments that may be stable or unstable, familiar or unfamiliar, and predictable or unpredictable. The LPN recognizes that each client is unique and has complex holistic health needs. "Client" may refer to an individual, family, group/aggregate, community or population. Depending on the nurse's domain(s) of practice, the client may be a patient, a nursing student, a research participant, another CLPNM registrant, or other healthcare providers.

THE NURSE

Entry-level practical nurses at the beginning of their career are able to provide nursing care in a variety of settings to clients with a range of complex health conditions across the lifespan. They have the theoretical background and practical experience necessary to identify meaningful patterns and recurrent aspects of many clinical situations and are able to perform the entry-level competencies safely and confidently.

In this document, many of the competencies described are beyond entry level. However, every entry-level practical nurse has the foundational education necessary to develop additional nursing knowledge, skill and judgment through post-basic training and education, and ultimately, to acquire any of the competencies listed within this document. For further information on the competencies of an entry-level practical nurse, please refer to the Entry-Level Competencies for the Licensed Practical Nurse in Manitoba.

LPNs' basic educational preparation, post-basic learning opportunities, professional standards, and mandatory Continuing Competence Program all assist in ensuring that they are prepared to provide safe, competent, and ethical nursing care.

In order to safely, competently and ethically address client health care needs and employer expectations, an LPN may be required to expand their individual nursing competencies within

the scope of the profession. As a member of a self-regulated profession, the LPN is an autonomous practitioner who is accountable and answerable for their nursing practice. This means that each LPN assumes responsibility for identifying their own learning needs and seeking professional development opportunities to enhance practice. LPNs may look to a variety of opportunities to develop their competence, including enrolling in courses and programs, accessing clinical experts, and engaging in reflective practice in conjunction with self-directed learning. In this way, novice practical nurses may evolve to expert practical nurses in their particular areas of practice.

ASSUMPTIONS

In setting out the nursing competencies of Manitoba's LPNs, the CLPNM has made the assumption that all Manitoba LPNs also:

- Demonstrate that they have obtained the entry-level competencies by graduating from an entry-level practical nursing program and passing the Canadian Practical Nurse Registration Exam.
- Meet all requirements for initial and ongoing registration with the CLPNM.
- Demonstrate the knowledge, skills, judgment, and attitudes required to perform each of the competencies required for the profession within the practice environment.
- Are prepared to provide safe, competent, and ethical nursing care in a variety of settings to clients across the lifespan.
- Understand that the foundation of practical nursing is defined by legislation, regulation, scope of practice, standards of practice, practice directions, a code of ethics, and entry-level competencies.
- Engage in self-reflection and participate in the CLPNM's Continuing Competence Program to maintain and expand their individual competence.
- Recognize their limitations and seek guidance from experienced practitioners.
- Gain confidence in their abilities through experience, and expand their knowledge, skills, and judgment as they progress throughout their career.
- Obtain the baseline competencies upon which they can expand, through post-basic education and training, to meet a broader range of client needs, within the scope of their profession.
- Adhere to and apply the profession's scope of practice, standards of practice, code of ethics, and practice directions, as well as organizational guidelines, policies, and procedures.
- Work collaboratively as part of the interprofessional team, and have access to collaboration and appropriate authorizing mechanisms (e.g. orders and clinical decision tools), when required to meet the holistic needs of the client.
- Use appropriate and safe techniques for all competencies performed within the care environment.
- Apply the concepts related to the determinants of health to individuals, families, groups, communities and populations, in various health care environments.
- Are accountable for their decisions and actions and are committed to protecting the public.

OVERVIEW OF THE COMPETENCIES

The competencies of Manitoba's LPNs are organized into six domains. These domains are summarized by the following general competency statements:

1. **People-centred care**: The LPN uses a people-centred approach in responding to the needs of individuals, families, groups, communities and populations.

2. **Collaborative care**: The LPN practises as a member of the health care team in the delivery of comprehensive and integrated health care services to clients.

3. **Reflective practice**: The LPN applies a process of purposive thinking and reflective reasoning to assimilate theoretical and practical knowledge for self-evaluation and for improvement in nursing practice.

4. **Knowledge-based practice**: The Licensed Practical Nurse critically appraises, analyzes, interprets, and synthesizes current knowledge, evidence, and best practice to provide rationale for effective nursing practice and the provision of nursing care across the client continuum from low complexity to high complexity. The Licensed Practical Nurse employs current knowledge and evidence to provide care to stable and unstable clients with conditions that may have predictable or unpredictable outcomes. The Licensed Practical Nurse provides care within environments that may be stable or unstable, familiar or unfamiliar, and predictable or unpredictable.

5. **Safe and ethical care**: The LPN protects the client, the public, and the health care team, including themself, from psychological and physical harm and upholds the ethical and practice standards of the profession.

6. **Leadership**: The LPN provides leadership to maximize the health and well-being of the client, the nurse, the health care team, the organization, and society as a whole.

Each of the six domains is divided into subdomains in this document, and each subdomain includes indicators of the theoretical knowledge and nursing competencies that fall within the scope of practice of the practical nursing profession in Manitoba.

Indicators of theoretical knowledge describe the knowledge base of the LPN. Indicators of nursing competence describe how the knowledge, judgment and skill of the LPN are applied in practice.

The theoretical knowledge described in this document is acquired in the entry-level practical nursing diploma program. Many of the nursing competencies are also learned in the entry-level program. However, recognizing that knowledge is layered and scaffolding of knowledge continues after a formal program of study ends, some of the nursing competencies are developed beyond entry-to-practice, through post-basic education, training, and experience. Although the knowledge, judgment and skill of the LPN continue to grow throughout their

career, the entry-level diploma program provides the foundational knowledge the LPN needs to develop any of the competencies listed in this document.

Diagram 1 illustrates the relationship between the scope of practice, professional standards, and competencies of the practical nursing profession. As the diagram shows, the competencies are framed by the scope of practice and are carried out based on the guidance found in the professional standards, which include standards of practice, a code of ethics, and practice directions.

Diagram 1: Overview of LPN Competencies in Manitoba

	LPN COMPETENCIES	
	DOMAIN	SUBDOMAIN
SCOPE OF PRACTICE	1: People-Centred Care	Communication and Relational Skills
		Respect, Dignity, and Human Rights
		Information Sharing and Capacity-Building
		Partnership with the Client
	2: Collaborative Care	Collaboration
	3: Reflective Nursing Practice	Critical Thinking
		Evidence-Based Practice
		Nursing Process
	4: Knowledge-Based Nursing Practice	Pharmacology
		Inflammation and Wound Healing
		Genetics
		Immune System
		Infection and Communicable Diseases
		Cancer
		Fluid, Electrolyte, and Acid-Base Imbalances
		Preoperative Care
		Intraoperative Care
		Postoperative Care
		Visual and Auditory System
		Integumentary System
		Respiratory System
		Hematological System
		Cardiovascular System
		Gastrointestinal System
		Urinary System
		Endocrine System
		Female Reproductive System
		Male Reproductive System
		Nervous System
		Musculoskeletal System
		End of Life Care
		Mental Health Nursing
		Community Health Nursing
		Maternal Health
		Neonate Health
		Pediatric Health
		Emergency Nursing
		Nursing Nephrology
		Nursing Foot Care
	5: Safe and Ethical Care	Integration of Professional Standards
		Documentation and Reporting
		Risk Management
		Safety
		Emergency Preparedness and Response
	6: Leadership	Management and Organizational Leadership
		Clinical Leadership
		Leadership in Education
Practice also guided by	Standards of Practice	
	Code of Ethics	
	Practice Directions	

1. PEOPLE-CENTRED CARE

The LPN uses a people-centred approach in responding to the needs of individuals, families, groups, communities and populations.

Using a "people-centred approach" means much more than addressing a client's health. It also means ensuring that the client is satisfied with the health care provided, which in turn means respecting a client's dignity, confidentiality, self-determination, values, beliefs, gender identity, sexual orientation, and other factors, such as psychosocial, cultural, spiritual, and broader determinants of health.

Key to a successful people-centred approach are communication and relational skills that foster a culture of capacity-building, client participation in decision-making, and empowerment of the individual, the families, groups, communities and populations.
It requires a nurse to share appropriate and unbiased information in a timely manner, establishing equal partnerships with the client, and creating a culture of care and compassion. It also requires advocating for equitable access, treatment, and allocation of resources for all clients.

Competencies of people-centred care fall into four subdomains:

1.1 Communication and relational skills.
1.2 Respect, dignity, and human rights.
1.3 Information sharing and capacity-building.
1.4 Partnerships with the client.

Each of these subdomains includes:

- Integrated theoretical knowledge.
- Nursing competencies.

1. People-Centred Care	1.1 Communication and Relational Skills
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Foundations and theories of the nurse-client relationship.
- Levels of communication (e.g., intrapersonal, interpersonal, transpersonal, small-group, public).
- Elements of the communication process (e.g., referent, sender and receiver, messages, channels, feedback, interpersonal variables, environment).
- Forms of communication (e.g., verbal and non-verbal, symbolic and meta-communication).
- Professional nursing relationships (e.g., nurse-client, nurse-support persons, nurse–health care team, nurse-community relationships).
- Elements of professional communication (e.g., courtesy, use of names, trustworthiness, respect, autonomy, responsibility, assertiveness, clarity, conciseness, and comprehension).
- Characteristics and phases of the nurse-client relationship including the pre-interaction phase, orientation phase, working phase, and termination phase.
- Communication within the nursing process (e.g., assessment, nursing diagnosis, planning, implementation, evaluation).
- Communication techniques for the client with specific needs (e.g., aphasia; dysarthria; muteness; cognitive, hearing, and visual impairment; unresponsive clients; clients with language barriers).
- Therapeutic communication techniques (e.g., active listening, sharing empathy, hope, appropriate use of humour and feelings, using therapeutic touch and silence, providing information, clarifying, focusing, paraphrasing, asking relevant questions, summarizing, self-disclosure and confrontation).
- Recognition of non-therapeutic techniques (e.g., giving personal opinions; changing the subject; giving false reassurance, approval, or disapproval; responding defensively, passively, or aggressively; and arguing).
- Communication in stressful and in crisis situations.
- Contextual factors that influence communication (e.g., psychophysiological, relational, situational, environmental, and cultural context).
- Critical thinking in building, maintaining, and terminating the nurse-client relationship.
- Conflict resolution theories and practice.
- Documenting and reporting client information.

1. People-Centred Care	1.1 Communication and Relational Skills
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Differentiates between the attributes of therapeutic relationships and the attributes of non-therapeutic relationships.
- Establishing, maintaining, and appropriately concluding therapeutic relationships.
- Establishing therapeutic relationships that are goal oriented.
- Establishing and maintaining appropriate professional boundaries when communicating with the client.
- Effectively applying the communication process to the specific circumstances of the client (e.g., age, culture, religious belief, health status).
- Using appropriate communication strategies to interact with a client who has specific communication needs (e.g., hearing loss, language barriers, mental/physical/speech impairment, disorientation, dementia).
- Integrating culturally safe communication strategies when communicating with the client.
- Adapting communication strategies according to individual and group circumstances.
- Applying knowledge, understanding of human behaviour, and communication strategies in establishing professional relationships.
- Applying conflict management and resolution skills when necessary.
- Analyzing the impact of personal values and assumptions on interactions with clients and members of the health care team.
- Advocates for the use of Indigenous health knowledge and healing practices, in collaboration with the client.
- Demonstrates the ability to use verbal and non-verbal communication skills to convey respect and empathy for the client.

1. People-Centred Care	1.2 Respect, Dignity, and Human Rights
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Views on caring including the moral and ethical basis of responsive nurse-client relationships.
- Theory related to client's perspective of caring.
- Caring in nursing practice (e.g., providing presence, touch, active listening, knowing the client, supporting spirituality, care for support persons).
- Challenges of caring (e.g., human caring model, task-oriented biomedical model, institutional demands).
- Nursing values, professional nursing, and ethics of care.
- Ethical theories (e.g., deontology, utilitarianism, bioethics, feminism, relational ethics).
- Recognizing ethical issues and processing ethical dilemmas in nursing practice (e.g., issues of client care, caregivers, safety in the work environment).
- Cultural concepts related to health, spirituality, illness, and ethnicity.
- Cultural context of health and caring, cultural competence, and cultural safety in nursing practice.
- Transcultural nursing theory and framework.
- Historical development of the nursing approach to respect, dignity, and human rights.
- Cultural assessment (e.g., examining the cultural values, beliefs, and practices of individuals, families, and communities).
- Theoretical models and traditional concepts associated with spiritual health.
- Spiritual health and the nursing process.
- Complementary therapies and cultural approaches and beliefs about health.
- Legal liability issues related to the nurse-client relationship (e.g., confidentiality, consent).

1. People-Centred Care	1.2 Respect, Dignity, and Human Rights
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Understanding and respecting the rights of the client.
- Establishing and maintaining respect, empathy, trust, and compassion in interactions with the client.
- Respecting client's directives, including situations of guardianship, power of attorney, and trusteeship.
- Facilitating and promoting the client's right to self-determination and to informed decision-making.
- Recognizing and respecting the values, opinions, needs, beliefs, cultural identity and lifestyle choices of the client.
- Liaising with other providers as appropriate to ensure that the spiritual needs, cultural needs, and human rights of the client are met.
- Using appropriate strategies to promote the client's self-esteem, dignity, and integrity.
- Applying trauma and violence informed, culturally safe approaches during client interactions and decision-making.
- Advocating for the client's rights to equitable access, treatment, and allocation of resources, especially for vulnerable populations.
- Applying the CLPNM Code of Ethics to address situations of ethical conflict, dilemma, or distress.
- Protecting the client's rights by maintaining confidentiality, privacy, and dignity in written, verbal, and electronic communication.
- Obtaining informed consent (implied or express) in multiple contexts (e.g., consent for care, refusal of treatment, release of health information, participation in research).
- Encouraging and empowering the client to draw on his or her strengths and to identify appropriate resources within the community.
- Recognizing the client's role and contribution to the interprofessional health care team.
- Demonstrates knowledge of and the ability to respond to the Calls to Action of the Truth and Reconciliation Commission of Canada, and the United Nations Declaration on the Rights of Indigenous Peoples.
- Adapts practice in response to the client's spiritual and cultural beliefs.
- Demonstrates knowledge of diversity between and within different cultures, including ethnicity, disability, social and economic status, age, sexuality, gender identity, faiths and beliefs.
- Uses knowledge of the impacts of health disparities and health inequities to optimize health outcomes for all clients.

1. People-Centred Care	1.3 Information Sharing and Capacity-Building
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Goals of client education (e.g., maintaining and promoting health and preventing illness, restoring health, optimizing quality of life).
- Principles of learning (e.g., learning environment, ability to learn—emotional, intellectual, physical capabilities, developmental stage).
- Domains of learning (e.g., cognitive, affective, psychomotor).
- Motivational learning theories.
- Integration of the nursing process into the teaching processes:
  - Assessment (e.g., learning needs, ability to learn, motivation to learn, teaching environment, resources for learning).
  - Nursing diagnosis (e.g., gap between the known and the unknown such as deficient knowledge, ineffective health maintenance).
  - Planning (e.g., developing learning objectives, setting priorities, timing, organizing teaching material, promoting participation, building on existing knowledge, selecting teaching methods, selecting resources, writing teaching plans).
  - Implementation (e.g., teaching approaches; teaching methods such as one-on-one, group instruction, preparatory instruction, demonstrations, analogies, role-playing, simulation; attention to learning barriers such as illiteracy, learning disabilities, sensory alterations, language).
  - Evaluation (e.g., measurement methods, client expectations, effectiveness of teaching intervention, documentation).
- Primary health care and the determinants of health and their influence on health.
- Barriers to primary health care.
- Pillars of primary health care (e.g., teams, access, information, healthy living).
- Facilitators and barriers to individual and community capacity-building.
- Building capacity for health promotion.

1. People-Centred Care	1.3 Information Sharing and Capacity-Building
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Gathering data about the client, including learning needs, ability to learn, motivation to learn, and client's ability to achieve learning objectives.
- Gathering data using appropriate resources such as the client's medical record, health history, the learning environment and the literature.
- Assessing health literacy and health knowledge.
- Establishing learning objectives, identifying priorities regarding information and learning needs, and identifying type of teaching method to use.
- Actively involving and collaborating with the client when developing the teaching plan and learning activities.
- Providing culturally appropriate information and education material and referring the client to appropriate resources.
- Determining and evaluating outcomes of teaching-learning process and adapting teaching plan and methods accordingly.
- Reinforcing information and teaching as needed.
- Regularly reviewing and updating individual and group information and resources.
- Providing written information in conjunction with verbal information when appropriate.

1. People-Centred Care	1.4 Partnership with the Client
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- How to encourage active participation and involvement of the client and/or designate to encourage partnership.
- How to develop relationships between individuals, groups, or organizations, in which the parties are working together to achieve a joint goal.
- How to promote shared power among all participants in the processes of health promotion, disease and injury prevention, health maintenance, restoration of health, treatment and palliation of illness and injury.
- How to promote participation that encourages empowerment.
- Client as partner in nursing practice (equality in decision-making, a shared vision, integrity, agreement on specific goals and plan of action to meet the goals).
- Characteristics of effective partnerships (equality in decision-making, a shared vision, integrity, agreement on specific goals, a plan of action to meet the goals).
- Pillars of primary health care (teams, access, information, healthy living).
- Principles of primary health care and community health and influence on the role of the client in the health care team.
- Ottawa Charter for health promotion and disease and injury prevention.

1. People-Centred Care	1.4 Partnership with the Client
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Integrating the principles of primary health care and community health in partnering with the client.
- Establishing a therapeutic relationship with the client.
- Promoting a culture of care and communication.
- Creating a climate that supports mutual engagement and partnerships with the client.
- Partnering with the client and other health professionals to coordinate care, plan services or programs, and to influence policies.
- Assisting and supporting the client to make informed health decisions.
- Collaborating with the client in decision-making and supporting actions/interventions to meet the client's health and social needs.
- Actively supporting client capacity for self-management.
- Advocates for the use of Indigenous health knowledge and healing practices, in collaboration with the client, the client's community, and Indigenous healers and Elders.
- Engages in self-reflection to interact from a place of cultural humility to create culturally safe environments where clients perceive respect for their unique healthcare practices, preferences, and decisions.
- Uses principles of trauma-informed care, which places priority on trauma survivors' safety, choice, and control.

2. COLLABORATIVE CARE

The LPN practises as a member of the health care team in the delivery of comprehensive and integrated health care services to clients.

As an autonomous practitioner, the LPN is an active participant in the interprofessional health care team. Recognizing their professional autonomy and accountability, the LPN works collaboratively with other members of the health care team to secure the best care and services for each client.

The LPN acknowledges that collaboration is an integral dimension of people-centred health care services. Providing safe, timely, effective, efficient, and equitable health care requires a balanced consideration of the rights and needs, as well as responsibilities and capabilities of people in the health care system, including clients, health care providers, and others. Maximizing the role and expertise of each member of the health care team (including the client) will lead to the provision of comprehensive and integrated health care services and avoid duplicating services. The theoretical knowledge and competencies of the LPN serve as the basis for effective collaboration.

Competencies related to collaborative care include:

- Integrated theoretical knowledge.
- Nursing competencies.

2. Collaborative Care	2.1 Collaboration
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Principles of effective communication with individuals, teams, and groups.
- Roles and contributions of health care team members in meeting client outcomes.
- Nursing care delivery models, collaborative practice, and nursing teams (e.g., functional nursing, team nursing, total client care, primary nursing, case management, collaborative practice model).
- Continuity of care concept (e.g., information, relationships between a client and one or more health care professionals over time, management of care across organizational boundaries).
- Decision-making at the staff level (e.g., authority, responsibility, autonomy, accountability).
- Leadership skills (e.g., advocacy, effective communication, conflict management, team building, collaborative practice, people-centredness, delegation, evidence-informed decision-making).
- Clinical care coordination (e.g., clinical decisions, priority setting, time management, evaluation, delegation).
- Principles of delegation (e.g., right task, right circumstances, right person, right direction or communication, right supervision).

2. Collaborative Care	2.1 Collaboration
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Recognizing the necessity for and exhibiting mutual respect for colleagues in the workplace and within the profession.
- Making time available to listen to colleagues' professional concerns and requests.
- Providing advice and constructive feedback where appropriate.
- Acting as a resource and mentor for colleagues, members of the health care team, and students.
- Ensuring that nursing provisions (e.g., assessments, decisions, actions) and information (e.g., diagnostic test results) are communicated to the health care team as appropriate.
- Appropriately referring clients to the right provider of service.
- Engaging in shared learning and dialogue.
- Participating in shared decision-making about care delivery with colleagues and members of the health care team.
- Attending and contributing to practice meetings.
- Integrating evidence-informed practice in collaboration with members of the health care team.
- Recognizing and seeking advice and support when the needs of individuals and groups are beyond own competencies and education.
- Liaising with relevant health care providers to facilitate continuity of care for clients.
- Providing holistic and compassionate care in collaboration with the health care team.
- Applying appropriate conflict resolution strategies to support effective teamwork and positive client outcomes.
- Collaborating with the health care team to inform policy, guidelines, clinical decision tools, and protocol development.
- Participating with the health care team in decision-making about the resources needed to provide clinical care.

- Collaborating with the health care team to provide integrated care, continuity of care, and comprehensive nursing care.
- Sharing appropriate information about client care with the health care team while maintaining confidentiality.
- Working in collaboration with the health care team to create a quality and safe practice environment that supports professional practice and client safety.
- Assessing appropriateness for delegation to unregulated health care providers, assigning care, and providing clinical guidance to health providers and students as necessary.
- Fosters an environment that encourages questioning and exchange of information.
- Identifies the need for, fosters and initiates interdisciplinary communication.
- Applies the principles of team dynamics and group processes in interprofessional team collaboration.

3. REFLECTIVE NURSING PRACTICE

The LPN applies a process of purposive thinking and reflective reasoning to assimilate theoretical and practical knowledge for self-evaluation and improvement in nursing practice.

The educational and clinical preparation of LPNs prepares them to be reflective practitioners. More specifically, as a reflective practitioner, the LPN purposefully recalls and examines situations or actions that have occurred in the past to discover their purpose or meaning and examines their own behaviour and that of others while in a situation. Reasoning processes that rely on critical thinking are also important elements of the LPN's reflective practice. The systematic use of the nursing process to invoke complex intuitive and conscious thinking strategies is part of all clinical decision-making in practical nursing.

A reflective practice promotes and facilitates:

- The ongoing development and integration of the LPN's theoretical and practical knowledge.
- The provision of nursing care to clients and their support persons to the best of the LPN's ability.
- Self-awareness, self-evaluation, and self-direction.
- Improvements in the LPN's practice.
- Interactions and communication with members of the health care team.
- A culture of mutual support between members of the health care team.

Competencies of reflective nursing practice are organized into three subdomains:

3.1 Critical thinking.
3.2 Evidence-based process.
3.3 Nursing process.

Each of these subdomains includes:

- Integrated theoretical knowledge.
- Nursing competencies.

3. Reflective Practice	3.1 Critical Thinking
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Concepts of critical thinking, clinical reasoning, and clinical judgment.
- Principles of the nursing process, problem solving, and evidence-informed decision-making.
- Application of logic, intuition, and creativity grounded in specific knowledge, skills, and experience.
- Models of critical thinking.
- Factors influencing critical thinking ability (e.g., personal, situational).
- Factors inhibiting critical thinking ability (e.g., personal habits).
- Personal critical-thinking indicators, behaviours, attitudes, and qualities:
  - Self-aware, genuine/authentic.
  - Effective at communicating.
  - Aware of context.
  - Analytical and insightful.
  - Logical and intuitive.
  - Confident, resilient, honest, and forthright.
  - Autonomous, responsible, careful, and prudent.
  - Open and fair-minded.
  - Sensitive to diversity.
  - Creative, realistic, and practical.
  - Reflective and self-corrective.
  - Proactive, courageous, patient and persistent, flexible.
  - Healthy and improvement oriented (self, client, systems).
- Critical-thinking strategies including:
  - Using logic, intuition, and trial and error.
  - Focusing on specific and global details.
  - Drawing concept maps, diagrams, and decision trees.
  - Clinical simulation and debriefing.
  - Other useful strategies.

3. Reflective Practice	3.1 Critical Thinking
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking, clinical reasoning, and clinical judgment in addressing client care issues, including:
  - Applying the nursing process.
  - Reviewing, integrating, and applying evidence and research to clinical situations.
  - Questioning, clarifying, and challenging unclear or questionable orders, decisions, or actions made by other interprofessional health care team members.
  - Focusing on safe, quality, and ethical nursing care.
  - Consistently re-evaluating, self-correcting, and striving to improve nursing care.
  - Developing interpersonal relationships including the nurse-client relationship and interprofessional relationships.

- Developing critical thinking characteristics including honesty, fair-mindedness, creativity, patience, persistence, and confidence.

- Taking responsibility and seeking out learning experiences to obtain theoretical and experiential knowledge.

- Gaining interpersonal skills including teamwork, conflict resolution, and client advocacy.

- Mastering the technical competencies of the profession.

3. Reflective Practice	3.2 Evidence-Based Practice
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Principles and support of evidence-based practice in health care.
- Knowledge development in nursing (e.g., empirics, esthetics, personal knowledge, ethics, and emancipatory knowledge).
- Theoretical foundations of nursing practice (e.g., practice-based theories, needs theories, interactional theories, systems theories, simultaneity theories).
- Differentiation between evidence-based practice and traditional practice.
- Research paradigm (e.g., scientific and qualitative/interpretive paradigm).
- Evidence-based practice process and research designs:
  - Quantitative (e.g., experimental research, descriptive survey designs, exploratory descriptive designs, data analysis).
  - Qualitative (e.g., ethnography, phenomenology, grounded theory, action research, participatory action research).
- Ethical and legal issues in research.
- How to research the evidence (e.g., ask the clinical question, collect the best evidence, critique the evidence, integrate the evidence).
- Elements of evidence-informed articles (e.g., abstract, introduction, literature review or background, manuscript narrative, purpose statement, results or conclusions, clinical implications).
- Sources of evidence-based practice:
  - Identification of a clinical question based on client health status.
  - Use of the LPN's professional knowledge and clinical experience.
  - Scientific knowledge of all types.
  - Client experiences, values, preferences, and choices.
  - Consideration of milieu, resources, accessibility, and availability.
- Application of evidence and research findings into nursing practice.
- Use of evidence-based nursing practice decisions or directions.

3. Reflective Practice	3.2 Evidence-Based Practice
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using knowledge, critical thinking, clinical reasoning, and clinical judgment to build an evidence-based practice.
- Making accurate, timely, and appropriate clinical decisions to produce the best care possible for clients on the basis of:
  - Theoretical and practical knowledge of the profession.
  - Evidence from expert clinical practice.
  - Non-research evidence (e.g., quality improvement and risk management data, national and local standards, infection control data, chart reviews, clinical expertise).
  - Individual client's values, beliefs, and experiences.
- Using best-practice and evidence, nursing experience, and respect for the values and beliefs of the client in the provision of quality nursing care and interventions.
- Using the six-step approach to evidence-based practice:
  1. Asking a clinical question.
  2. Collecting the most relevant and best evidence.
  3. Critically analyzing the evidence gathered.
  4. Applying or integrating evidence, along with clinical expertise, client preference, and values, when making a practice decision or change.
  5. Evaluating the practice decision or change.
  6. Communicating results.
- Accessing current literature and resources and staying informed about current evidence, trends, and issues that impact the client and the health care team.
- Integrating nursing and health care knowledge, competencies, and attitudes to provide safe and effective nursing care.
- Using a nursing model as a basis for their nursing practice.
- Supporting, contributing, and participating in health care research including clinical trials by:
  - Ensuring ethics committee approval is received and informed consent is obtained.
  - Ensuring the safety and well-being of the client during a clinical trial.
  - Recognizing and reporting treatment-related adverse events.
  - Participating in recruiting clients for clinical trials.
- Advocating for the implementation and use of evidence-based practice.
- Identifying issues and problems in nursing practice as a potential basis for review and research.
- Taking on a teaching role for students and staff as appropriate.
- Sharing knowledge, new information, and research evidence gained through continuing education and nursing experiences.

3. Reflective Practice	3.3 Nursing Process
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Relationship of critical reflection to the nursing process—assessment, nursing diagnosis, planning, implementation, and evaluation.
- Developmental tasks and stages across the lifespan and use of developmental screening tests to gather data.
- Subjective and objective data collection, types of data, sources of data (e.g., client and community, support persons or designate, health care team, medical records, literature, LPN's experience), tools for data collection, and methods of data collection.
- Formulation of nursing diagnosis and the use of NANDA International Nursing Diagnosis (e.g., actual diagnosis, risk diagnosis, health promotion diagnosis, and wellness diagnosis).
- Components of a nursing diagnosis (e.g., diagnostic label, related factors, definition, risk factors, support of the diagnostic statement).
- Concept mapping for nursing diagnoses linking medical diagnosis to nursing diagnosis.
- Sources of diagnostic errors (e.g., data collection, interpretation and analysis of data, data clustering, diagnostic statement, documentation).
- Application of nursing diagnoses to care planning and establishing priorities.
- Nursing outcomes classification and guidelines for writing goals and expected outcomes (e.g., client-centred, singular, observable, measurable, time-limited, mutual, realistic goal or outcome).
- Nursing interventions classification and selection of interventions based on the nursing diagnosis, goals and expected outcomes, the evidence base, feasibility, acceptability to the client/community, and the LPN's competence.
- Nursing care plans (e.g., care plans for community-based settings, critical pathways) and concept maps.
- Implementation process including:
  - Reviewing and revising the existing nursing care plan.
  - Organizing resources and care delivery (e.g., equipment, personnel, environment, client).
  - Anticipating and preventing complications.
  - Identifying areas of assistance (e.g., expert knowledge and skills, unregulated health providers).
- Implementation skills (e.g., cognitive skills, interpersonal skills, psychomotor skills).

- Direct care measures (e.g., activities of daily living, instrumental activities of daily living, physical care techniques, lifesaving measures, counselling, teaching, controlling adverse reactions, preventive measures).

- Indirect care measures (e.g., communication of information about clients, leadership measures).

- Types of nursing interventions (e.g., nurse-initiated, physician-initiated, interdependent or collaborative).

- Factors to determine type of intervention (e.g., nursing diagnosis, goals and expected outcomes, the evidence base, feasibility, acceptability to the client, LPN's competence).

- Communication of nursing interventions.

- Evaluation process (e.g., identifying criteria and standards, collecting evaluation data, interpreting and summarizing findings, documenting findings, care plan revisions).

- Determinants of health and its influence on the health of clients.

3. Reflective Practice	3.3 Nursing Process
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using the nursing process to deliver safe, competent, and ethical health care interventions.

- Conducting a comprehensive and systematic nursing assessment by:
  - Using a relevant evidence-based assessment framework to collect client data.
  - Using a range of assessment techniques to collect relevant and accurate data.
  - Analyzing and interpreting assessment data accurately.
  - Applying knowledge of anatomy and physiology to perform physical assessments, formulate diagnoses, and plan appropriate client care.
- Developing nursing diagnoses by:
  - Integrating knowledge related to disease processes, etiology, pathophysiology, clinical manifestation, and alterations in client health to identify pertinent assessment data and client need, and to determine the most appropriate nursing interventions and evaluate their effectiveness.
  - Analyzing and interpreting assessment findings to formulate nursing diagnoses specific to each client's health care needs.
  - Communicating nursing diagnoses to clients and the health care team.
  - Integrating assessment findings, clinical data, and identified nursing diagnoses in the development of a comprehensive nursing care plan.

- Planning nursing care in consultation with the client and the interprofessional team as necessary by:
  - Identifying expected and agreed-upon health outcomes and time frame for achievement.
  - Incorporating data from other health care professionals when planning care as necessary.
  - Documenting and communicating the plan of care.
  - Planning for continuity of care to achieve expected outcomes.
  - Incorporating conflict management strategies when required.

- Providing safe and effective evidence-based nursing care to achieve identified client health outcomes by:
  - Managing the nursing care of individuals and groups.
  - Organizing workload and applying time management skills to meet requirements of the care plan.
  - Providing nursing care according to the documented care plan.
  - Prioritizing workload based on the individual's and group's needs, acuity, and optimal time for interventions.
  - Identifying priorities quickly using context-specific knowledge.
  - Responding effectively to unexpected or rapidly changing situations.
  - Developing flexible and creative approaches to manage challenging clinical situations.

- Accurately identifying parameters for the safety of individuals and groups.
- Using appropriate technology to perform safe and efficient nursing interventions.
- Verifying and clarifying policies, procedures, and physicians' orders.
- Maintaining clear, concise, accurate, and timely records of client's care.
- Communicating client progress toward achieving identified client health outcomes.
- Applying appropriate leadership skills and style to health care situations.

- Evaluating progress of expected health outcomes in consultation with the client and the interprofessional team by:
  - Determining the progress of individuals and groups toward planned outcomes.
  - Revising the plan of care and determining further outcomes in accordance with the evaluation data.
  - Evaluating outcomes of care provided by unregulated health care workers.
  - Evaluating and refining therapeutic communication techniques, conflict resolution skills, leadership skills and style, and health teaching strategies.

- Engaging in reflective practice to understand the impact of personal values, beliefs, and assumptions in the provision of nursing care, and acts to reduce bias.

- Seeking assistance from other members of health care team when additional knowledge, skills, and experience are necessary.

4. KNOWLEDGE-BASED NURSING PRACTICE

The Licensed Practical Nurse critically appraises, analyzes, interprets, and synthesizes current knowledge, evidence, and best practice to provide rationale for effective nursing practice and the provision of nursing care across the client continuum from low complexity to high complexity. The Licensed Practical Nurse employs current knowledge and evidence to provide care to stable and unstable clients with conditions that may have predictable or unpredictable outcomes. The Licensed Practical Nurse provides care within environments that may be stable or unstable, familiar or unfamiliar, and predictable or unpredictable.

As an autonomous health care professional, the LPN provides people-centred health care services to individuals, families, groups, communities and populations in accordance with his or her educational preparation, professional standards, relevant legislation, and practice context. The LPN demonstrates a high level of confidence and proficiency in carrying out a range of diverse procedures, treatments, and nursing interventions that are evidence- and research-based.

The role of the LPN may vary according to the client population, practice structure, and employing organization. An individual LPN may be required to expand their competencies, within the boundaries of the profession's scope of practice, to meet the needs of their client population and to meet employment expectations.

The LPN has a range of knowledge and skills that they use in any health care setting and circumstance. This may include, but is not limited to:

- Partnering with the health care team and integrating both the LPN's and client's insights in the nursing process.
- Coordinating and directing a plan of care for clients with varying complexities in unpredictable and unfamiliar environments.
- Managing multiple interventions simultaneously in unpredictable and rapidly changing or emergent situations.
- Recognizing, analyzing, and interpreting deviations from anticipated client responses.
- Coordinating and directing actions of other providers as appropriate in emergency situations.

Competencies of knowledge-based nursing practice fall into the following subdomains:

4.1 Pharmacology
4.2 Inflammation and Wound Healing
4.3 Genetics
4.4 Immune System
4.5 Infection and Communicable Diseases
4.6 Cancer
4.7 Fluid, Electrolyte, and Acid-Base Imbalances
4.8 Preoperative Care
4.9 Intraoperative Care
4.10 Postoperative Care
4.11 Visual and Auditory System
4.12 Integumentary System
4.13 Respiratory System
4.14 Hematological System
4.15 Cardiovascular System
4.16 Gastrointestinal System
4.17 Urinary System
4.18 Endocrine System
4.19 Female Reproductive System
4.20 Male Reproductive System
4.21 Nervous System
4.22 Musculoskeletal System
4.23 End of Life Care
4.24 Mental Health Nursing
4.25 Community Health Nursing
4.26 Maternal Health
4.27 Neonate Health
4.28 Pediatric Health
4.29 Emergency Nursing
4.30 Nursing Nephrology
4.31 Nursing Foot Care

Each of these subdomains includes:

- Integrated theoretical knowledge.
- Nursing competencies.

4. Knowledge-Based Practice	4.1 Pharmacology
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

PHARMACOLOGY AND NURSING PRACTICE

- Medication therapy in Canada.
- Identification of various resources to retrieve information regarding medication therapies.
- Pharmacological principles.
- Medication reconciliation (e.g., consult with client, caregivers, and interdisciplinary team).
- Pharmacological considerations for special populations.
- Ethno-cultural, legal, and ethical considerations.
- Prevention of medication errors (e.g., rights of medication administration, the "three checks" of medication administration).
- Client education and medication therapy.
- Substance misuse or abuse (e.g., physiological and psychological dependence, polypharmacy).
- Safe medication storage, handling, preparation, administration, and disposal.
- Safe and accurate use of dosage calculations and conversion of measurement systems in all aspects of medication therapy.
- Medication classification, pharmacokinetics, and pharmacodynamics including, but not limited to:
    - Medications affecting the nervous system including analgesics.
    - Medications affecting the cardiovascular and renal systems.
    - Medications affecting the reproductive system.
    - Medications affecting the endocrine system.
    - Medications affecting the respiratory system.
    - Medications affecting the musculoskeletal system.
    - Medications affecting the integumentary system.
    - Medications affecting the gastrointestinal system and nutrition.
    - Anti-infective and anti-inflammatory medications.
    - Immune and biological modifiers and chemotherapeutic medications.
    - Miscellaneous therapeutic medications (e.g., hematological, dermatological, ophthalmic, otic, vitamins and minerals, over-the-counter medications, natural health products).
- Clinical trials for evaluating new treatments (Phases I–IV).

TYPES OF MEDICATION ACTION

- Factors that influence medication actions including age-related and developmental factors.
- Therapeutic effects of medications.
- Adverse effects of medications (e.g., toxic effects, idiosyncratic reactions, allergic reactions, medication tolerance, dependence, medication interactions).
- Medication dose responses including:
    - Absorption, distribution, metabolism, and excretion.
    - Medication action (e.g., onset of medication action, peak action, duration of action, plateau).

ROUTES OF ADMINISTRATION

- Enteral routes (e.g., oral, nasogastric, PEG, GJ, GT, rectal).
- Parenteral routes (e.g., subcutaneous, intramuscular, intravenous, intradermal, epidural, intraosseous).
- Percutaneous (e.g., sublingual routes, topical, transdermal, otic, ophthalmic, nasal, vaginal, buccal, inhalation, intraocular disk).

NURSING ASSESSMENT

- Phases of the nursing process and medication therapy.
- Components of the assessment process for clients receiving medication therapy, including the collection and analysis of subjective and objective data.
- Process of formulating nursing diagnosis, goals, and outcome criteria for clients receiving medication therapy.
- Key elements of medication administration.
- Evaluation process involved in the administration of medication therapy and reflected in the goals and outcomes criteria.
- Collaborative plan of care using the nursing process and medication administration.
- Rights of medication administration and the related professional responsibility to clients for safe medication practice.
- "Three checks" of medication administration and the related responsibility to clients.

4. Knowledge-Based Practice	4.1 Pharmacology
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a client assessment, medication review, and medication reconciliation, including allergy assessment.
- Using critical thinking and clinical judgment when administering, documenting, and evaluating a client's response to medication therapy.
- Following the principles of safe and effective medication preparation, administration, handling, storage, and disposal in accordance with policies, protocols and applicable legislation.
- Accepting, transcribing, and processing medication orders (e.g., verbal, written, phone, electronic).
- Administering a medication or vaccine following an approved and appropriate authorizing mechanism.
- Explaining to the client the purpose of medication therapy, possible adverse effects and the expected therapeutic action and outcome.
- Being aware of and incorporating cultural considerations when administering medication therapy.
- Mixing dose specific medications, as per drug monographs and protocols, including:
    - Preparing injections from ampules and vials.
    - Mixing parenteral medications in one syringe.
    - Adding medications to intravenous fluid containers.
    - Reconstituting powdered medications.
- Administering a medication or vaccine by any appropriate route or method:
    - Enteral and percutaneous routes, including:
        - Oral medications.
        - Sublingual medications.
        - Buccal medications.
        - Nasogastric or enteral tube.
        - Topical applications.
        - Otic and ophthalmic medications (drops, instillations).
        - Metered-dose inhalers and dry-powder inhaled medications.
        - Nebulized medications (including medications through mechanical ventilation).
        - Vaginal and rectal suppositories.
    - Parenteral routes, including:
        - Intradermal injections.
        - Subcutaneous injections.
        - Intramuscular injections.
        - Intravenous infusions, including:

        - Intravenous bolus, piggyback, intermittent infusion sets, electronic pumps, gravity infusion, patient-controlled analgesia (PCA) pumps and mini-infusion pumps.
    - Continuous subcutaneous infusions (hypodermoclysis).
    - Intraosseous injections and infusions.
    - Epidural infusions.
    - Central venous access devices.

- Provides medication to clients (e.g., starter packs or pre-packaged medication for day passes), pursuant to orders or protocols.

- Participating as part of a research team carrying out clinical trials.

- Taking into account pediatric, gerontological, psychological state, and home care considerations in medication administration.

- Documenting medication administration.

- Self-reporting and documenting medication errors.

- Conducting counts on controlled medications (e.g., narcotics).

- Witnessing and co-signing waste of controlled medications and substances.

- Reporting and documenting therapeutic effects, adverse effects, client response, and withheld or refused medications to an appropriate health care professional.

4. Knowledge-Based Practice	4.2 Inflammation and Wound Healing
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE CELL

- Structures and functions of the cell:
  - Structure of and movement through plasma membrane (diffusion, osmosis, filtration, mediated transport mechanisms, endocytosis, exocytosis).
  - Cell structural components.
  - Cell function (whole cell activity, cell metabolism, protein synthesis).
  - Cell life cycle.

- Body's defence mechanisms:
  - Skin and mucous membranes.
  - Mononuclear phagocyte system.
  - Inflammatory response (e.g., vascular and cellular response, chemical mediators).
  - Immune system response.

- Wound healing
  - Inflammatory, proliferative, and remodelling or maturation phases.
  - Delays and complications of healing (e.g., hypertrophic scars and keloid formation, contracture, dehiscence, excess granulation tissue, adhesions, hemorrhage, infection, evisceration, fistulas).
  - Factors affecting wound healing (e.g., nutritional deficiencies, inadequate blood supply, corticosteroid medications, infection, mechanical friction on wound, advanced age, obesity, diabetes mellitus, poor general health, anemia).
  - Wound closure (primary, secondary, tertiary intention).
  - Regeneration and repair.

ALTERATIONS OF THE CELL (CELL INJURY)

- Cell injury (sub-lethal and lethal).

- Cell adaptation to sub-lethal injury (e.g., hypertrophy, hyperplasia, atrophy, metaplasia, dysplasia, anaplasia).

- Causes of lethal cell injury (e.g., hypoxia or ischemic injury, physical agents, chemical, microbial, immunological, neoplastic, normal substances).

- Cell death (apoptosis and necrosis).

ETIOLOGY AND PATHOPHYSIOLOGY OF SPECIFIC WOUNDS

- Pressure ulcers, abrasions, abscesses, avulsions, contusions, laceration, puncture wounds, bites.
- Venous and arterial wounds (venous ulcers, arterial ulcers), diabetic ulcers, malignant and fungating wounds.
- Acute and surgical wounds.
- Diagnostic studies, nursing care, and treatment common to inflammation and specific wounds.

NURSING ASSESSMENT

- Baseline assessment—providing critical information about the client's skin integrity and potential risks of skin breakdown.
- Subjective data—assessing symptoms and complete health history including risk factors and pain assessment.
- Objective data—interpreting vital signs, lab data, and assessment of the wound including:
    - Location of wound—anatomical position of the wound on the body.
    - Type of wound—etiology of the wound (surgical, pressure, trauma).
    - Extent of tissue involvement (e.g., full-thickness wound, partial thickness).
    - Knowledge of the staging system of the National Pressure Ulcer Advisory Panel for assessment of pressure ulcer.
    - Type and percentage of tissue in wound base—type of tissue (e.g., granulation, slough, eschar, and the approximate amount).
    - Tissue perfusion.
    - Wound size—dimensions of wound (width, length, depth), including tunnelling and undermining.
    - Wound approximation, dehiscence, evisceration, and fistulas.
    - Intactness of sutures and staples.
    - Assessment of drain in situ and patency.
    - Signs of infection and inflammation.
    - Wound exudate—amount, colour, and consistency.
    - Presence or absence of odour.
    - Periwound area—colour, temperature, and integrity of the skin.

4. Knowledge-Based Practice	4.2 Inflammation and Wound Healing
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting wound and client risk assessment and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching related to:
  - Prevention of infection, trauma, and contact with potentially harmful agents.
  - Early recognition of the manifestation of inflammation and infection.
  - Importance of immediate and ongoing treatment of wound.
  - Role of adequate nutrition in the healing process.

- Identifying clients at risk for pressure ulcers and implementing pressure ulcer prevention strategies:
  - Application of appropriate assessment tools (e.g., Braden scale).

CLINICAL INTERVENTIONS

- Observing, recording and interpreting vital signs, pain response, and lab data.

- Inspecting, palpating, interpreting, and recording characteristics of the wound (e.g., measurements, clinical manifestations of inflammation, consistency, colour, and odour of any drainage, intactness, and presence of sutures, irritation around suture or staple site, swelling or separation of wound edges, undermining, and tunnelling).

- Obtaining specimen for wound cultures.

- Reporting and recording abnormal findings and intervening appropriately.

- Administering pharmacological and non-pharmacological interventions in accordance with assessment findings (e.g., pain and fever), client symptoms, appropriate authorizing mechanisms, protocols, and principles of safe medication administration.

- Promoting adequate hydration and nutrition, rest, immobilization and elevation of injured extremity (when appropriate).

- Administering oxygen and heat and cold interventions.

- Managing wounds according to type, extent, and characteristics of the wound (e.g., surgical, acute, malignant, skin ulceration, traumatic wounds):
    - Cleansing wound and performing wound irrigation (including below the dermis).
    - Preventing and treating wound infection.
    - Protecting clean wound from trauma.
    - Performing wound debridement (e.g., autolytic, mechanical and enzymatic, or conservative sharp wound debridement for removing non-viable tissue to the level of but not into viable tissue).
    - Applying negative-pressure wound therapy.
    - Assisting qualified health care professionals in the administration of hyperbaric oxygen therapy.
    - Applying appropriate dressing to the wound, packs below the dermis, and changes dressing as required (e.g., gauze, non-adherent dressing, transparent film, hydrocolloid dressing, foam, absorptive dressing, hydrogel, alginate dressing, charcoal dressing, antimicrobial dressing, biologic dressing, pressure bandage, binders).

- Performing ongoing assessment of wound.

- Conducting a risk assessment for pressure ulcer using a validated assessment tool.
    - Initiating nursing action based on ulcer characteristics (e.g., measuring wound, documentation, debridement of wound, wound irrigation, local wound care).
    - Frequently assessing pressure ulcer and applying pressure ulcer prevention strategies.
    - Selecting and using pressure-reducing support surfaces (e.g., an air-suspension bed, air-fluidized bed, bariatric bed, rotokinetic bed).

EMERGENCY INTERVENTIONS

- Assessing wounds after assessing and stabilizing airway, breathing, and circulation.

- Assessing for associated injuries such as fractures, dislocations, impalements or neurovascular compromise, and risks of potential infection.

- Cleansing wound (high-pressure irrigation, direct contact) with appropriate cleansing solution.

- Performing wound closure (e.g., tissue adhesive glue, paper adhesive strips).

- Collaborating with qualified professional team members to perform surgical wound closure.

- Applying appropriate wound dressings and wound pouching/drainage system.

- Implementing diagnostic testing as required.
    - Performing common screening and diagnostic procedures and obtaining diagnostic samples.
    - Interpreting common screening and diagnostic test results.
    - Responding appropriately to screening and diagnostic test results.

- Immunizing according to appropriate authorizing mechanisms, and protocols (e.g., tetanus toxoid, tetanus immune globulin, rabies immunization).

- Maintaining documentation and reporting mechanisms according to facility policies.

COMMUNITY BASED NURSING

- Providing health teaching to client related to:
  - Prevention of recurrent pressure ulcers in the home:
    - Identifying and explaining risk factors and etiology of pressure ulcers.
    - Assessing risks at regular intervals.
    - Teaching incontinence care techniques.
    - Demonstrating correct positioning.
    - Assessing client's and support persons' resources (e.g., knowledge, skills, capacity, environment, finances).
  - Assessing skin for:
    - Signs and symptoms of wound for complications (e.g., contractures, dehiscence, evisceration, adhesions, infection).
    - Changes in wound colour, odour, and amount of drainage.
  - Wound care and dressing change.
  - Rest and nutrition in wound healing.
  - Medication-specific side effects and adverse effects.
  - Importance of adhering to prescribed medication and treatment regimen.
  - Importance of notifying an appropriate health care professional when signs of abnormal wound healing or medication side effects occur.

4. Knowledge-Based Practice	4.3 Genetics
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF DEVELOPMENT, GROWTH, AGING, AND GENETICS

- Prenatal development (e.g., embryonic and fetal development).
- Life stages from birth to death.
- Genetics (e.g., chromosomes, genes, DNA, protein synthesis, patterns of inheritance).

ALTERATIONS IN GENES OR COMBINATION OF GENES

- Single gene disorders (e.g., autosomal dominant, autosomal recessive, X-linked recessive).
- Chromosomal disorders, multifactorial inheritance.

GENETICS IN CLINICAL PRACTICE

- Understanding of multi-generational pedigree.
- Genetic testing:
    - Prenatal diagnosis and screening (e.g., amniocentesis, chorionic villus sampling, maternal serum screening, ultrasonography).
    - Screening for carriers of genetic disease.
    - Pre-symptomatic and predisposition testing.

NURSING ASSESSMENT—GENETICS

- Comprehensive health assessment of client undergoing genetic testing or with genetic disorders.
- Additional requirements for the nursing assessment:
    - Assessment of inheritance patterns through the use of the Punnett squares.
    - Psychological issues arising related to knowledge of carrier status of a genetic disorder and influence on life and health care issues.
- Ethical management of genetics information.

4. Knowledge-Based Practice	4.3 Genetics
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment of a client with genetic disorders and/or undergoing genetic testing, and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Understanding the fundamentals of genetics and the influence that genetics has on health and disease.
- Providing accurate information when appropriate to client pertaining to genetics, genetic diseases, and genetic disorders.
- Supporting families in making critical decisions related to genetic issues such as genetic testing.
- Collaborating with the interprofessional team and involving other professionals in the provision of comprehensive health services (e.g., genetic counsellor).
- Adhering to the ethical principles of autonomy, confidentiality, privacy, dignity and equity when providing nursing care.

4. Knowledge-Based Practice	4.4 Immune System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE LYMPHATIC ORGANS AND IMMUNITY

- Structure and functions of the lymphatic system:
  - Central lymphatic organs (e.g., thymus gland, bone marrow).
  - Peripheral lymphatic organs (e.g., tonsils, gut, genital, bronchial, and skin associated lymphoid tissues, lymph nodes, and spleen).
- Types of immunity (natural and artificial active acquired, natural and artificial passive acquired).
- Cells involved in immune response, antigens, and cytokines.
- Comparison of humoral and cell-mediated immunity.
- Types and characteristics of immunoglobulins.
- Effects of aging on the immune system.

ALTERATIONS IN THE IMMUNE RESPONSE

- Etiology, pathophysiology, clinical manifestations, and complications of hypersensitivity reactions and autoimmune disorders, including:
  - Type I: anaphylactic reactions (e.g., anaphylaxis, allergies, atopic reactions).
  - Type II: cytotoxic and cytolytic reactions (e.g., hemolytic transfusion reactions, Goodpasture syndrome).
  - Type III: immune-complex reactions associated with immune disorders (e.g., systemic lupus erythematosus, acute glomerulonephritis, rheumatoid arthritis).
  - Type IV: delayed hypersensitivity reactions (e.g., contact dermatitis and microbial hypersensitivity reactions).
- Autoimmunity, etiology, clinical manifestations, and treatment modalities of autoimmune diseases.
- Relationship between the human leukocyte antigen system and certain diseases (including histocompatibility studies).
- Etiological factors and categories of immunodeficiency disorders.

ALTERATIONS IN THE IMMUNE RESPONSE

- Organ transplants and rejections following transplantation.
- Types and side effects of immunosuppressive therapy.
- Diagnostic studies, nursing care, and treatment common to the assessment of the immune system.

ALTERED IMMUNE RESPONSE EMERGENCIES, including

- Etiology, pathophysiology, clinical manifestations, and complications of systemic anaphylactic reactions.

NURSING ASSESSMENT—IMMUNE SYSTEM

- Assessment of client with altered immune functions.
- Additional requirements for the nursing assessment:
    - Subjective data:
        - Comprehensive health history, past and present allergies, and social and environmental factors, medications and unusual reactions, assessment of symptoms, family history.
    - Objective data:
        - Comprehensive physical assessment and possible diagnostic findings.

4. Knowledge-Based Practice	4.4 Immune System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment of a client with alterations of the immune system and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching related to:
    - Altered immune functions, etiology, clinical manifestations, and treatment modalities.
    - Prevention and management of hypersensitivity reactions (e.g., reducing exposure to allergen, treating symptoms of allergies).
    - Self-care and self-management of altered immune response.

- Performing and interpreting diagnostic studies (e.g., intradermal and epicutaneous skin testing).

CLINICAL INTERVENTIONS

- Recording all client's allergies and reactions to allergens on the chart, the nursing care plan, and the medication record.

- Performing allergy testing.

- Administering desensitizing treatment:
    - Monitoring client for adverse reaction (pruritus, urticaria, sneezing, laryngeal edema, hypotension, redness and swelling at injection site).
    - Ensuring emergency equipment and essential medications are at hand in the event of an anaphylactic reaction.
    - Informing client of potential delayed reaction, up to 24 hours after injection.
    - Accurately recording medication administration and client's response.

EMERGENCY INTERVENTIONS

- Recognizing signs and symptoms of anaphylactic reaction.

- Establishing and maintaining patent airway and initiating CPR if indicated.

- Preventing spread of allergen by using a tourniquet.

- Administering medications (e.g., epinephrine, histamine blockers, volume expanders, vasopressors) pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
- Administering high-flow oxygen via non-rebreather mask.
- Placing client in Trendelenburg position.
- Continuously monitoring vital signs, respiratory effort, oxygen saturation, level of consciousness, and cardiac rhythm.
- Monitoring and responding to anxiety.
- Anticipating and assisting with intubation.
- Anticipating and assisting with cricothyrotomy or tracheostomy.

4. Knowledge-Based Practice	4.5 Infection and Communicable Diseases
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

MICROBIOLOGY

- Role of micro-organisms in health and the transmission of disease.
- Overview, classification, and characteristics of pathogenic and non-pathogenic micro-organisms.
- Morphology of bacteria, viruses, fungi, and protozoa.
- Transmission mechanisms, modes of transmission, and the nature of infection induced by bacteria, viruses, fungi, and protozoa.
- Factors impacting incidences of infections and communicable diseases.
- Host microbe relationships and stages of infections.
- Defences against infection (e.g., normal flora, body system defences, inflammation).
- Infection transmission in hospitals (e.g., health care–associated infection), communities, population and the methods used to control spread of infection.
- Sites, causes, and types of health care–associated infections (e.g., surgical and traumatic wounds, urinary tract, respiratory tract, bloodstream):
    - Public health and diseases in the population—communicable and infectious diseases.
    - Emerging infectious diseases (e.g., Ebola virus, HIV, AIDS, West Nile, anthrax, avian, pandemic influenza, Covid-19).
    - Association between determinants of health and communicable and infectious diseases.
    - The epidemiological triangle (infectious agent, host, and environment).
- Antibiotic-resistant organisms.
- Susceptibility of client to infection throughout the lifespan (e.g., age, nutritional status, stress, disease process, medical therapy).

ALTERATIONS IN THE BODY SYSTEMS

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to:

- Bacterial infections.
- Viral infections.
- Protozoal infections.
- Fungal infections.

INFECTION PREVENTION AND CONTROL

- Health care associated infections:
  - Infection control (e.g., asepsis, pasteurization, sterilization, disinfection, biomedical waste management).
  - Preventing occupational infections in health care workers and clients:
    - Universal precautions including protection from blood, all body fluids, secretions, and excretions, non-intact skin, and mucous membranes.
    - Transmission-based precautions including airborne, droplet, and contact precautions.
    - Needle stick injury prevention.

- Community/Society:
  - Three levels of prevention in community health (primary, secondary, tertiary).
  - Multisystem approach to infection control.
  - Vaccine and non-vaccine preventable diseases.
  - Reportable diseases.

- Diagnostic studies, nursing care, and treatments related to specific infections.

INFECTION AND COMMUNICABLE DISEASES EMERGENCIES

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to:
  - Severe acute respiratory syndrome (SARS).
  - Vancomycin resistant enterococcus (VRE).
  - Influenza.
  - Necrotizing fasciitis.
  - Methicillin-resistant staphylococcus aureus (MRSA).
  - Coronavirus disease (Covid-19).

NURSING ASSESSMENT—INFECTION AND COMMUNICABLE DISEASES

- Assessment of client's defence mechanisms, susceptibility, and knowledge of infections, including:

  - Subjective data:
    - Assessment of historical and social information (e.g., risk behaviours including history that focuses on potential exposure, sexual history of clients and their partners, illicit medication use history, medication use, description of symptoms).
    - Assessment of historical and socio-cultural factors (e.g., risk behaviours including history that focuses on potential exposure, sexual and injection medication use history for clients and their partners).

  - Objective data:
    - Comprehensive physical assessment.
    - Factors that increase susceptibility to infection (e.g., inadequate primary and secondary defences, including analysis of laboratory findings).

4. Knowledge-Based Practice	4.5 Infection and Communicable Diseases
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment of a client at risk of infection and/or with an infection or communicable disease, and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Protecting self against exposure to pathogens.

- Adhering to infection guidelines and protocols to protect self and client.

- Using primary prevention interventions:
  - Providing education on healthy behaviours and on how to decrease the risk of infection.
  - Assessing for risk behaviours.
  - Providing health education on STBBIs and safe sex measures.
  - Providing health promotion education related to healthy sexual behaviours, preventing self-infection, managing symptoms, and preventing infection of others.

- Using secondary prevention interventions:
  - Testing and screening for infectious diseases.
  - Identifying, treating and following up with sexual contacts in incidences of STBBIs.
  - Providing client teaching and counselling on preventing reinfection, managing symptoms, and preventing the infection of others.
  - Advising on partner notification (contact tracing) and client confidentiality.
  - Notifying appropriate authorities of reportable infections.
  - Adhering to protocols for reportable disease requirements.
  - Providing pre-test and post-test counselling when HIV test is indicated.

- Using tertiary prevention interventions:
  - Providing symptom management and psychosocial support.
  - Providing case management in the community (services, referrals, respite care, medications, maintaining infection control standards and reducing risk behaviours, management of symptomatic illnesses).
  - Performing immunization and client teaching.
  - Providing health promotion to reduce the risk of reinfection.

CLINICAL INTERVENTIONS

- Using universal precautions and aseptic techniques in daily practice.

- Informing clients of the rationale for isolation procedures, nature of the disease, and steps in carrying out specific precautions.

- Providing sensory stimulation and psychosocial support to client under isolation precautions.

- Protecting the client's normal defence mechanisms by:
  - Providing daily hygiene and promoting comfort and sleep.
  - Ensuring maintenance of adequate fluid intake and well-balanced diet.
  - Encouraging deep breathing and coughing.
  - Monitoring clients for signs and symptoms of infection, including:
    - Monitoring all invasive and surgical sites for pain, swelling, erythema, purulent drainage.
    - Auscultating and interpreting breath sounds and assessing sputum characteristics.
    - Reviewing laboratory test results.

- Collecting specimens of body fluids or drainage from infected body sites for cultures.

- Administering medication and treatments pursuant to appropriate authorizing mechanisms, and protocols.

EMERGENCY INTERVENTIONS

- Conducting thorough client assessments including obtaining history related to client's illness or injury, recent exposure to infectious agent, presence of an invasive device (e.g., catheter), recent surgery, and specific medication.

- Responding appropriately and swiftly to potential acute presenting problem (e.g., acute pelvic inflammation).

- Recognizing signs and symptoms of infection/communicable disease.

- Anticipating and assisting with intubation as necessary.

- Administering oxygen through a non-rebreather mask at high flow rate.

- Establishing intravenous access.

- Performing peripherally inserted central catheter (PICC) placement.

- Assisting with insertion of other central venous access devices (CVADs).

- Administering fluid resuscitation as prescribed including blood and blood products.

- Administering medications pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.

- Continuously monitoring vital signs, oxygen saturation, level of consciousness, and findings from diagnostic tests.

- Recognizing signs and symptoms of septic shock.

COMMUNITY-BASED NURSING

- Providing symptom management and psychosocial support.
- Providing directly observed therapy (DOT) home health programs (e.g., for clients with TB).
- Providing immunization and client teaching.
- Informing clients of the rationale for isolation procedures in the community, nature of the disease, and steps in carrying out specific precautions.

4. Knowledge-Based Practice	4.6 Cancer
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

BIOLOGY OF CANCER

- Major dysfunctions present in the process of cancer (e.g., defective cellular proliferation and defective cellular differentiation).
- Development of cancer (e.g., initiation, promotion, progression).
- Role of the immune system in the recognition and destruction of cancer cells.
- Classification of cancer (e.g., anatomical site, histological analysis, extent of disease, clinical staging).
- Seven warning signs of cancer (C.A.U.T.I.O.N.).
- Cancer through the lifespan and cancer as a disease of aging.
- Prevalence and incidence of cancer.

DETECTION OF CANCER AND TREATMENT

- Biopsy (incisional, excisional, endoscopic procedures).
- Treatment modalities for cancer (curative, control, palliative):
    - Surgical therapy including supportive (e.g., creation of colostomy, feeding tube).
    - Chemotherapy effects on cells, classification of chemotherapy medications, preparation and administration of chemotherapy:
        - Central vascular access devices—tunnelled catheters, peripherally inserted central catheters and midline catheters, implanted infusion ports, infusion pumps (IV, subcutaneous, intra-arterial, epidural routes).
        - Regional chemotherapy administration (e.g., intraprostatic).
        - Effects of chemotherapy on normal tissue.
    - Radiation therapy external and internal radiation:
        - Effects of radiation therapy (e.g., cellular death and tissue reaction).
        - Goals of radiation therapy.
- Treatment modalities for cancer (curative, control, palliative):
    - Biological and targeted therapy including use of interferons, interleukins, monoclonal antibodies, and growth factors to modify relationship between the host and the cancer cells.
    - Toxic and side effects of biological agents.

- Safe handling and disposal of chemotherapy medications and radioactive material.

- Adverse effects caused by radiation therapy and chemotherapy (e.g., fatigue; anorexia; bone marrow suppression; skin reactions; oral, oropharyngeal and esophageal reactions; pulmonary, gastrointestinal, and reproductive effects; alopecia; risk of hemorrhage and infections).

- Bone marrow and stem cell transplantation.

- Management of pain in cancer.

- Complications resulting from cancer (e.g., nutritional problems, infection, oncological emergencies).

- Diagnostic studies, nursing care, and treatment common to the diagnosis of cancer.

ONCOLOGICAL EMERGENCIES

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to:
    - Obstructive emergencies (e.g., superior vena cava syndrome, spinal cord compression, third space syndrome, intestinal obstruction).
    - Metabolic emergencies (e.g., syndrome of inappropriate antidiuretic hormone, acute hypercalcemia, tumour lysis syndrome, septic shock and disseminated intravascular coagulation, acute infection, cytopenias related to bone marrow suppression, electrolyte and fluid imbalances).
    - Infiltrative emergencies (e.g., cardiac tamponade, carotid artery rupture).

CANCER SURVIVORSHIP

- Effects of cancer on quality of life:
    - Physical well-being and symptoms.
    - Psychological well-being.
    - Social well-being.
    - Spiritual well-being.
    - Well-being of support persons.
    - Financial impact.

- Late effects of radiation and chemotherapy.

- Phases of cancer survival (acute, extended, and permanent).

- Survivorship care plan:
    - Prevention and detection of new cancers and recurrent cancer.
    - Surveillance for cancer metastases, cancer recurrence, secondary cancer.
    - Interventions for consequences of cancer and its treatment.
    - Coordination between specialists and primary care professionals.

NURSING ASSESSMENT

- Comprehensive health assessment:
    - Subjective data
        - Comprehensive health history, and social and environmental factors, medications, assessment of symptoms, family history.
    - Objective data

        - Comprehensive physical assessment and possible diagnostic findings.

- Survivor assessment—explore client's history of cancer including:
    - Treatment modalities and short- and long-term impact on client.
    - Client's self-perception, symptoms, effects of symptoms on lifestyle and self-care ability.
    - Effects on client's relationships and social, spiritual, sexual, and psychological health.
    - Client's ability to remain productive and successful in his or her job, economic security, and physical well-being.

4. Knowledge-Based Practice	4.6 Cancer
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment of a client with cancer or a survivor of cancer and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing cancer prevention education to individuals, groups, and communities including:
  - Healthy lifestyle choices (e.g., proper nutrition, fitness, and vitamin D).
  - Recognition of early health problems and changes in the body.
  - Importance of regular checkups and screening programs.
  - Eliminating or reducing exposure to carcinogenic substances (e.g., tobacco, alcohol, UV rays).
  - Relationship between infection and cancer, artificial hormones, and family genetics.

- Establishing a survivorship care plan.

- Preparing cancer survivor and support persons with knowledge and resources needed for ongoing self-management related to:
  - Short- and long-term impact of treatment modalities.
  - Lifestyle behaviours to improve quality of life.
  - Dietary supplements and nutritional complementary therapies to manage disease symptoms.
  - Psychosocial care.
  - Supporting spirituality.
  - Resources to facilitate informed decision-making.
  - Timely and appropriate referrals to agencies and resources.

CLINICAL INTERVENTIONS

- Taking the goals of the treatment plan into account (cure, control, palliation) when providing support and nursing care to client.

- Using evidence-informed guidelines and protocols in the treatment and nursing care of client receiving different treatment modalities (e.g., chemotherapy, radiotherapy, biological therapy).

- Educating the client about treatment regimens and the management of side effects, disease symptoms, and the progression of malignant process.

- Collaboratively managing the side effects of chemotherapy, radiation therapy, and biological therapy, and the symptoms of cancer.

- Recognizing toxic effects of treatment and reports acute toxic effects to the appropriate health care professional.

- Distinguishing tolerable side effects from acute toxic effects of chemotherapeutic agents and radiation therapy.

EMERGENCY INTERVENTIONS

- Adhering to client's health care directives.

- Recognizing the clinical manifestations of oncological emergencies and managing client needs (e.g., hypotension, tachycardia, altered mental status, delayed capillary fill, decreased urinary output, pale cool skin and extremities, hemorrhaging).

- Rapidly collecting client's history and recognizing clients who are at high risk of an oncological emergency.

- Ensuring adequate oxygenation and circulatory support to correct hypoxia and inadequate tissue perfusion.

- Maintaining an effective airway and ventilation, applying non-rebreather mask at high flow level (assisting with intubation when necessary and cares for client on ventilator).

- Initiating IV, administering prescribed fluid resuscitation including blood and blood products, and administering prescribed medications.

- Recognizing signs and symptoms of extravasation and intervening appropriately.

- Monitoring vital signs and oxygen delivery (e.g., SPO_2, CVP, pulmonary capillary wedge pressure, arterial pressure through an arterial line when applicable).

- Conducting ongoing hemodynamic monitoring and client assessment.

COMMUNITY-BASED NURSING

- Educating client about treatment regimens and the management of side effects, illness symptoms, and the progression of malignant process.

- Educating client on the safe handling and disposal of chemotherapy medications and radioactive material.

- Assisting client to cope with the psychosocial, physical, spiritual issues associated with cancer.

- Mobilizing a collaborative team of health care professionals, community resources, and the client's support persons to better meet client's needs.

- Advising client about the availability of supportive therapies (e.g., analgesics, antiemetics, antidiarrheals) to ensure optimal quality of life during treatment.

4. Knowledge-Based Practice	4.7 Fluid, Electrolyte, and Acid-Base Imbalances
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

PHYSIOLOGY OF BODY FLUID COMPARTMENTS

- Composition of major body fluid compartments (intracellular, extracellular, and trans-cellular space).
- Functions of body fluid and calculation of fluid gain or loss.
- Processes involved in the regulation of the movement of water and electrolytes between the body fluid compartments (e.g., diffusion, facilitated diffusion, active transport, osmosis [osmotic pressure, hydrostatic pressure, oncotic pressure]).
- Regulation of water balance (e.g., hypothalamic, pituitary, adrenal cortex, renal, cardiac, gastrointestinal regulation and insensible water loss).
- Acid-base regulation (e.g., buffer system, respiratory system, renal system).
- Composition and indication for use of common intravenous fluid solutions and electrolyte therapy (e.g., hypotonic, isotonic, hypertonic solutions and intravenous additives and plasma expanders including whole blood, packed cells, plasma, albumin, commercial plasma, dextran, hetastarch, cryoprecitate).

FLUID, ELECTROLYTE, AND ACID-BASE IMBALANCES

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to:
    - Extracellular fluid volume imbalances—hypervolemia and hypovolemia.
    - Sodium and volume imbalances—hypernatremia and hyponatremia.
    - Potassium imbalance—hyperkalemia and hypokalemia.
    - Magnesium imbalance—hypermagnesemia and hypomagnesemia.
    - Calcium imbalance—hypercalcemia and hypocalcemia.
    - Phosphate imbalance—hyperphosphatemia and hypophosphatemia.

FLUID, ELECTROLYTE, AND ACID-BASE IMBALANCES

- Acid-base imbalances (e.g., respiratory acidosis, respiratory alkalosis, metabolic acidosis, metabolic alkalosis, mixed acid-base disorders):
    - Etiology, clinical manifestations, and treatment modalities.

- Risk factors for fluid, electrolytes, and acid-base imbalances (e.g., age, gender, environmental, chronic diseases, trauma, therapies, gastrointestinal losses).

- Diagnostic studies, nursing care, and treatment common to the assessment of fluid, electrolyte, and acid-base imbalances.

EMERGENCIES RELATED TO FLUID, ELECTROLYTE, ACID-BASE IMBALANCES AND TREATMENT MODALITIES

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to convulsions, unconsciousness, coma, dysrhythmias, cardiopulmonary arrest.

- Acute blood transfusion reactions.

- Cardiopulmonary arrest.

NURSING ASSESSMENT—FLUID, ELECTROLYTE, AND ACID-BASE

- Subjective data:
    - History of problems involving the kidneys, heart, GI system, lungs.
    - Specific diseases (e.g., diabetes mellitus, diabetes insipidus, chronic obstructive pulmonary disease, ulcerative colitis, Crohn's disease).
    - Incidence of prior fluid, electrolyte, or acid-base disorder.
    - Medication, surgery, or other treatments (e.g., kidney or bowel surgery).
    - Other subjective data such as description of illness (onset, course, and treatment), special diet, bowel and bladder habits, exercise patterns, changes in sensations (e.g., numbness, tingling, fasciculation, muscle weakness), changes in mentation or alertness (e.g., confusion, memory impairment, lethargy).

- Objective data:
    - Thorough physical examination.
    - Patient hydration status (skin turgor, texture, fluid intake, and output).
    - Assessment of serum electrolyte, serum and urine osmolality, serum glucose, BUN, serum creatinine, urine specific gravity, urine electrolytes, arterial and venous blood gases.

4. Knowledge-Based Practice	4.7 Fluid, Electrolyte, and Acid-Base Imbalances
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment of a client with fluid, electrolyte, and acid-base imbalances and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Performing common screening and diagnostic procedures and obtaining diagnostic samples.
- Interpreting common screening and diagnostic study results.
- Responding appropriately to screening and diagnostic study results.

HEALTH PROMOTION

- Providing health teaching to client related to:
  - Fluid and electrolyte requirements, promotion of healthy environments affecting hydration and access to safe water.
  - Recognition of risk factors and early signs and symptoms of fluid, electrolytes, and acid-base imbalances (especially in vulnerable clients such as infants, elderly clients, and clients with chronic health alterations).
  - Risk management including water intake, adequate ventilation, activity and exercise during heat waves, diet education.
- Acknowledging, advocating, and facilitating necessary actions respecting client's ethical and religious beliefs regarding blood transfusions.

CLINICAL INTERVENTIONS

- Monitoring for cardiovascular, respiratory, and neurological changes.
- Performing skin turgor test.
- Assessing need for and obtaining order to initiate intravenous therapy.
- Using the nursing process in the provision of intravenous therapy including:
  - Initiating intravenous therapy.
  - Performing venipuncture and initiating infusion.
  - Calculating, regulating, and maintaining intravenous flow rate (including administering fluid bolus).
  - Changing intravenous solution and infusion tubing.

- Inspecting insertion site and performing dressing change, including central venous access devices (CVADs).
- Maintaining patency of intravenous access device and CVAD, including peripherally inserted central catheter (PICCs) (e.g., flushing, anticoagulation).
- Recognizing complications, intervening, and reporting complications.
- Drawing blood samples including blood cultures through all intravenous access devices and CVADs.
- Discontinuing intravenous access.
- Using electronic infusion devices as appropriate.
- Managing unexpected outcomes and complications of intravenous infusion and intervenes to correct complications.

- Performing peripherally inserted central catheter (PICC) placement.
- Assisting qualified health professionals in the insertion of other central vascular access devices (CVADs), and implanted vascular access devices (IVADs).
- Removal of PICCs and assisting with removal of other CVADs.
- Administering fluid via hypodermoclysis.
- Administering medication and parenteral replacement of fluids and electrolytes (e.g., crystalloids, colloids, total parental nutrition).
- Measuring and monitoring fluid intake and output.
- Reviewing, interpreting, communicating, and documenting laboratory test results.
- Initiating discharge teaching for client discharged on intravenous therapy and CVAD/PICC/IVAD therapy.

EMERGENCY INTERVENTIONS

- Conducting a thorough client assessment relevant to the specific emergency situation.
- Recognizing signs and symptoms of specific emergency.
- Taking appropriate action based on level of competency.
- Establishing and maintaining patent airway and initiating CPR if indicated.
- Establishing intravenous access and/or assisting with insertion of central line.
- Establishing intraosseous infusion.
- Administering fluid resuscitation as prescribed including blood and blood products.
- Administering medications pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
- Continuously monitoring vital signs, oxygen saturation, level of consciousness, and findings from diagnostic tests.

- Anticipating and assisting with intubation.

- Assisting physician, and collaborating and consulting with members of the interprofessional team to manage the emergency situation.

COMMUNITY-BASED NURSING

- Providing teaching related to:
    - Intravenous/CVAD/PICC/IVAD therapy:
        - Signs and symptoms of infiltration, phlebitis, and inflammation and other potential complications with flow, blood in tubing, or on dressing.
        - Reporting early onset of signs and symptoms to health care professional.
        - Importance of not altering flow rate.
        - Care and protection of device when performing hygiene activities while using universal precautions.
    - Venous access device selection and potential complications:
        - Discomforts around insertion site (e.g., arms, shoulders, or side of neck, shortness of breath).
    - Purpose of infusion and implications.
    - Use of electronic infusion pump (EIP) in the administration of IV therapy, alarms, troubleshooting, and disconnection of IV tubing in the event of EIP failure in client's home.
    - Instructions and return demonstration of required skills.
    - Dressing changes, inspection of insertion site, irrigations, tubing changes.
    - Recognition of complications with the central venous line and insertion site (e.g., catheter damage, displacement, swelling, tenderness, redness, leaking at insertion site, occlusion of port or catheter, temperature above 37.5° Celsius).
    - Appropriate disposal of soiled dressings and equipment.

- Implementing safety protocols in the client's home environment (e.g., using properly grounded electrical outlets, using safe and suitable areas in the home to avoid contamination).

- Providing list of health care professionals and phone numbers for emergency access at all times for problems.

4. Knowledge-Based Practice	4.8 Preoperative Care
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- History of surgical nursing.
- Classification of surgery and types of surgical procedures:
  - Seriousness (e.g., major, minor).
  - Urgency (e.g., elective, urgent, emergency).
  - Purpose (e.g., diagnostic, ablative, palliative, reconstructive or restorative).
  - Procurement for transplant.
  - Constructive.
  - Cosmetic.

PREOPERATIVE CARE

- Legal preparation for surgery and components of informed consent.
- Purpose of the preoperative client interview.
- The LPN's role in the physical, psychological, and educational preparation of the client undergoing surgery.
- Common diagnostic tests prior to surgery; measurement and normal values of diagnostic tests.
- Components of preoperative care plan (e.g., goals and objectives, setting priorities, informed consent).
- Day-of-surgery preparation for client.

PREOPERATIVE NURSING ASSESSMENT

- Baseline preoperative function to assist in preventing and recognizing possible postoperative complications.
- Data that identifies risk factors and plan care to ensure client safety throughout the surgical experience.

PREOPERATIVE NURSING ASSESSMENT

- Assessment considerations and risk factors (e.g., age, sex, cognitive function, physiological factors, cultural and ethnic factors, psychosocial factors):

- Subjective data:
  - Health history (e.g., medication history, risk factors including current health status/illness, previous surgeries and illness, perception and understanding of surgery, allergies, smoking habits, alcohol ingestion and substance use and abuse, occupation, preoperative pain assessment, culture, client expectations and supports).
  - Psychosocial assessment (e.g., situational changes, concerns with the unknown, concerns with body image, past experiences, knowledge deficit, support, financial implications).

- Objective data:
  - Physical examination.
  - Assessment related to the client's medical history and on body systems that likely will be affected by surgery.
  - Review of diagnostic test results.

4. Knowledge-Based Practice	4.8 Preoperative Care
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a preoperative health assessment and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Reviewing or conducting a nursing assessment of preoperative client.
- Synthesizing information from multiple resources to establish a plan of care, including a preoperative teaching plan.
- Implementing preoperative nursing interventions:
  - Reviewing and/or facilitates obtaining of informed consent.
  - Providing health promotion activities (including postoperative exercises).
  - Providing preoperative teaching.
  - Preparing the client physically for surgery, including administering preoperative medication and maintaining client safety.
- Reporting any abnormal vital signs, respiratory infections, or other problems to physician.
- Evaluating nursing interventions to the extent possible prior to surgery.
- Documenting preoperative surgical nursing care.
- Collaborating with members of the health care and interprofessional team during the preoperative phase of surgery.

4. Knowledge-Based Practice	4.9 Intraoperative Care
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

INTRAOPERATIVE CARE

- The functions of the members of the surgical team.
- The role of the LPN (e.g., scrub and circulating roles).
- Standards of practice and competencies for perioperative nursing.
- Principles of aseptic techniques used in the operating room.
- Client positioning for surgery and safety.
- Differentiation between, and advantages, disadvantages, and rationale for, choice of general, regional, or local anesthesia technique.
- Techniques used for administering local anesthesia.
- Leadership in perioperative nursing care.

4. Knowledge-Based Practice	4.9 Intraoperative Care
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting an intraoperative assessment and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

PREOPERATIVE HOLDING AREA

- Assessing the client's health status and health record.
- Assessing the psychological status of the client and support persons.
- Determining client health care goals and expected outcomes.
- Developing a plan of care to meet client health care goals and expected outcomes.
- Transferring the client to the operating room.

CIRCULATING NURSE COMPETENCIES

- Receiving client in the operating room.
- Reviewing the preoperative assessment.
- Monitoring the client's physiological status during the perioperative experience.
- Providing equipment and supplies based on the client's need.
- Assisting the anesthesia provider and supporting the client during the induction, maintenance, and emergence phase of general anesthesia.
- Assisting the anesthesia provider and supporting the client during regional, monitored, conscious sedation/analgesia.
- Positioning the client for surgery and performing skin preparation.
- Creating and maintaining a sterile field.
- Performing sponge, sharps, and instrument counts.
- Providing specimen care.

- Administering intravenous fluids, medications, and blood or blood products.
- Providing postoperative care (e.g., ensures surgical dressings and drains are secure, assists with client transfer and positioning, accompanies the anesthesia provider and the client to the post-anesthesia recovery room, and monitors the client until the post-anesthesia nurse receives report and assumes care).

SCRUB NURSE COMPETENCIES

- Performing surgical hand antisepsis.
- Donning a sterile gown and performing closed gloving.
- Creating and maintaining a sterile field (e.g., establishing sterile setup for surgical intervention and applying sterile drapes).
- Providing instruments, equipment, and supplies based on the client's need.
- Performing sponge, sharps, and instrument counts.
- Taking corrective action when breaks in aseptic technique occur within the sterile field.
- Communicating and documenting maintenance of sterile field, sponge, sharps, and instrument counts, and provision of equipment and supplies.

4. Knowledge-Based Practice	4.10 Postoperative Care
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

POSTOPERATIVE CARE

- Immediate postoperative recovery:
  - Critical phase for assessing the after-effects of anesthesia.
  - Admitting client to post-anesthesia care unit (PACU) and care of client in the PACU.
  - Etiology, assessment, and potential problems of client in the PACU.
  - Use of post-anaesthetic recovery score (PARS) for client discharge from the PACU.

- Postoperative convalescent phase:
  - Postoperative nursing care individualized on the basis of the nature of the surgery, pre-existing medical conditions, the onset of complications, and the speed of recovery.
  - Problems related to postoperative period on clinical unit.
  - Postoperative teaching and preparation for discharge planning.

POSTOPERATIVE ASSESSMENT

- Immediate post-recovery period:
  - Timely and accurate critical assessment focus on pain management and monitoring, and maintaining respiratory, circulatory, fluid and electrolyte, and neurological status.
  - Comprehensive and detailed assessments of a client's condition regarding effect of anesthesia, including airway clearance, cardiovascular complications, temperature control, and neurological functioning.

- Postoperative convalescent period:
  - Respiratory, circulatory, and neurological functions; temperature control; fluid and electrolyte balances; nutritional balance; skin integrity and condition of wound; GI and GU functions; comfort; client expectations.

4. Knowledge-Based Practice	4.10 Postoperative Care
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a postoperative health assessment and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

CLINICAL INTERVENTIONS

- Immediate post-recovery period:
    - Receiving report from the circulating nurse and/or anesthesia provider (e.g., pertinent medical history including allergies, procedures performed, type of anesthesia, vital signs, complication, blood loss, fluid replacement, medication, type and size of airway, extent of surgical wound, restrictions to movement, and preoperative medical and/or nursing diagnoses).
    - Confirming client identity and performing immediate nursing interventions (e.g., attaches oxygen tubing to regulator, hangs IV fluids, checks IV flow rates, attaches pulse oximetry, connects any drainage tubes to gravity drainage, continuous or intermittent suction, attaches cardiac monitor, ensures indwelling catheter and bag are in drainage position and patent).
    - Conducting comprehensive and detailed ongoing assessments of client's condition (e.g., vital signs; pulse oximetry; respiratory and cardiac, neurological, GI, GU, and fluid status; temperature; surgical site and drains; skin integrity; comfort, safety, and anxiety levels).
    - Administering medication and/or treatments as necessary.
    - Contacting physician for transfer or discharge orders once all physiological signs have stabilized.

- Postoperative convalescent period:
    - Ensuring client's room is set up to receive postoperative client.
    - Receiving report from PACU nurse.
    - Confirming client identity, assisting in transferring client to bed, and performing immediate nursing interventions (e.g., attaches any existing oxygen tubing, hangs IV fluids, checks IV flow rate, attaches NG tube to suction, places indwelling catheter in drainage position).
    - Conducting a comprehensive physical assessment appropriate for client's unique type of surgery including assessment of all vital signs, and compares findings with vital signs in recovery area and client's baseline values.
    - Continuing to monitor client as ordered and as condition warrants.
    - Maintaining client's airway, monitoring lung sounds, ensuring all drainage tubes are properly connected, validating NG tube placement, and irrigating as ordered.
    - Assessing surgical dressing, reinforcing as needed, inspecting drains and condition of wound if no dressing.
    - Assessing for bladder distention, monitoring intake and output auscultating for bowel sounds.

- Assessing pain level and managing pain control including the provision of patient-controlled analgesia, epidural analgesia, local infusion pump analgesia, and non-pharmacological aides to promote comfort.
- Administering medication and/or treatments as necessary.
- Monitoring progress of wound healing and preforming dressing changes.
- Applying all types of dressings, bandages, and binders including, but not limited to:
    - Dry/moist-to-dry dressings.
    - Pressure bandages.
    - Transparent dressings.
    - Hydrocolloid, hydrogel, foam, or absorption dressings.
    - Gauze and elastic bandages.
    - Abdominal and breast binders.
- Applying warm and cold therapies including:
    - Moist heat (compress and sitz bath).
    - Aquathermia.
    - Ice pack hypothermia or hyperthermia blankets.
- Removing drains, sutures, and staples.
- Monitoring drainages and managing wound drainage devices (e.g., Jackson-Pratt, Hemovac, Penrose).
- Applying anti-embolism stockings or pneumatic compression cuffs to lower extremities and attaching to compressor.
- Encouraging breathing and coughing exercises, range-of-motion exercises, and other postoperative exercises; ensures proper body positioning and alignment.
- Involving and teaching client and support persons/designate to promote informed decision-making.
- Conducting postoperative teaching and initiating discharge planning process:
    - Involving client and support persons/designate in postoperative teaching and discharge planning.
    - Preparing to make necessary referrals as client's condition dictates.

4. Knowledge-Based Practice	4.11 Visual and Auditory System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE VISUAL AND AUDITORY SYSTEM

- Structures and functions of the visual and auditory systems:
    - Visual system—internal structures (e.g., iris, lens, ciliary body, choroid, and retina) and external structures (e.g., eyebrows, eyelids, eyelashes, lacrimal system, conjunctiva, cornea, sclera, and extraocular muscles).
    - Auditory system—peripheral auditory system (e.g., structures of the ear: external, middle, inner) and central auditory system (e.g., brain and its pathways).
- Physiological processes involved in normal vision and hearing.
- Factors affecting sensory function (e.g., age, quality and quantity of stimuli, social interaction, family factors, environmental factors).
- Age-related changes in the visual and auditory system that influence assessment findings.

ALTERATIONS OF THE VISUAL AND AUDITORY SYSTEMS

- Types of sensory alterations (e.g., sensory deficits, sensory deprivation, sensory overload).
- Types of refractive errors (e.g., myopia, hyperopia, presbyopia, astigmatism, aphakia) and corrections (e.g., corrective glasses, contact lenses, corneal moulding, laser, implant, thermal procedures).
- Levels of visual impairment:
    - Legally blind (e.g., total blindness, functional blindness).
        - Common causes (e.g., age-related macular degeneration, glaucoma, diabetic retinopathy, and cataracts).
    - Partially sighted.
- Etiology, pathophysiology, and clinical manifestations of visual disorders:
    - Extraocular disorders including dry eye disorder, strabismus, inflammation, and infection (e.g., hordeolum, chalazion, blepharitis, conjunctivitis, keratitis).
    - Intraocular inflammation and infection (e.g., uveitis, cytomegalovirus retinitis, endophthalmitis, panophthalmitis).
    - Corneal disorders (e.g., corneal scars and opacities, keratoconus).
    - Intraocular disorders (e.g., cataracts).
    - Retinopathy (e.g., diabetic retinopathy, hypertensive retinopathy).
    - Retinal detachment, age-related macular degeneration, glaucoma.
    - Enucleation and ocular manifestations of systemic diseases.
- Etiology, pathophysiology, and clinical manifestation of auditory problems:

- External ear and canal (e.g., trauma, external otitis, cerumen and foreign bodies, malignancy of the external ear and canal).
- Middle ear and mastoid (e.g., acute otitis media, chronic otitis media and mastoiditis, otitis media with effusions, otosclerosis).
- Inner ear problems (e.g., Ménière's disease, labyrinthitis, acoustic neuroma, hearing loss and deafness).

- Diagnostic studies, nursing care, and treatment common to the assessment of the visual and auditory system.

VISUAL AND AUDITORY EMERGENCIES

- Etiology, pathophysiology, and clinical manifestations:
  - Eye trauma (e.g., blunt injury, penetrating injury, chemical injury, thermal injury, foreign bodies, trauma, burns).
  - Retinal emergencies (e.g., central retinal artery occlusion, retinal detachment).
  - Acute angle-closure glaucoma.
  - Ear infection, pain, foreign body in the ear canal, or injury to the tympanic membrane.

NURSING ASSESSMENT OF THE VISUAL AND AUDITORY SYSTEM

- Integration of knowledge from several areas: normal anatomy and physiology of the sensory and nervous system, the pathophysiology of sensory deficits and factors that affect sensory function, and therapeutic communication principles.

- Determinants of health (e.g., biology and genetics, gender, personal health habits, culture, environment).

- Findings of diagnostic studies of the visual and auditory system aid in monitoring client's condition and planning appropriate interventions.

- Recognition of environmental hazards for client with sensory alterations.

- Visual system:
  - Subjective data:
    - Health history including ocular history (e.g., vision difficulty, eye pain), medication, family history, nutrition and elimination, sleep, reproductive system, STIs, self-care, social and occupational history, coping abilities.
  - Objective data:
    - Physical examination including inspecting the ocular structures and determining the status of their respective functions.
    - Physiological functional assessment including determining visual acuity, the client's ability to judge closeness and distance, assessing extraocular muscle function, evaluating the visual fields, observing pupil function, and measuring intraocular pressure.
    - Assessment of ocular structures including the ocular adnexa, the external eye, and internal structures.
- Auditory system:
  - Assessment of the vestibular system.
  - Subjective data:
    - Current health of the auditory system, health history, medication, surgery or other treatments, family history, nutrition and elimination, activities of daily living and exercise, self-care, coping abilities.
  - Objective data:
    - Physical examination of external ear, external auditory canal, and tympanum.

4. Knowledge-Based Practice	4.11 Visual and Auditory System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a comprehensive health assessment of a client with alterations of the sensory systems of the body and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing education and resources to individuals, groups, and communities on risk reduction for sensory loss, including:
  - Promoting disease prevention, early detection, and referrals.
  - Reinforcing health promotion and prevention practices.
  - Establishing safety practices (e.g., assistive devices, equipment, noise control) and safe physical environment (e.g., workplace, school, home, playground).
  - Promoting early and timely immunization of children against diseases capable of causing hearing loss (e.g., rubella, mumps, measles).
  - Health teaching on the signs of decreased visual and auditory acuity and importance of regular checkups with specialists.

- Recommending and/or conducts appropriate screening techniques to target populations, including:
  - Conducting newborn hearing screening during well-baby clinics.
  - Reinforcing to parents eye examination guidelines for infants and children.
  - Using the Amsler Grid to screen for macular degeneration.

- For clients who have experienced sensory alterations and/or loss:
  - Providing health teaching on understanding sensory loss, maintaining healthy lifestyles, promoting self-care, promoting socialization activities, and involving support persons/designate.
  - Encouraging client to visit ear/eye specialist regularly.
  - Assisting client and support persons to identify potential hazards at home and work and to take steps to prevent accidents and injury.
  - Promoting good hygiene of the ears and eyes.
  - Providing emotional support to client and support persons.

CLINICAL INTERVENTIONS

- Involving client and support persons/designate in the provision of a safe, pleasant, and stimulating sensory environment.

- Using effective communication techniques specific to the sensory alteration.
- Providing pre-, intra-, and postoperative care.
- Administering medications including eye and ear drops, and topical medication, pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
- Applying warm or cool compresses and other comfort measures as necessary.
- Providing nursing care to clients with visual impairment of recent onset.
- Providing eye care to comatose clients.
- Providing care of contact lenses, artificial eyes, and hearing aids.
- Irrigating eye and ear (uses appropriate restraint for child when necessary to prevent complications).
- Collecting specimens from the eyes or ears.
- Providing information about disease process and treatment options.
- Referring clients to specialized health care services (e.g., occupational therapist, speech therapist).
- Documenting and reporting as necessary.
- Collaborating with members of the health care and interprofessional team.

EMERGENCY INTERVENTIONS

- Stabilizing the client's ABCDE (airway, breathing, circulation, disability, exposure), then proceeding with the ocular/ear examination:
  - Assisting and/or removing the contact lens (if applicable).
  - Instilling eye/ear drops or ointments as required.
  - Administering analgesics, antibiotics, antipyretics pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
  - Applying warm compresses.
  - Cleansing and irrigating eye/ear.
  - Obtaining a baseline pH measurement of the eye in the case of a chemical exposure.
  - Applying eye patch when appropriate.
  - Assisting physician in the removal of foreign bodies embedded in the eye or in the ear.

4. Knowledge-Based Practice	4.12 Integumentary System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHISIOLOGY OF THE INTEGUMENTARY SYSTEM

- Structures and functions of the integumentary system:
    - Layers of the integumentary system.
    - Hypodermis and accessory skin structures (hair, muscles, glands, nails).
    - Protection, temperature regulation, vitamin D production, sensation, excretion.
    - Effects of aging on the integumentary system.

ALTERATIONS OF THE INTEGUMENTARY SYSTEM

- Etiology, pathophysiology, and clinical manifestations of:
    - Acute dermatological problems.
    - Chronic dermatological problems.
    - Malignant dermatological disorders.
    - Bacterial, viral, and fungal infections of the integument.
    - Infestations and insect bites.
    - Allergic dermatological disorders.
    - Benign dermatological disorders.
    - Dermatological manifestations of common systemic diseases.
    - Aesthetic procedures and skin grafts.

- Etiology, pathophysiology, and clinical manifestations of burn injuries:
    - Types of burn injuries (e.g., thermal, chemical, electrical, radiation).
    - Classification of burn injury (e.g., depth of burn, extent of burn, location of burn, client risk history).
    - Phases of burn management:
        - Emergent (resuscitative) phase:
            - Pathophysiology (e.g., fluid and electrolyte shifts, inflammation and healing, immunologic changes).
            - Complications (e.g., cardiovascular, respiratory, urinary systems).
        - Acute (wound healing) phase:
            - Pathophysiology, clinical manifestations, laboratory values (sodium and potassium).
            - Complications (e.g., infection, cardiovascular, respiratory, neurological, musculoskeletal, GI, endocrine system).
            - Excision and grafting (e.g., cultured epithelial autografts, artificial skin).
            - Pain management.
            - Physical, occupational, and nutritional therapy.

            - Psychosocial care.
        - Rehabilitative (restorative) phase:
            - Pathophysiological changes and clinical manifestations.
            - Complications (e.g., joint contractures and hypertrophic scarring).
    - Emergency management of burns.
    - Physiological and psychological basis of pain.

- Diagnostic studies, nursing care, and treatment common to the assessment of the integumentary system.
- Risks and precautions associated with aesthetic procedures.

NURSING ASSESSMENT OF THE INTEGUMENTARY SYSTEM

- Subjective data:
    - Health history, family history, social, environment, or occupational history, self-care history, cognitive-perceptual nutritional history, general assessment (current skin condition, related changes, symptoms).

- Objective data:
    - Physical assessment related to the integumentary system (general observations on obesity, emaciation, clinical manifestation of inflammation, primary/secondary skin lesions).
        - Inspection including general colour, change in colour, pigmentation, vascularity, bruising, presence of lesions, moles, masses, or discolourations.
        - Odour, distribution, texture, and quantity of hair; examination of the nails (shape, thickness, curvature, surface), nail bed (grooves, pitting, ridges or detachment).
        - Palpation including temperature, turgor, mobility, moisture, texture.
        - Age-related factors considered in assessment of findings (skin, hair, nails), physical condition, current health status, and occupation.

- Burn injuries:
    - Collaboration with interprofessional team in the assessment of the extent of a burn.
    - Age-related considerations for a client with burns (e.g., older adult at greater risk for injury); pre-existing medical conditions.

4. Knowledge-Based Practice	4.12 Integumentary System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a dermatological health assessment and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Reinforcing health promotion activities appropriate to good skin health (e.g., avoidance of environmental hazards, adequate rest and exercise, proper hygiene and nutrition).

- Encouraging use of self-examination and treatment, including:
    - Safe sun practices.
    - Avoidance of known irritants for client suffering with irritant or allergic contact dermatitis.
    - Effects of radiation.
    - Restorative function of sleep, exercise, hygiene, and a well-balanced diet.
    - Dangers of self-diagnosis and treatment.
    - Adherence to duration of treatment and need to follow treatment directions.
    - Signs of skin inflammation or extension of skin problems.

CLINICAL INTERVENTIONS

- Applying soaks or wet dressings to the affected area.

- Providing medicated baths when appropriate (e.g., potassium permanganate, sodium bicarbonate).

- Applying topical medications pursuant to orders and protocols, and principles of safe medication administration, and evaluating for therapeutic effect.

- Adhering to infection control practices.

- Providing nursing care in dermatology settings and assisting with dermatology procedures.

- Advising clients on skin care following dermatological procedures.

- Collaborating with members of the interprofessional team in stabilizing burn injury clients in the emergent and acute care phases, including:
    - Providing wound care, pain management, physical and occupational therapy, nutritional therapy, and psychosocial care.
    - Assessing and managing the client's pain.
        - Administering prescribed medications.

        - Managing patient-controlled analgesia.
        - Managing pain by using non-pharmacological strategies (e.g., relaxation techniques, visualization).
    - Providing psychosocial support in collaboration with the health care team.

- Encouraging client and support person participation in care and teaching in the rehabilitative phase.

- Perform aesthetic procedures and treatments, including but not limited to:
    - neuromodulator injections
    - cosmetic filler injections

- Apply laser therapy for vascular abnormalities, birthmarks, warts, scarring, resurfacing, including:
    - managing laser safety protocols

- Assessing and monitoring the client throughout and following aesthetic procedures.

COMMUNITY-BASED NURSING

- Teaching client and support persons/designate appropriate treatment related to dermatological condition:
    - Application of dressings.
    - Baths and prescribed bath solutions and application of moisturizer.
    - Administration of medications.
    - Control of pruritus; pain management.
    - Infection control precautions to prevent spread of infection.
    - Skin care related to specific dermatological conditions.
    - Cosmetic surgery; pre- and postoperative management.

- Providing psychological support to client and support persons, and addressing spiritual and cultural needs.

- Encouraging client and support persons to maintain a continual exercise program.

- Referring client and support persons to appropriate counselling services when required.

EMERGENCY INTERVENTIONS

- Calling and managing code and initiating CPR for infants, children, adults, and elderly clients.

- Conducting primary (ABCDE) assessment.

- Collaborating with members of the interprofessional team to manage the emergency situation.

- Initiating emergency measures for chemical, electrical, and thermal burns:
    - Assessing for inhalation injury and managing client airway:
        - Administering humidified air and supplemental oxygen as required.
        - Maintaining patent airway:
            - Oral airway insertion.
            - Nasal airway insertion.
            - Supraglottic airway insertion (e.g., laryngeal mask, laryngeal tube, esophageal-tracheal tube).
            - Suctioning artificial airway openings—oropharyngeal, nasopharyngeal, esophageal/tracheal, nasotracheal, endotracheal, and tracheal.

            - Assisting appropriate provider with the insertion of endotracheal and tracheostomy airways.
    - Monitoring vital signs, level of consciousness, respiratory status, and cardiac rhythm.
    - Managing fluid loss and initiating IV therapy:
        - Establishing IV fluid replacement.
        - Inserting urinary catheter.
        - Monitoring fluid input and output.
    - Providing wound care:
        - Assessing extent and depth of burns.
        - Initiating appropriate wound care.
    - Positioning client to prevent contracture.
    - Assessing for need for splints.
    - Assessing and managing client pain and anxiety.

- Adhering to infection control practices.

- Providing wound care in emergency situations (e.g., wound cleansing, dressings, immunization administration).

- Communicating nursing interventions with the interprofessional team.

- Maintaining documentation and reporting mechanisms according to facility policies.

4. Knowledge-Based Practice	4.13 Respiratory System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE RESPIRATORY SYSTEM

- Structures and functions of the upper and lower respiratory tract, and the chest wall.

- Physiology of respiration:
    - Process of gas diffusion within the lungs (e.g., ventilation, diffusion, arterial blood gases, mixed venous blood gases, oximetry, oxygen delivery).
        - Significance of arterial blood gas values and the oxygen-hemoglobin dissociative cure in relation to respiratory function.
        - Signs and symptoms of inadequate oxygenation and the implications of these findings.
        - Age-related changes in the respiratory system and differences in assessment findings.
    - Control of respiration (e.g., chemoreceptors, mechanical receptors).
    - Respiratory defence mechanisms including filtration of air, mucociliary clearance system (e.g., cough reflex, reflex bronchoconstriction), alveolar macrophages.

- Considerations for special populations (e.g., children, elderly, obstetric, bariatric).

ALTERATIONS OF THE UPPER RESPIRATORY SYSTEM

- Structural and traumatic disorders of the nose (e.g., deviated septum, nasal fracture, rhinoplasty, nursing management of nasal surgery).

- Epistaxis, including causes, and nursing management.

- Inflammation and infection of the nose, and paranasal sinuses, and clinical manifestations (e.g., allergic rhinitis, acute viral rhinitis, influenza, sinusitis).

- Obstruction of the nose and paranasal sinuses and clinical manifestations (e.g., polyps, foreign bodies).

- Problems related to the pharynx and clinical manifestations (e.g., acute pharyngitis, peritonsillar abscess, obstructive sleep apnea).

- Problems related to the trachea and larynx (e.g., airway obstruction, tracheostomy, swallowing dysfunction, speech with a tracheostomy tube, decannulation, laryngeal polyps).

- Head and spinal injuries.

- Head and neck cancer including clinical manifestation, diagnostic studies, collaborative care.
    - Nutritional therapy, radiation therapy, surgical therapy, voice rehabilitation, stoma care, self-image depression, sexuality.
    - Ambulatory and home care.

- Diagnostic studies, nursing care, and treatment common to the upper respiratory system.

ALTERATIONS OF THE LOWER RESPIRATORY SYSTEM

- Causative factors, clinical symptoms, and treatment of acute bronchitis.

- Pathophysiology, types, clinical manifestations, and complications of lung disease (e.g., pneumonia).

- Pathogenesis, classification, clinical manifestation, diagnostic abnormalities of tuberculosis.

- Pathophysiology and clinical manifestation of bronchitis and lung abscess.

- Causative factors and clinical features of environmental lung diseases.

- Causes, risk factors, pathogenesis, and clinical manifestation of lung cancer and treatment modalities.

- Mechanisms involved and clinical manifestation of chest trauma and thoracic injuries (e.g., pneumothorax, fractured ribs, flail chest) and nursing responsibilities related to chest tubes and pleural drainage.

- Types of chest surgery (e.g., lobectomy, pneumonectomy, segmental/wedge resection, decortication, exploratory thoracotomy, video-assisted thoracic surgery, lung volume reduction therapy).

- Compare-and-contrast restrictive (e.g., disease or alteration of the central nervous system, neuromuscular system, chest wall such as chest wall trauma) and obstructive (e.g., pleural effusion, pleurisy, pneumothorax, atelectasis, pneumonia, interstitial lung disease, acute respiratory distress syndrome) lung disease.

- Pathophysiology and clinical manifestation of pulmonary hypertension and cor pulmonale.

- Lung transplantation as a treatment for pulmonary disorders.

- Etiology and pathophysiology of acute respiratory failure and acute respiratory distress syndrome.

- Diagnostic studies, nursing care, and treatments common to lower respiratory system.

- Etiology, pathophysiology, and clinical manifestations of obstructive pulmonary diseases (e.g., asthma, emphysema, chronic bronchitis, cystic fibrosis):
    - Oxygen therapy including indication for use, methods of administration, complications, and oxygen therapy in the home.
    - Treatment modalities for obstructive pulmonary disease (e.g., surgical therapy, pulmonary rehabilitation, nutritional therapy, education on exercise, energy-conserving strategies, sexual activity, sleep, psychosocial considerations).
    - Planning for end-of-life issues with clients and support persons/designate.
    - Diagnostic studies and treatments common to obstructive pulmonary disease.

RESPIRATORY EMERGENCIES

- Evidence-based practice trends in dealing with respiratory emergencies:
    - Acute and chronic bronchitis, pneumonia, acute asthma episode, COPD, emphysema, pulmonary embolus, pulmonary edema.
    - Spontaneous pneumothorax, foreign body aspiration, submersion injury.
    - Inhalation injury (e.g., carbon monoxide poisoning, thermal or heat injury, smoke poisoning).
    - Acute respiratory failure and acute respiratory distress syndrome.
    - Cardiopulmonary arrest including cultural considerations in life support and resuscitation.

- Maintenance of patent airway in adults, infants, and pediatric and elderly clients.

NURSING ASSESSMENT RESPIRATORY SYSTEM

- Data collection types to inform a comprehensive health assessment process.

- Subjective data:
    - Health history, smoking history, environmental considerations, medications, surgery or other treatments, current health, assessment of symptoms.

- Objective data:
    - Physical assessment related to the respiratory system (e.g., general observations, vital signs, nose, mouth and pharynx, neck, thorax and lungs, auscultation, palpation, percussion (normal and abnormal lung sounds).

- Primary (ABCDE) and secondary assessment in emergency situations.

- Purpose, significance of results, and nursing responsibilities related to diagnostic studies of the respiratory system:
    - Blood, oximetry, sputum studies, and, skin tests.
    - Radiology studies (e.g., chest radiograph, computed tomography, magnetic resonance imaging, ventilation-perfusion scan, pulmonary angiography, positron emission tomography).
    - Endoscopic examinations (e.g., bronchoscopy, mediastinoscopy).
    - Lung biopsy, thoracentesis, pulmonary function tests, exercise testing.

- Nursing diagnosis related to respiratory system, care planning, implementation, and evaluation.

4. Knowledge-Based Practice	4.13 Respiratory System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a respiratory health assessment and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Conducting health teaching and providing information in relation to:
  - Risk factors associated with head and neck cancers (e.g., personal habits, tobacco use, alcohol use, excessive sun exposure).
  - Risks of influenza, relief of symptoms, and prevention of secondary infections.
  - Screening programs for tuberculosis (e.g., tuberculin skin test, chest x-ray).
  - Smoking cessation programs; supporting education and policy changes related to smoking.
  - Environmental factors related to respiratory problems (e.g., asthma, allergies), identification and reducing exposure to triggers, and self-management.
  - Vaccination, target groups, and health benefits.

- Partnering with groups and communities in identifying populations at risk for respiratory problems:
  - Using the community health nursing process to promote individual, group, and community health and well-being.

- Administering vaccines (e.g., influenza, pneumococcal).

- Using medical asepsis and adhering to infection control principles to reduce the incidence of hospital-acquired respiratory infection.

- Implementing preventive measures while client is hospitalized to prevent hospital-acquired respiratory complications (e.g., pneumonia).

CLINICAL INTERVENTIONS

- Independently managing and providing respiratory surgical and medical nursing care.

- Performing endotracheal tube (ET) care including maintenance, removal/changing of tape, ET tube care, suctioning, skin and mouth care, monitoring ET tube cuff pressure and placement.

- Providing health education, including but not limited to:
  - Pre- and postoperative teaching tailored to the surgery procedure (e.g., upper/lower respiratory system including head and neck cancers).

- General medical respiratory problems (e.g., anatomy and physiology of medical problem, medication therapy and side effects, procedures and treatments, impact and outcomes).
- Discharge planning (e.g., evaluation of client and support persons' ability to perform self-care, teaching self-care, environmental factors influencing self-care and interventions).

- Assessing respiratory status, pain management, observation of surgical site for hemorrhage and edema.

- Administering medication via oral (e.g., ingestion and inhalation), topical, and parenteral route, in liquid forms, and instillation into body cavities.

- Monitoring vital signs and detecting surgical and medical complications related to the respiratory system.

- Maintaining patent airway:
  - Client positioning.
  - Oral airway insertion.
  - Nasal airway insertion.
  - Supraglottic airway insertion (e.g., laryngeal mask, laryngeal tube, esophageal-tracheal tube).
  - Suctioning artificial airway openings—oropharyngeal, nasopharyngeal, esophageal/tracheal, nasotracheal, endotracheal, and tracheal.
  - Assisting appropriate provider with the insertion of endotracheal and tracheostomy airways.

- Administering oxygen via nasal cannula, oxymizer, oxygen mask (simple face mask, venture, partial non-rebreather, non-rebreather mask, fact tent, oxygen hood, oxygen tent, oxygen-conserving cannula, transtracheal catheter, and tracheostomy collar), and artificial airway (endotracheal tube, tracheostomy).

- Applying and monitoring use of pulse oximetry, incentive spirometry, and peak flow meter.

- Providing tracheostomy care on all types of tubes:
  - Cuff management (e.g., inflation, deflation, measuring cuff pressure).
  - Airway suctioning and instilling solution into tracheostomy.
  - Cleaning around the stoma, changing tracheostomy ties, care of tube and inner cannula, care of sutures and change dressings.
  - Connection of port to compressed air and humidification.
  - Emergency replacement of tracheostomy tube.
  - Auscultation, recording, and reporting as necessary.

- Managing tracheostomy complications (e.g., abnormal bleeding, tube dislodgement, obstructed tube, subcutaneous emphysema, tracheoesophageal fistula, tracheal stenosis).

- Initiating, monitoring, and caring for client receiving non-invasive ventilation (e.g., continuous positive airway pressure, bi-level positive airway pressure).

- Providing nursing care to client on mechanical ventilation:
  - Establishing on previously initiated client.
  - Weaning or discontinuing as ordered or according to protocol.
  - Providing sedation as necessary.
  - Providing manual ventilation during suctioning or troubleshooting.
  - Checking ventilator settings.
  - Verifying artificial airway placement.

- Maintaining appropriate cuff pressure.
- Assessing pulmonary and neurological status.

- Performing endotracheal tube care including removal and changing of tape, ET tube care, skin and mouth care, monitoring ET tube cuff pressure.

- Performing chest physiotherapy (e.g., auscultation, percussion, vibration, shaking, postural drainage and deep breathing and coughing) and using an Acapella device.

- Providing nursing care to clients with chest tubes, monitoring clients for complications, maintaining chest tubes connected to disposable drainage systems (e.g., water seal systems, waterless systems), and recognizing and intervening when issues arise with drainage system or chest tube placement.

- Reinfusing chest tube drainage.

- Assisting with chest tube removal.

- Preforming wound care and irrigation including wound assessment, wound irrigation, suture and staple removal, managing drainage evacuation, and dressing application:
  - Choosing appropriate wound dressings (dry, moist-to-dry, transparent, hydrocolloid, hydrogel, foam, absorption dressing).
  - Packing wounds.
  - Applying pressure bandages, elastic bandages, and binders.
  - Applying negative pressure wound therapy (e.g., VAC therapy).

DIAGNOSTIC PROCEDURES/SPECIMEN COLLECTION

- Preparing client for procedure including establishing peripheral IV and injecting IV sedation during procedure.

- Assisting physician with diagnostic procedures (e.g., bronchoscopy, thoracentesis).

- Monitoring clients during procedure while taking into account special considerations such as the pediatric, gerontological, and other special-needs clients.

- Collecting nose and throat specimen for culture, sputum by expectoration or suction, arterial specimen for blood gas measurement.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment to determine respiratory emergency.

- Conducting secondary and ongoing assessments in stabilized respiratory situations.

- Assisting physician and/or code team with secondary assessment in event of cardiopulmonary arrest.

- Assisting physician with emergency chest tube insertion.

- Inserting oral or nasal airway when necessary (including oropharyngeal, esophageal/tracheal, nasopharyngeal insertion).

- Performing oropharyngeal, nasopharyngeal, esophageal/tracheal, nasotracheal, endotracheal, and tracheal suctioning.

- Calling and managing code and initiating CPR/ACLS/PALS for children, infants, adults, and elderly clients.
- Applying automated external defibrillator paddles and delivering defibrillation as ordered.
- Reporting and documenting.
- Collaborating and consulting with members of the interprofessional team to manage the emergency.
- Communicating nursing interventions (written and oral) with health care and interprofessional team.

COMMUNITY-BASED NURSING

- Providing respiratory nursing care in the home.
- Conducting health teaching related to:
  - Specific diagnostic procedures, post-procedure care, complications, and when to report to physician including use of home oxygen equipment, home tracheostomy care, and suctioning.
- Working collaboratively with health care team and interprofessional team to provide comprehensive respiratory care and follow-up care to client in acute care and once discharged.
- Referring clients to appropriate health professional including members of the interprofessional team, ambulatory and home care services personnel.

4. Knowledge-Based Practice	4.14 Hematological System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE HEMATOLOGICAL SYSTEM

- Structures and functions of the hematological system (bone marrow, blood [plasma and blood cells], spleen, lymph system).
- Types and function of blood cells (e.g., erythrocytes, leukocytes, thrombocytes).
- Iron metabolism.
- Blood clotting mechanisms—hemostasis:
  - Vessel constriction.
  - Platelet plug formation.
  - Coagulation cascade activation.
  - Fibrin clot development.
  - Clot dissolution.
- Age-related considerations related to the hematological system.

ALTERATIONS OF THE HEMATOLOGICAL SYSTEM

- Classification, etiology, and clinical manifestations, and treatment of anemia.
  - Decreased erythrocyte production.
  - Decreased hemoglobin synthesis (e.g., iron deficiency, thalassemia, sideroblastic).
  - Defective DNA synthesis (e.g., cobalamin deficiency, folic acid deficiency).
  - Decreased number of erythrocyte precursors (e.g., aplastic, myeloproliferative disorders and myelodysplasia, chronic diseases or disorders).
  - Medications.
  - Blood loss:
    - Acute (e.g., trauma, blood vessel rupture).
    - Chronic (e.g., gastritis, menstrual flow, hemorrhoids).
  - Increased erythrocyte destruction (e.g., hemolytic anemias):
    - Intrinsic (e.g., sickle cell anemia, enzyme deficiency, membrane abnormality).
    - Extrinsic (e.g., physical trauma, antibodies, infectious agents, medications and toxins).
- Problems of hemostasis (e.g., thrombocytopenia, hemophilia, Von Willebrand disease, disseminated intravascular coagulation).

- Pathophysiology and clinical manifestation of malignant diseases that affect the blood and blood-forming tissues of the bone marrow and the lymph system, and the spleen (e.g., leukemia, lymphomas, multiple myeloma).

- Pathophysiology and clinical manifestation of hypovolemic and septic shock.

- Blood transfusion therapy, reactions (acute and delayed transfusion reactions), autotransfusion.

- Diagnostic studies, nursing care, and treatments common to the assessment of the hematological system.

HEMATOLOGIC AND ONCOLOGIC EMERGENCIES

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to:
    - Structural or metabolic oncology-related emergencies.
    - Hypovolemic shock/hyperviscosity.
    - Septic shock.

NURSING ASSESSMENT OF THE HEMATOLOGICAL SYSTEM

- Data collection types to inform health assessment process.

- Subjective data:
    - Health history, medications, surgery or other treatments, dietary history, assessment of symptoms.

- Objective data:
    - General, integumentary, respiratory, cardiovascular, gastrointestinal, neurological, possible findings.

- Ongoing assessment based on client's clinical status.

- Differentiation of normal from abnormal findings in a physical assessment.

- Purpose, significance of results, and nursing responsibilities related to diagnostic studies of the hematological system, including but not limited to:
    - CBC, serum iron concentration, total iron-binding capacity, transferrin saturation. PT, APTT, coagulation factors, serum blood cultures, etc.
    - Stool occult (guaiac) test, endoscopy, colonoscopy.
    - Schilling test, peripheral blood smear, Sickling test.
    - Skeletal x-ray studies, MRI, Doppler studies, chest radiography.
    - Bone marrow biopsy, aspiration, pathological examination, bone marrow transplantation.
    - Liver biopsy, lymph node biopsy, genetic testing.

- Nursing diagnosis related to the hematologic system.

- Care planning, implementation, and ongoing evaluation.

4. Knowledge-Based Practice	4.14 Hematological System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the hematological system and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching specific to the hematological problem:
    - Nutritional education (includes reinforcing education provided by dietitian).
    - Treating infections; protecting client from environmental factors.
    - Immunizations (e.g., pneumococcal, influenza, and hepatitis).
    - Pain control.
    - Early detection of signs and symptoms of bleeding.
    - Self-management of symptoms versus those requiring medical treatment.
    - Self-medication.
    - Long-term teaching plan and support.

- Referring clients to survivor networks and support groups.

CLINICAL INTERVENTIONS

- Initiating, monitoring, regulating, and discontinuing administration of blood and blood products:
    - Adhering to the Canadian Blood Services protocol.
    - Performing venipuncture for group and crossmatch.
    - Conducting pre-transfusion assessment, explaining procedure, providing instructions related to side effects.
    - Ensuring signed consent and/or obtaining consent.
    - Adhering to blood administration precautions.
    - Initiating infusion, monitoring client for transfusion reactions, and carrying out appropriate nursing interventions.

- Administering prescribed medications.

- Applying protective isolation practices.

- Managing pain (e.g., continuous narcotic analgesic during acute phase of hospitalization).

- Collecting serial blood cultures, cultures of sputum, throat, lesions, wounds, urine, feces, and tracheal aspirations as ordered.

- Assessing client's knowledge regarding adequate nutritional intake and medication therapies, as well as client's adherence to safety precautions.

- Reinforcing health teaching related to specific medical condition.

EMERGENCY INTERVENTIONS

- Assessing and monitoring for signs of external bleeding (e.g., petechiae, oozing at IV or injection sites) and signs of internal bleeding (e.g., increased heart rate, changes in mental status, increasing abdominal girth, pain).

- Administering oxygen therapy, volume replacement therapy, and medication therapy to stabilize client's condition.

- Performing phlebotomy procedure.

- Conducting ongoing assessment based on the client's clinical status (e.g., frequent measurements of blood pressure and physical examination of signs of hypoperfusion, including mental status, urinary output, skin colour and temperature).

- Collaborating and consulting when necessary with members of the interdisciplinary health care team.

- Communicating nursing interventions with the health care team.

- Working collaboratively with the health care team to provide comprehensive acute and follow-up care.

- Referring clients to an appropriate health professional including members of the interprofessional team, ambulatory and home care services personnel.

COMMUNITY-BASED NURSING

- Providing nursing care to the client in the home care setting.

- Conducting health teaching related to specific diagnostic procedures, post-procedure care, complications, and when to report to physician.

- Working collaboratively with health care team and interprofessional team to provide comprehensive care and follow-up care to client in acute care and once discharged.

- Referring clients to appropriate health professional including members of the interprofessional team, and ambulatory and home care services personnel.

4. Knowledge-Based Practice	4.15 Cardiovascular System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE CARDIOVASCULAR SYSTEM

- Structures, anatomical location, and functions of the cardiac structures (e.g., pericardial layers, atria, ventricles, semilunar valves, and atrioventricular valves).
- Coronary circulation.
- Normal sequence involved in the conduction pathway of the heart, including:
  - Electrocardiograph, telemetry.
  - Normal heart rhythms.
- Structure and function of arteries, capillaries, and veins.
- Regulation of the cardiovascular system (e.g., autonomic nervous system, baroreceptors, chemoreceptors).
- Blood pressure and the mechanisms involved in its regulation (e.g., sympathetic nervous system, baroreceptors, vascular).
- Waveforms and the associated cardiac events represented on the normal electrocardiogram.
- Coronary revascularization.
- Age-related differences in cardiovascular system (e.g., chest wall, heart, blood vessels).

ALTERATIONS IN THE CARDIOVASCULAR SYSTEM

- Pathophysiological mechanisms, clinical manifestations, and complications associated with primary hypertension and hypertensive crisis.
- Pathophysiology, etiology, clinical manifestations, and risk factors for coronary artery disease, angina, and acute coronary syndrome.
- Pathophysiology of myocardial infarction from the onset of injury through the healing process.
- Precipitating factors, pathophysiology, clinical presentation of clients who are at risk for or have experienced sudden cardiac arrest.
- Pathophysiology and compensatory mechanisms involved in heart failure (systolic and diastolic heart failure).

- Electrophysiological mechanisms of dysrhythmias and types of dysrhythmias.

- Etiology, pathophysiology, and clinical manifestations of inflammatory structural heart disease, including but not limited to:
    - Infective endocarditis and pericarditis.
    - Myocarditis, rheumatic fever, rheumatic heart disease.
    - Congenital and acquired valvular heart disease.
    - Types of cardiomyopathies.

- Etiology, pathophysiology, and clinical manifestations of vascular disorders, including but not limited to:
    - Peripheral arterial disease.
    - Aortic aneurysms, aortic dissection.
    - Thromboangiitis obliterans (Buerger's disease) and Raynaud's phenomenon.
    - Thrombophlebitis and deep venous thrombosis.
    - Venous leg ulcers.
    - Pulmonary emboli.

- Diagnostic studies and interventions common to the cardiovascular system.

CARDIOVASCULAR SYSTEM EMERGENCIES

- Hypertensive crisis (e.g., hypertensive encephalopathy, intracranial or subarachnoid haemorrhage, acute left ventricular failure with pulmonary edema, MI, renal failure, dissecting aortic aneurysm).

- Acute coronary syndrome (e.g., unstable angina).

- Ventricular fibrillation.

NURSING ASSESSMENT CARDIOVASCULAR SYSTEM

- Data collection types to inform health assessment process.

- Subjective data:
    - Health history (e.g., chest pain, dyspnea, orthopnea, cough, fatigue, cyanosis or pallor edema, nocturia), cardiac history, family history, self-care history, medications, surgery or other treatments.

- Objective data:
    - Vital signs, peripheral vascular system (inspection, palpation, and auscultation); may include a complete general assessment (e.g., musculoskeletal, neurological, integumentary, respiratory, GI, GU).
    - Purpose and significance of results of diagnostic studies:
        - Invasive (e.g., cardiac catheterization and coronary angiography, electrophysiology study, intracoronary ultrasound, blood flow and pressure measurements).
        - Non-invasive (e.g., chest radiograph, electrocardiogram, exercise or stress testing, echocardiogram, nuclear cardiology, MRI, computed tomography, blood studies).

4. Knowledge-Based Practice	4.15 Cardiovascular System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the cardiovascular system and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching specific related to:
    - Anatomy and physiology of the heart and pathophysiology related to specific disease.
    - Awareness and management of cardiovascular risk factors (e.g., diet, inactivity, abdominal obesity, dyslipidemia, diabetes, smoking, importance of treating streptococcal pharyngitis).
    - Medications for cardiovascular disease.
    - Adherence to medication regimen and reporting of adverse effects.
    - Detection of early signs and symptoms and appropriate responses, including early recognition and treatment of infections.
    - The benefit of regular checkups with health care provider.
    - Resources in the community.
    - Screening programs.
    - Monitoring blood pressure and techniques to assess blood pressure.

CLINICAL INTERVENTIONS

- Assessing chest pain and providing pain relief (e.g., sublingual nitroglycerin, chewable acetyl salicylic acid, and other prescribed medications), and monitoring client's response to medication.

- Recognizing signs and symptoms of cardiac complications in the pediatric client (e.g., cardiac insufficiency).

- Administering and monitoring effectiveness of oxygen.

- Assessing and managing pain (e.g., angina, acute pericarditis).

- Monitoring cardiac rhythms.

- Monitoring vital signs, arterial blood gases, and heart sounds.

- Ensuring pacemaker is functioning properly (on/off, pacing, sensing).

- Assessing and using telemetry equipment.
- Establishing client to 24-hour Holter monitoring.
- Monitoring fluid balance and initiating intravenous line when appropriate.
- Observing for any indication of bleeding with the use of anticoagulants.
- Assisting with percutaneous coronary intervention (PCI), pericardiocentesis, angiogram, and cardiac catheterization.
- Promoting rest; alleviating stress and anxiety for the client.
- Promoting self-management (e.g., daily weights, medication regimens, exercise plan, salt restrictions, early treatment of infections).

EMERGENCY INTERVENTIONS

- Taking appropriate action based on level of competency.
- Conducting primary (ABCDE) assessment to determine cardiac emergency.
- Conducting secondary and ongoing assessments in stabilized cardiac emergency.
- Obtaining an EKG.
- Assisting physician and/or code team with secondary assessment in the event of cardiac arrest.
- Establishing intravenous or intraosseous access, administering fluid and/or medication as prescribed, and titrating as necessary.
- Monitoring vital signs and continuously assessing pain.
- Maintaining patent airway to support perfusion:
    - Client positioning.
    - Oral airway insertion.
    - Nasal airway insertion.
    - Supraglottic airway insertion (e.g., laryngeal mask, laryngeal tube, esophageal-tracheal tube).
    - Suctioning artificial airway openings—oropharyngeal, nasopharyngeal, esophageal/tracheal, nasotracheal, endotracheal, and tracheal.
    - Assisting appropriate provider with the insertion of endotracheal and tracheostomy airways.
- Administering oxygen when necessary.
- Calling and managing code and initiating CPR.
- Delivering defibrillation using an automatic external defibrillator.
- Delivering manual defibrillation, cardioversion or transcutaneous cardiac pacing when part of a health care team performing advanced cardiac life support measures, and in accordance with protocols.

COMMUNITY-BASED NURSING

- Managing treatment plan and evaluating the effectiveness of care.

- Assisting the client in adhering with treatment plan.

- Integrating the client and client's support system in the care plan.

  Assessing learning needs of the client and support persons.
- Developing, implementing, and evaluating learning plan, including but not limited to:
    - Prevention of infection.
    - Avoidance of excessive fatigue.
    - Monitoring of body temperature.
    - Recognition of signs and symptoms of complications and when to seek medical attention.
    - Importance of physical activity, rest periods, and good nutrition.
    - Safety precautions in the home to prevent injuries.
    - Self-care and self-management of the cardiovascular disease.

- Providing specific teaching related to the use and care of an implantable cardioverter-defibrillator devices, pacemaker (transvenous, epicardial, and transcutaneous).
- Reinforcing adherence to the teaching plan.

- Performing direct nursing care including:
    - Monitoring IV or central line for patency and administering IV medication.
    - Monitoring client for adverse medication reactions.
    - Auscultating heart to monitor effectiveness of digoxin, β-adrenergic blockers, and antidysrhythmic medications.

- Assisting client and support persons with the management of cardiovascular risk factors.

4. KNOWLEDGE-BASED PRACTICE	4.16 Gastrointestinal System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE GASTROINTESTINAL SYSTEM

- Structures of the gastrointestinal (GI) system (e.g., mouth, esophagus, stomach, small and large intestine, rectum, anus) and the accessory organs (e.g., liver, pancreas, gallbladder).
- Primary functions of the GI system (e.g., ingestion and propulsion, secretion of mucous, water, and enzymes, digestion, absorption, and elimination).
- Physiology of digestion and elimination.
- Primary functions of the accessary organs and age-related considerations of the GI system in the health assessment.

ALTERATIONS IN THE GASTROINTESTINAL SYSTEM

- Etiology, pathophysiology, clinical manifestations, and complications of nutrition-related health conditions (e.g., malnutrition, starvation, malabsorption syndrome, food-medication interactions, eating disorders).
- Etiology (e.g., genetic-biological basis, environmental factors, psychosocial factors), and pathophysiology of obesity including:
    - Classification of body weight and obesity.
    - Health risks associated with obesity.
    - Medical and surgical therapy (e.g., restrictive and malabsorptive surgeries, cosmetic surgeries).
- Etiology, pathophysiology, and clinical manifestations of metabolic syndrome.
- Etiology, pathophysiology, and clinical manifestations of problems of the upper GI tract throughout the lifespan, including but not limited to:
    - Nausea and vomiting.
    - Oral inflammation, infections, and oral cancer.
    - Gastroesophageal reflux disease and hiatal hernia.
    - Esophageal cancer, diverticula, achalasia, and esophageal strictures.
    - Acute and chronic gastritis.
    - Upper gastrointestinal bleeding.
    - Gastric, duodenal ulcers, and gastric cancer.

- Etiology, pathophysiology, and clinical manifestations of problems of the lower GI tract including:
    - Diarrhea, fecal incontinence, and constipation.
    - Acute abdominal pain.
    - Acute appendicitis, peritonitis, and gastroenteritis.
    - Ulcerative colitis, Crohn's disease, intestinal obstruction.
    - Irritable bowel syndrome.
    - Mechanical, neurogenic, and vascular bowel obstructions.
    - Colorectal cancer.
    - Diverticulitis, diverticulosis, hernias.
    - Malabsorption syndrome, tropical/non-tropical syndrome, lactase deficiency, short bowel syndrome.
    - Anorectal problems (e.g., hemorrhoids, anal fissure, anorectal abscess, anal fistula, pilonidal sinus).

- Etiology, pathophysiology, and clinical manifestations of disorders of the liver including:
    - Hepatitis (e.g., A, B, C, D, E, G virus and autoimmune hepatitis).
    - Cirrhosis of the liver.
    - Fulminant hepatic failure and liver cancer.

- Etiology, pathophysiology, and clinical manifestations of disorders of the pancreas including:
    - Acute and chronic pancreatitis.
    - Pancreatic cancer.

- Etiology, pathophysiology, and clinical manifestations of disorders of the biliary tract including:
    - Cholelithiasis and cholecystitis.
    - Gallbladder cancer.

- Diagnostic studies, nursing care, and treatment common to the gastrointestinal system.

GI SYSTEM EMERGENCIES

- Upper and lower GI bleed.
- Abdominal trauma.
- Acute intestinal (bowel) obstruction.
- Bleeding esophageal varices.
- Acute pancreatitis, appendicitis, cholecystitis, diverticulitis, and gastroenteritis.

NURSING ASSESSMENT—GASTROINTESTINAL SYSTEM

- Data collection types to inform health assessment process.
- Subjective data:
    - Health history (e.g., changes in appetite, eating habits and weight, dieting), nutritional assessment, history or existence of problems related to GI functioning, frequency of bowel movements, use of laxatives and antacids, history of disease, surgery or other treatments related to GI system, and medication history.

- Objective data:
    - Inspection and palpation of mouth, inspection, auscultation, percussion, and palpation of the abdomen, inspection of rectum and anus, digital examination of the rectum.
    - Purpose and significance of results of diagnostic studies:
        - Radiological studies (e.g., upper and lower GI series, abdominal ultrasound).
        - Endoscopy, blood chemistry, liver biopsy, liver function studies.
        - Miscellaneous tests (e.g., paracentesis, fecal analysis).

4. Knowledge-Based Practice	4.16 Gastrointestinal System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the gastrointestinal system and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health education related to:
    - Healthy eating habits and physical activity throughout the lifespan.
    - Healthy oral care habits.
    - Early detection and prevention of oral cancer.
    - Avoidance of high irritants (e.g., alcohol, smoking).
    - Colorectal cancer screening.
    - Hepatitis prevention.

CLINICAL INTERVENTIONS

- Implementing nursing interventions related to the treatment of nutritional deficiencies including:
    - Performing nutritional assessment.
    - Collaborating with other members of the health care team in supporting clients with nutrition (e.g., dietitian).
    - Assessing client who is at risk for aspiration.
    - Assisting and implementing aspiration precautions for client with dysphagia.
    - Inserting nasogastric or nasoenteric feeding tube.
    - Verifying feeding tube placement.
    - Administering enteral tube feedings (e.g., nasogastric and nasointestinal tubes; gastrostomy and jejunostomy tubes).
    - Irrigating a feeding tube.
    - Caring for gastrostomy and jejunostomy feeding tubes, and central venous line including performing dressing changes.
    - Administering total parenteral nutrition (TPN) through infusion pump.
    - Administering peripheral nutrition with lipid emulsion.
    - Recognizing signs and symptoms of catheter-related infection, septicemia, hypovolemia, and hyperglycemia.
    - Assessing psychological status, providing support, and referring client to appropriate care provider as necessary.

- Implementing nursing interventions related to the treatment of obesity:
    - Collaborating with other members of the health care team in supporting client in a weight loss program.

- Providing pre- and postoperative care to clients having undergone bariatric surgery.
- Assessing psychological status, providing support, and referring clients to appropriate care providers as necessary.

- Implementing nursing interventions related to the treatment of conditions of the upper and lower gastrointestinal tract.
  - Inserting and maintaining nasogastric tube connected to intermittent suction and assessing drainage.
  - Accurately recording intake and output, monitoring vital signs, and assessing for signs of dehydration.
  - Maintaining hemodynamic stability, pain control, fluid and electrolyte balance, nutritional support, and psychosocial support.
  - Providing pre- and postoperative care of clients with surgery (e.g., radical neck, hiatal hernia, peptic ulcer, abdominal surgery).
    - Observing for signs of decreased peristalsis and lower abdominal discomfort that may indicate impeding intestinal obstruction.
  - Administering medication and monitoring client for side effects.
  - Monitoring laboratory studies and stools for indication of GI bleed.
  - Testing for occult blood in gastric contents.
  - Recognizing complications such as hemorrhage, perforation, and gastric outlet obstruction.
  - Assisting with endoscopy procedures of the upper GI tract.
  - Applying medical asepsis and using appropriate infection-control practices and precautions in cases of acute diarrhea and gastroenteritis.
  - Providing symptomatic nursing care for nausea, vomiting, and diarrhea.
  - Maintaining hemodynamic stability, pain control, fluid and electrolyte balance, nutritional support, and psychosocial support.
  - Initiating a bowel training program in cases of fecal incontinence or constipation.
  - Carrying out nursing measures to maintain skin integrity (fecal containment devices, perianal pouching, incontinence briefs, and meticulous skin care).
  - Digitally removing fecal impaction.
  - Assessing bowel sounds.
  - Providing pre- and postoperative care of clients with any type of abdominal surgery.
  - Performing colostomy care including colostomy irrigations and ileostomy care.
  - Testing for occult blood in stool.
  - Assisting with endoscopy procedure of the lower GI tract.

- Implementing nursing interventions related to the treatment of conditions impacting the accessory organs of the gastrointestinal tract:
  - Implementing measures to stimulate appetite in cases of hepatitis and cirrhosis of the liver.
  - Implementing comfort measures.
  - Monitoring intake and output, daily weights, measurements of extremities, and abdominal girth.
  - Assisting with paracentesis procedure.
  - Observing for signs of fluid retention, electrolyte imbalances, and hematological disorders.
  - Assessing for signs of hypocalcemia (e.g., Chvostek's or Trousseau's sign).
  - Observing for signs of biliary duct obstruction (e.g., jaundice, clay-coloured stools, dark foamy urine, steatorrhea, fever, pruritus, and increased white blood cell count.
  - Observing for bleeding of the mucous membranes of the mouth, the nose, the gingivae, and injection sites.
  - Ensuring effective pain control.

- Providing symptomatic and supportive nursing care.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment to determine GI related emergency.
- Assessing client's condition with emphasis on blood pressure, rate and character of pulse, and peripheral perfusion with capillary refill, and observing for the presence or absence of neck vein distention.
- Evaluating client for signs and symptoms of shock.
- Assessing respiratory status along with a thorough abdominal evaluation.
- Drawing ordered bloodwork, cross match, arterial blood gasses (ABGs), blood cultures, and other laboratory study specimens, and interpreting and communicating results.
- Establishing intravenous lines.
- Initiating prescribed IV therapy, volume expanders, or blood transfusion.
- Assessing client for signs of hemorrhage.
- Assessing client's level of responsiveness, sensory and motor abnormalities, fluid and electrolyte imbalances, acid-base imbalances, and the effect of treatment measures.
- Monitoring client for symptoms of tetany.

COMMUNITY-BASED NURSING

- Teaching client and their support persons:
    - Home nutritional therapies (e.g., catheter or tube care, proper technique in mixing and handling of the nutritional solutions and tubing, potential side effects).
    - Prevention of nausea and vomiting and strategies to maintain fluid and nutritional intake.
    - Prevention and management of diarrhea and constipation.
    - Diet and exercise programs.
    - Wound care and infection-control precautions in the home.
    - Prevention of GI bleed episodes and consequences of not adhering to diet and medication therapy.
    - Aspects of specific diseases, medications, possible lifestyle changes, and regular follow-up care.
    - Possible complications after gastrointestinal surgery (e.g., vomiting, fever, pain, weight loss, incisional drainage, changes in bowel function).
    - Symptoms of complications and when to seek medical advice.
    - Importance of adhering to medication regimen.
    - Self-care management.
    - Pain management.
- Providing supportive care to client.
- Assessing for the presence of postoperative complications or complications of specific diseases such as hepatitis.
- Referring client to appropriate members of the health care team.

4. Knowledge-Based Practice	4.17 Urinary System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE URINARY SYSTEM

- Structures and functions of the urinary system (e.g., kidneys, ureters, bladder, urethra).
- Physiology in the formation and passage of urine (e.g., glomerular filtration, urine formation, hormone production, blood pressure regulation).
- Age-related considerations of the urinary system.

ALTERATIONS IN THE URINARY SYSTEM

- Etiology, pathophysiology, and clinical manifestations of infectious and inflammatory disorders of the urinary system including:
    - Urinary tract infection.
    - Acute and chronic pyelonephritis.
    - Urethritis, urethral diverticula, interstitial cystitis.
    - Renal tuberculosis.
- Etiology, pathophysiology, and clinical manifestations of immunological disorders of the kidney including:
    - Glomerulonephritis, acute post-streptococcal glomerulonephritis (APSGN).
    - Rapidly progressive glomerulonephritis and chronic glomerulonephritis.
    - Goodpasture syndrome, nephrotic syndrome.
- Etiology, pathophysiology, and clinical manifestations of obstructive uropathies including:
    - Urinary tract calculi.
    - Ureteral strictures.
- Etiology, pathophysiology, and clinical manifestations of acute kidney injury.
- Etiology, pathophysiology, and clinical manifestations of renal trauma and renal vascular problems (e.g., nephrosclerosis, renal artery stenosis, and renal vein thrombosis).
- Etiology, pathophysiology, and clinical manifestations of hereditary renal diseases (e.g., polycystic kidney disease, medullary cystic disease, Alport syndrome, chronic hereditary nephritis).

- Renal involvement in metabolic and connective tissue diseases.
- Urinary tract tumours (e.g., kidney and bladder cancer).
- Chronic kidney disease.
- Kidney transplantation.
- Diagnostic studies, nursing care, and treatment common to the urinary system.

URINARY SYSTEM EMERGENCIES

- Goodpasture syndrome.
- Rapidly progressive glomerulonephritis.
- Acute kidney injury or failure.
- Peritonitis.

RENAL REPLACEMENT THERAPIES

- Peritoneal dialysis.
- Hemodialysis.
- Organ transplantation.

NURSING ASSESSMENT—URINARY SYSTEM

- Data collection types to inform health assessment process.
- Subjective data:
    - Health history of diseases related to the renal or urological problems, medication use, surgery or other treatments, nutritional, elimination, activity, pain, self-concept, sexuality, and coping assessment.
- Objective data:
    - Inspection of the skin, mouth, abdomen, weight, and general state of health, palpation of the kidneys, percussion of the flank area and bladder (if distended), auscultation over both costovertebral angles and in the upper abdominal quadrant, the abdominal aorta, and the renal arteries.

4. Knowledge-Based Practice	4.17 Urinary System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the urinary system and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching related to:
  - Preventive measures and early treatment for urinary tract infection.
  - Importance of seeking early treatment for urinary problem.
  - Risks related to overuse of non-steroidal anti-inflammatory medications (NSAIDs).
  - The use of antibiotics and importance of taking full course of medication regimen.
  - Early diagnosis of sore throats and skin lesions for the prevention acute post-streptococcal glomerulonephritis (APSGN).
  - Importance of appropriate fluid intake.

CLINICAL INTERVENTIONS

- Teaching client about disease process, adequate hydration, nutrition and appropriate fluid/dietary intake.
- Monitoring client's fluid intake and encouraging or limiting as ordered or according to protocols.
- Inserting a urinary catheter.
- Performing catheter care and removing catheter.
- Performing bladder scan and/or catheterization to determine residual urine.
- Performing urinary catheter irrigation and bladder irrigation.
- Performing suprapubic catheter care.
- Initiating and maintaining peritoneal dialysis and continuous ambulatory peritoneal dialysis:
  - Adding medication to dialysate bag when necessary according to order or institutional policy.
  - Changing dressing at catheter insertion site.
  - Assessing for signs of infection such as redness, swelling, and bleeding.
- Performing hemodialysis.

EMERGENCY INTERVENTIONS

- Managing fluid and electrolyte balance during the oliguric and diuretic phases of renal failure.
- Recognizing signs and symptoms of hypervolemia (in the oliguric phase) or hypovolemia (in the diuretic phase) in renal failure.
- Initiating fluid resuscitation as prescribed.
- Monitoring and recording intake and output and measuring daily weights.
- Providing and managing pain control.
- Assisting with intravenous pyelogram (IVP).

COMMUNITY-BASED NURSING

- Reinforcing self-care strategies and lifestyle changes and providing support and guidance to clients and their support persons on benefits of:
    - Adhering to medication, fluid, and dietary regimens.
    - Avoiding bladder irritants such as caffeine, alcohol, citrus products, aged cheese, nuts, foods containing vinegar, curries or hot peppers, and foods and beverages likely to lower urinary pH.
    - Practising good nutrition, hydration, rest, and activity.
    - Follow up care with health provider.
    - Being alert to signs and symptoms of recurrent urinary problems (e.g., urinary tract infections).

4. Knowledge-Based Practice	4.18 Endocrine System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE ENDOCRINE SYSTEM

- Structures and functions of the endocrine system (e.g., hormones, hypothalamus, pituitary, thyroid, parathyroid, adrenal glands, and heart.
- Regulation of hormonal secretion (e.g., simple and complex feedback, nervous system control, rhythms).
- Hormones (e.g., tropic, growth, prolactin, antidiuretic, thyroxine and tri-iodothyronine, calcitonin, parathyroid, aldosterone, androgens, estrogen, glucagon, insulin, atrial natriuretic hormone).
- Age-related considerations of the endocrine system.

ALTERATIONS IN THE ENDOCRINE SYSTEM

- Etiology, pathophysiology, clinical manifestations, and complication of problems related to the endocrine system including:
    - Disorders associated with insulin production:
        - Diabetes mellitus (type 1 and 2).
        - Diabetic ketoacidosis, hyperosmolar hyperglycemic non-ketotic syndrome (HHS).
    - Disorders of the anterior pituitary gland:
        - Growth hormone excess.
        - Hypopituitarism.
    - Disorders associated with antidiuretic hormone secretion:
        - Syndrome of inappropriate antidiuretic hormone.
        - Diabetes insipidus (nephrogenic and psychogenic).
    - Disorders of the thyroid gland:
        - Thyroid enlargement (goitre).
        - Thyroid nodules.
        - Thyroiditis.
        - Hyperthyroidism and hypothyroidism.
    - Disorders of the parathyroid gland:
        - Hyper- and hypoparathyroidism.
- Etiology, pathophysiology, clinical manifestations, and complication of problems related to the endocrine system including:
    - Disorders of the adrenal cortex:

        - Cushing's syndrome.
        - Adrenocortical insufficiency (Addison's disease).
        - Hyperaldosteronism.
    - Disorders of the adrenal medulla:
        - Pheochromocytoma.

- Risk factors associated with diabetes and medication therapy.

- Diagnostic studies, nursing care, and treatments common to the endocrine system.

ENDOCRINE SYSTEM EMERGENCIES

- Diabetic ketoacidosis.

- Hyperosmolar hyperglycemic non-ketotic syndrome (HHS).

- Acute thyrotoxicosis.

- Myxedema coma.

- Acute adrenal insufficiency.

NURSING ASSESSMENT—ENDOCRINE SYSTEM

- Data collection types to inform health assessment process.

- Subjective data:
    - Health history; family history; social and occupational history; self-care history; nutritional history; medications, surgery or other treatments; sleep history; symptom assessment.

- Objective data:
    - A comprehensive physical examination including vital signs, height and weight, mental-emotional status, integument, head, neck, thorax, abdomen, extremities, genitalia, diagnostic studies.

4. Knowledge-Based Practice	4.18 Endocrine System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the endocrine system and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Identifying, monitoring, and educating clients at risk for the development of endocrine problems including:
    - Risk factors associated with specific endocrine problems.
    - Healthy eating education and exercise.
    - Self-management.
    - Detection of complications of endocrine problem (e.g., hypoglycemia, hyperglycemia).
- Promoting diabetic screening and thyroid function screening for high-risk individuals.

CLINICAL INTERVENTIONS

- Administering fast-acting (simple) carbohydrates to reverse mild to moderate hypoglycemia.
- Providing preoperative and postoperative care specific to endocrine surgical procedures (e.g., thyroidectomy, neurological care for hypophysectomy, parathyroidectomy, and adrenalectomy).
- Administering fluid (orally or intravenously) and hormone replacement.
- Monitoring vital signs and signs of fluid volume deficit and electrolyte imbalance.
- Monitoring diagnostic test results (e.g., serum glucose).
- Monitoring and recording intake and output, urine specific gravity, daily weights.
- Taking measures to provide relief for eye discomfort and to prevent corneal ulcerations.
- Monitoring client for mental alertness and energy level.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment to determine endocrine system related emergency.

- Ensuring patent airway.
- Administering oxygen.
- Establishing IV access with large-bore catheter.
- Initiating fluid resuscitation as prescribed.
- Initiating continuous regular insulin drip.
- Administering medication pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
- Monitoring vital signs, level of consciousness, cardiac rhythm, oxygen saturation, and urine output.
- Assessing breath sounds.
- Monitoring diagnostic test results.
- Providing psychosocial support to client and support persons.

COMMUNITY-BASED NURSING

- Assessing client's knowledge of the endocrine problem and developing teaching plan.
- Educating client and support persons on:
    - Endocrine disease.
    - Independence and self-care including self-monitoring of blood glucose levels and recognizing need for extra medication.
    - Prevention of and signs and symptoms of complications of the disease.
    - Medication administration, adjustment to, and side effects of medications.
    - Adherence to medication regimen.
    - Personal hygiene with an emphasis on foot care.
    - Medical identification and travel.
    - Healthy diet and importance of physical activity.
    - Weight management.
    - Risk reduction.
    - Client's susceptibility to infections.
    - When to contact health professional.
    - Importance of follow-up appointments.
- Assessing the ability of client and support persons to assume self-management.
- Providing referral to appropriate care providers (e.g., diabetic educator, social worker, community resources).
- Involving client's support persons in teaching and learning processes.
- Assessing client's response to hormone therapy.
- Conducting follow-up assessments of client using hormone therapy (e.g., insulin, cortisol, thyroid hormones).

4. Knowledge-Based Practice	4.19 Female Reproductive System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE FEMALE REPRODUCTIVE SYSTEM

- Structures and functions of the female reproductive system.
- Neuroendocrine regulation of the female reproductive system.
- Age-related considerations of the reproductive system and sexual response including perimenopause and postmenopause.

ALTERATIONS IN THE FEMALE REPRODUCTIVE SYSTEM

- Etiology, pathophysiology, clinical manifestations, complication of problems related to the female reproductive system including:
    - Benign breast disorders:
        - Mastalgia.
        - Breast infections.
        - Fibrocystic changes.
        - Fibroadenoma.
        - Nipple discharge.
    - Breast cancer, Paget's disease, inflammatory breast cancer.
    - Infertility, abortion.
    - Premenstrual syndrome, amenorrhea, dysmenorrhea, abnormal vaginal bleeding.
    - Premenstrual dysphoric disorders.
    - Ectopic pregnancy.
    - Conditions of the vulva, vagina, and cervix.
    - Pelvic inflammatory disease.
    - Endometriosis, toxic shock syndrome.
    - Benign tumours (e.g., uterine fibroids) of the female reproductive system and ovarian cysts.
    - Cancer of the female reproductive system.
    - Uterine prolapse, vaginal wall prolapse (e.g., cystocele, rectocele).
    - Urinary incontinence.
- Diagnostic studies, nursing care, and treatments common to the female reproductive system.

FEMALE REPRODUCTIVE SYSTEM EMERGENCIES

- Emergency management of client who has been sexually assaulted and/or who has experienced intimate partner violence.
- Acute pelvic inflammatory disease and tubo-ovarian abscess.
- Ovarian torsion.
- Ectopic pregnancy.
- Miscarriage.

NURSING ASSESSMENTS OF THE FEMALE REPRODUCTIVE SYSTEM

- Data collection types to inform health assessment process.
- Consideration for sexual and gender minority communities.
- Subjective data:
    - General health information (e.g., health history, family history of cancer of the reproductive system, medications, surgery or other treatments, nutritional history, self-care history, elimination history), menstrual history, obstetrical history, menopause, sexual history.
- Objective data:
    - Physical examination (inspection and palpation) of the breast, abdomen, and genitalia, and internal pelvic examination.

4. Knowledge-Based Practice	4.19 Female Reproductive System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the reproductive system and choosing the appropriate data collection types to inform the nursing process.
- Conducting comprehensive and systematic health assessments using relevant evidence-based assessment frameworks to collect client data.
- Applying trauma and violence informed, culturally safe approaches during client interactions and decision making.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Promoting screening for cancers of the reproductive system (e.g., breast, vulva, cervix, endometrium).

- Teaching related to:
    - Structures and functions of the female reproductive system.
    - Risk factors for cancers of the reproductive system.
    - Perimenopausal changes and options to minimize unwanted symptoms including non-pharmacological approaches.
    - Infertility testing and treatment.
    - Prevention of lower genital tract infections.
    - Breast, vulvar, and pelvic examination.
    - Sexual assault prevention.
    - Safe sex practices.

- Providing teaching and emotional support to couples throughout fertility testing and treatment and diagnosis of STIs.

CLINICAL INTERVENTIONS

- Providing preoperative and postoperative care (e.g., mastectomy, ectopic pregnancies, drainage of abscess through laparoscopy/laparotomy, hysterectomy).

- Attending to the physical and emotional needs of client undergoing spontaneous or induced abortion.

- Providing symptom relief and client teaching.

- Monitoring vital signs.

- Monitoring character, amount, colour, and odour of vaginal discharge.

- Providing psychosocial care to client and her support persons.

EMERGENCY INTERVENTIONS

- Adhering to the sexual assault protocol in providing care to client.
- Conducting a sexual assault assessment and/or intimate partner violence assessment.
- Initiating antibiotic therapy.
- Establishing parenteral therapy as prescribed.
- Referring to mental health care providers.

COMMUNITY-BASED NURSING

- Assessing reproductive system, including:
    - Subjective data: past health and family history, medications, surgeries, elimination and menstrual health, menopause, nutritional history, gender identity, sexual history, gravida and parity.
    - Objective data: inspection and palpation of the breasts, fundus, and external genitalia, and internal pelvic examination (with speculum and collection of specimens), including performing cervical cancer screening (PAP test).
- Teaching client:
    - Signs and symptoms of complications of surgery.
    - Management of chemotherapy/radiotherapy side effects.
    - Self-care management.
- Referring client to mental health professional and resources when required.
- Emphasizing the importance of annual mammography and breast self-examination.
- Providing ongoing psychosocial support to client and their support persons.

4. Knowledge-Based Practice	4.20 Male Reproductive System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE MALE REPRODUCTIVE SYSTEM

- Structures and functions of the male reproductive system.
- Neuroendocrine regulation of the male reproductive system.
- Age-related considerations of the male reproductive system and sexual response including testosterone and/or androgen deficiency.

ALTERATIONS IN THE MALE REPRODUCTIVE SYSTEM

- Etiology, pathophysiology, clinical manifestations, and complications of problems related to the male reproductive system including:
    - Breast disorders:
        - Gynecomastia (pubertal, senescent).
        - Breast cancer.
    - The prostate gland:
        - Benign prostatic hyperplasia.
        - Prostate cancer.
        - Prostatitis.
    - The penis:
        - Congenital problems.
        - Problems of the prepuce.
        - Problems of the erectile mechanism.
        - Cancer of the penis.
    - The scrotum and testes:
        - Epididymitis and orchitis.
        - Congenital problems.
        - Acquired problems (e.g., hydrocele, spermatocele, varicocele).
        - Testicular torsion.
        - Testicular cancer.
    - Sexual functioning:
        - Vasectomy.
        - Erectile dysfunction.
        - Infertility.
- Diagnostic studies, nursing care, and treatments common to the male reproductive system.

MALE REPRODUCTIVE SYSTEM EMERGENCIES

- Testicular torsion.
- Sexual assault.
- Priapism.

NURSING ASSESSMENTS OF THE MALE REPRODUCTIVE SYSTEM

- Data collection types to inform health assessment process.

- Consideration for sexual and gender minority communities.

- Subjective data:
    - General health information (e.g., health history; family history of cancer of the reproductive system; medications, surgery, or other treatments; self-care history; elimination history; sexual history).
- Objective data:
    - Physical examination (inspection and palpation) of pubis, penis, scrotum and testes, inguinal region and spermatic cord, anus and prostate, and internal pelvic examination.

4. Knowledge-Based Practice	4.20 Male Reproductive System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the reproductive system and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes
- Conducting comprehensive and systematic health assessments using relevant evidence-based assessment framework to collect client data.
- Applying trauma and violence informed, culturally safe approaches during client interactions and decision making.

HEALTH PROMOTION

- Promoting screening for cancers of the reproductive system (e.g., testicular, penis, prostate, breast).
- Teaching related to:
    - Structures and functions of the male reproductive system.
    - Risk factors for cancers of the reproductive system.
    - Monthly testicular self-examination.
    - Infertility testing and treatment.
- Providing teaching and emotional support to couple throughout fertility testing and treatment and diagnosis of STIs.

CLINICAL INTERVENTIONS

- Adjusting preoperative and postoperative care to the type of surgical procedure (e.g., prostatectomy, orchiectomy, vasectomy).

EMERGENCY INTERVENTIONS

- Providing preoperative care for client with testicular torsion.
- Adhering to the sexual assault protocol in providing care to client.
- Conducting a sexual assault assessment and/or an intimate partner violence assessment.
- Initiating antibiotic therapy.
- Establishing parenteral therapy as prescribed.

- Referring to mental health care providers.

COMMUNITY-BASED NURSING

- Assessing reproductive system:
    - Subjective data: past health and family history, medications, surgeries, elimination health, hormone changes, nutritional history, gender identity, and sexual history.
    - Objective data: inspection and palpation of the breasts, external genitalia (pubis, penis, scrotum and testes, inguinal region and spermatic cord), anus, and prostate.

- Assisting client in managing urinary incontinence after prostatic surgery.

- Providing health teaching related to:
    - The importance of avoiding heavy lifting, and refraining from heavy lifting or intercourse post-surgery.
    - Managing sexual dysfunction.
    - Ongoing psychosocial support to client and partner.
    - Self-care management.
    - The importance of continuing follow-up care.
    - Testicular self-exams.

- Providing referral for counselling and support groups.

4. Knowledge-Based Practice	4.21 Nervous System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM

- Structures and functions of the nervous system.
- Regulation and maintenance of intracranial pressure.
- Age-related considerations and effects of aging on the nervous system.

ALTERATIONS IN THE NERVOUS SYSTEM

- Etiology, pathophysiology, clinical manifestations, and complications of the nervous system including:
    - Increased intracranial pressure.
    - Types of head injuries by mechanism if injury and clinical manifestations (e.g., scalp lacerations, skull fractures, mild to severe brain injury).
    - Traumatic brain injury and complications (e.g., epidural, subdural, and intraparenchymal hematoma, traumatic subarachnoid hemorrhage).
    - Brain tumours.
    - Inflammatory conditions of the brain (e.g., meningitis, encephalitis, brain abscess).
    - Rabies.
    - Ischemic and hemorrhagic strokes.

- Etiology, pathophysiology, clinical manifestations, and complications of chronic neurological problems including:
    - Migraine, tension-type, and cluster headaches.
    - Seizure disorder, multiple sclerosis, Parkinson's disease, myasthenia gravis.
    - Amyotrophic lateral sclerosis and Huntington's chorea.

- Etiology, pathophysiology, clinical manifestations and complications of cognitive problems including:
    - Delirium.
    - Dementia.
    - Cognitive impairment.
    - Alzheimer's disease.
    - Lewy body dementia, Pick's disease, Creutzfeldt-Jakob disease, normal pressure hydrocephalus.

- Etiology, pathophysiology, clinical manifestations, and complications of peripheral nerve and spinal cord problems:
    - Trigeminal neuralgia, Bell's palsy.
    - Polyneuropathies (e.g., Guillain-Barré syndrome, botulism, tetanus, neurosyphilis).
    - Spinal cord problems (e.g., spinal cord injury, spinal cord tumours, post-polio syndrome).

- Diagnostic, radiological, and electrographic studies; nursing care; and treatments common to the nervous system.

NERVOUS SYSTEM EMERGENCIES

- Increased intracranial pressure.

- Arterial epidural hematoma.

- Head injury.

- Bacterial meningitis.

- Hemorrhagic stroke (intracerebral and subarachnoid hemorrhage).

- Status epilepticus, delirium.

- Spinal cord injury; compression of the spinal cord.

NURSING ASSESSMENT—NERVOUS SYSTEM

- Data collection types to inform health assessment process.

- Subjective data:
    - Presenting symptom assessment, health history (e.g., headaches, head injury, dizziness or vertigo, seizures, tremors, weakness, coordination, numbness or tingling, difficulty swallowing, difficulty speaking, history of stroke, spinal cord or head injury, meningitis, encephalitis, congenital defect, alcohol or medication misuse).

- Objective data:
    - Assessing categories of function (e.g., mental status, function of central nervous system, motor function, cerebellar function, sensory function, reflex function).
    - Assessment that is dependent on purpose of the examination, including:
        - Mental status (cerebral function) including general appearance and behaviour, level of consciousness (using the Glasgow Coma Scale), orientation, mood and affect, thought content.
        - Cranial nerves.
        - Motor system.
        - Sensory system (e.g., light touch, pain and temperature, vibration sense, position sense, cortical sensory functions, reflexes).

4. Knowledge-Based Practice	4.21 Nervous System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the neurological system and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Providing health teaching related to:
  - Prevention of head injuries (promotes driving safety, use of seatbelts, helmets, dangers of driving under the influence of medications and alcohol, child safety seats).
  - Vaccination program promotion (e.g., streptococcus pneumonia, haemophilus influenza).
  - Importance of early and vigorous treatment of respiratory and ear infections.
  - Control and transmission prevention of diseases (e.g., mosquito control, vaccination of domestic animals, strategies to avoid contact with wild animals).
  - Stroke prevention (e.g., blood pressure control, blood glucose control, diet and exercise, smoking cessation, limiting alcohol consumption, routine health assessments):
    - Risk factors that require close health management (e.g., diabetes mellitus, hypertension, smoking, dyslipidemia, cardiovascular disease).
    - Early symptoms associated with stroke or transient ischemic attack (TIA).
  - Early warning signs of dementia or Alzheimer's disease.
  - Botulism and tetanus prevention.
  - Counselling and referral to programs for smoking cessation, recreation and exercise programs, alcohol and medication treatment programs; routine physical examination of non-neurological problems.

CLINICAL INTERVENTIONS

- Assessing and monitoring neurological status, vital signs, and respiratory status.

- Auscultating breath sounds, intervenes to clear airway (coughing or suctioning), and performing chest physiotherapy.

- Reporting decreasing level of consciousness to physician.

- Providing pre- and postoperative nursing interventions as appropriate to specific surgery.

- Maintaining proper body position depending on type of neurological disorder and conducting and encouraging passive and active range-of-motion exercises.

- Monitoring client for deep vein thrombosis (e.g., measuring calf and thigh daily, observing swelling of the lower extremities, assesses for positive Homan's sign, notes unusual warmth of the leg and pain in the calf).
- Providing care to clients in skeletal traction (e.g., Crutchfield, Vinke, or Gardner-Wells traction, halo fixation apparatus, thoracolumbar orthosis).
- Gathering both subjective and objective data during a seizure episode and providing appropriate nursing interventions during and post seizure.
- Minimizing environmental stimulants, anticipating safety hazards, and providing protection from injury.
- Establishing appropriate communication system that client, support persons, and staff can use.
- Assisting client's support persons in understanding what is happening to client and providing psychological support to client and support persons.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment to determine neurological emergency.
- Maintaining patent airway and anticipating need for intubation.
- Administering oxygen as prescribed.
- Establishing IV access and administering IV therapy as prescribed.
- Assessing client and monitoring for dehydration and adequate fluid intake.
- Monitoring vital signs, oxygen saturation, and cardiac rhythm.
- Performing neurological assessment (e.g., level of consciousness, Glasgow Coma Scale score, pupil size and reactivity).
- Elevating head of bed to enhance respiratory exchange and decrease cerebral edema.
- Recognizing importance of involving client's support persons in nursing assessment due to potential cognitive, emotional, and motivational deficits.
- Stabilizing cervical spine (e.g., applies spinal collar).
- Maintaining proper body position and alignment.
- Implementing interventions to maintain client's body temperature.
- Assisting with lumbar puncture, tracheostomy, and intubation.
- Administering anti-seizure, anti-pyretic, thrombolytic, and other medications as prescribed.
- Recognizing symptoms of meningitis, initiating isolation protocols, and reporting to physician.

- Providing psychosocial support to client and support persons.

COMMUNITY-BASED NURSING

- Providing health education to client and support persons:
    - Education on the specific neurological problem and potential residual effects.
    - Signs and symptoms that may indicate complications (e.g., headache, nausea, vomiting, drowsiness, seizures, blurred vision, motor problems, sensory disturbances).
    - Importance of avoiding use of heavy machinery, playing contact sports, taking warm baths, driving.
    - Importance of self-care, exercise program, and well-balanced diet.
    - Stroke rehabilitation and community reintegration.
    - First aid treatment in managing seizures, client medication adherence, and non-pharmacological techniques in controlling and reducing seizures.
    - Treatment regimens, side effects of medications, and how to watch for them.
    - Effects of spinal cord injury on sexual health.
    - Importance of regular follow-up care.

- Regularly assessing and monitoring client with chronic neurological diseases and establishing care plan to meet the changing needs of the client and support persons.

- Providing ongoing psychosocial support to client and/support persons.

- Referring client to appropriate community resources and health care providers.

4. Knowledge-Based Practice	4.22 Musculoskeletal System
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE MUSCULOSKELETAL SYSTEM

- Structures and functions of the musculoskeletal system (e.g., bone, joints, cartilage, muscle, ligaments and tendon, fascia, bursae).
- Gross anatomical and microscopic composition of bone.
- Classification system of joints and movements at synovial joints.
- Types and structure of muscle tissue.
- Effects of aging on the musculoskeletal system.

ALTERATIONS IN THE MUSCULOSKELETAL SYSTEM

- Etiology, pathophysiology, clinical manifestations and complications of musculoskeletal disorders including:
    - Soft tissue injuries (e.g., strains, sprains, dislocations, subluxations, bursitis, repetitive strain injury, carpal tunnel syndrome, rotator cuff injury, meniscus injury, muscle spasms).
    - Fractures including classification, types, clinical manifestations, fracture healing and immobilization, complications of fractures (e.g., infection, compartment syndrome, venous thrombosis, fat embolism syndrome).
    - Osteomyelitis.
    - Primary malignant and benign bone tumours.
    - Low back pain (acute and chronic).
    - Herniated intervertebral disk, neck pain, and foot disorders.
    - Metabolic bone disease (e.g., osteomalacia, osteoporosis, Paget's disease).
    - Etiology, pathophysiology, clinical manifestations, and complications of arthritis and connective tissue disorders including:
    - Osteoarthritis and rheumatoid arthritis.
    - Spondyloarthropathies (e.g., ankylosing spondylitis, psoriatic arthritis, reactive arthritis, septic arthritis, Lyme disease, HIV-associated rheumatic disease, gout, systemic lupus erythematosus, systemic sclerosis, polymyositis and dermatomyositis, Sjögren's syndrome).
    - Soft tissue rheumatic syndromes (e.g., myofascial pain syndrome, fibromyalgia syndrome, chronic fatigue syndrome).
- Diagnostic studies, nursing care, and treatments common to the musculoskeletal system.

MUSCULOSKELETAL SYSTEM EMERGENCIES

- Dislocations, fractures.

- Compartment syndrome, venous thrombosis, fat embolism syndrome.

NURSING ASSESSMENT—MUSCULOSKELETAL SYSTEM

- Data collection types to inform health assessment process.

- Subjective data:
    - Focuses on symptom analysis (location, quality, timing, severity, intensity of symptoms, and precipitating, alleviating, and associating factors), health history, family history, medications, surgery, and previous hospitalizations.

- Objective data:
    - Involves observation, palpation, motion, and muscular assessment (e.g., skin colour, scars, overt signs of previous injury, deformity, nodules, masses, contractures, discrepancies in limb length or muscle size).
    - Superficial and deep palpation (e.g., head-to-toe palpation including neck, shoulders, elbows, wrists, hands, back, hips, knees, ankles, and feet).
    - Range of motion (e.g., evaluation of both passive and active range of motion, function range of motion, and impact on activities of daily living).
    - Muscle-strength testing (e.g., evaluation of individual or group muscle strength during contraction).
    - Measurement (e.g., limb length and circumferential muscle mass measurements when discrepancies or subjective problems are noted).
    - Assessment of reflexes.

4. Knowledge-Based Practice	4.22 Musculoskeletal System
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a nursing assessment of the musculoskeletal system and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Demonstrating knowledge of musculoskeletal conditions and treatments.
- Demonstrating knowledge of cast and splint construction, application, care, and removal.
- Demonstrating ability to distinguish between a variety of x-ray views.
- Demonstrating knowledge and ability to assemble, apply or assist in application and removal of orthopedic devices.

HEALTH PROMOTION

- Discussing the importance of:
    - Stretching and warm-up exercises before vigorous activity.
    - Strengthening, balancing, and endurance exercises to build muscle strength and bone density.
- Encouraging strategies to reduce injuries (e.g., using protective athletic equipment, wearing seat belts, using safety equipment at work, not drinking and driving).
- Educating clients on the warning signs of bone cancer, including swelling, bone pain of unexpected origin, limitation of joint function, and changes in skin temperature.
    - Importance of periodic screening and health examination.
- Discussing modifiable risk factors related to musculoskeletal injuries (e.g., excess weight, occupational and recreational hazards).
- Identifying the importance of early recognition, early diagnosis, and treatment of arthritis.

CLINICAL INTERVENTIONS

- Providing general preoperative and postoperative nursing measures specific to type of surgery (e.g., hip replacement, amputation, mandibular surgery, joint surgical procedures, spinal surgery).

- Conducting regular neurovascular assessments of the affected extremity (e.g., colour, temperature, capillary refill, distal pulses, edema, sensation, motor function, pain).
- Conducting a lumbar laminectomy assessment as ordered or according to protocol (e.g., sensation, movement, muscle strength, wound, pain).
- Ensuring proper moving, alignment, and positioning of client in bed.
- Using appropriate, safe and effective transfer techniques.
- Providing care to clients in skin traction, skeletal traction, and immobilization device (e.g., splint, sling, cast, cervical collar, shoulder immobilizer, braces).
- Observing for signs of infection.
- Providing skin care and pin site care.
- Performing range-of-motion exercises.
- Applying elastic stockings, compression bandage, sequential compression device, and negative pressure wound therapy.
- Assisting client in performing isometric exercises.
- Assisting client with ambulation and with use of canes, crutches, and walker.
- Assessing client and applying passive motion machine; monitoring client.
- Preventing complications associated with limited mobility (e.g., constipation, renal calculi, deconditioning of the cardiopulmonary system).
- Assessing client for pain and administering medications in accordance with appropriate authorizing mechanisms and principles of safe medication administration.
- Performing range-of-motion exercises.
- Preventing pathological fractures of bones (e.g., log rolling, fall prevention, careful handling of affected extremity).

EMERGENCY INTERVENTIONS

- Providing pain relief and supporting and protecting the injured joint.
- Assisting with limb immobilization.
- Applying and removing casts.
- Performing cast removal.
- Preparing client for surgery.
- Applying heat and cold therapy.

COMMUNITY-BASED NURSING

- Providing health education related to:
    - Specific musculoskeletal injury/disease.
    - Reduction of edema in injury limb (application of ice and elevation).
    - Use of appropriate analgesics for pain control.
    - Post-surgical complications and when to access medical services.
    - Cast care, signs of cast complications, and medical follow-up.
    - Caring for prosthetic devices.
    - Infection control.
    - Importance of good posture, back-strengthening exercises, and good body mechanics.
    - Medication therapy as an adjunct to non-pharmacological interventions.

- Coordinating exercise, rehabilitation, and education program for the interdisciplinary team.

4. Knowledge-Based Practice	4.23 End of Life Care
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

SOCIOLOGY OF DEATH AND DYING

- Social issues related to death and dying.
- Palliative care practices.

PHYSICAL MANIFESTATIONS AT END OF LIFE

- Sensory changes (e.g., blurred vision, decreased sense of taste and smell, decreased touch perception, loss of blink reflex, decrease sense of touch in lower extremities).
- Circulatory and respiratory changes (e.g., bradycardia; decreased blood pressure; rapid or slow, shallow, and irregular respirations and Cheyne-Stokes respiration; wet and noisy breath sounds; pale, mottled, and cyanotic extremities; skin cool to the touch).
- Loss of muscle tone (e.g., sagging jaw, difficulty in speaking and swallowing, loss of gag reflex, decrease gastrointestinal motility and peristalsis, loss of sphincter control).
- Brain death (e.g., neurological failure and neurological death).

PSYCHOSOCIAL MANIFESTATIONS AT END OF LIFE

- Grief, including Kübler-Ross's five stages of grieving (denial, anger, bargaining, depression, acceptance).
- Altered decision-making
- Anxiety about unfinished business (e.g., asking for forgiveness and forgiving others).
- Decreased socialization and withdrawal.
- Fear of loneliness, isolation, pain, helplessness, peacefulness, restlessness, emotional closure, mourning, bereavement.

VARIABLES AFFECTING END OF LIFE

- Cultural and religious influences, and the influences of support persons.
- Spiritual needs and spiritual distress.

LEGAL AND ETHICAL ISSUES AFFECTING END OF LIFE

- Decisions related to treatments and life-supporting measures, such as cardiopulmonary resuscitation, admission to intensive care units, and more common health care decisions.

- Legal documents used in end-of-life care including:
    - Advanced directive.
    - Do not resuscitate order (DNR).
    - Living will.
    - Power of attorney for personal care.

PALLIATIVE CARE AND HOSPICE

- Concepts of hospice and palliative care.

- Bereavement program.

- Pronouncement of death.

NURSING ASSESSMENT—END OF LIFE

- Varies with the client's condition and the proximity of death.

- Limited to essential data.

- Subjective data:
    - Symptom analysis (e.g., location, quality, timing, severity, intensity), and precipitating and alleviating symptoms and associating factors. Also includes:
        - Health history (e.g., medical diagnosis, medication profile, and allergies).
        - Brief review of body systems (e.g., discomfort, fatigue, pain, nausea, constipation, dyspnea).
        - Functional assessment of activities of daily living (e.g., food and fluid intake, sleep and rest patterns, response to the stress of terminal illness).
        - Assessment of cultural and spiritual needs and coping abilities of client and support persons.

- Objective data:
    - Focuses on changes that accompany terminal illness and the specific disease process.
    - Dependent on client's stability and comfort; as changes occur, assessment and documentation done more frequently.
    - As death approaches, neurological assessment conducted (e.g., level of consciousness; level of comfort; presence of reflexes; pupil responses; vital signs; skin colour; temperature; respiratory status; character and pattern of respirations; characteristics of breath sounds; renal, nutritional, and fluid intake; urinary output; bowel function).

- Post-mortem assessment (e.g., confirming the identity of the client, noting the general appearance of the body, ascertaining that the client does not rouse to verbal or tactile stimuli, checking for the absence of breath sounds and the apical pulse, looking and listening for the absence of spontaneous respirations and absence of the pupillary light reflex).
    - Documents time and date of death, the findings of the assessment, and if appropriate family and/or support persons have been notified, or if an autopsy is required or requested.
    - Checks the organizational policy to determine if the Chief Medical Examiner is to be notified; proceeds according to policy.

4. Knowledge-Based Practice	4.23 End of Life Care
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting an end-of-life nursing assessment and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Providing psychosocial care to client and support persons including:
    - Managing client anxiety using both pharmacological and non-pharmacological interventions.
    - Providing support for fear of death.
    - Actively listening to and providing empathetic responses.
    - Promoting client's and support persons' expression of feelings related to grief and the impending loss.
    - Respecting client's privacy and need or desire to talk (or to not talk).
- Accessing appropriate psychosocial support services for client and support persons (e.g., pastoral/spiritual care, cultural representative, social worker).
- Ensuring client's safety and physiological needs are met.
- Providing education and information to the client and support persons related to client's condition and the dying process.
- Focusing physical care on symptom management and the needs for oxygen, nutrition, pain relief, mobility, elimination, and skin care.
- Providing culturally safe and appropriate care.
- Respecting the client's, family's and/or support persons' perspectives on decision-making and death and dying.
- Communicating with appropriate health professional, next of kin, and appropriate agency about client's death.
- Pronouncing death.
- Providing post-mortem care.
- Performing post-mortem assessments and care.
- Assisting in post-mortem examination and sample procurement.
- Notifying, preparing documenting, and releasing body to funeral home according to organizational policies and procedures.

4. Knowledge-Based Practice	4.24 Mental Health Nursing
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

FOUNDATIONS OF MENTAL HEALTH NURSING

- Definition of mental health, mental illness, and mental health continuum.
- Relevant theories and therapies for mental health practice.
- Classification of mental health disorders (e.g., Diagnostic and Statistical Manual of Mental Disorders).
- Epidemiology of mental disorders.
- Psychiatric mental health nursing in acute, chronic care, and community settings.
- Cultural implications for psychiatric mental health nursing.
- Legal and ethical considerations for safe practice, including but not limited to the Mental Health Act (MHA), Freedom of Information and Protection of Privacy Act (FIPPA), Protection for Persons in Care Act (PPIC), and Personal Health Information Act (PHIA).

ANATOMY AND PHYSIOLOGY OF THE BRAIN

- Structure and function of the brain:
    - Maintenance of homeostasis.
    - Regulation of the autonomic nervous system and hormones.
    - Control of biological drives and behaviour (e.g., cycle of sleep and wakefulness, circadian rhythms).
    - Conscious mental activity, memory, and social skills.
- Cellular composition of the brain.

STRESS AND THE PHYSIOLOGICAL RESPONSE TO STRESS

- Definition of stress and stressors (e.g., physical, psychological stressors).
- Stress response theories including:
    - Fight or flight response.
    - General adaptation response (e.g., alarm, resistance, exhaustion stage).

- Physiological response to stress including interrelationships between the nervous, endocrine, and immune system (e.g., neurotransmitter stress response, immune stress response).

- Mediators of the stress response (e.g., perception, personality, social support, culture, spirituality, religious beliefs).

- Coping styles and coping resources (e.g., emotion-focused coping and problem-focused coping, coping flexibility).

- Managing stress through relaxation techniques (e.g., relaxation exercises, meditation, guided imagery, breathing exercises, physical exercises, biofeedback, cognitive reframing, mindfulness, journaling, humour).

- Adaptive defence mechanisms (e.g., compensation, conversion, denial, displacement, dissociation, identification, intellectualization, introjection, projection, rationalization, reaction formation, regression, repression, splitting, sublimation, suppression, undoing).

- Crisis theory including types and phases of crisis.

PSYCHOBIOLOGICAL DISORDERS

- Stress and the stress response.

- Epidemiology, etiology, comorbidity, clinical manifestations, lifespan and cultural considerations of psychobiological disorders including, but not limited to:
    - Anxiety and anxiety disorders (e.g., panic disorders, phobias, obsessive compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder, acute stress disorder, substance-induced anxiety disorder, anxiety due to medical conditions, anxiety disorder not otherwise specified).
    - Depressive disorders including:
        - Major depressive disorders (e.g., premenstrual dysphoric disorder, mixed anxiety-depression, recurrent brief depression, minor depression).
        - Dysthymic disorder.
    - Bipolar disorders (e.g., bipolar 1 and 2 disorders, cyclothymia).
    - Schizophrenia.
    - Eating disorders (e.g., anorexia nervosa, bulimia nervosa).
    - Cognitive disorders (e.g., delirium, dementia, amnestic disorder).

PSYCHOBIOLOGICAL DISORDERS

- Epidemiology, etiology, comorbidity, clinical manifestations, lifespan and cultural considerations of psychobiological disorders including:
    - Addictive disorders (e.g., substance abuse, substance dependence).
    - Personality disorders:
        - Cluster A (e.g., paranoid, schizoid, schizotypal personality disorders).
        - Cluster B (e.g., antisocial, borderline, narcissistic, histrionic personality disorder).
        - Cluster C (e.g., dependent, obsessive-compulsive, avoidant personality disorder).
        - Personality disorders not otherwise specified.
    - Pervasive developmental disorders in children and adolescents:
        - Autistic disorders (includes Asperger's and Rhett's disorders).
        - Attention deficit disorders.
        - Conduct disorders.

    - Anxiety disorders in children and adolescents:
        - Panic and school phobia.
        - Obsessive-compulsive disorder.
        - Separation anxiety disorder.
        - Social phobia.
        - Post-traumatic stress disorder.
    - Anxiety symptoms in children and adolescents.
    - Suicide (e.g., parasuicide, suicide ideation, suicide attempt).
    - Severe and persistent mental illness and serious mental illness (e.g., severe forms of depression, panic disorders, obsessive-compulsive disorders, schizophrenia, and bipolar disorders).

- Diagnostic studies, nursing care, and treatments common to psychobiological disorders.

CRISIS SITUATIONS

- Suicide, anger, aggression, violence, abuse, and sexual assault.

NURSING ASSESSMENT—MENTAL HEALTH

- Data collection types to inform health assessment process.

- Subjective data:
    - Assessment of presenting symptoms and referring party, medical health history, psychiatric history (e.g., symptoms, treatments, medications, and most recent service utilization), substance abuse history and current use, family history including health and mental health disorders and treatments, psychosocial history, legal history, strengths and deficits, cultural beliefs, needs relevant to psychosocial care.

- Objective data:
    - Mental health status examination to evaluate the client's current cognitive processes: appearance, behaviour, speech, mood, disorders of thought, perceptual disturbances, cognition, ideas of harming self or others.

4. Knowledge-Based Practice	4.24 Mental Health Nursing
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a mental health status assessment and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Promoting mental health and reducing the incidence of crisis.

- Identifying individuals at risk for harming self or others.

- Assessing suicide risk.

- Identifying individuals and families at high risk for abuse:
    - As part of the interdisciplinary team that includes mental health care professionals, participating in the development of screening programs to identify individuals at risk.

- Applying trauma and violence informed, culturally safe approaches during client interactions and decision making.

- Contributing to the development of, and then providing health teaching related to, mental health/mental illness and crisis prevention:
    - Reducing stress and influence of risk factors.
    - Increasing social supports.
    - Increasing coping skill, self-esteem, and self-confidence.
    - Promoting medication adherence.
    - Preventing substance abuse and drug interactions.

- Coordinating supportive services and connecting individuals with appropriate resources in the community.

- Participating, as part of the interdisciplinary team that includes mental health care professionals, in primary, secondary, and tertiary prevention.

- Contributing to the development of social policy changes:
    - Relapse prevention.
    - Problem-solving skills, stress management, and crisis intervention.
    - Self-care activities.
    - Educational groups for clients and families on topics such as stress management, coping skills, and grieving.

CLINICAL INTERVENTIONS

- As part of the interdisciplinary team that includes mental health care professionals, participating in the development and implementation of the plan of care.

- Providing health teaching adapted to the client's needs:
    - Participating in identifying the health teaching need of the client.
    - Teaching basic principles of physical and mental health such as:
        - Coping, interpersonal relationships, and social skills.
        - Mental disorders, the treatments, and their effects on daily living.

- Assisting client in assuming personal responsibility for activities of daily living.

- Focusing on improving the client's mental and physical well-being.

- Participating, as part of the interdisciplinary team that includes mental health care professionals, in the development and implementation of milieu management therapy:
    - Orienting clients to their rights and responsibilities, activities, rules, reality orientation practices, and unit environment.
    - Selecting specific activities that meet client's physical and mental health needs.
    - Ensuring client is maintained in the least restrictive environment as safety permits.
    - Using distraction techniques when appropriate.

- Administering medications pursuant to appropriate authorizing mechanisms, protocols, and in accordance with the principles of safe medication administration.

- Participating in health care team conferences.

- Under the direction of a mental health care professional, participating as part of the interdisciplinary team in mental health care treatments and interventions.

- Monitoring, preventing, and assisting in the management of aggressive behaviours, abuse, and inappropriate behaviours.

- Participating, as part of the interdisciplinary team that includes mental health care professionals, in the management of the symptoms of substance abuse, drug withdrawal, rehabilitation and recovery.

- Planning, as part of an interdisciplinary team that includes mental health care professionals, for discharge with client and support persons (e.g., housing and follow-up treatment).

EMERGENCY INTERVENTIONS

- Determining if client poses an immediate safety risk to self, other clients, and staff.

- Initiating necessary precautions to safeguard the client or others at risk of physical harm.

- Encouraging client to express feelings in a non-destructive manner.

- Assisting in identifying the precipitants and dynamics of the crisis.

- Assisting in identifying alternative courses of action to resolve the crisis.

- Constantly monitoring and acknowledging client's personal feelings and thoughts.

- Assisting in evaluating the possible consequences of the various courses of action.
- Assisting the client to decide on a particular course of action in accordance with the plan of care.
- Assisting in formulating a time frame for implementing the chosen course of action.
- Evaluating with the client whether the crisis has been resolved by the chosen course of action.
- Planning with the client how adaptive coping skills can be used to deal with crises in the future.
- Providing constant observation for suicide prevention as appropriate.
- Participating in critical incident stress debriefing.

COMMUNITY-BASED NURSING

- As part of the interdisciplinary team and under the direction of a mental health care professional, participating in the development of a comprehensive plan of care for client and support system with attention to socio-cultural needs.
- Negotiating boundaries with client in accordance with the plan of care.
- Encouraging adherence to medication regimen.
- Teaching and supporting adequate nutrition and self-care.
- Assisting client in self-assessment.
- Monitoring, documenting, and reporting as necessary changes in behaviours.
- Using creative strategies in accordance with the plan of care to refer client to positive social activities.
- Communicating regularly with client's support system to assess and improve level of functioning.
- Making referrals to community resources as needed.

4. Knowledge-Based Practice	4.25 Community Health Nursing
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Definitions of populations, groups, aggregates, and community.
- Introduction to concepts of community and population health:
  - Community as client and partner.
  - Community health nursing and public health.
  - Primary health care.
  - Determinants of health.
  - Health promotion, disease prevention, population health.
  - Levels of disease prevention (primary, secondary, tertiary).
  - Epidemiology.
- Concepts and components of health promotion (e.g., the Ottawa Charter).
- Range of health promotion approaches:
  - Healthy individuals (e.g., screening, individual risk assessment, immunization, counselling, health education, developing personal skills).
  - Healthy communities (e.g., strengthening community action, health communication).
  - Healthy environment and society (e.g., advocacy, building healthy public policy).
- Competencies, roles, and activities in community health nursing (e.g., communicator, facilitator, collaborator, coordinator, consultant, educator, direct care or service provider, community developer).
- Community health nursing settings (e.g., home care, community mental health, street health, telehealth, occupational health nursing, clinic-based nursing, correctional institutes, public health).
- Role of community in maintaining, improving, promoting, and protecting its own health and well-being:
  - Community development, community mobilization, capacity-building.
  - Health promotion and client-community empowerment.
  - Enabling health goal achievement.
  - Partnerships with individuals, groups, and communities.
- Ethics, ethical decision-making, and advocacy in community health nursing.
- Concepts for advocacy, effective skills involved in nursing advocacy, and role of advocate to promote health of individuals and populations.
- Effect of culture on community health nursing practice and cultural competence.
- Environmental health, principles, risk reduction, and risk communication.
- Levels of prevention in community health nursing (primary, secondary tertiary).

- Accessibility and barriers to the provision and use of community resources.
- Personal safety in community health nursing practice.
- Health and wellness promotion across the lifespan:
  - Infant, child, and adolescent health.
  - Adult health (women's and men's health).
  - Maternal health.
  - Older adult health.
  - Family health.
  - Vulnerable populations.
- Communicable and infectious diseases (e.g., prevention, control).
- Role of community health nurse in providing preventive care for communicable diseases.
- Role of community health nurse in preparing for and responding to disasters.

COMMUNITY AND CLIENT HEALTH ASSESSMENT

- Use of the community health nursing process to assess, plan, intervene, and evaluate practice from a micro level (e.g., individual, family) to a macro level (e.g., systems, society).
- Introduction to community health assessment techniques (e.g., windshield survey, comprehensive community health assessment):
  - Data collection and interpretation about the community and its health:
    - Gathering or compiling existing data.
    - Generating missing data.
    - Interpreting data.
    - Identifying community abilities and health concerns.
  - Data collection methods (e.g., informant interviews, focus groups, participant observation, windshield surveys, general surveys).
- Introduction to social assessments (e.g., focus groups in health promotion to gain insight into the perceptions, beliefs, and opinions).
- Introduction to cultural nursing assessment (e.g., identifying the beliefs, values, meanings, and behaviours of people while considering history, life experiences, and the social and physical environments in which they live).
- Introduction to environmental health assessment (e.g., school, home, workplace, and community assessments):
  - Nursing assessment activities can range from an individual health assessment to participating in community assessment or partnering in a specific environmental site assessment.
  - Exposure history and individual risk assessment.
  - Occupational and environmental health history.
- Introduction to community health nursing assessment:
  - Child health (e.g., objective and subjective assessment including nutritional assessment, elimination patterns, sleep behaviours, development and behaviour, safety issues, parenting concerns).
  - Adult health (e.g., subjective and objective assessment to inform health assessment process).

    Family health assessment.

4. Knowledge-Based Practice	4.25 Community Health Nursing
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting a health assessment and choosing the appropriate data collection methods to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Assuming various community health nursing roles in urban and rural environments and adapting delivery of services to a variety of settings including, but not limited to:
    - Community health clinics, client home, schools, mobile health units, and correctional institutions.
- Assisting, as part of an interprofessional team, in the assessment for, and in the development and implementation of, programs that promote the health of a community or a population (e.g., Emergency Preparedness and Response, capacity building programs.
- Participating in the delivery of community-based programs and interventions for clients across the lifespan and for individuals, families, groups, communities and populations in areas such as:
    - Health promotion, health and wellness, healthy communities.
    - Communicable and infectious diseases.
    - Disease, injury, disability, and rehabilitation.
    - Chronic diseases.
    - Environmental health.
    - Disaster management.

COMMUNITY-BASED NURSING

- Providing nursing care and services in the community in home care, clinics, outpatient settings, occupational health, and safety and corrections.

HOME CARE NURSING

- Performing direct and indirect home care nursing interventions:
    - Direct care activities:
        - Observing and evaluating client's health status and condition.
        - Administering nursing interventions, treatments, and rehabilitative exercises (e.g., medications, catheter insertion, ostomy irrigation, wound care).
        - Helping client and support persons develop positive coping behaviours.

        - Teaching the client and support persons to carry out physician's orders such as treatments, therapeutic diets, or medication administration.
        - Reporting to physician changes in client's condition and arranging for medical follow-up as indicated.
        - Helping the client and support persons identify resources that will help the client attain a state of optimal health.
    - Indirect activities:
        - Care coordination and care planning.
        - Consulting with other nurses and health care providers and coordinating referrals.
        - Supervising unregulated health care professionals.
        - Organizing and participating in client care conferences.
        - Advocating for clients within the health care system.
        - Obtaining and analyzing results of diagnostic tests.
        - Documenting care.

CLINIC AND OUTPATIENT NURSING

- Admission, assessment, and prioritization of client needs.
- Health promotion, injury and illness prevention, health maintenance, and disease-specific support and teaching.
- Home support and community rehabilitation interventions.
- Pre-hospital services (e.g., preoperative teaching).
- Coordination of client referrals.
- Visual acuity testing, removal of casts, allergy testing, wart treatment (e.g., liquid nitrogen) and other nursing interventions in clinics settings.
- Assisting with out-patient, clinic procedures.
- Preparation for and assistance with examinations and procedures (e.g., pelvic exam, sigmoidoscopy, vasectomy, circumcision, biopsy, preparation of slides for microscopic examination).
- Participation in presentations at seminars and information sessions.

OCCUPATIONAL HEALTH AND SAFETY

- Case management.
- Health promotion programs:
    - Management of stress, obesity, smoking, stress responses, and exercise programs.
    - Referrals to employee-assistance programs or other appropriate community resources.
    - Pre-employment and placement assessments.

- Primary prevention interventions:
    - Immunizations.
    - Smoking cessation, good nutrition, and coping skills programs.
    - Use of protective equipment.

- Health protection interventions:
    - Worker and workplace assessment and surveillance (e.g., post-accident assessment, identifying ergonomic problems).

- Secondary prevention:
    - Health surveillance and periodic screening (e.g., audiometric and visual acuity testing, Breathalyzer application, spirometry and pulmonary function testing, surveillance for substance abuse).
    - Elimination or modification of hazard-producing situations.
    - Interventions aimed at disability limitation (e.g., referral for counselling and treatment, removal of employee from hazardous situation).

- Tertiary prevention:
    - Return-to-work programs or limited-duty programs.

- Administration and management interventions:
    - Enforcing safety acts, regulations, protocols and procedures related to Workers Compensation Act, Workplace Hazardous Materials Information System, Workplace Health and Safety Act, transportation of dangerous goods.
    - Developing and implementing wellness policies and standards.

- Completing required documentation.

- Administration and management interventions:
    - Maintaining administrative records and statistics (e.g., attendance records, accidents, near-miss accidents, workers' compensation claims).

- Managing emergency situations, triaging, providing first aid measures, and referring client to appropriate medical treatment.

- Participating in research activities.

4. Knowledge-Based Practice	4.26 Maternal Health
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

HUMAN REPRODUCTIVE ANATOMY AND PHYSIOLOGY

- Functions of the external, internal, and accessory female organs in human reproduction.
- Female reproductive cycle, menstruation, and female hormones.
- Role of pelvic bones in the birth process.
- Physiology of lactation.

FAMILY PLANNING

- Natural family planning (e.g., basal body temperature, cervical mucus, calendar or rhythm method).
- Temporary contraception (e.g., abstinence, hormonal contraceptives, barrier methods, spermicides, intrauterine devices).
- Emergency contraception.
- Unreliable contraceptive methods (e.g., withdrawal, douching, breastfeeding).
- Permanent contraception (e.g., female and male sterilization).

PRENATAL DEVELOPMENT

- Cell division and gametogenesis (mitosis and meiosis).
- Fertilization (e.g., sex determination, inheritance, tubal transport, implantation of the zygote).
- Development—cell differentiation (e.g., chorion, amnion, yolk sac, germ layers).
- Prenatal developmental milestones for the zygote, embryo, and fetus.
- Accessory structures of pregnancy (e.g., placenta, umbilical cord).
- Fetal circulation before and after birth, and closure of fetal circulatory shunts.
- Multifetal pregnancy (e.g., monozygotic, dizygotic).

PRENATAL CARE AND ADAPTATIONS TO PREGNANCY

- Normal physiological and psychological changes in pregnancy.

- Prenatal care—prenatal visits:
    - Determining expected date of delivery (Naegele's rule).
    - Presumptive, probable, and positive signs of pregnancy.
    - Weight gain, nutritional requirements (pregnancy and during lactation), exercise.
    - Fetal heart rate.

COMPLICATIONS DURING PREGNANCY

- Manifestation, nursing care, and treatment of:
    - Hyperemesis gravidarum.
    - Bleeding disorders of early pregnancy (e.g., spontaneous abortion, ectopic pregnancy, hydatidiform mole).
    - Bleeding disorders of late pregnancy (e.g., placenta previa, abruption placentae).
    - Gestational hypertension (e.g., pre-eclampsia, eclampsia).
    - Blood incompatibility between woman and fetus (Rh and ABO incompatibility—erythroblastosis fetalis).
    - Diabetes mellitus and gestational diabetes mellitus.
    - Anemia (e.g., nutritional, genetic).
    - Infections (e.g., viral, non-viral, sexually transmitted, urinary tract).
    - Environmental hazards (e.g., bioterrorism, substance abuse, trauma).

- Nursing care and treatment related to complications of pregnancy.

LABOUR AND BIRTH

- Cultural influences on birth practices.

- Components of the birth process
    - Powers—uterine contractions, maternal pushing.
    - Passage—bony pelvis, soft tissues.
    - Passenger—fetal head, lie, attitude, presentation, position.
    - Psyche—birth experience.

- Normal childbirth—mechanism of labour.

- Stages and phases of labour:
    - First phase—dilatation and effacement:
        - Latent phase.
        - Active phase.
        - Transition phase.
    - Second phase—expulsion of fetus.
    - Third stage—expulsion of placenta.
    - Fourth stage—recovery.

- Fetal heart rate patterns: accelerations, early decelerations, variable decelerations, late decelerations.

- Pharmacological and non-pharmacological pain management.

- Regional analgesics and anesthetics.

- Cord blood banking.
- Diagnostic tests and nursing care of woman and fetus during labour and birth.
- Episiotomy and lacerations.

COMPLICATIONS DURING LABOUR AND BIRTH

- Problems with the powers of labour (e.g., hyper/hypotonic labour dysfunction).
- Problems with the passenger (e.g., fetal size, abnormal fetal presentation or position).
- Problems with the passage (e.g., pelvis and soft tissues).
- Problems with the psyche.
- Abnormal duration of labour.
- Premature rupture of membranes and pre-term labour.
- Post-term pregnancy.

OBSTETRICAL PROCEDURE

- Artificial rupture of membranes, induction or augmentation of labour, version, episiotomy and lacerations (including first, second, third, and fourth degree), forceps and vacuum-extraction births, Caesarean section.

EMERGENCIES DURING CHILDBIRTH

- Prolapsed umbilical cord.
- Uterine rupture.
- Uterine inversion.
- Amniotic fluid emboli.

COMPLICATIONS FOLLOWING BIRTH

- Manifestations and medical and nursing management of complications:
    - Shock (e.g., cardiogenic, hypovolemic, and anaphylactic).
    - Hemorrhage (e.g., early and late postpartum hemorrhage).
    - Anemia.
    - Thromboembolic disorders.
    - Puerperal infection (e.g., endometritis, urinary tract, mastitis).
    - Subinvolution of the uterus.
    - Mood disorders (e.g., postpartum depression and psychosis).

NURSING ASSESSMENT—ADMISSION OF THE LABOURING WOMAN

- Fetal condition (e.g., fetal heart rate with fetoscope, a hand-held Doppler transducer, or an external fetal monitor; colour, amount, odour of amniotic fluid).

- Maternal condition (e.g., vital signs).

- Impending birth—continual observation of client for indicators (e.g., restlessness, grunting, bearing down with contractions, bulging of the perineum or crowning).

- General assessment data collected:
    - Medical and obstetrical history, allergies, food intake, recent illness, and medication use (including illicit substances), and birth plan.

- Objective data:
    - Status of labour:
        - Vaginal exam (cervical effacement and dilation).
        - Fetal presentation (Leopold's maneuver).
        - Assessment of contractions by palpation and electronic fetal monitor.
    - Evaluation of the woman's general condition—edema of fingers and face, and abdominal scars is further explored, fundal height is measured, reflexes are assessed to identify hyperactivity that may occur with gestational hypertension and pre-eclampsia.

NURSING ASSESSMENT—POSTPARTUM

- Assessment of infant's Apgar score and any obvious abnormalities.

- Examination of the placenta for intactness and abnormalities.

- Routine nursing assessment in the postpartum period:
    - Vital signs.
    - Breasts (e.g., engorgement, nipple tenderness, breastfeeding).
    - Fundus (e.g., firmness, height, location).
    - Bladder (e.g., fullness, output, burning, pain).
    - Bowels (e.g., flatus, bowel sounds, defecation).
    - Lochia (e.g., character, colour, amount, odour, and presence of clots).
    - Episiotomy.
    - Homan's sign.
    - Psychosocial (e.g., family interaction, support, depression).
    - Adaptation (e.g., interest in newborn, eye contact, touch, ability to respond to infant cries).
    - Pain (e.g., location, character, severity, relief measure, analgesics).
    - Awareness and support of cultural practices.

4. Knowledge-Based Practice	4.26 Maternal Health
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting an assessment of the woman and fetus during labour, delivery, and postpartum, and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH TEACHING FOR CHILDBEARING

- Providing education for childbearing, including but not limited to:
    - Prenatal and postpartum education.
    - Childbirth and pain management.
    - Non-pharmacological and pharmacological pain management.

DISCHARGE TEACHING

- Initiating infant discharge care:
    - Basic care of infant, including bathing, cord care, feeding, elimination.
    - Recognizing hunger in newborns.
    - Sleep cycle of newborn and safe sleep positions for newborn.
    - Safety measures including proper use of car safety seats.
    - Immunizations.
    - Support groups and return appointments for well-baby care.
    - Signs and symptoms of problems and contact telephone numbers.

- Initiating postpartum self-care, maternal nutrition, and follow-up appointments.
    - Breastfeeding.
    - Freezing and storing breast milk.
    - Self-care.
    - Family planning.

CLINICAL INTERVENTIONS

- Providing nursing care during labour:
    - Admitting woman to birthing facility:
        - Obtaining history of the parents including desirability of pregnancy, number of pregnancies and deliveries (gravida and parity), previous birth history, number of children in the family, types of support systems, anticipated feeding method (breast or bottle).

        - Obtaining consent and lab tests (blood, urine, nitrazine paper test), initiating intravenous infusion, and determining fetal position and presentation.
    - Monitoring the fetus (e.g., fetal heart rate, inspection of amniotic fluid).
    - Monitoring woman during labour (e.g., vital signs, contractions, progress of labour through periodic vaginal and cervical examinations, intake and output, response to labour).
    - Providing pharmacological and non-pharmacological support to mother.
    - Administering medications for induction and augmentation of labour pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
    - Providing encouragement and support to mother and partner/support persons.
    - Assisting the appropriate care provider with obstetrical procedures.
    - Initiating discharge planning during admission process.
    - Taking on the role of the primary nurse responsible for managing the nursing care of the labouring mother.

- Taking on the role of the primary nurse responsible for managing the nursing care of the delivering mother, including:
    - Preparing the delivery instruments and infant equipment.
    - Administering medications (e.g., oxytocin, analgesics, tocolytic) to mother pursuant to appropriate authorizing mechanisms, protocols, and principles of safe medication administration.
    - Taking appropriate actions to relieve fetal distress:
        - Repositioning to prevent supine hypotension.
        - Administering high-flow oxygen by face mask and IV fluid bolus.
        - Stopping oxytocin infusion.
    - Assisting with emergency birth.
    - Implementing emergency measures in the unexpected and extended absence of a physician or midwife.
    - Preparing mother for operating room.
    - Assessing infant's Apgar score and for obvious abnormalities.
    - Providing initial care to infant (e.g., suctioning, drying skin, skin-to-skin contact with mother, placing infant in a radiant warmer, eye ointment, intramuscular vitamin K).
    - Examining placenta.
    - Verifying identification and placing bands on mother and infant; adhering to safety protocols.
    - Promoting infant-parent bonding.
    - Providing education and support with initial breastfeeding if chosen method of newborn feeding.

- Providing nursing care to mother in postpartum period:
    - Conducting routine postpartum assessments as indicated.
    - Identifying and preventing hemorrhage, including fundal massage.
    - Evaluating and intervening for pain including non-pharmacological approaches (e.g., applies cold and heat to perineum).
    - Promoting bonding and attachment between the infant and family.
    - Assisting mother to latch and breastfeed if chosen method of feeding.
    - Providing health teaching and assisting mother to feed with chosen method.
    - Observing parent-newborn interaction, including both verbal and non-verbal communication.

- Providing postoperative care to client following a Caesarean birth.
- Planning for discharge.
- Collaborating with health care team including services such as family planning, protective services, daycare centres, homemakers, parenting classes, self-help groups, family counselling, and child advocates.

4. Knowledge-Based Practice	4.27 Neonate Health
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ADJUSTMENT TO EXTRAUTERINE LIFE

- Anatomy and physiology of the neonate.
- Normal reflexes of the neonate and disappearance of primitive reflexes (e.g., Babinski, Moro, sucking and rooting, blinking, grasp reflexes).
- Neonate's immune response to inflammation and infection.
- Apgar scoring (e.g., heart rate, respiratory effort, muscle tone, reflex response to suction or gentle stimulation on the soles of the feet, skin colour).
- Transition phases involved in adapting to extrauterine life:
    - Phase 1—from birth to 30 minutes (period of reactivity).
    - Phase 2—from 30 minutes to two hours after birth (decreased responsiveness).
    - Phase 3—from two to eight hours after birth (second period of reactivity).
- Mechanisms of thermoregulation (e.g., evaporation, conduction, convection, radiation).
- Common skin manifestations of the neonate (e.g., lanugo, vernix caseosa, mongolian spots, milia, acrocyanosis, desquamation).
- Prophylactic medication administration (e.g., vitamin K and eye ointment).
- Cause and appearance of physiological jaundice.

PRE-TERM AND POST-TERM NEONATES

- Pre-term and post-term physical characteristics of neonate.
- Problems related to pre-term births (e.g., inadequate respiratory function, sepsis, poor thermoregulation, hypoglycemia and hypocalcemia, hemorrhage, retinopathy of prematurity, poor nutrition, immature kidneys, necrotizing enterocolitis, jaundice).
- Special needs of pre-term neonates (e.g., thermoregulation, nutrition, positioning).
- Post-term neonates (e.g., hypoglycemia and hyperglycemia; meconium aspiration; intrauterine and neonate trauma).

NEONATE WITH A PERINATAL INJURY OR CONGENITAL MALFORMATION

- Etiology, pathophysiology, manifestations, and treatment of:
    - Malformation present at birth (e.g., hydrocephalus, spina bifida, congenital heart malformations, cleft lip and palate, club foot, development hip dysplasia, tracheoesophageal fistula, hypospadias).
    - Metabolic defects (e.g., cystic fibrosis, phenylketonuria, Tay-Sachs disease, pathological jaundice).
    - Blood disorders (e.g., sickle cell anemia, hemophilia, thalassemia, defects of white blood cells and immune defence).
    - Chromosomal abnormalities (e.g., Down syndrome, Klinefelter's syndrome, Turner's syndrome, trisomy 13 and 18).
    - Perinatal injury (e.g., infections, medications, maternal disorders, abnormalities) unique to pregnancy (e.g., hemolytic disease of the neonate, intracranial hemorrhage, transient tachypnea of the neonate, meconium aspiration syndrome, neonatal abstinence syndrome, macrosomia).

EMERGENCIES

- Respiratory distress (e.g., persistent cyanosis, grunting respirations, flaring of the nostrils, sternal retraction, sustained tachycardia and tachypnea, bradycardia and bradypnea episodes).

- High-risk pre-term and post-term neonates.

- Severe birth defects.

NURSING ASSESSMENT—NEONATE

- Complete physical examination, assessment of reflexes, and gestational age assessment (e.g., skin, vernix, hair, ears, breast tissue, genitalia, sole creases).

- Observations for major anomalies in Phase 1 of neonate care:
    - Neonate's movements and facial expressions assessed for symmetry and equality of movement.
    - Head and face assessed for trauma as well as buttocks if breech presentation, and measurement of head circumference.
    - Range of motion of the hip joint assessed (e.g., hip dysplasia, crepitus, restrictions).
    - Fingers and toes assessed for abnormal numbers or webbing.
    - Feet assessed for straightness; arms and feet for length equality.
    - Urinary or meconium passage assessed to confirm patency.

- Pain assessment including facial expression, cry, movement of the arms and legs, consolability, and oxygen saturation.

- Neonatal behavioural assessment scale (alertness, response to visual and auditory stimuli, motor coordination, level of excitement, and organizational process in response to stress).

4. Knowledge-Based Practice	4.27 Neonate Health
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting an assessment of the neonate and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

INITIAL CARE OF THE NEONATE

- Using aseptic techniques when caring for the neonate.
- Maintaining thermoregulation (e.g., drying the neonate, placing infant in radiant warmer, placing a hat on infant's head, wrapping infant in warm blankets, facilitating skin-to-skin contact between neonate and mother).
- Maintaining cardiorespiratory function (e.g., wiping face, nose, and mouth; bulb suctioning; applying cord clamp; performing Apgar scoring according to facility policy).
- Performing eye care.
- Administering prophylactic medication (e.g., eye ointment and vitamin K).
- Observing for urination and passage of meconium.
- Ensuring identifiers are placed on the parents and neonate.
- Explaining safety protocols to parents.
- Performing an assessment for major anomalies.
- Encouraging breastfeeding (if feeding method of choice).
- Encouraging bonding with family.

CARE OF THE NEONATE

- Completing a head-to-toe assessment including observations for gestational age and birth defects.
- Obtaining Apgar score and monitoring closely for respiratory distress.

- Auscultating chest, assessing respiratory and circulatory functions, and interpreting findings.
- Clearing mucous from mouth and nose if indicated.
- Supporting thermoregulation and recording temperature after bath according to facility policy.
- Observing bowel and urinary function.
- Obtaining vital signs, weights, and measurements (e.g., length; head and chest circumference).
- Providing umbilical care, circumcision care when indicated, and skin care.
- Confirming that appropriate identifiers remain on the parents and neonate.
- Explaining safety protocols to parents.
- Conducting nursing care to promote bonding and attachment.
- Ensuring adequate nutrition of neonate.
- Evaluating and providing adequate pain relief in neonates when indicated.
- Monitoring neonate for side effects of pain medication or signs of withdrawal from medication.
- Monitoring neonate for signs of dehydration and malnutrition.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment to determine cardiac emergency.
- Calling and managing code and initiating CPR.
- Taking appropriate action based on individual competence.

- Maintaining patent airway to support perfusion:
    - Client positioning.
    - Oral airway insertion.
    - Nasal airway insertion.
    - Supraglottic airway insertion (e.g., laryngeal mask, laryngeal tube, esophageal-tracheal tube).
    - Suctioning artificial airway openings—oropharyngeal, nasopharyngeal, esophageal/tracheal, nasotracheal, endotracheal, and tracheal.
    - Assisting appropriate provider with the insertion of endotracheal and tracheostomy airways.

- Administering oxygen when necessary.

- Delivering manual defibrillation, cardioversion, or transcutaneous cardiac pacing when part of a health care team performing advanced cardiac life support measures, and in accordance with protocols.
- Conducting secondary and ongoing assessments in stabilized cardiac emergency.
- Obtaining an EKG.
- Assisting physician and/or code team with secondary assessment in the event of cardiac arrest.
- Establishing intravenous or intraosseous access, administering fluid and/or medication as prescribed, and titrating as necessary.
- Monitoring vital signs and continuously assessing pain.

4. Knowledge-Based Practice	4.28 Pediatric Health
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

GROWTH, DEVELOPMENT, AND NUTRITION

- Concepts of growth, development, and maturation.
- Developmental differences between children and adults.
- Growth charts and developmental screening.
- Factors that influence growth and development (e.g., hereditary traits, nationality and race, ordinal position in the family, gender, environment, the family).
- Personality development (e.g., cognitive and moral development).
- Maslow's hierarchy of needs.
- Nutrition and illness.
- Physical, psychosocial, cognitive, spiritual developments, and age specific events from:
  - 1 to12 months
  - 1 to 3 years
  - 3 to 5 years
  - 6 to 12 years
  - 13 to 18 years
- Theories of development (e.g., Piaget, Erickson, Kohlberg, Freud).
- Child's reaction to hospitalization (e.g., separation anxiety, fear, regression, cultural needs).
- Developmental needs for the hospitalized infant, toddler, preschooler, school-age child, and adolescent.

ALTERATIONS OF THE BODY SYSTEMS IN THE CHILD

- Etiology, pathophysiology, manifestations and treatment of alterations of the body systems in the pediatric client including:
  - Sensory neurological system.
  - Otitis externa and media, hearing impairment, barotrauma, dyslexia, amblyopia, strabismus, conjunctivitis, hyphema, and retinoblastoma.
  - Nervous system:
    - Reye's syndrome, sepsis, meningitis, encephalitis, brain tumours.
    - Seizure disorders and other conditions causing decreased level of consciousness.

        - Cerebral palsy.
        - Cognitive impairment (e.g., from head injuries, near drowning, cerebral vascular accidents).
    - Musculoskeletal system:
        - Traumatic fractures—humeral, radial, ulnar, femoral, fibular, tibial.
        - Osteomyelitis, muscular dystrophy, slipped capital epiphysis.
        - Legg-Calvé-Perthes disease, osteosarcoma, Ewing's sarcoma.
        - Juvenile rheumatoid arthritis; scoliosis.
        - Sports injuries.
        - Child abuse.
    - Respiratory system:
        - Nasopharyngitis, acute pharyngitis, sinusitis.
        - Croup syndromes, epiglottitis, bronchitis, bronchiolitis.
        - Pneumonia, tonsillitis, and adenoiditis.
        - Allergic rhinitis, asthma, status asthmaticus.
        - Cystic fibrosis; bronchopulmonary dysplasia.
        - Sudden infant death syndrome.
    - Cardiovascular system:
        - Congenital heart disease:
            - Defects that increase pulmonary blood flow.
            - Obstructive defects.
            - Defects that decrease pulmonary blood flow.
            - Defects that cause mixed pathology.
        - Acquired heart disease; congestive heart failure.
        - Rheumatic fever; systemic hypertension.
        - Hyperlipidemia; Kawasaki disease.
    - Blood, blood-forming organs, or lymphatic system:
        - Iron deficiency anemia, sickle cell disease, and thalassemia.
        - Bleeding disorders (e.g., hemophilia, platelet disorders, idiopathic thrombocytopenic purpura).
        - Disorders of white blood cells (e.g., leukemia, Hodgkin disease).
        - Chronic illness and developmental disabilities.

ALTERATIONS OF THE BODY SYSTEMS IN THE CHILD

- Etiology, pathophysiology, manifestations and treatment of alterations of the body systems in the pediatric client including:
    - Gastrointestinal system:
        - Congenital disorders (e.g., esophageal atresia, imperforate anus, pyloric stenosis, celiac disease, Hirschsprung disease [aganglionic megacolon], intussusception, Meckel diverticulum, hernias).
        - Disorders of motility (e.g., gastroenteritis, vomiting, gastroesophageal reflux, diarrhea, constipation, fluid and electrolyte imbalance, dehydration, overhydration).
        - Nutritional deficiencies (e.g., failure to thrive, Kwashiorkor, rickets, scurvy).
        - Infections (e.g., appendicitis, thrush, parasites).
        - Poisoning (e.g., from plants, drugs, lead).
    - Genitourinary system:
        - Phimosis, hypospadias, and epispadias.
        - Exstrophy of the bladder; obstructive uropathy.
        - Acute urinary tract infection.
        - Nephrotic syndrome; acute glomerulonephritis.
        - Wilms tumour, hydrocele, and cryptorchidism.
    - Integumentary system:
        - Congenital lesions (e.g., strawberry nevus, port-wine nevus).

        - Infections (e.g., miliaria, intertrigo, seborrheic dermatitis, diaper dermatitis, acne vulgaris, herpes simplex type 1, infantile eczema, staphylococcal infection, impetigo, fungal infections, pediculosis).
        - Injuries (e.g., burns, frostbite).
        - Infestations (e.g., scabies, lice).
    - Respiratory system:
        - Acute bronchiolitis, respiratory syncytial virus.
        - Perinatal respiratory diseases (e.g., transposition of the great vessels, total anomalous venous return, truncus arteriosus, hypoplastic left heart syndrome).
        - Congenital respiratory disorders (e.g., hernia of the diaphragm, lung sequestration, cystic adenomatoid malformation, bronchogenic cyst, foregut cyst, aberrant vascularization, double arch of the aorta, tracheal rings, tracheomalacia, tracheal atresia, primary ciliary dyskinesia).
    - Metabolic disorders:
        - Inborn errors of metabolism (e.g., Tay-Sachs disease).
        - Endocrine disorders (e.g., hypothyroidism, diabetes insipidus, diabetes mellitus).
    - Common childhood communicable infections (e.g., chicken pox, mumps, impetigo).
    - Emotional or behavioural conditions:
        - Organic behavioural disorders (e.g., autism, obsessive-compulsive disorder).
        - Environmental or biochemical behavioural disorders (e.g., depression, suicide, substance abuse, attention-deficit/hyperactivity disorder, anorexia nervosa, bulimia).

EMERGENCIES

- Respiratory emergencies (e.g., respiratory distress, respiratory failure, airway obstruction by foreign body, bronchiolitis, carbon monoxide poisoning, croup, epiglottitis, peritonsillar and retropharyngeal abscess, pertussis, pneumonia, pneumothorax).

- Cardiovascular emergencies (e.g., inadequate heart function, rhythm disturbances, heart failure, hypovolemia, septic shock, anaphylaxis, sickle cell disease).

- Neurologic emergencies (e.g., seizures, status epilepticus).

- Gastrointestinal and genitourinary (e.g., gastroenteritis, abdominal pain, appendicitis, incarcerated hernia, intussusception, pyloric stenosis, testicular torsion, urinary tract infections).

- Endocrine emergencies (e.g., diabetic ketoacidosis).

- Infectious disease emergencies (e.g., AIDS, tuberculosis, bacteremia, meningitis, meningococcemia, encephalitis, Kawasaki disease, Lyme disease, skin rashes).

- Other emergencies (e.g., cellulitis, hair tourniquets, impetigo, scabies).

NURSING ASSESSMENT

- General survey (e.g., general appearance, alertness and responsiveness, age-appropriate behaviour, presence of bruises, stridor or grunting sounds, rigid body, rubbing of the ears).

- Subjective data:
    - Information concerning the child's usual health habits and practices regarding eating, sleeping, toileting, activity patterns, and use of special words or gestures.
    - Information concerning coping patterns, siblings, family values, parenting concerns, safety issues.
    - Use of current developmental screening tools to identify children who are unable to perform at expected developmental levels or milestones.

- Assessment of children for signs of child abuse and neglect, and use of facility screening tools (e.g., predictive questionnaires) with parents.
- Use of complementary and alternative medicine and over-the-counter medications.
- Review of immunization record.

- Objective Data
  - Physical survey including a head-to-toe assessment and vital signs.

4. Knowledge-Based Practice	4.28 Pediatric Health
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when conducting an assessment of the child and choosing the appropriate data collection types to inform the nursing process.

- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.

HEALTH PROMOTION

- Actively involving parents throughout assessment process and partnering with parents in identifying appropriate interventions to address health concerns.

- Teaching and guiding parents in facilitating the transitions through the development stages of the child:
    - Growth and developmental patterns and age-appropriate assessment.
    - Healthy lifestyles for parent, children, and families (e.g., nutrition, physical activity, injury and accident prevention, second-hand smoke).
    - Childhood communicable diseases and importance of immunization.

- Identifying children and parents at risk for child abuse or neglect and reporting to appropriate authority.

- Referring parents and child to appropriate community resources.

- Participating in well-baby clinics and school health programs aimed at maintaining and promoting health.

CLINICAL INTERVENTIONS

- Providing nursing care to neonate.

- Using medical, surgical, mental health, community health, and end-of-life nursing competencies, taking into account neonate, infant, and pediatric considerations in the provision of nursing care to children of all ages including but not limited to:
    - Applying the nursing process to the nursing care of neonates, infants, and children.
    - Calculating medication dosages for neonates, infants, and children.
    - Administering medications, including immunizations, to neonates, infants, and children.
    - Providing psychosocial support to parents and children.

EMERGENCY INTERVENTIONS

- Conducting primary (ABCDE) assessment and intervening as necessary.
- Assisting with endotracheal intubation.
- Initiating and performing resuscitative and pediatric advanced life support measures on the neonate, infant, and child.

COMMUNITY-BASED NURSING

- Providing education to parents and/or child on the specific concern including:
    - Anatomy, physiology, pathophysiology, manifestation, and treatment of disease, illness, and common childhood communicable diseases.
    - Health promotion and disease prevention.
    - Self-management and care of neonate/infant/child in the home.
    - Signs and symptoms of complications related to specific illness or surgery and when to seek medical services.
- Referring parents and/or child to community services and providing appropriate resources to support the family.
- Providing direct care nursing services in the client's home.
- Providing ongoing psychosocial support to parents, child, and family.

4. Knowledge-Based Practice	4.29 Emergency Nursing
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

FOUNDATIONS OF EMERGENCY NURSING

- Historical perspective, definition, mission, values, and standard of emergency nursing practice.
- Collaborative nursing practice including but not limited to, pre-hospital providers, emergency department physicians and nurses, trauma surgeons, respiratory therapists, radiologists, and pharmacy.
- Emergency department nurses as community educators.
- Application of primary, secondary, and tertiary prevention.
- Legal and regulatory constructs (e.g., communication, medical records, portability of health insurance, consent, emergency medical treatment, negligence and malpractice).
- Diversity nursing model in emergency department care including assumptions, beliefs, communication, diversity, and education.

CLINICAL FOUNDATIONS OF EMERGENCY NURSING

- Triage acuity rating system (e.g., emergent, urgent, non-urgent), triage process, and triage documentation (Canadian Triage and Acuity Scale).
- Pediatric triage, rules of pediatric triage, pediatric assessment triangle.
- Client assessment.
- Air and surface client transport, transport process, care during transport, and stresses of transport for client.
- Vascular access and fluid replacement.
- Wound management.
- Pain management.
- Presence of support persons during resuscitation.
- Organ and tissue donation.
- Palliative and end-of-life care in the emergency department.

- Forensic nursing in emergency department.

- Emergency preparedness (e.g., natural disaster; nuclear, biologic, and chemical agents of mass destruction).

- Management of critical care client in the emergency department.

MAJOR TRAUMA EMERGENCIES

- Epidemiology and mechanisms of injury.

- Etiology, pathophysiology, manifestations, and treatments of major traumas:
    - Head, spinal, thoracic trauma.
    - Abdominal and genitourinary trauma.
    - Maxillofacial, orthopedic, and neurovascular trauma.
    - Burns.
    - Pediatric and obstetrical trauma.

MEDICAL AND SURGICAL EMERGENCIES

- Etiology, pathophysiology, manifestations, and treatments of emergencies:
    - Respiratory, cardiovascular, hematologic, shock, fluid, and electrolyte emergencies.
    - Neurological, endocrine, and musculoskeletal emergencies.
    - Gynecologic, gastrointestinal, renal, and genitourinary emergencies.
    - Ocular, dental, ear, nose, throat, and facial emergencies.
    - Oncologic and communicable diseases and pandemic emergencies.
    - Environmental and toxicological emergencies.

EMERGENCIES IN SPECIAL POPULATIONS

- Obstetrics and pediatric emergencies.

- Child and elder abuse and neglect.

- Intimate partner violence.

- Sexual assault.

- Mental health emergencies (e.g., substance abuse, psychosis, thoughts of harming self or others).

NURSING ASSESSMENT

- Triage assessment process (e.g., CTAS):
    - Across-the-room-assessment (e.g., using sense of sight, hearing, and smell; general impression of health status).
    - Determining the client's chief complaint.

- Pediatric triage assessment
    - Use of the pediatric assessment triangle (e.g., general impression, work of breathing, circulation to skin).

- Subjective data:

    - Validation of the client's chief complaint (e.g., history of complaint, signs and symptoms).
    - Information gathered (e.g., medications whether prescribed, over-the-counter, street, herbal preparations or home remedies; medical history; allergies; last menstrual period; immunizations).
- Objective data:
    - Brief focused physical examination based on the client's current injury or illness.
    - Vital signs and assignment of acuity rating.

- Triage reassessment according to the organization's emergency department triage protocol.

INITIAL ASSESSMENT

- Primary (ABCDE) assessment:
    - Airway with simultaneous cervical spine protection for trauma clients.
    - Breathing effectiveness.
    - Circulation effectiveness.
    - Disability (e.g., brief neurological assessment).
    - Exposure/environmental control.

- Secondary FGHI assessment (evaluating client condition once emergent threats are addressed):
    - Full set of vital signs; focus adjuncts (e.g., cardiac monitor, continuous pulse oximetry); facilitate family presence.
    - Give comfort measures.
    - History and head-to-toe assessment.
    - Inspect posterior surfaces.

ONGOING ASSESSMENT

- Ongoing assessment of client's response to treatment:
    - Determines improvement or deterioration in client status.
    - Determines frequency of assessment based on client's clinical status.
    - Follows facility protocols for specific situations such as reassessment of pain.
    - Assessing considerations for special populations (e.g., pediatric, geriatric, obstetric, bariatric).

4. Knowledge-Based Practice	4.29 Emergency Nursing
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical reasoning when triaging and conducting primary, secondary, and ongoing assessments of the client presenting to the emergency department, and choosing the appropriate data collection types to inform the nursing process.
- Using clinical judgment when formulating the nursing diagnosis, developing a nursing care plan, providing nursing interventions, and evaluating outcomes.
- Triaging client according to protocol.
- Providing triage and initial nursing interventions when appropriate (e.g., application of ice, immobilization, elevation of an injured extremity, education on why measures are important, application of dressing).
- Performing common screening and diagnostic procedures and obtaining diagnostic samples.
- Interpreting common screening and diagnostic test results.
- Responding appropriately to screening and diagnostic test results.
- Documenting according to emergency department policy.
- Teaching and providing psychosocial supports to client and support persons.
- Conducting nursing interventions related to primary, secondary, and tertiary prevention assessments.
- Initiating basic and advanced cardiac life support or pediatric advanced life support.
- Carrying out emergency nursing interventions related to all body systems:
    - Mechanisms of disease and injury.
    - Inflammation and wounds.
    - Fluids and electrolytes.
    - Sensory systems of the body (visual, auditory, integumentary).
    - Respiratory system.
    - Hematologic and oncologic systems.
    - Cardiovascular system.
    - Gastrointestinal system.
    - Urinary system.
    - Endocrine system.

- Reproductive system (male and female).
- Nervous system.
- Musculoskeletal system.
- Mental health.
- Maternal health.
- Pediatric health.

4. Knowledge-Based Practice	4.30 Nursing Nephrology

LPNs who complete the Manitoba Nephrology Nursing Course have the competence to practise nursing nephrology.

Please contact the Manitoba Renal Program for information on the specific competencies provided through the course.

4. Knowledge-Based Practice	4.31 Nursing Foot Care
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

ANATOMY AND PHYSIOLOGY OF THE FEET AND LOWER EXTREMITIES

Demonstrate knowledge of human anatomy and physiology, and biomechanics of feet and lower extremities.

ALTERATIONS OF THE FEET AND LOWER LIMBS

Demonstrate knowledge of conditions that impact lower limbs and feet:

- Arthritis,
- Calluses.
- Cellulitis.
- Edema.
- Plantar Fasciitis.
- Peripheral Vascular Disease.
- Circulatory and Neurological Disorders.

Demonstrate knowledge of the complications of diabetes and the effects on the feet:

- Neuropathy.
- Decrease in sensation.
- Decrease in movement.
- Decrease in circulation.

NURSING ASSESSMENT OF THE FEET AND LOWER LIMBS

Assess/inspect the feet and lower extremities, including:

- Diabetic assessment of lower extremities.
- Vascular assessment of lower extremities, including:
    - Doppler.
    - ABI.
    - Claudication.
    - Edema.
    - Temperature.
- Gait and footwear.

4. Knowledge-Based Practice	4.31 Nursing Foot Care
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

HEALTH PROMOTION

Employ health teaching specific to reaching optimal foot health, including:

- Teach appropriate foot health and foot care to client, family, and others.

CLINICAL INTERVENTIONS

Perform basic foot care procedures, including:

- Cleaning, moisturizing.
- Application of creams, lotions, simple dressings.
- Toenail care (including cutting).

Recognize, monitor, and manage common disorders of the lower limb and foot, including:

- Abnormal nails (clubbing, spooning, involuted and ingrown).
- Athlete's foot, warts, and fungus.
- Bunions.
- Hammer, claw, and mallet toes.

Perform post basic foot care procedures*, including:

- Assessment (health history, subjective and objective data collection).
- Care planning.
- Gait and footwear assessment.
- Principles/application and contraindications of padding and strapping.
- Use the instruments in a safe, competent, and appropriate manner, including:
    - Black's File.
    - Diamond Deb File.
    - Nail Scissors.
    - Probe.
    - Nail Nippers.
    - Foot File.
    - Rotary File.
    - Nail packing.
    - Monofilament.
    - Curette.
- Evaluation of care

*LPNs are required to complete a CLPNM approved foot care program before performing post basic foot care interventions. See the CLPNM Nursing Foot Care Practice Direction.

Perform invasive foot care procedures**, including:

- Remove tissue below the level of the dermis to the level of viable tissue with a sharp instrument for the purpose of:
    - Corn debridement or removal.
    - Callus debridement or removal.

Monitor and manage pain and any unintended outcomes associated with invasive foot care.

Apply accepted infection prevention and control guidelines in providing post-basic foot care, including:

- Cleaning, disinfecting, and sterilization of multi-use equipment.
- Single-use equipment.
- Hand hygiene.
- Personal protective equipment.
- Workplace hazardous materials information system.

Assess and refer clients to other health professionals, as necessary.

- Compare actual assessment findings to expected finding and consult appropriate care provider when assessment findings:
    - Are not as anticipated, changed, or new.
    - Client is not achieving intended outcomes.

SELF-EMPLOYED PRACTICE

Demonstrate knowledge and ability to adhere to the highest quality of nursing care and professional behaviour in self-employed practice as required by legislation, regulation, and practice directions when establishing a post basic foot care business.

Develop, maintain, and adhere to policies, including but not limited to:

- Transparent and ethical billing practices.
- Transparent and accurate advertising.
- Appropriate informed consent procedures.
- Implementation of nursing process.
- Professional development and practice currency.

Demonstrate knowledge and ability to manage information according to the following principles:

- Accurate record of services provided.
- Confidentiality of patient information.

** LPNs are required to complete a CLPNM approved foot care program and additional education sharp wound debridement before performing invasive foot care. See the CLPNM Nursing Foot Care Practice Direction.

5. SAFE AND ETHICAL CARE

The LPN protects the client, the public, and the health care team including themself, from psychological and physical harm and upholds the ethical and practice standards of the profession.

Safety of the client, the public, and the health care provider is a crucial component of quality health care delivery. Client safety is the state of continuously working toward the avoidance, management, and treatment of unsafe acts. The LPN optimizes client and health provider safety by using evidence-based practices and systematic approaches to reduce and mitigate risks within the health care system.

Documentation and reporting are also critical responsibilities of the LPN in the protection of the client and public. Effective documentation can positively affect the quality of life and health outcomes for clients and minimize the risk of errors. Effective, accurate, and timely communication of client information with the health care team is also paramount in ensuring client safety and continuity of care. A lack of communication can result in fragmented care, duplication of care, and therapies being delayed or omitted.

Further, the LPN serves and protects the client, the public, and society as a whole by adhering to the ethical, practice, and nursing competencies of the profession.

Competencies of safe and ethical care fall into five subdomains:

5.1 Integration of professional standards.
5.2 Documenting and reporting.
5.3 Risk management.
5.4 Safety.
5.5 Emergency preparedness and response.

Each of these subdomains includes:

- Integrated theoretical knowledge.
- Nursing competencies.

5. Safe and Ethical Care	5.1 Integration of Professional Standards
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Relationship between ethics and professional practice (e.g., values, Code of Ethics, responsibility, accountability, advocacy).
- Ethical theories including deontology, utilitarianism, bioethics, and relational ethics.
- Components of bioethics (e.g., autonomy, beneficence, non-maleficence, justice).
- Ethical decision-making frameworks for nursing practice and leadership.
- Ethical issues in nursing practice
  - Client care (e.g., informed consent, futile care, withdrawal of food and hydration).
  - Safety in the work environment.
- Legal concepts that relate to ethics and nursing.
- Legal and ethical responsibilities and obligations of LPNs.
- Legal aspects of nurse-client, nurse-physician, nurse-nurse, and nurse-employer relationships.
- Legal issues that arise in nursing practice and criminal liability (e.g., abortion, medication regulations, communicable diseases, death and dying, advance directives, health care surrogates, organ donation, mental health issues, public health issues).
- LPN governing documents and professional standards, including:
  - LPN Act.
  - LPN Regulations.
  - CLPNM By-laws.
  - Regulated Health Professions Act.
  - Code of Ethics.
  - Standards of Practice.
  - Practice Directions.

5. Safe and Ethical Care	5.1 Integration of Professional Standards
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Practising within the legislated scope of practice.
- Ensuring they have the theoretical and practical knowledge to safely carry out procedures, treatments, and interventions.
- Using the Standards of Practice in daily practice to:
  - Guide nursing practice (legal reference to describe reasonable and prudent practice).
  - Provide a point of reference for self-evaluation and self-reflection.
  - Provide a benchmark to maintain and enhance competencies.
- Processing ethical dilemmas using the ethical decision-making framework and the CLPNM Code of Ethics.
- Using the Code of Ethics as the foundation to their practice (e.g., promotes accountability, responsibility, and advocacy).
- Understanding, upholding, and promoting the ethical standards of the profession, as outlined in the CLPNM Code of Ethics.
- Responding professionally to unacceptable behaviours and reporting them to appropriate authorities.
- Identifying and responding to incidents of unsafe practice and professional misconduct and reporting to appropriate authorities.
- Collaborating with the health care and interprofessional team to ensure safe, competent, comprehensive, and ethical care.
- Demonstrates professional judgment to ensure social media and information and communication technologies (ICTs) are used in a way that maintains public trust in the profession.
- Selects and utilizes information and communication technologies (ICTs) in the delivery of client care.
- Demonstrates knowledge of the uses of virtual care, and the related ethical considerations and professional requirements.

5. Safe and Ethical Care	5.2 Documentation and Reporting
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Interprofessional communication through the client's health record and reports.
- Confidentiality of client information through verbal reports, and written and electronic documentation.
- Canadian privacy legislation (e.g., Personal Information Protection and Electronic Documents Act) and provincial legislation (e.g., Personal Health Information Act, Freedom of Information and Protection of Privacy Act).
- Purpose of records:
  - Communication and care planning.
  - Legal documentation.
  - Education.
  - Funding and resource management.
  - Research, statistical data, quality management.
- Guidelines for legal and quality documentation and reporting (e.g., factual, accurate, complete, current, organized, compliant with standards).
- Common documentation systems (e.g., narrative, problem-oriented health care records, source records, charting by exception, case management plan, critical pathways, care maps).
- Common record-keeping forms:
  - Admission nursing history forms.
  - Flow sheets and graphic records.
  - Client care summary or Kardex.
  - Acuity records or workload measurement systems.
  - Standardized care plans.
  - Discharge summary forms.
  - Integrated progress notes.
- Implications of documentation in specific areas of nursing and types of documentation including computerized types (e.g., nursing information systems, clinical information systems, electronic health records).
- Reporting types and processes (e.g., change-of-shift reports, telephone reports, telephone of verbal orders, transfer reports, incident reports).

5. Safe and Ethical Care	5.2 Documentation and Reporting
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Complying with Canadian privacy legislation and organizational policies and procedures related to documentation process, critical pathways, and care maps.
- Reporting violations of privacy legislation to appropriate authorities according to provincial legislation.
- Documenting thoroughly, accurately, and in a timely manner (e.g., precise measurements, correct spelling, acceptable abbreviations).
- Recording in client's health record all information pertaining to a client's health care management that is gathered by examination, observation, or as a result of client interaction or treatment.
- Assuming responsibility for the contents of data entry in the health record by affixing theirsignature and designation to the entry.
- Clearly documenting any changes in client's condition in the client's health record.
- Protecting the confidentiality of client health information and the security of computer systems.
- Receiving, transcribing, and initiating a physician's or other authorized health professional's order (verbal by telephone or in person, fax/electronic) as appropriate.
- Challenging and/or clarifying questionable orders.
- Receiving, transcribing, communicating, and documenting results of screening or diagnostic tests.
- Giving client transfer report by phone or in person.
- Informing physicians or other appropriate health professional of changes in a client's condition by telephone or in person.
- Initiates collaboration to support care planning and safe, continuous transitions from one health-care facility to another, or to residential, community or home and self-care.

5. Safe and Ethical Care	5.3 Risk Management
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Risks at development stages (e.g., neonates, infants and children, adolescents, adults, older adults).
- Children and environmental health hazard risks.
- Individual risk factors (e.g., lifestyle, impaired mobility, sensory or communication impairment, lack of safety awareness).
- Risks in health care agency:
  - Workplace risks (e.g., hazardous substances, spread of infection, routine safety practices, fire hazards, bomb threats, disaster emergencies).
  - Risks to client safety (e.g., falls, client-inherent accidents, procedure-related accidents, equipment-related accidents, medical related risks, informatics and technology).
- Risks in client's environment (e.g., home exterior, home interior, kitchen, bathroom, bedroom, electrical and fire hazards, furnace, chimney, stove, extension cords, appliances, combustible items, electrical outlets).
- Proper use of safety equipment (e.g., smoke and carbon monoxide detectors, first aid kits, flashlights).
- Environment as a determinant of health (e.g., environmental health; environmental epidemiology; epidemiological triangle of agent, host, and environment; environmental harm).
- Attributes affecting the client's perception of risks.
- Reducing environmental risks in the provision of nursing care and health promotion and appropriately communicating risks.
- Steps involved in risk management and measures to minimize risks (e.g., identifying potential risks, analyzing risks, acting to reduce risks, evaluating steps taken).
- Ethics and advocacy in risk management.

5. Safe and Ethical Care	5.3 Risk Management
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Applying the nursing process to minimize risks to the client.
- Using safety measures to ensure a safe work environment.
- Using informatics and technologies responsibly and responds in a professional manner to the impact they have in the health care settings.
- Adhering to and applying organizational guidelines, policies, and procedures in risk management.
- Managing and evaluating the appropriateness of physical resources in the provision of safe, effective, and efficient care.
- Actively participating and contributing to quality improvement and risk management activities.
- Conducting their independent practice using a risk management approach.

5. Safe and Ethical Care	5.4 Safety
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Strategies related to maintaining client safety (e.g., basic needs, physical hazards, transmission of pathogens, pollution, terrorism).

- Strategies related to maintaining personal and staff safety (e.g., preventing musculoskeletal injury, preventing and managing aggressive behaviour, infection control).

- The promotion of a culture of safety including the development of safety competencies:
  - Understanding client safety concepts, epidemiology, and basic theories.
  - Awareness of health care error.
  - Promotion of a systems approach to care and safety.
  - Promotion of staff empowerment to resolve unsafe situations.
  - Role modelling and demonstrating a commitment to leadership in safe practice.
  - Ensuring feedback on safety issues.
  - Integration of safe practices into daily activities.
  - Commitment to communication, teamwork, and quality.
  - Reporting of adverse events.
  - Commitment to a just, non-punitive culture.

- Core domains of abilities shared by all health care professionals (e.g., Canadian Patient Safety Institute and Manitoba Institute for Patient Safety) and concepts of risk reduction.

- Relationship between safety and the nursing process:
  - Assessment (e.g., health history, client's home environment, health care environment, risks for falls, risk for medical errors, client expectation).
  - Nursing diagnosis related to categories of risk (e.g., physical environment, knowledge, sensory perception, thought processes).
  - Planning (e.g., goals and outcomes, setting priorities, continuity of care related to safe care).
  - Implementation including:
    - Health promotion interventions.
    - Developmental interventions (e.g., neonates, infants, toddlers, preschoolers, adolescents, adults, older adults).
    - Environmental interventions (e.g., fire prevention, aseptic technique, physical environmental needs).
    - Client physical needs (e.g., oxygen, nutrition, temperature).
      Specific risks to clients (e.g., preventing falls, side rails, electrical hazards, seizures, radiation).

  - Implementation including:
    - Clinical judgment in the use and application of physical, chemical, and environmental restraints:
      - Physical restraints (e.g., belt, extremity ankle or wrist, mitten, elbow):

        - Unexpected outcomes of restraint application (e.g., impaired skin integrity, altered neurovascular status, increasing confusion, disorientation, or agitation, escape from restraint resulting in fall or injury) and related interventions.
    - Chemical restraints (e.g., sedation).
    - Environmental restraints (e.g., locked nursing unit, exits to secure, enclosed outdoor spaces).
    - Follows least restraint practices.

- Evaluation of safe client care.

5. Safe and Ethical Care	5.4 SAFETY
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Using critical thinking and clinical judgment in the application of the nursing process to minimize risks and maintain client safety.

- Working with the client and staff to ensure a safe physical environment and safe work practices:
  - Minimizing physical hazards to client.
  - Reducing the transmission of pathogens.
  - Minimizing client falls and client-inherent incidents.
  - Minimizing procedure-related incidents and equipment-related accidents.
  - Preventing staff related injuries and ensuring personal safety.

- Incorporating safety competencies in daily practice (e.g., Canadian Patient Safety Institute):
  - Contributing to a culture of patient safety.
  - Working in teams for patient safety.
  - Communicating effectively for patient safety.
  - Managing safety risks.
  - Optimizing human and environmental factors.
  - Recognizing, responding to, and disclosing adverse events.

- Actively participating in risk-reduction activities.

- Adhering to organizational policies, procedures, and guidelines including those aimed at ensuring client and health provider safety, including those related to:
  - The application of physical, chemical, and environmental restraints.
  - The implementation of seizure precautions, elopement risk, aggressive behaviour protocols.
  - Fire and disaster emergencies; bomb threats.
  - Handling and disposing of sharps and biomedical waste.
  - Workplace Hazardous Materials Information System and transportation of dangerous goods.
  - Safe work practices (e.g., needle stick protocols).
  - Safety reports and documentation.

- Identifying potentially abusive situations and taking action to protect self, colleagues, and clients from injury (e.g., aggressive clients, bullying).

- Using universal precautions in daily nursing practice to prevent and control infection.

- Completing incident reports and other appropriate documentation as necessary and objectively describing any event not consistent with the routine care of the client.

- Actively participating and contributing to quality improvement, risk management, and workplace health and safety activities.

- Conducting independent practice in an appropriate, safe, and sanitary environment while ensuring that:
    - Client records are kept confidential in a safe and secure environment.
    - A written plan is in place to ensure that client health records and laboratory specimens (if applicable) are not abandoned or at risk of being abandoned.
    - Equipment is maintained in good repair and in sound operating condition.
    - Proper decontamination, cleaning, disinfection, and sterilization of multiple-use equipment is carried out prior to use or reuse.

5. Safe and Ethical Care	5.5 Emergency Preparedness and Disaster Planning
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Differences between emergency and disaster.
- Roles of individual, local-municipal, provincial-territorial, and federal responsibilities in emergency and disaster planning.
- Types of disasters:
  - Biological (e.g., epidemic, pandemic, infestation).
  - Meteorological and hydrological (e.g., flood, drought, cold and heat wave, tornado).
  - Geological (e.g., earthquake, landslide and mudslide, tsunami).
  - Human-made disasters (e.g., conflict; technological accident; industrial accidents; computer viruses; fire; hazardous chemicals; structural collapse; terrorism; chemical, biological, and radiological events).
- Emergency and disaster management:
  - Mitigation.
  - Personal, professional, and community preparedness (e.g., health care emergency operations plans, testing of emergency plans, emergency measures organizations).
  - Response (e.g., incident management system, triage).
  - Recovery (e.g., critical incident stress management).
- Epidemics and pandemics including etiology, stages of pandemic, and pandemic planning.
- Outbreak management including isolation and immunization.
- Ethical issues during a disaster or pandemic.
- Populations at greatest risk for disruption after a disaster.
- Disaster management in primary, secondary, and tertiary prevention.

5. Safe and Ethical Care	5.5 Emergency Preparedness and Disaster Planning
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Participating with community committee members for primary prevention measures in developing a disaster management plan for the community.
- Participating in secondary prevention measures in assessing disaster victims and triaging appropriately.
- Participating in tertiary prevention measures in home visits to uncover dangers that may cause additional injury to victims or cause other problems.
- Being aware of and applying organizational guidelines, policies, and procedures in responding to emergencies and disasters.
- Initiating appropriate responses to emergencies and disasters.
- Triaging clients and communicating effectively with clients, health care providers, and other stakeholders.
- Using critical thinking while continuously applying the nursing process to facilitate rapid rescue and recovery, and to help match available resources to the population's emergency needs.
- Providing psychosocial support to victims.
- Providing the basic necessities to the victims and obtaining needed items (e.g., oxygen and medications).
- Referring victims to mental health resources if the situation warrants.
- Participating in critical-incident stress debriefing.

6. LEADERSHIP

The LPN provides leadership to maximize the health and well-being of the client, the nurse, the health care team, the organization, and society as a whole.

All LPNs must be leaders. LPNs assume positions of leadership in health care delivery in diverse settings and roles. Nursing leadership begins with a strong professional identity and accountability. Nursing leaders promote a culture for the provision of safe quality care, collaboration, and the promotion of healthy work environments.

Leadership development is ongoing throughout the career of the LPN. Individual leadership style will be influenced by a variety of sources including leadership theories, best practices, mentors, role models, and experiences. The LPN learns leadership by making good clinical decisions, advocating for public health and quality care, learning from mistakes, seeking guidance, engaging in collaborative practice with nursing teams and other professionals, seeking mentors, and striving to improve during each client interaction.

The educational preparation of the LPN promotes the development of leadership competencies including advocacy, conflict management, collaborative practice, people-centredness, delegation, and evidence-based decision-making. In their practice, the LPN demonstrates leadership practices that honour the importance of relationships, values, and culture, and further promotes a quality working environment. The leadership capacity of the LPN serves to maximize the health and well-being of colleagues, quality client outcomes, organizational performance, and societal outcomes. As well, the LPN plays a key role in effecting positive change in nursing practice and the practice environment.

Leadership competencies fall into three subdomains:

6.1 Management and organizational leadership.
6.2 Clinical leadership.
6.3 Leadership in education.

Each of these subdomains includes:

- Integrated theoretical knowledge.
- Nursing competencies.

6. Leadership	6.1 Management and Organizational Leadership
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Health care system organization, characteristics, and types of organizational structures.
- Main features of leadership theories related to health care organizations.
- Relationships between organizational mission, vision, philosophy, and nursing practice.
- Leadership and management competencies as they relate to:
    - Clinical practice including leading self (e.g., career planning learning, stress and time management, prioritizing), and leading others (e.g., inspiring, enabling, mentoring, teaching, empowering, managing, advising).
    - Teaching including caring (e.g., compassion, respect, humanism, connecting, inspiring, thanking) and change (e.g., organizing, activating, adapting, flexing, systems thinking, empowering, organizational development).
    - Research including innovating, creating, theorizing, envisioning the future, communicating.
    - Health reform including team building (e.g., facilitating, problem solving, decision-making, participating, involving).
- Organizational supports and personal resources that enable effective leadership practices.
- Attributes of an effective nurse leader to promote a healthy work environment (e.g., articulating a vision; enabling others to act; encouraging others; taking initiative; sharing a philosophy of care that integrates purpose, best practices, and concern for relationships).
- Key elements for management (e.g., responsibility, autonomy, authority, accountability) and principles and criteria for decision-making.
- Concepts related to support staff involvement (e.g., nursing practice councils, interprofessional collaboration, staff communication, developing a learning organization).

6. Leadership	6.1 Management and Organizational Leadership
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Practising in a variety of leadership, management, and administrative roles including, but not limited to charge nurse, team leader, nurse manager, nurse administrator.
- Acting as a preceptor, providing mentorship, and supervising nursing students and other health care providers.
- Participating in or conducting annual performance appraisals, job interviews, and disciplinary processes.
- Participating in the development of and reinforcing organizational policies, procedures, and guidelines to support best practice.
- Interpreting and applying organizational policies (e.g., vision, mission, values, goals), collective agreements, and legislation.
- Participating in the organization's strategic planning sessions.
- Advocating for and participating in changes to organizational policies and procedures that will advance clinical care and promote healthy practice environments for clients and health care providers.
- Actively participating in workplace and professional organizations to influence health care policy and practices.
- Promoting the role of the LPN in clinical, political, and professional contexts.
- Participating in and leading quality improvement teams, committees (both internal and external), and accreditation processes.
- Supporting professional efforts in the field of Licensed Practical Nursing to achieve a healthier society (e.g., lobbying, advocacy, participation in varied groups/committees).
- Reflecting on their leadership skills and abilities and seeking out additional knowledge, resources, and mentorship to further develop leadership competencies.

6. Leadership	6.2 Clinical Leadership
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Clinical and community leadership and roles for the LPN.
- Clinical care coordination including decision-making, priority setting, use of organizational skills and resources, time management, and evaluation.
- Barriers and facilitators to effective clinical leadership.
- Clinical decision-making and problem-solving processes.
- Clinical care coordination and interprofessional collaboration.
- Leadership and emotional intelligence in promoting group dynamics (e.g., self-awareness, self-management, social awareness, relationship management).
- Leadership behaviours (e.g., advising, analyzing, clarifying, confronting, evaluating, initiating, questioning, reflecting behaviour, reflecting feelings, suggesting, summarizing, supporting).
- Leadership styles (e.g., authoritarian, democratic, laissez-faire) and their effectiveness in particular circumstances.
- Principles of effective delegation and application to nursing practice to ensure client safety (e.g., right task, right circumstances, right person, right direction or communication, right supervision).
- Roles and scope of practice of unregulated health care providers.
- Principles of stress management, time management, conflict management, and priority setting.
- Dynamics of stress in the workplace; signs and symptoms, and management of stress.

6. Leadership	6.2 Clinical Leadership
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Practising in a variety of clinical leadership roles such as team leader, educator, clinical coordinator, case manager, home care coordinator and program manager for community health nursing.
- Assessing own strengths and limitations as a leader.
- Promoting communication between and among members of the health care and interprofessional team.
- Participating and providing leadership to the health care and interprofessional team.
- Using relational knowledge and ethical principles when working with students and other health care team members to maximize collaborative client care.
- Delegating to appropriate health care providers in the health care setting (e.g., home care, residential care, community health care, acute care settings).
- Assuming responsibility for education, supervision, and support of health care providers as they perform the delegated nursing activities.
- Promoting and participating in education and learning in the workplace and contributing to team development.
- Advocating for a people-centred approach in the delivery of health care services.
- Participating in and/or leading clinical quality improvement teams and integrating quality improvement principles and activities into nursing practice.
- Calling, organizing, and leading clinical practice meetings when appropriate.
- Identifying, reducing, preventing, communicating, reporting, and documenting risks in practice environments.
- Evaluating barriers to effective time management and priority setting and implementing appropriate strategies to overcome barriers.
- Self-managing own stress and applying stress management strategies in the workplace.
- Developing and enhancing leadership and management skills through ongoing education, clinical mentoring, and experience.
- Participating in and contributing to the development of healthy public policy.

- Uses a range of verbal and non-verbal communication methods, and considers cultural differences, to better understand and respond to a client's personal and health needs.
- Incorporates principles of harm reduction to reduce negative effects of client behaviours on health.
- Assists clients to access, review, and evaluate information the client retrieves using ICTs.

6. Leadership	6.3 Leadership in Education
THEORETICAL KNOWLEDGE	

The Licensed Practical Nurse has acquired theoretical knowledge that includes:

- Effective communication in teaching and learning including barriers to learning.
- Education as a means to empower the client to exercise self-determination.
- Domains of learning (e.g., cognitive, affective, psychomotor).
- Learning principles (e.g., learning environment, ability to learn, learning styles and preference, motivation to learn).
- Teaching and the nursing process.
- Teaching and learning strategies.
- Appropriate presentation skills and techniques.

6. Leadership	6.3 Leadership in Education
NURSING COMPETENCIES	

Competencies of the Licensed Practical Nurse include:

- Promoting a positive, safe, and respectful learning environment for clients, peers, students, and colleagues.

CLIENT EDUCATION

- Using the nursing process to respond to the client's learning needs.
- Applying the appropriate teaching and learning strategies in responding to client's learning needs.
- Recognizing the barriers to effective teaching and learning strategies and applying appropriate interventions to address barriers.
- Developing content of teaching and learning educational sessions for the client.
- Evaluating the impacts of teaching and adjusts teaching methods as appropriate.

EDUCATION OF NURSING STUDENTS

- Applying effective communication techniques and managing conflict.
- Selecting clinical assignments for students and supervising and mentoring students to ensure delivery of safe client care.
- Providing individual support and assistance to students developing their learning plans.
- Applying and integrating a variety of teaching and learning methods and strategies for both theoretical and clinical environments.
- Effectively managing the learning environment in the classroom, laboratory, and clinical settings.
- Encouraging interactions between instructor, student, peers, clients, and members of the health care team.
- Evaluating student learning in the classroom, laboratory, and clinical setting.
- Maintaining confidential, accurate, objective, and current records of student performance.

- Acting as an advocate for nursing students.
- Establishing and maintaining appropriate professional boundaries between students, preceptors, and educators.
- Providing support and orientation to preceptors of nursing students.
- Participating in the development, implementation, and evaluation of education programs.
- Participating in curriculum development and revisions of course content.
- Evaluating own performance and maintaining continuing competencies as an educator.
- Applying various teaching and learning methods including:
    - One-on-one discussions.
    - Group instruction.
    - Preparatory instructions.
    - Demonstrations.
    - Seminars.
    - Debates.
    - Role play.
    - Computer-based learning methods.
    - Self-paced learning.
    - Simulation.

STAFF EDUCATION

- Acting as a role model, resource, and mentor to novice members of the health care team, peers, and colleagues.
- Imparting and sharing knowledge with members of the health care team including the client.
- Individually evaluating learning of staff and developing and implementing remedial educational supports and guidance as necessary.
- Developing and/or incorporating educational supports as appropriate to the practice environment in order to support continuing competence of nursing and support staff.
- Encouraging compliance with mandatory continuing competence programs as appropriate for regulated health care staff.

GLOSSARY OF TERMS

ABCDE: A systematic assessment that focuses on airway, breathing, circulation, disability, and exposure/environment and serves to identify life-threatening conditions so that appropriate interventions can be initiated.

Accountability: The obligation to answer for the professional, ethical, and legal responsibilities of one's activities and actions and or inactions.

Act: A written ordinance made by a parliament or legislative body.

Advocate: "Advocate": To speak or act on behalf of self or others with the intent of influencing or adding voice and enhancing autonomy.

Aggregate: A collection of individuals who have in common one or more personal or environmental characteristics. Aggregates are defined as groups within a larger population (subpopulation).

Analyze: Examine methodically and in detail the constitution or structure of information (breaking down of information into organized parts) for purposes of explanation and interpretation.

Application of knowledge: The use of abstract, learned ideas in a practical situation.

Appraise: Assess, review, and evaluate the value or merit of something (e.g., evolving knowledge, scientific information, research findings).

Authorizing mechanism: The means by which a health care professional obtains authority to perform a health care activity that is within the professional's scope of practice to perform. For example, an order for a prescription medication, given by an authorized prescriber, or a clinical decision tool.

Autonomous practitioner: A practitioner who has the competence and authority to act in accordance with self-chosen goals and to assume the professional responsibility related to their own decisions. This includes making independent decisions about client care within the parameters of the practitioner's role and scope of practice and adhering to the standards of practice and code of ethics of the practitioner's profession.

Baseline competencies: The foundational knowledge, judgment, and skill that allow a professional to gain additional formal or informal education and clinical experience in an area of nursing practice. The concept is rooted in understanding that knowledge is layered, and that scaffolding of knowledge does not end when a formal program of study ends.

Client(s): The person or persons with whom the nurse is engaged in a professional therapeutic relationship. The client may be an individual, family, group/aggregate, community, or population. Depending on the nurse's domain(s) of practice, the client may be a patient, a nursing student, a research participant, another CLPNM registrant, or other healthcare providers

Client continuum: The client continuum, at one end, represents client needs that may be less complex, predictable, and have a low risk for negative outcomes to the opposite end, representing client needs that may be highly complex, unpredictable, and at high risk for negative outcomes.

Clinical decision tool: An authorizing mechanism that provides the authority for an LPN to perform certain health care activities that are within the LPN's scope of practice to perform. For more information, consult the CLPNM's Practice Direction on Clinical Decision Tools.

Clinical judgment: A reasoning process that relies on critical thinking and multiple ways of knowing. Clinical judgment implies the systematic use of the nursing process to invoke the complex intuitive and conscious thinking strategies that are part of all clinical decision-making in nursing.

Clinical reasoning: The ability to discern the relevance of knowledge and evidence to the actual client; the thinking that guides practice. Clinical reasoning links theory to practice, uses past experiences to guide decisions, and connects personal values and style to therapeutic nursing interventions.

Collaboration: The act of working together with one or more members of a team who each contribute to achieving a common goal.

Community: An entity composed of systems of formal organizations reflecting society's institutions, informal groups, and aggregates. When caring for a community as a client, the focus is on the collective health and well-being of the community, not any one individual's health status within that community.

Community-based nursing: Nursing care directed toward a specific population or group within the community, defined by the "philosophy of the practice" rather than the physical setting. Care may be provided to individuals or groups and is designed to meet the needs of people as they move between and among health care settings. Primary, secondary, or tertiary care may be provided to individuals or groups.

Compassion: A multi-dimensional concept consisting of three key elements: recognizing another person's suffering, empathizing with that person's pain, and acting in a way to ease the suffering.

Competence: The ability of a nurse to integrate the professional attributes required to perform in each role, situation, or practice setting. Professional attributes include, but are not limited to knowledge, skills, judgment, attitude, values, and beliefs.

Competencies: Statements describing the expected performance that reflects the integration of knowledge, skills, judgment, and professional attributes required in a given nursing role, situation, or practice setting.

Complexity: A concept that encompasses the elements of acuity, predictability, and the risk of negative outcomes. Predictable outcomes are client health outcomes that can reasonably be expected to follow an anticipated path with respect to timing and nature. Unpredictable outcomes are client health outcomes that cannot reasonably be expected to follow an anticipated path with respect to timing and nature. Risk of negative outcomes varies on the

circumstances of the client: the higher the risk of probability of negative outcomes, the higher the need for deep, broad nursing knowledge, competencies, judgment, and attributes.

Consultation: The process of seeking advice or information from another member of the health care team. LPNs consult with others when a situation demands knowledge or expertise that is beyond their individual competence or experience. Client care needs and the availability of resources influence the amount and type of consultation required. LPNs also provide consultation to other members of the health care team.

Critical thinking: An active and purposeful problem-solving process that requires LPNs to advance beyond the performance of skills and interventions to provide the best possible care, based on evidence. Critical thinking includes identifying and prioritizing risks and problems, clarifying and challenging assumptions, using an organized approach to assessment, checking for accuracy and reliability of information, weighing evidence, recognizing inconsistencies, evaluating conclusions, and adapting thinking.

Culture: Includes, but is not restricted to, race, ethnicity, gender, sexual orientation, socioeconomic status, age, physical ability, religious beliefs, political beliefs, and ideologies.

Delegation: Extending authority to perform a specific client care task to an unregulated care provider who does not otherwise have the authority to perform the task, while retaining accountability for the outcome.

Determinants of health: The social, economic, environmental and behavioural factors that contribute to health status. Examples include income and social status, social support networks, education, employment and working conditions, social environments, physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender, and culture.

Diversity: The ethnic, social, or gender variety in a group, culture, or institution. The concept of diversity reflects an understanding that everyone is unique and recognizes individual differences. These can be along the dimensions of race, ethnicity, gender, sexual orientation, socioeconomic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies.

Entry-level educational preparation: The knowledge, skill, and judgment acquired by a practical nursing student at the point of graduation from a CLPNM-approved diploma in practical nursing program, or equivalent, making that person eligible for Graduate Practical Nurse Registration in Manitoba, and to write the Canadian Practical Nurse Registration Examination (CPNRE).

Entry-level Licensed Practical Nurse: The LPN at the point of initial active practising registration with the CLPNM, following graduation from a nursing education program and passing the Canadian Practical Nurse Registration Examination (CPNRE).

Environmental context: Elements that affect or are affected by client care, which include, but are not limited to, policies, procedures, and clinical pathways. Also included are factors such as the availability of consultation resources, the turnover rate of clients, the practice setting, culture, and the usual acuity of the client population.

Evidence-based practice: Practice that is based on successful strategies that improve client outcomes and that are derived from a combination of various sources of evidence, including client perspective, research, national guidelines, policies, consensus statements, expert opinion, and quality improvement data.

Fitness to practice: The physical, mental, and psychological capacity to consistently meet the demands of the nurse's position and to care for clients safely, competently, and ethically.

Health care team: Providers from different disciplines, often including both regulated health professionals and unregulated workers, working together to provide care for and with individuals, families, groups, communities, populations.

Insight: The capacity to gain an accurate and deep intuitive understanding of a person or thing. Insight creates the potential for action and provides the clarity for action, for both the LPN and the client.

Insightful nursing practice: Nursing practice in which nurses are fully present to clients and relate to them with open attentiveness as they engage in dialogue about whatever is of concern in the client's health circumstances. As insight is gained, both by the client and the LPN, new comprehension of the situation not previously held is formed and revealed in subsequent action.

Interpretation: A person's understanding of the meaning of something including evolving knowledge, scientific information, and research findings.

Interprofessional collaboration: Collaboration between members of different professions, such as social workers, and physicians.

Intraprofessional collaboration: Collaboration between members of the same profession.

Leadership: The process of influencing people to accomplish common goals. The attributes of leadership include self-awareness, commitment to individual growth, ethical values and beliefs, presence, reflection and foresight, advocacy, integrity, intellectual energy, being involved, being open to new ideas, having confidence in one's own capabilities, and a willingness to make an effort to guide and motivate others. Leadership is not limited to formal leadership roles.

Partnerships: Situations in which the LPN works with clients and other members of the health care team to achieve specific health outcomes for the client. Partnership implies consensus-building in the determination of these outcomes.

People-centred care: Care that is rooted in universally held values and principles that are enshrined in international law, such as human rights and dignity, non-discrimination, participation and empowerment, access and equity, and a partnership of equals. It is designed to respond to stakeholder needs in humane and holistic ways and to enable individuals, families, and communities to collaborate with health providers and health care organizations to improve the quality and responsiveness of health care. People-centred care is an approach that recognizes that before people become patients or clients, they need to be informed and empowered in promoting and protecting their own health. There is a need to reach out to all people, to families, and communities and their chosen support systems within and beyond the clinical setting. The provision of people-centred care involves a balanced consideration of the rights and needs as well as the responsibilities and capacities of people, including health

providers, constituents, and stakeholders of the health care system. Major components of people-centred care include respect and dignity, human rights, information-sharing and capacity-building, and partnerships.

Population: A collection of people who share one or more personal or environmental characteristics and reside in a community. These people may or may not come together as a group or aggregate.

Preceptor: An experienced nurse who functions as a role model for a nursing student and provides transitional support via a collaborative, collegial relationship. In conjunction with a nursing faculty advisor, the preceptor is responsible for monitoring, supervising, and evaluating the nursing activities of a nursing student.

Professional boundary: The defining lines that separate the therapeutic behaviour of the LPN from any behaviour that, well-intentioned or not, could reduce the benefit of nursing care to clients, families, or communities.

Protocol: A standardized, evidence-based plan guiding nursing actions and decisions in specific clinical scenarios.

Reflection: The process of thinking back on or recalling a situation to discover its purpose or meaning. Reflection is necessary for self-evaluation and improvement in nursing practice.

Reflective nursing practice: The practice of a nurse purposefully recalling and examining situations or actions to examine own behaviour and that of others while in a situation to discover its purpose. Reasoning processes that rely on critical thinking are also important dimensions of the nurse's reflective practice, as well as the systematic use of the nursing process to invoke complex intuitive and conscious thinking strategies that are part of all clinical decision-making.

Relational practice: An inquiry that is guided by conscious participation with clients using a number of relational skills including listening, questioning, empathy, mutuality, reciprocity, self-observation, reflection, and a sensitivity to emotional contexts. Relational practice encompasses therapeutic nurse-client relationships and relationships among health care providers.

Research: Systematic inquiry that uses orderly scientific methods to answer questions or solve problems.

Responsibility: The characteristics of reliability and dependability. It implies an ability to distinguish between right and wrong. Responsibility includes a duty to perform actions adequately and thoughtfully.

Safe practice: The reduction and mitigation of unsafe acts within the health care system. Safe practice refers to both staff and client safety. Staff safety includes, but is not limited to, prevention of musculoskeletal injury, prevention and management of aggressive behaviour, and infection control. Client safety is the state of continuously working toward the avoidance, management, and treatment of unsafe acts.

Self-regulated nursing profession: The governance of nurses by members of their own profession in the public interest. Elements of self-regulation include setting professional

standards; developing a code of ethics; establishing a continuing competence program, credentialing, and certification process; and participating in professional activities and continuing education.

Spirituality: A concept that is unique to each individual, which depends on a person's culture, development, life experiences, and beliefs and ideas about life. It enables a person to love; have faith and hope; seek meaning in life; and nurture relationships with others. It offers a sense of being connected intrapersonally, interpersonally and with a higher power.

Stakeholder: A person, group or organization that is invested in the practice of practical nursing and client health care. Examples include the public, nurses, other health care providers, employers, and educators

Support persons: individuals chosen by the client to provide support and encouragement, and to help the client cope with illness and strive for the client's optimal health; may be family members, partners, and/or close friends.

Synthesize: The ability to apply knowledge and skills to produce a new whole.

Therapeutic relationship: A professional relationship that ensures the client's needs are first and foremost. The relationship is based on trust, respect, and intimacy, and requires the appropriate use of the power inherent in the health care provider's role. The professional relationship between the nurse and clients is based on a recognition that clients (or designates) are in the best position to make decisions about their lives when they are active and are informed participants in the decision-making process.

Unregulated care providers: Paid providers who are neither registered nor licensed by a regulatory body. They have no legally defined scope of practice. Unregulated care providers may not have mandatory education or practice standards. Unregulated care providers include health care aides, care attendants, home support workers, community health representatives among others.

Values: The beliefs about the shared worth or importance of what is desired and esteemed within the Practical Nursing profession that practical nurses strive to uphold.

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