



Effective April 2020

NCLEX-PN[®] Examination

Test Plan for the National Council Licensure
Examination for Practical Nurses



NCSBN
Leading Regulatory Excellence



Mission Statement

NCSBN® empowers and supports nursing regulators in their mandate to protect the public.

(Mission Statement Adopted by Delegate Assembly 2019)

Purpose and Functions

The purpose of NCSBN is to provide an organization through which boards of nursing act and counsel together on matters of common interest and concern affecting the public health, safety and welfare, including the development of licensing examinations in nursing.

The major functions of NCSBN include developing the NCLEX-RN® and NCLEX-PN® Examinations, performing policy analysis and promoting uniformity in relationship to the regulation of nursing practice, disseminating data related to NCSBN's purpose and serving as a forum for information exchange for NCSBN members.

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Printed in the United States of America



**National Council of
State Boards of Nursing**

2020 NCLEX-PN® Test Plan

Effective Date
April 2020

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I. Background

The test plan for the National Council Licensure Examination for Practical Nurses (NCLEX-PN®) was developed by the National Council of State Boards of Nursing, Inc. (NCSBN®). The purpose of this document is to provide detailed information about the content areas tested on the NCLEX-PN.

This booklet contains the:

- *2020 NCLEX-PN® Test Plan*;
- Information on testing requirements and sample examination questions (items);
- Item writing exercises;
- References; and
- Appendix.

About the NCLEX-PN® Test Plan

The test plan is reviewed and approved by the NCLEX® Examination Committee (NEC) every three years. Multiple resources are used, including the recent practice analysis of licensed practical/vocational nurses (LPN/VNs), and expert opinions of the NEC, NCSBN staff and nursing regulatory bodies (NRBs) to ensure that the test plan is consistent with nurse practice acts. Following the endorsement of proposed revisions by the NEC, the test plan document is presented for approval to the Delegate Assembly, which is the decision-making body of NCSBN.

The test plan serves a variety of purposes. It is used to guide candidates preparing for the examination, to direct item writers in the development of items, and to facilitate the classification of examination items. This document offers a comprehensive listing of content for each client needs category and subcategory outlined in the test plan. Sample items are provided at the end of each category, which are specific to the client needs category in that section. There is an item writing guide along with sample case scenarios, which provide nurse educators with hands-on experience in writing NCLEX-style test items.

For up-to-date information on the NCLEX-PN, visit the NCSBN website at www.ncsbn.org.

II. 2020 NCLEX-PN® Test Plan

Test Plan for the National Council Licensure Examination for Practical Nurses (NCLEX-PN® Examination)

Introduction

Entry into the practice of nursing is regulated by the licensing authorities within each of the NCSBN nursing regulatory bodies (state, commonwealth and territorial boards of nursing). To ensure public protection, each jurisdiction requires candidates for licensure to meet set requirements that include passing an examination that measures the competencies needed to perform safely and effectively as a licensed practical/vocational nurse (LPN/VN). NCSBN develops a licensure examination, the National Council Licensure Examination for Practical Nurses (NCLEX-PN®), which is used by U.S. members to assist in making licensure decisions.

Several steps occur in the development of the NCLEX-PN Test Plan. The first step is conducting a practice analysis that is used to collect data on the current practice of entry-level LPN/VNs (*Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice*, NCSBN, 2019). Twelve thousand newly licensed practical/vocational nurses are asked about the frequency and priority of performing nursing care activities. Nursing care activities are then analyzed in relation to the frequency of performance, impact on maintaining client safety and client care settings where the activities are performed. This analysis guides the development of a framework for entry-level nursing practice that incorporates specific client needs, as well as processes that are fundamental to the practice of nursing. The next step is the development of the NCLEX-PN Test Plan, which guides the selection of content and behaviors to be tested. Variations in jurisdiction laws and regulations are considered in the development of the test plan.

The NCLEX-PN Test Plan provides a concise summary of the content and scope of the licensure examination. It serves as a guide for examination development as well as candidate preparation. The NCLEX® assesses the knowledge, skills and abilities that are essential for the entry-level LPN/VN to use in order to meet the needs of clients requiring the promotion, maintenance and restoration of health. The following sections describe beliefs about people and nursing that are integral to the examination, cognitive abilities that will be tested in the examination and specific components of the NCLEX-PN Test Plan.

Beliefs

Beliefs about people and nursing underlie the NCLEX-PN Test Plan. People are finite beings with varying capacities to function in society. They are unique individuals who have defined systems of daily living reflecting their values, cultures, motives and lifestyles. People have the right to make decisions regarding their health care needs and to participate in meeting those needs. The profession of nursing makes a unique contribution in helping clients (individuals, family or group, including significant others and population) achieve an optimal level of health in a variety of settings. For the purposes of the NCLEX, a client is defined as the individual, family or group which includes significant others and population.

Nursing is both an art and a science, founded on a professional body of knowledge that integrates concepts from the liberal arts, and the biological, physical, psychological and social sciences. It is a learned profession

based on an understanding of the human condition across the life span and the relationships of an individual with others and within the environment. Nursing is a dynamic, continually evolving discipline that employs critical thinking to integrate increasingly complex knowledge, skills, technologies and client care activities into evidence-based nursing practice. The goal of nursing for client care is preventing illness; promoting comfort; protecting, promoting and restoring health; and promoting dignity in dying.

The LPN/VN uses “specialized knowledge and skills which meet the health needs of people in a variety of settings under the direction of qualified health professionals” (NFLPN, 2003). Considering unique cultural and spiritual client preferences, the applicable standard of care and legal considerations, the LPN/VN uses a clinical problem-solving process (the nursing process) to collect and organize relevant health care data, assist in the identification of the health needs/problems throughout the client’s life span and contribute to the interdisciplinary team in a variety of settings. The entry-level LPN/VN demonstrates the essential competencies needed to care for clients with commonly occurring health problems that have predictable outcomes. “Professional behaviors, within the scope of nursing practice for a practical/vocational nurse, are characterized by adherence to standards of care, accountability of one’s own actions and behaviors, and use of legal and ethical principles in nursing practice” (NAPNES, 2007).

Classification of Cognitive Levels

Bloom’s taxonomy for the cognitive domain is used as a basis for writing and coding items for the examination (Bloom et al., 1956; Anderson & Krathwohl, 2001). The practice of practical/vocational nursing requires application of knowledge, skills and abilities; therefore, the majority of items are written at the application or higher levels of cognitive ability.

Test Plan Structure

The framework of Client Needs was selected because it provides a universal structure for defining nursing actions and competencies for a variety of clients across all settings and is congruent with state laws/rules.

Client Needs

The content of the NCLEX-PN Test Plan is organized into four major Client Needs categories. Two of the four categories are divided into subcategories:

Safe and Effective Care Environment

- Coordinated Care
- Safety and Infection Control

Health Promotion and Maintenance

Psychosocial Integrity

Physiological Integrity

- Basic Care and Comfort
- Pharmacological Therapies
- Reduction of Risk Potential
- Physiological Adaptation

Integrated Processes

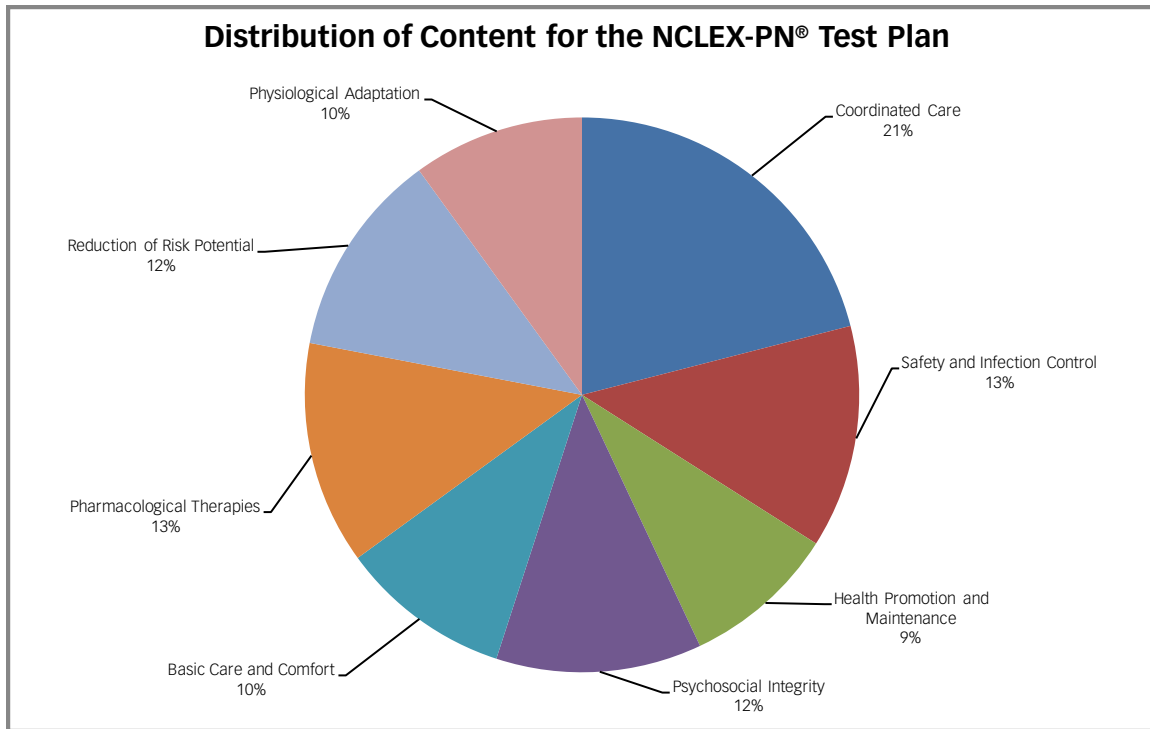
The following processes are fundamental to the practice of practical/vocational nursing and integrated throughout the Client Needs categories and subcategories:

- *Clinical Problem-Solving Process (Nursing Process)* – a scientific approach to client care that includes data collection, planning, implementation and evaluation.
- *Caring* – interaction of the LPN/VN and client in an atmosphere of mutual respect and trust. In this collaborative environment, the LPN/VN provides support and compassion to help achieve desired therapeutic outcomes.
- *Communication and Documentation* – verbal and nonverbal interactions between the LPN/VN and the client, as well as other members of the health care team. Events and activities associated with client care are validated in written and/or electronic records that reflect standards of practice and accountability in the provision of care.
- *Teaching and Learning* – facilitation of the acquisition of knowledge, skills and attitudes to assist in promoting a change in behavior.
- *Culture and Spirituality* – interaction of the nurse and the client (individual, family or group, including significant others and population) which recognizes and considers the client-reported, self-identified, unique and individual preferences to client care, the applicable standard of care and legal considerations.

Distribution of Content

The percentage of test items assigned to each client needs category and subcategory in the NCLEX-PN Test Plan is based on the results of the *Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice* (NCSBN, 2019), and expert judgment provided by members of the NCLEX Examination Committee.

Client Needs	Percentage of Items from Each Category/Subcategory
Safe and Effective Care Environment	
<ul style="list-style-type: none"> ■ Coordinated Care ■ Safety and Infection Control 	<p>18–24%</p> <p>10–16%</p>
Health Promotion and Maintenance	6–12%
Psychosocial Integrity	9–15%
Physiological Integrity	
<ul style="list-style-type: none"> ■ Basic Care and Comfort ■ Pharmacological Therapies ■ Reduction of Risk Potential ■ Physiological Adaptation 	<p>7–13%</p> <p>10–16%</p> <p>9–15%</p> <p>7–13%</p>



NCLEX-PN Examinations are administered adaptively in variable length format to target candidate-specific ability. To accommodate possible variations in test length, content area distributions of the individual examinations may differ up to $\pm 3\%$ in each category.

Overview of Content

The activity statements used in the *2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice* (NCSBN, 2019) preface each of the eight content categories and are identified throughout the test plan by an asterisk (*). NCSBN performs an analysis of those activities used frequently and identified as important by entry-level nurses to ensure client safety. This is called a practice analysis; it provides data to support the NCLEX as a reliable, valid measure of competent, entry-level LPN/VN practice. The practice analysis is conducted every three years.

In addition to the practice analysis, NCSBN conducts a knowledge, skills and abilities (KSA) survey. The primary purpose of this study is to identify the knowledge needed by newly licensed practical/vocational nurses in order to provide safe and effective care. Findings from both the *2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice* (NCSBN, 2019) and the *2018 LPN/VN Nursing Knowledge Survey* (NCSBN, 2019) can be found at www.ncsbn.org/1235.htm. Both documents are used in the development of the NCLEX-PN Test Plan as well as to inform item development.

All task statements in the *2020 NCLEX-PN® Test Plan* require the nurse to apply the fundamental principles of clinical decision making and critical thinking to nursing practice. The test plan also makes the assumption that the nurse integrates concepts from the following bodies of knowledge:

- Social Sciences (psychology and sociology); and
- Biological Sciences (anatomy, physiology, biology and microbiology)

In addition, the following concepts are utilized throughout the four major client needs categories and sub-categories of the test plan:

- Clinical Problem Solving (Nursing process);
- Caring;
- Communication and documentation;
- Teaching and Learning; and
- Culture and Spirituality

Please note: There are certain inconsistencies throughout this document related to word usage and punctuation. Sentences or phrases marked by an asterisk () are activity statements taken directly from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice (NCSEB, 2019). In order to provide proper attribution to the original survey these statements have not been altered to fit the overall grammatical style of this document. In addition, the term "client" refers to an individual, family or group, which includes significant others and population. "Clients" are the same as "residents" or "patients." In general, if the age or age category of the client is not stated in an item, it can be understood that the client is an adult. NCLEX items are developed based on a variety of practice settings, such as acute/critical care, long-term care/rehabilitation care, skilled care, outpatient care and community-based/home care settings.*

Safe and Effective Care Environment

The LPN/VN provides nursing care that contributes to the enhancement of the health care delivery setting and protects clients and health care personnel.

Coordinated Care

- **Coordinated Care** – the LPN/VN collaborates with health care team members to facilitate effective client care.

COORDINATED CARE

Related Activity Statements from the Report of Findings from the *2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice*

- Provide information about advance directives
- Advocate for client rights and needs
- Promote client self-advocacy
- Assign client care and/or related tasks (e.g., assistive personnel, LPN/VN)
- Involve client in care decision making
- Contribute to the development of and/or update the client plan of care
- Participate as a member of an interdisciplinary team
- Recognize and report staff conflict
- Participate in staff education (e.g., inservices, continued competency)
- Use data from various credible sources in making clinical decisions
- Monitor activities of assistive personnel
- Maintain client confidentiality
- Provide for privacy needs
- Follow up with client after discharge
- Participate in client discharge or transfer
- Provide and receive report
- Organize and prioritize care based on client needs
- Practice in a manner consistent with code of ethics for nurses
- Participate in client consent process
- Use information technology in client care
- Verify and process health care provider orders
- Recognize self-limitations of task/assignments and seek assistance when needed
- Respond to the unsafe practice of a health care provider (e.g., intervene, report)
- Follow regulation/policy for reporting specific issues (e.g., abuse, neglect, gunshot wound, communicable disease)

COORDINATED CARE, continued

Related Activity Statements from the Report of Findings from the 2018 LPN/VN Practice Analysis:
Linking the NCLEX-PN® Examination to Practice

- Provide care within the legal scope of practice
- Participate in quality improvement (QI) activity (e.g., collecting data, serving on QI committee)
- Apply evidence-based practice when providing care
- Participate in client data collection
- Participate in client referral process
- Participate in providing cost effective care

Related content includes, but is **not limited** to:

Advance Directives

- Provide information about advance directives*
- Review client understanding of advance directives (e.g., living will, health care proxy, Durable Power of Attorney for Health Care [DPAHC])
- Verify the client advance directives status

Advocacy

- Advocate for client rights and needs*
- Discuss identified treatment options with client and respect the decisions made
- Promote client self-advocacy*
- Use interpreters to assist in achieving client understanding

Client Care Assignments

- Assign client care and/or related tasks (e.g., assistive personnel, LPN/VN)*
- Compare needs of client to knowledge, skills and abilities of assistive personnel prior to making client care assignments
- Organize information for client assignments
- Provide information to supervisor when client care assignments need to be changed (e.g., change in client status)

Client Rights

- Inform client of individual rights (e.g., confidentiality, informed consent)
- Involve client in care decision making*
- Intervene if client rights are violated
- Recognize client right to refuse treatment/procedure

Collaboration with Interdisciplinary Team

- Identify roles/responsibilities of health care team members
- Identify need for nursing or interdisciplinary client care conference
- Contribute to the development of and/or update the client plan of care*
- Contribute to planning interdisciplinary client care conferences
- Participate as a member of an interdisciplinary team*

Concepts of Management and Supervision

- Recognize and report staff conflict*
- Verify abilities of staff members to perform assigned tasks (e.g., job description, scope of practice, training, experience)
- Provide input for performance evaluation of other staff
- Participate in staff education (e.g., inservices, continued competency)*
- Use data from various credible sources in making clinical decisions*
- Serve as resource person to other staff
- Monitor activities of assistive personnel*

Confidentiality/Information Security

- Identify staff actions that impact client confidentiality and intervene as needed (e.g., access to medical records, discussions at nurses' station, change-of-shift reports)
- Recognize staff member and client understanding of confidentiality requirements
- Apply knowledge of facility regulations when accessing client records
- Maintain client confidentiality*
- Provide for privacy needs*

Continuity of Care

- Follow up with client after discharge*
- Participate in client discharge or transfer*
- Provide follow-up for unresolved client care issues
- Provide and receive report*
- Record client information (e.g., medical record, referral/transfer form)
- Use agency guidelines to guide client care (e.g., clinical pathways, care maps, care plans)

Establishing Priorities

- Organize and prioritize care based on client needs*
- Participate in planning client care based upon client needs (e.g., diagnosis, abilities, prescribed treatment)
- Use effective time management skills

Ethical Practice

- Identify ethical issues affecting staff or client
- Inform client of ethical issues affecting client care
- Intervene to promote ethical practice
- Practice in a manner consistent with code of ethics for nurses*
- Review client and staff member knowledge of ethical issues affecting client care

Informed Consent

- Identify appropriate person to provide informed consent for client (e.g., client, parent, legal guardian)
- Participate in client consent process*
- Describe informed consent requirements (e.g., purpose for procedure, risks of procedure)
- Recognize that informed consent was obtained (e.g., completed consent form, client understanding of procedure)

Information Technology

- Use information technology in client care*
- Access data for client or staff through online databases and journals
- Enter computer documentation accurately, completely and in a timely manner

Legal Responsibilities

- Identify legal issues affecting staff and client (e.g., refusing treatment)
- Verify and process health care provider orders*
- Recognize self-limitations of task/assignments and seek assistance when needed*
- Respond to the unsafe practice of a health care provider (e.g., intervene, report)*
- Follow regulation/policy for reporting specific issues (e.g., abuse, neglect, gunshot wound, communicable disease)*
- Document client care
- Provide care within the legal scope of practice*

Performance Improvement (Quality Improvement)

- Identify impact of performance improvement/quality improvement activities on client care outcomes
- Participate in quality improvement (QI) activity (e.g., collecting data, serving on QI committee)*
- Document performance improvement/quality improvement activities
- Report identified performance improvement/quality improvement concerns to appropriate personnel (e.g., nurse manager, risk manager)
- Apply evidence-based practice when providing care*

Referral Process

- Recognize need for client referral for actual or potential problem (e.g., physical therapy, speech therapy)
- Use appropriate documents to contribute information needed for client referral (e.g., medical record, referral form)
- Participate in client data collection*
- Participate in client referral process*

Resource Management

- Recognize client need for materials and equipment (e.g., oxygen, suction machine, wound care supplies)
- Review effective use of client care materials by assistive personnel (e.g., supplies)
- Participate in providing cost effective care*

Sample Item

The nurse in a long-term care facility is making client care assignments for unlicensed assistive personnel (UAP). Which of the following statements by the nurse would provide the UAP with the **best** directions about the assignment?

1. "Encourage the client to increase daily fluid intake."
2. "Ambulate the client 20 ft (6.7 m) every 4 hours beginning at 0900." **(key)**
3. "Assist the client to perform passive range-of-motion (ROM) exercises."
4. "Reinforce physical therapy instructions about the proper use of a walker."

(Key) is used throughout this document to denote the correct answer(s) for the exam item.

Safety and Infection Control

- **Safety and Infection Control** – the LPN/VN contributes to the protection of clients and health care personnel from health and environmental hazards.

SAFETY AND INFECTION CONTROL
<p>Related Activity Statements from the Report of Findings from the <i>2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Identify client allergies and intervene as appropriate ■ Verify the identity of client ■ Assist in and/or reinforce education to client about safety precautions ■ Use transfer assistive devices (e.g., gait/transfer belt, slide board, mechanical lift) ■ Evaluate the appropriateness of health care provider's order for client ■ Participate in preparation for internal and external disasters (e.g., fire, natural disaster) ■ Use safe client handling techniques (e.g., body mechanics) ■ Identify and address unsafe conditions in health care environment (e.g., environmental, biohazard, fire) ■ Acknowledge and document practice error (e.g., incident report) ■ Follow protocol for timed client monitoring (e.g., safety checks) ■ Implement least restrictive restraints or seclusion ■ Assure availability and safe functioning of client care equipment ■ Initiate and participate in security alert (e.g., infant abduction, flight risk) ■ Apply principles of infection control (e.g., aseptic technique, isolation, sterile technique, universal/standard precautions)

Related content includes, but is **not limited** to:

Accident/Error/Injury Prevention

- Identify client allergies and intervene as appropriate*
- Identify and facilitate correct use of infant and child car seats by client
- Identify client factors that influence accident/error/injury prevention (e.g., age, developmental stage, lifestyle)
- Recognize what factors related to mental status may contribute to the client potential for accident or injury (e.g., confusion, altered thought processes, diagnosis)
- Determine client/staff member knowledge of safety procedures
- Verify the identity of client*
- Utilize facility client identification procedures (e.g., client name band, allergy bands)
- Monitor client care environment for safety hazard and report problems to appropriate personnel
- Assist in and/or reinforce education to client about safety precautions*

*Activity Statements used in the 2018 LPN/VN Practice Analysis

- Use transfer assistive devices (e.g., gait/transfer belt, slide board, mechanical lift)*
- Remove fire hazards from client care areas
- Protect client from accident/error/injury (e.g., protect from another individual, falls, environmental hazards, burns)
- Provide client with appropriate method to signal staff members
- Evaluate the appropriateness of health care provider's order for client*

Emergency Response Plan

- Identify nursing and assistive personnel roles during internal and external disasters
- Participate in preparation for internal and external disasters (e.g., fire, natural disaster)*
- Contribute to selection of client to recommend for discharge in disaster situation

Ergonomic Principles

- Use safe client handling techniques (e.g., body mechanics)*
- Provide instruction and information to client about body positions that prevent stress injuries

Handling Hazardous and Infectious Materials

- Identify and employ methods to control the spread of infectious agents (e.g., cleaning with appropriate solutions)
- Identify and address unsafe conditions in health care environment (e.g., environmental, biohazard, fire)*
- Demonstrate knowledge of facility protocols for handling hazardous and infectious materials

Home Safety

- Identify fire/environmental hazards (e.g., frayed electrical cords, small area rugs, inadequate footwear)
- Determine client understanding of home safety needs
- Provide client with information on home safety
- Reinforce client education on home safety precautions (e.g., home disposal of syringes, lighting, handrails, kitchen safety)

Reporting of Incident/Event/Irregular Occurrence/Variance

- Identify situations requiring completion of incident/event/irregular occurrence/variance report (e.g., medication administration error, client fall)
- Acknowledge and document practice error (e.g., incident report)*
- Monitor client response to error/event/occurrence

Least Restrictive Restraints and Safety Devices

- Demonstrate knowledge of appropriate application of restraints/safety devices
- Follow protocol for timed client monitoring (e.g., safety checks)*
- Implement least restrictive restraints or seclusion*
- Document use of restraints/safety devices and client response
- Check for proper functioning of restraints/safety devices

Safe Use of Equipment

- Assure availability and safe functioning of client care equipment*
- Follow facility protocols/procedures for safe use of equipment
- Provide safe equipment use for client care (e.g., continuous passive motion [CPM] device, oxygen, mobility aids)

Security Plan

- Initiate and participate in security alert (e.g., infant abduction, flight risk)*
- Use principles of triage and evacuation protocols/procedures
- Monitor effectiveness of security plan

Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

- Identify communicable diseases and modes of transmission (e.g., airborne, droplet, contact)
- Identify client knowledge of infection control procedures
- Apply principles of infection control (e.g., aseptic technique, isolation, sterile technique, universal/standard precautions)*
- Use appropriate supplies to maintain asepsis (e.g., gloves, mask, sterile supplies)
- Use correct techniques to apply and remove gloves, mask, gown and protective eye wear
- Use correct hand hygiene techniques
- Prevent environmental spread of infectious disease through correct use of equipment
- Protect immunocompromised client from exposure to infectious diseases/organisms
- Monitor client care area for sources of infection
- Set up a sterile field
- Reinforce appropriate infection control procedures with client and staff members

Sample Item

The nurse is reinforcing teaching with a client who is using a mechanical lift. Which of the following information should the nurse reinforce?

1. "Place your hands on the sling."
2. "You should lie prone on the sling."
3. "Place your arms across your chest." **(key)**
4. "You will need to rock to a standing position."

Health Promotion and Maintenance

- **Health Promotion and Maintenance** – the LPN/VN provides nursing care for clients that incorporate knowledge of expected stages of growth and development, and prevention and/or early detection of health problems.

<p>HEALTH PROMOTION AND MAINTENANCE</p> <p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Provide care that meets the needs of the newborn less than 1 month old through the infant or toddler client through 2 years ■ Provide care that meets the needs of the preschool, school age and adolescent client ages 3 through 17 years ■ Provide care that meets the needs of the adult client ages 18 through 64 years ■ Provide care that meets the needs of the adult client ages 65 and over ■ Assist with fetal heart monitoring for the antepartum client ■ Assist with monitoring a client in labor ■ Monitor recovery of stable postpartum client ■ Collect data for health history (e.g., client medical history, family medical history) ■ Collect baseline physical data (e.g., skin integrity, height and weight) ■ Identify barriers to communication ■ Identify barriers to learning ■ Compare client to developmental milestones ■ Assist client with expected life transition (e.g., attachment to newborn, parenting, retirement) ■ Identify clients in need of immunizations (required and voluntary) ■ Participate in health screening or health promotion programs ■ Provide information for prevention of high risk behaviors (e.g., substance abuse, sexual practices, smoking cessation) ■ Identify community resources for clients

Related content includes, but is **not limited** to:

Aging Process

- Identify client knowledge on aging process and assist in reinforcing teaching on expected changes related to aging
- Provide care that meets the needs of the newborn less than 1 month old through the infant or toddler client through 2 years*
- Provide care that meets the needs of the preschool, school age and adolescent client ages 3 through 17 years*
- Provide care that meets the needs of the adult client ages 18 through 64 years*
- Provide care that meets the needs of the adult client ages 65 and over*

*Activity Statements used in the 2018 LPN/VN Practice Analysis

Ante/Intra/Postpartum and Newborn Care

- Identify client emotional preparedness for pregnancy (e.g., support systems, perception of pregnancy)
- Assist in performing client non-stress test
- Assist with fetal heart monitoring for the antepartum client*
- Assist with monitoring a client in labor*
- Perform care of postpartum client (e.g., perineal care, assistance with infant feeding)
- Contribute to newborn plan of care
- Reinforce client teaching on infant care skills (e.g., feeding, bathing, positioning)
- Monitor recovery of stable postpartum client*
- Monitor client ability to care for infant

Data Collection Techniques

- Collect data for health history (e.g., client medical history, family medical history)*
- Collect baseline physical data (e.g., skin integrity, height and weight)*
- Prepare client for physical examination (e.g., reinforce explanation of procedure, provide privacy and comfort)
- Document findings according to agency/facility policies/procedures
- Report client physical examination results to health care provider

Developmental Stages and Transitions

- Identify and report client deviations from expected growth and development
- Identify occurrence of expected body image changes
- Identify barriers to communication*
- Identify barriers to learning*
- Compare client to developmental milestones*
- Assist client with expected life transition (e.g., attachment to newborn, parenting, retirement)*
- Assist client to select age-appropriate activities
- Modify approaches to care in accordance with client development stage
- Determine client acceptance of expected body image change (e.g., aging, pregnancy, menopause)
- Determine impact of expected body image changes on client (e.g., temperament)

Health Promotion/Disease Prevention

- Identify risk factors for disease/illness (e.g., age, gender, ethnicity, lifestyle)
- Identify clients in need of immunizations (required and voluntary)*
- Identify precautions and contraindications to immunizations
- Identify client health seeking behaviors (e.g., breast and testicular self-examinations)
- Gather data on client health history and risk for disease (e.g., lifestyle, family and genetic history)
- Check results of client health screening tests (e.g., Papanicolaou [Pap] test or smear, stool occult blood test)
- Provide assistance for screening examinations (e.g., scoliosis, breast and testicular self-examinations, blood pressure check)
- Participate in health screening or health promotion programs*
- Assist client in disease prevention activities
- Monitor client actions to maintain health and prevent disease (e.g., smoking cessation, exercise, diet, stress management)
- Monitor incorporation of healthy behaviors into lifestyle by client (e.g., screening examinations, immunizations, limiting risk taking behaviors)
- Recognize client unexpected response to immunizations

High Risk Behaviors

- Assist client to identify high risk behaviors
- Provide information for prevention of high risk behaviors (e.g., substance abuse, sexual practices, smoking cessation)*
- Monitor client lifestyle practice risks that may impact health (e.g., excessive sun exposure, lack of regular exercise)
- Reinforce client teaching related to client high risk behavior (e.g., unprotected sexual relations, needle sharing)

Lifestyle Choices

- Identify client lifestyle practices that may have an impact on health
- Identify contraindications to chosen contraceptive method (e.g., smoking, compliance, medical conditions)
- Identify client attitudes/perceptions on sexuality
- Recognize client need/desire for contraception
- Recognize expected outcomes for client family planning methods
- Recognize client need to discuss sensitive issues related to sexuality

- Support client in family planning
- Respect client lifestyle choices (e.g., child-free, home schooling, rural or urban living)
- Reinforce teaching with client on healthy lifestyle choices (e.g., exercise regimen, smoking cessation)

Self-Care

- Determine client ability and support for performing self-care (e.g., feeding, dressing, hygiene)
- Consider client self-care needs before contributing to changes in plan of care
- Monitor client ability to perform instrumental activities of daily living (e.g., using telephone, shopping, preparing meals)

Community Resources

- Identify community resources for clients*
- Assist and/or participate in community health education
- Reinforce teaching with client about health risks based on family, population, and/or community characteristics

Sample Item

The nurse is reinforcing teaching with a client about the signs of hunger in a newborn. Which of the following signs should the nurse reinforce? **Select all that apply.**

1. open hands
2. quivering bottom lip
3. rooting movements (**key**)
4. sucking on the hands (**key**)
5. hand to mouth movements (**key**)

Psychosocial Integrity

- **Psychosocial Integrity** – the LPN/VN provides care that assists with promotion and support of the emotional, mental and social well-being of clients.

PSYCHOSOCIAL INTEGRITY
<p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Reinforce education to caregivers/family on ways to manage client with behavioral disorders ■ Incorporate behavioral management techniques when caring for a client ■ Participate in reminiscence therapy, validation therapy or reality orientation ■ Participate in client group session ■ Identify signs and symptoms of substance abuse, chemical dependency, withdrawal or toxicity ■ Collect data regarding client psychosocial functioning ■ Identify client use of effective and ineffective coping mechanisms ■ Recognize stressors that affect client care ■ Assist client to cope/adapt to stressful events and changes in health status ■ Collect data on client's potential for violence to self and others ■ Assist in managing the care of an angry and/or agitated client (e.g., de-escalation techniques) ■ Plan care with consideration of client spiritual or cultural beliefs ■ Provide end of life care and education to clients ■ Explore reasons for client non-compliance with treatment plan ■ Assist in the care of a client experiencing sensory/perceptual alterations ■ Assist in the care of the cognitively impaired client ■ Promote positive self-esteem of client ■ Provide emotional support to client ■ Use therapeutic communication techniques with client ■ Promote a therapeutic environment

Related content includes, but is **not limited** to:

Abuse/Neglect

- Identify client risk factors for abusing or neglecting others
- Identify signs and symptoms of physical, psychological or financial abuse in client (e.g., family involvement, inadequate weight gain, poor hygiene)
- Recognize risk factors for domestic, child and/or elder abuse/neglect and sexual abuse
- Provide safe environment for abused/neglected client

- Provide emotional support to client who experienced abuse or neglect
- Reinforce client teaching on coping strategies to prevent abuse or neglect
- Evaluate client response to interventions

Behavioral Management

- Monitor client appearance, mood and psychomotor behavior and observe for changes
- Explore cause of client behavior
- Assist client with achieving self-control of behavior (e.g., contract, behavior modification)
- Assist client in using behavioral strategies to decrease anxiety
- Reinforce education to caregivers/family on ways to manage client with behavioral disorders*
- Incorporate behavioral management techniques when caring for a client*
- Participate in reminiscence therapy, validation therapy or reality orientation*
- Participate in client group session*
- Reinforce client participation in therapy
- Use behavioral management techniques when caring for a client (e.g., positive reinforcement, setting limits)
- Evaluate client response to behavioral management interventions

Chemical and Other Dependencies

- Identify signs and symptoms of substance abuse, chemical dependency, withdrawal or toxicity*
- Plan and provide care to client experiencing substance-related withdrawal or toxicity (e.g., nicotine, opioid, sedative)
- Provide care and support for client with impulse-control disorders (e.g., gambling, sexual addiction, pornography)
- Reinforce provided information on substance abuse diagnosis and treatment plan to client
- Encourage client participation in support groups (e.g., Alcoholics Anonymous, Narcotics Anonymous)
- Monitor client response to treatment plan and contribute to revision of plan as needed

Coping Mechanisms

- Collect data regarding client psychosocial functioning*
- Identify client support systems and available resources
- Identify client use of effective and ineffective coping mechanisms*
- Recognize stressors that affect client care*
- Recognize abilities of client to adapt to temporary/permanent role changes
- Recognize client response to illness (e.g., rationalization, hopelessness, anger)
- Provide support to the client with unexpected altered body image (e.g., alopecia)

- Use therapeutic techniques to assist client with coping ability
- Assist client to cope/adapt to stressful events and changes in health status*
- Assist client in maintaining level of independence after unexpected body image changes (e.g., amputation, paralysis)
- Monitor client progress toward achieving improved body image (e.g., mastectomy, colostomy)

Crisis Intervention

- Identify client in crisis
- Identify client risk for self-injury and/or violence (e.g., suicide or violence precaution)
- Collect data on client's potential for violence to self and others*
- Assist in managing the care of angry and/or agitated client (e.g., de-escalation techniques)*
- Use crisis intervention techniques to assist client in coping
- Provide opportunities for client to understand why the crisis occurred
- Guide client to resources for recovery from crisis (e.g., social supports)
- Reinforce client teaching on suicide/violence prevention
- Report changes in client behavior (indicating a developing crisis) to supervisor

Cultural Awareness

- Identify importance of client culture/ethnicity when planning/providing/monitoring care
- Recognize client cultural practices that may affect interventions for procedures/surgery (e.g., direct eye contact)
- Recognize cultural issues that may impact client understanding/acceptance of psychiatric diagnosis
- Plan care with consideration of client spiritual or cultural beliefs*
- Respect cultural background/practices of client (does not include dietary preferences)
- Document how client language needs are met

End-of-Life Concepts

- Identify client end-of-life needs (e.g., financial concerns, fear, loss of control, role changes)
- Identify client ability to cope with end-of-life interventions
- Provide care or support for client/family at end-of-life
- Assist client in resolution of end-of-life issues
- Provide end-of-life care and education to clients*

Grief and Loss

- Identify client reaction to loss (e.g., denial, fear)
- Support the client in anticipatory grieving
- Reinforce client teaching on expected client reactions to grief and loss (e.g., denial, fear)
- Provide client with resources to adjust to loss/bereavement (e.g., individual counseling, support groups)

Mental Health Concepts

- Identify expected behaviors of client with independent or dependent personality
- Identify client symptoms of acute or chronic mental illness (e.g., schizophrenia, depression, bipolar disorder)
- Recognize client use of defense mechanisms
- Recognize change in client mental status
- Recognize client symptoms of relapse
- Explore reasons for client non-compliance with treatment plan*
- Assist in the care of a client experiencing sensory/perceptual alterations*
- Assist in the care of the cognitively impaired client*
- Assist in promoting client independence
- Promote positive self-esteem of client*

Religious and Spiritual Influences on Health

- Identify client emotional problems related to religious/spiritual beliefs (e.g., spiritual distress, conflict between recommended treatment and beliefs)
- Recognize effect of client religious/spiritual beliefs on plan of care
- Assist client to meet religious/spiritual needs (e.g., referral to pastoral care)
- Assist in evaluation of client religious/spiritual needs related to necessary nursing interventions
- Respect client religious/spiritual beliefs

Sensory/Perceptual Alterations

- Identify needs of client with altered sensory perception (e.g., hallucinations, delirium)
- Verify client ability to effectively communicate needs

Stress Management

- Identify actual/potential stressors for client (e.g., fear, lack of information)
- Implement measures to reduce environmental stressors (e.g., noise, temperature, pollution)
- Monitor client effective use of stress management techniques

Support Systems

- Determine client abilities to provide client support
- Identify client support systems/resources
- Identify family response to client illness (e.g., acute episodes, chronic disorder, terminal illness)

Therapeutic Communication

- Provide emotional support to client*
- Assist client in communicating needs to health care staff
- Develop and maintain therapeutic relationships with client
- Respect client personal values and beliefs
- Establish a trusting nurse-client relationship
- Use therapeutic communication techniques with client*
- Encourage client appropriate use of verbal and non-verbal communication
- Monitor effectiveness of communications with client

Therapeutic Environment

- Promote a therapeutic environment*
- Identify external factors that may interfere with client recovery (e.g., stressors, noise)
- Participate in community meetings
- Contribute to maintaining a safe and supportive environment for client
- Monitor client response to environmental factors

Sample Item
<p>The nurse is assisting to evaluate the coping strategies of the spouse of a client who had a stroke 5 days ago. Which of the following statements by the spouse would indicate ineffective coping?</p> <ol style="list-style-type: none">1. "I sleep only for short periods of time since my spouse became ill." (key)2. "I feel frustrated when my spouse turns away and will not talk with me."3. "I eat meals in my spouse's room so my spouse will not have to eat meals alone."4. "I have been performing a few household chores each day before visiting my spouse."

Physiological Integrity

Basic Care and Comfort

- **Basic Care and Comfort** – the LPN/VN provides comfort to clients and assistance in the performance of activities of daily living.

BASIC CARE AND COMFORT
<p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Provide care to client with bowel or bladder management protocol ■ Perform irrigation (e.g., urinary catheter, bladder, wound, ear, nose, eye) ■ Provide for mobility needs (e.g., ambulation, range of motion, transfer, repositioning, use of adaptive equipment) ■ Use measures to maintain or improve client skin integrity ■ Provide care to an immobilized client based on need ■ Assist in the care and comfort for a client with a visual and/or hearing impairment ■ Promote alternative/complementary therapy in providing client care (e.g., music therapy, pet therapy) ■ Provide non-pharmacological measures for pain relief (e.g., imagery, massage, repositioning) ■ Evaluate pain using standardized rating scales ■ Provide feeding for client with enteral tubes ■ Monitor and provide for nutritional needs of client ■ Monitor client intake/output ■ Assist with activities of daily living ■ Provide site care for client with enteral tubes ■ Assist in providing postmortem care ■ Provide measures to promote sleep/rest

Related content includes, but is **not limited** to:

Assistive Devices

- Identify appropriate use of assistive devices (e.g., cane, walker, crutches)
- Contribute to care of client using assistive device (e.g., feeding devices, telecommunication devices, touch pad, communication board)
- Reinforce teaching for client using assistive device
- Review correct use of assistive devices to client and staff members

Elimination

- Identify client at risk for impaired elimination (e.g., medication, hydration status)
- Provide care to client with bowel or bladder management protocol*
- Monitor client bowel sounds
- Perform irrigation (e.g., urinary catheter, bladder, wound, ear, nose, eye)*
- Provide skin care to client who is incontinent (e.g., wash frequently, barrier creams/ointments)

Mobility/Immobility

- Identify signs and symptoms of venous insufficiency and intervene to promote venous return (e.g., elastic stockings, sequential compression device)
- Check client for mobility, gait, strength, motor skills
- Provide for mobility needs (e.g., ambulation, range of motion, transfer, repositioning, use of adaptive equipment)*
- Reinforce client teaching on methods to maintain mobility (e.g., active/passive range of motion [ROM], strengthening, isometric exercises)
- Use measures to maintain or improve client skin integrity*
- Maintain correct client body alignment
- Provide care to an immobilized client based on need*

Non-Pharmacological Comfort Interventions

- Identify client need for palliative/comfort care
- Assist in the care and comfort for a client with a visual and/or hearing impairment*
- Assist in planning comfort interventions for client with impaired comfort
- Apply therapies for comfort and treatment of inflammation/swelling (e.g., apply heat and cold treatments, elevate limb)
- Promote alternative/complementary therapy in providing client care (e.g., music therapy, pet therapy)*
- Provide non-pharmacological measures for pain relief (e.g., imagery, massage, repositioning)*
- Provide palliative/comfort care interventions to client
- Respect client palliative care choices
- Reinforce client teaching on stress management techniques (e.g., relaxation exercises, exercise, meditation)
- Reinforce client teaching on palliative/comfort care
- Monitor client non-verbal signs of pain/discomfort (e.g., grimacing, restlessness)
- Monitor client response to non-pharmacological interventions
- Monitor outcome of palliative care interventions
- Evaluate pain using standardized rating scales*

Nutrition and Oral Hydration

- Identify client potential for aspiration (e.g., feeding tube, sedation, swallowing difficulties)
- Check client feeding tube placement and patency
- Provide feeding for client with enteral tubes*
- Monitor and provide for nutritional needs of client*
- Monitor client ability to eat (e.g., chew, swallow)
- Monitor impact of disease/illness on client nutritional status
- Monitor client intake/output*
- Reinforce client teaching on special diets based on client diagnosis/nutritional needs and cultural considerations (e.g., high protein, kosher diet, calorie restriction)
- Promote client independence in eating

Personal Hygiene

- Determine client usual personal hygiene habits/routine
- Assist with activities of daily living*
- Provide site care for client with enteral tubes*
- Reinforce teaching to client on required adaptations for performing activities of daily living (e.g., shower chair, hand rails)

Postmortem Care

- Assist in providing postmortem care*
- Provide comfort to family
- Incorporate cultural practice in postmortem care
- Prepare the client for viewing by the family
- Ensure proper identification of client prior to transport to morgue/funeral home

Rest and Sleep

- Identify client usual rest and sleep patterns (e.g., bedtime, sleep rituals)
- Provide measures to promote sleep/rest*
- Schedule client care activities to promote adequate rest and sleep

Sample Item
<p>The nurse is reinforcing teaching with a client about using crutches. Which of the following information should the nurse reinforce?</p> <ol style="list-style-type: none"><li data-bbox="321 449 932 478">1. "The stairs should be avoided while using crutches."<li data-bbox="321 495 1062 525">2. "The elbows must stay straight while ambulating with crutches."<li data-bbox="321 541 1154 571">3. "Three finger widths should separate the axillae and the crutches." (key)<li data-bbox="321 588 1386 617">4. "Bearing weight on the affected leg should be avoided when using the four-point crutch gait."

Pharmacological Therapies

- **Pharmacological Therapies** – the LPN/VN provides care related to the administration of medications and monitors clients who are receiving parenteral therapies.

PHARMACOLOGICAL THERAPIES
<p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Perform calculations needed for medication administration ■ Reinforce education to client regarding medications ■ Evaluate client response to medication (e.g., adverse reactions, interactions, therapeutic effects) ■ Follow the rights of medication administration ■ Maintain medication safety practices (e.g., storage, checking for expiration dates, compatibility) ■ Reconcile and maintain medication list or medication administration record (e.g., prescribed medications, herbal supplements, over-the-counter medications) ■ Collect required data prior to medication administration (e.g., contraindications, desired therapeutic effects, current medications) ■ Administer medication by oral route ■ Administer intravenous piggyback (secondary) medications ■ Administer medication by gastrointestinal tube (e.g., g-tube, nasogastric (NG) tube, g-button, j-tube) ■ Administer a subcutaneous, intradermal or intramuscular medication ■ Administer medication by ear, eye, nose, inhalation, rectum, vagina or skin route ■ Count narcotics/controlled substances and report discrepancies ■ Calculate and monitor intravenous (IV) flow rate ■ Monitor transfusion of blood product ■ Maintain pain control devices (e.g., epidural, patient control analgesia, peripheral nerve catheter)

Related content includes, but is **not limited** to:

Adverse Effects/Contraindications/Side Effects/Interactions

- Identify potential and actual incompatibilities of client medications
- Identify a contraindication to the administration of a prescribed or over-the-counter medication to the client
- Identify symptoms of an allergic reaction (e.g., to medication)
- Implement procedures to counteract adverse effects of medications
- Withhold medication dose if client experiences adverse effect to medication

- Monitor and document client response to actions taken to counteract adverse effects of medications
- Monitor client for actual and potential adverse effects of medications (e.g., prescribed, over-the-counter and/or herbal supplements)
- Monitor anticipated interactions among client prescribed medications and fluids (e.g., oral, IV, subcutaneous, IM, topical)
- Monitor and document client side effects to medications
- Monitor and document client response to management of medication side effects including prescribed, over-the-counter and herbal supplements
- Reinforce client teaching on possible effects of medications (common side effects or adverse effects, when to notify primary health care provider)
- Notify primary health care provider of actual/potential adverse effects of client medications

Dosage Calculations

- Perform calculations needed for medication administration*
- Use clinical decision making when calculating doses

Expected Actions/Outcomes

- Identify client expected response to medication
- Use resources to check on purposes and actions of pharmacological agents
- Apply knowledge of pathophysiology when addressing client pharmacological agents
- Monitor client use of medications over time (e.g., prescription, over-the-counter, home remedies)
- Reinforce education to client regarding medications*
- Reinforce client teaching on actions and therapeutic effects of medications and pharmacological interactions
- Evaluate client response to medication (e.g., adverse reactions, interactions, therapeutic effects)*

Medication Administration

- Identify client need for PRN medications
- Mix client medication from two vials as necessary (e.g., insulin)
- Follow the rights of medication administration*
- Maintain medication safety practices (e.g., storage, checking for expiration dates, compatibility)*
- Reconcile and maintain medication list or medication administration record (e.g., prescribed medications, herbal supplements, over-the-counter medications)*
- Collect required data prior to medication administration (e.g., contraindications, desired therapeutic effects, current medications)*

- Assist in preparing client for insertion of central line
- Administer medication by oral route*
- Administer intravenous piggyback (secondary) medications*
- Administer medication by gastrointestinal tube (e.g., g-tube, nasogastric [NG] tube, g-button, j-tube)*
- Administer a subcutaneous, intradermal or intramuscular medication*
- Administer a medication by ear, eye, nose, inhalation, rectum, vagina or skin route*
- Dispose of client unused medications according to facility/agency policy
- Count narcotics/controlled substances and report discrepancies*
- Calculate and monitor intravenous (IV) flow rate*
- Monitor transfusion of blood product*
- Reinforce client teaching on client self administration of medications (e.g., insulin, subcutaneous insulin pump)

Pharmacological Pain Management

- Identify client need for pain medication
- Monitor and document client response to pharmacological interventions (e.g., pain rating scale, verbal reports)
- Maintain pain control devices (e.g., epidural, patient control analgesia, peripheral nerve catheter)*

Sample Item
<p>The nurse is caring for a client who has a prescription for ampicillin 375 mg, p.o., every 6 hours. The nurse has ampicillin 250 mg per 5 mL of solution available. How many mL should the nurse administer to the client with each dose? Record your answer using 1 decimal place.</p> <p>7.5 mL (key)</p>

Reduction of Risk Potential

- **Reduction of Risk Potential** – the LPN/VN reduces the potential for clients to develop complications or health problems related to treatments, procedures or existing conditions.

REDUCTION OF RISK POTENTIAL
<p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Check and monitor client vital signs ■ Perform an electrocardiogram (EKG/ECG) ■ Perform venipuncture for blood draws ■ Perform blood glucose monitoring ■ Collect specimen for diagnostic testing (e.g., blood, urine, stool, sputum) ■ Maintain central venous catheter ■ Monitor diagnostic or laboratory test results ■ Identify signs or symptoms of potential prenatal complications ■ Perform focused data collection based on client condition (e.g., neurological checks, circulatory checks) ■ Check for urinary retention (e.g., bladder scan, ultrasound, palpation) ■ Apply and check proper use of compression stockings and/or sequential compression devices (SCD) ■ Identify client risk and implement interventions ■ Monitor continuous or intermittent suction of nasogastric (NG) tube ■ Use precautions to prevent injury and/or complications associated with a procedure or diagnosis ■ Evaluate client oxygen (O2) saturation ■ Assist with care for client before and after surgical procedure ■ Reinforce client education about procedures and treatments ■ Monitor client responses to procedures and treatments ■ Insert, maintain and remove urinary catheter ■ Insert, maintain and remove nasogastric (NG) tube ■ Maintain and remove peripheral intravenous (IV) catheter ■ Assist with the performance of a diagnostic or invasive procedure

Related content includes, but is **not limited** to:

Changes/Abnormalities in Vital Signs

- Check and monitor client vital signs*
- Compare vital signs to client baseline vital signs
- Reinforce client teaching about normal and abnormal vital signs (e.g., hypertension, tachypnea, bradycardia, fever)

*Activity Statements used in the 2018 LPN/VN Practice Analysis

Diagnostic Tests

- Perform an electrocardiogram (EKG/ECG)*
- Perform diagnostic testing (e.g., blood glucose, oxygen saturation, testing for occult blood)
- Reinforce client teaching about diagnostic test

Laboratory Values

- Identify laboratory values for ABGs (pH, PO₂, PCO₂, SaO₂, HCO₃), BUN, cholesterol (total), creatinine, glucose, glycosylated hemoglobin (HgbA_{1c}), hematocrit, hemoglobin, INR, platelets, potassium, PT, PTT & APTT, sodium, WBC
- Compare client laboratory values to normal laboratory values
- Perform venipuncture for blood draws*
- Perform blood glucose monitoring*
- Collect specimen for diagnostic testing (e.g., blood, urine, stool, sputum)*
- Maintain central venous catheter*
- Reinforce client teaching on purposes of laboratory tests
- Monitor diagnostic or laboratory test results*
- Notify primary health care provider about client laboratory test results

Potential for Alterations in Body Systems

- Identify signs or symptoms of potential prenatal complications*
- Identify client with increased risk for insufficient blood circulation (e.g., immobilized limb, diabetes)
- Recognize change in client neurological status (level of consciousness, orientation, muscle strength)
- Compare current client clinical data to baseline information
- Perform focused data collection based on client condition (e.g., neurological checks, circulatory checks)*
- Check for urinary retention (e.g., bladder scan, ultrasound, palpation)*
- Apply and check proper use of compression stockings and/or sequential compression devices (SCD)*
- Monitor client output for changes from baseline (e.g., nasogastric emesis, stool, urine)
- Reinforce client teaching on methods to prevent complications associated with activity level/diagnosed illness/disease (e.g., foot care for client with diabetes mellitus)

Potential for Complications of Diagnostic Tests/Treatments/Procedures

- Identify client response to diagnostic tests/treatments/procedures
- Maintain client tube patency (e.g., chest tube, tracheostomy tube)
- Provide care for client receiving electroconvulsive therapy (ECT)
- Provide appropriate follow-up after incident (e.g., fall, client elopement or medication error)

- Identify client risk and implement interventions*
- Monitor continuous or intermittent suction of nasogastric (NG) tube*
- Use precautions to prevent injury and/or complications associated with a procedure or diagnosis*
- Reinforce teaching to prevent complications due to client diagnostic tests/treatments/procedures
- Notify primary health care provider if client has signs of potential complications (e.g., fever, hypotension, limb pain, thrombus formation)
- Evaluate client oxygen (O₂) saturation*
- Suggest change in interventions based on client response to diagnostic tests/treatments/procedures

Potential for Complications from Surgical Procedures and Health Alterations

- Identify client response to surgery or health alterations
- Assist with care for client before and after surgical procedure*
- Reinforce client education about procedures and treatments*
- Monitor client responses to procedures and treatments*
- Reinforce teaching to prevent complications due to surgery or health alterations (e.g., cough and deep breathing, elastic stockings)
- Suggest change in interventions based on client response to surgery or health alterations

Therapeutic Procedures

- Insert, maintain and remove urinary catheter*
- Insert, maintain and remove nasogastric (NG) tube*
- Maintain and remove peripheral intravenous (IV) catheter*
- Assist with the performance of a diagnostic or invasive procedure*
- Reinforce client teaching on treatments and procedures

Sample Item
<p>The nurse is caring for a client with peptic ulcer disease (PUD) who vomited 150 mL of blood-tinged green liquid. Which of the client’s laboratory test results would be a priority to check?</p> <ol style="list-style-type: none">1. serum pH2. hematocrit (HCT) (key)3. serum sodium level4. blood urea nitrogen (BUN)

Physiological Adaptation

- **Physiological Adaptation** – the LPN/VN participates in providing care for clients with acute, chronic or life-threatening physical health conditions.

PHYSIOLOGICAL ADAPTATION
<p>Related Activity Statements from the <i>Report of Findings from the 2018 LPN/VN Practice Analysis: Linking the NCLEX-PN® Examination to Practice</i></p>
<ul style="list-style-type: none"> ■ Recognize and report basic abnormalities on a client cardiac monitor strip ■ Provide care for client drainage device (e.g., wound drain, chest tube) ■ Provide cooling/warming measures to restore normal body temperature ■ Provide care for a client with a tracheostomy ■ Provide care to client with an ostomy (e.g., colostomy, ileostomy, urostomy) ■ Provide care to client on ventilator ■ Perform wound care and/or dressing change ■ Assist in the care of a client with a pacing device ■ Remove wound sutures or staples ■ Assist with client wound drainage device removal ■ Intervene to improve client respiratory status (e.g., breathing treatment, suctioning, repositioning) ■ Reinforce education to client regarding care and condition ■ Identify signs and symptoms related to acute or chronic illness ■ Provide care for a client with a fluid and electrolyte imbalance ■ Respond and intervene to a client life-threatening situation (e.g., cardiopulmonary resuscitation) ■ Recognize and report change in client condition

Related content includes, but is **not limited** to:

Alterations in Body Systems

- Identify signs and symptoms of an infection (e.g., temperature changes, swelling, redness, mental confusion or foul smelling urine)
- Recognize and report basic abnormalities on a client cardiac monitor strip*
- Provide care for client drainage device (e.g., wound drain, chest tube)*
- Provide cooling/warming measures to restore normal body temperature*
- Provide care for a client with a tracheostomy*
- Provide care to a client with an ostomy (e.g., colostomy, ileostomy, urostomy)*
- Provide care to client on ventilator*
- Provide care to correct client alteration in body system

*Activity Statements used in the 2018 LPN/VN Practice Analysis

- Provide care to client undergoing peritoneal dialysis
- Provide care for client experiencing increased intracranial pressure
- Provide care to client who has experienced a seizure
- Provide care for client experiencing complications of pregnancy/labor and/or delivery (e.g., eclampsia, precipitous labor, hemorrhage)
- Perform wound care and/or dressing change*
- Assist in the care of a client with a pacing device*
- Remove wound sutures or staples*
- Assist with client wound drainage device removal*
- Intervene to improve client respiratory status (e.g., breathing treatment, suctioning, repositioning)*
- Reinforce client teaching on ostomy care
- Reinforce education to client regarding care and condition*
- Notify primary health care provider of a change in client status
- Document client response to interventions for alteration in body systems

Basic Pathophysiology

- Identify signs and symptoms related to an acute or chronic illness*
- Consider general principles of client disease process when providing care (e.g., injury and repair, immunity, cellular structure)
- Apply knowledge of pathophysiology to monitoring client for alterations in body systems

Fluid and Electrolyte Imbalances

- Identify signs and symptoms of client fluid and/or electrolyte imbalances
- Provide care for a client with a fluid and electrolyte imbalance*
- Monitor client response to interventions to correct fluid and/or electrolyte imbalance

Medical Emergencies

- Respond and intervene to a client life-threatening situation (e.g., cardiopulmonary resuscitation)*
- Provide emergency care for wound disruption (e.g., evisceration, dehiscence)
- Notify primary health care provider about client unexpected response/emergency situation
- Recommend change in emergency treatment based upon client response to interventions
- Reinforce teaching of emergency intervention explanations to client
- Review and document client response to emergency interventions (e.g., restoration of breathing, pulse)

Unexpected Response to Therapies

- Identify and treat a client intravenous (IV) line infiltration
- Recognize and report change in client condition*
- Intervene in response to client unexpected negative response to therapy (e.g., unexpected bleeding)
- Document client unexpected response to therapy
- Promote recovery from client unexpected negative response to therapy (e.g., urinary tract infection)

Sample Item

The nurse is talking with a client who had a subtotal gastrectomy 1 month ago. Which of the following statements by the client would be a **priority** to follow up?

1. "I occasionally take an over-the-counter (OTC) laxative."
2. "I eat several small meals each day."
3. "I avoid drinking liquids with meals."
4. "I feel tired all the time." (**key**)

III. Administration of the NCLEX-PN® Examination

The NCLEX-PN is administered to candidates by computerized adaptive testing (CAT). CAT is a method of delivering examinations that uses computer technology and measurement theory. With CAT, each candidate's examination is unique because it is assembled interactively as the examination proceeds. Computer technology selects items to administer that match the candidate's ability. The items, which are stored in a large item pool, have been classified by test plan category and level of difficulty. After the candidate answers an item, the computer calculates an ability estimate based on all of the previous answers the candidate selected. The next item administered is chosen to measure the candidate's ability in the appropriate test plan category. This process is repeated for each item, creating an examination tailored to the candidate's knowledge and skills while fulfilling all NCLEX-PN Test Plan requirements. The examination continues with items selected and administered in this way until a pass or fail decision is made.

Examination Length

The NCLEX-PN is a variable length computerized adaptive test and can range from ~~85 to 205~~ items. Of these items, ~~25~~ are pretest items that are not scored. Regardless of the number of items administered, the time limit for this examination is five hours. The time allotted for the examination includes ~~the tutorial~~, sample items, all optional breaks and the examination.

The length of the examination is determined by the candidate's response to the items. Depending upon the particular pattern of correct and incorrect responses, candidates will receive different numbers of items and therefore use varying amounts of time. The candidate should select and maintain a reasonable pace that will permit them to complete the examination within the allotted time should the maximum number of items be administered. In general, it is recommended that the candidate spend approximately one to two minutes per item in order to maintain this pace.

Each candidate is given an examination that adheres to the test plan and is therefore given the opportunity to demonstrate his or her ability. The length of the candidate's examination is not an indication of a pass or fail result. A candidate may pass or fail regardless of the length of the examination. Additional information on passing and failing rules are included in further detail in this section.

The Passing Standard

The NCSBN Board of Directors (BOD) reevaluates the passing standard once every three years. The criterion that the BOD uses to set the standard is the minimum level of ability required for safe and effective entry-level nursing practice.

To assist the BOD in making this decision, they are provided with information on:

1. The results of a standard setting exercise performed by a panel of experts with the assistance of psychometricians;
2. The historical record of the passing standard with summaries of the candidate performance associated with those standards;
3. The results of a standard setting survey sent to educators and employers; and
4. Information describing the educational readiness of high school graduates who express an interest in nursing.

Once the passing standard is set, it is imposed uniformly to every examination according to the procedures laid out in the Scoring the NCLEX section. To pass the NCLEX, a candidate must perform **above** the passing standard. There is no fixed percentage of candidates that pass or fail each examination.

Similar Items

Occasionally, a candidate may receive an item that seems to be very similar to an item received earlier in the examination. This may happen for a variety of reasons. Items may contain content pertaining to similar symptoms, diseases, or disorders, yet address different phases of the nursing process. Alternatively, a pretest (unscored) item may contain content similar to an operational (scored) item. Candidates should not assume they received a second item similar in content to a previously administered item because the candidate answered the first item incorrectly. The candidate is instructed to always select the answer believed to be correct for each item administered.

Reviewing Answers and Guessing

Examination items are presented to the candidate one at a time on a computer screen. There is no time limit for a candidate to spend on each individual item. Once an answer to an item is selected, the candidate has the ability to consider the answer and change it, if necessary. However, once the candidate confirms the answer and proceeds to the next item by pressing the button, the candidate will no longer have the ability to return to a previous item. Every item must be answered even if the candidate is not sure of the correct answer. If the candidate is unsure of the correct answer, the candidate should consider all response options and provide their best answer in order to proceed to the next item. The computer will not allow the candidate to proceed to the next item without answering the current item on the screen. The best advice is to maintain a reasonable pace (one item every minute or two), and carefully read and consider each item before answering.

Scoring the NCLEX® Examination

Computerized Adaptive Testing (CAT)

The NCLEX is different from a traditional fixed-length examination, which administers the same items to every candidate. Fixed-length examinations ensure that the difficulty of the examination is constant for every candidate; therefore, the percentage correct is the indicator of the candidate's ability. This approach requires high ability candidates to answer all easy items on the examination and low ability candidates to guess on difficult items. This method provides less accurate information about the candidate's true ability. The NCLEX uses CAT to administer items. CAT is able to produce exam results that are more precise and efficient, using fewer items by targeting items to the candidate's ability. The computer (i.e., CAT scoring algorithm) estimates the ability of the candidate in relation to the passing standard. Every time the candidate answers an item, the computer re-estimates the candidate's ability. With each additional answered item, the ability estimate becomes more precise.

Each item that the candidate receives is selected from a large pool of items using three criteria:

1. The item is limited to the content area that will produce the best match to the test plan percentages. CAT ensures that each candidate’s exam contains enough items from each content area to match the required test plan percentages.
2. An item is selected that the candidate is expected to find challenging. The computer estimates the candidate’s ability based on all previous answers and the difficulty of those items, and selects an item that the candidate should have a 50 percent chance of answering correctly. This ensures the next item should not be too easy or too difficult and the examination can obtain maximum information about the candidate’s ability from the item.
3. Excludes any item that a repeat candidate has seen in the current item pool.

Pretest Items

For CAT to function properly, the difficulty of each item must be known in advance. The degree of difficulty is determined by administering the items as pretest items to a large sample of NCLEX candidates. Since the difficulty of pretest items are unknown in advance, these items are not included when estimating the candidate’s ability and subsequently making pass-fail decisions. When enough responses are collected, the pretest items are statistically analyzed and calibrated. If the pretest items meet the NCLEX statistical standards, they can be administered on future examinations as operational items. There are 25 pretest items on every NCLEX-PN. Pretest items appear identical to operational items, therefore it is recommended that candidates give their best effort for every item.

Passing and Failing

The decision as to whether a candidate passes or fails the NCLEX is governed by three different scenarios:

Scenario 1: The 95% Confidence Interval Rule

This scenario is the most common for NCLEX candidates. The computer will stop administering items when it is 95% certain that the candidate’s ability is either clearly above or clearly below the passing standard.

Scenario 2: Maximum-Length Exam

Some candidate’s ability levels will be very close to the passing standard. When this is the case, the computer continues to administer items until the maximum number of items is reached. At this point, the computer disregards the 95% confidence interval rule and considers only the final ability estimate:

- If the final ability estimate is above the passing standard, the candidate passes.
- If the final ability estimate is at or below the passing standard, the candidate fails.

Scenario 3: Run-Out-Of-Time Rule (R.O.O.T)

If a candidate runs out of time before reaching the maximum number of items and the computer has not determined with 95% certainty whether the candidate has passed or failed, an alternate criteria is used.

- If the candidate has not answered the minimum number of required items, the candidate automatically fails.
- If at least the minimum number of required items were answered, the computer looks at the last 60 ability estimates:
- If the last 60 ability estimates were consistently above the passing standard, the candidate passes.

~~If the candidate's ability estimate drops below the passing standard even once over the last 60 items, the candidate fails. This does not mean that the candidate must answer the last 60 items correctly. Each ability estimate is based upon all previous items answered.~~

Scoring Items

Many items on the NCLEX are multiple choice, however other item formats exist. Items are scored as either correct or incorrect. There is no partial credit. For updated information on the administration of the examination, access the NCSBN website at www.ncsbn.org/nclex.htm.

Types of Items on the NCLEX-PN®

During the administration of the NCLEX-PN, candidates will be required to respond to items in a variety of formats. These formats may include, but are not limited to: multiple choice, multiple response, fill-in-the-blank calculation, hot spot, exhibit, ordered response, audio and graphic. All item types may include multimedia, such as charts, tables, graphics and audio.

NCLEX® Terminology

Client: Individual, family or group which includes significant others and populations.

Prescription: Orders, interventions, remedies or treatments ordered or directed by an authorized primary health care provider.

Primary Health Care Provider: Member of the healthcare team (usually a medical physician [or other specialty, e.g., surgeon, nephrologist, etc.], nurse practitioner, etc.), licensed and authorized to formulate prescriptions on behalf of the client.

Unlicensed Assistive Personnel (UAP): Any unlicensed personnel trained to function in a supportive role, regardless of title, to whom a nursing responsibility may be delegated.

Examination Security and Confidentiality

Any candidate that violates test center regulations or rules, or engages in irregular behavior, misconduct and/or does not follow a test center administrator's warning to discontinue inappropriate behavior may be dismissed from the test center. Additionally, exam results may be withheld or cancelled and the licensing board may take other disciplinary action such as denial of a license and/or disqualifying the candidate from future registrations for licensure. Refer to the current candidate bulletin at www.ncsbn.org/1213.htm for more information.

Candidates should be aware and understand that the disclosure of examination items before, during or after the examination is a violation of law. Violations of confidentiality and/or candidates' rules can result in criminal prosecution or civil liability and/or disciplinary actions by the licensing agency including the denial of licensure.

Tutorial

Each NCLEX-PN candidate is provided information on how to answer examination items. ~~A tutorial is given at the beginning of the examination explaining the various formats that candidates may see on the examination.~~ More information on alternate item formats is available on the NCSBN website at www.ncsbn.org/9010.htm. The following are examples of how screens in the tutorial may appear with examples of possible item formats.

Multiple-Choice Item:

Calculator

Practice Item Type #1: Multiple-Choice Item

In this item type, you will be presented with a question and asked to select the best answer from four options. The options are preceded by circles. You can select only one option as your answer. You may use either the mouse or the number keypad to select your answer. To use the number keypad on your computer, press the appropriate number on your keyboard, either 1, 2, 3, or 4.

For the practice item below, the correct answer is option 3. Select option 3 now. If you selected a different answer, change it by selecting option 3. Note that your previous choice is deselected and that you can select only one option.

Click **Next** to confirm your answer and move to the next practice item.

What color is an orange?

- 1. Blue
- 2. Brown
- 3. Orange
- 4. Pink

Multiple-Response Item:

Calculator

Practice Item Type #2: Multiple-Response Item

In this item type, you will be presented with a question and a list of options and asked to select all the options that apply.

Note how this item type differs from the single-response multiple-choice item you saw earlier. In this item type, the options are preceded by square boxes and you can check more than one box. In the previous item type, the options are circles and you can only select one option.

For the practice item below, the correct options are *Apple* and *Banana* (options 1 and 2). Please use your mouse to check *Apple* and *Banana* now. The check mark indicates that you have selected that response option. To deselect the response, click on the box again. The check mark will disappear, indicating that you have deselected that response.

Click **Next** to confirm your answer and move to the next practice item.

Which of the following are fruits? **Select all that apply.**


- 1. Apple
- 2. Banana
- 3. Cow
- 4. Dog
- 5. Elephant

Fill-in-the-Blank Calculation Item:

Calculator

Practice Item Type #3: Fill-in-the-Blank Item

In this item type, you will be presented with a question and asked to calculate and type in your answer. Type only a number as your answer, including a decimal point if appropriate. To change your answer, use the backspace key to delete the number and type another number. **You will only be able to type in numbers as your answer. If you try to type any other characters, you will be presented with a message box asking you to try again.**

To use the calculator, click on the calculator button  on the upper left-hand corner of the screen. To enter numbers in the calculator, you can use the mouse to click on the calculator's buttons or use the number keypad on your keyboard. When you are finished with the calculator, you can close the calculator by clicking on the X in the top right corner of the calculator.

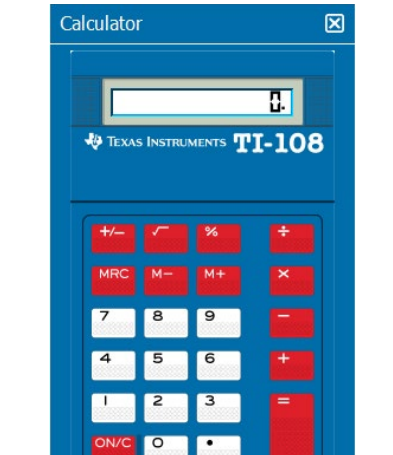
For the practice item below, first open the calculator. Second, compute a total weight by adding the weight of four pumpkins. Third, compute the average by dividing the total weight by the number of pumpkins (4). The division symbol is \div . Your calculator should now read 3.775.

You do not have to type in the unit of measurement, "kilograms" in this example. **If rounding is necessary, perform the rounding at the end of the calculation.** Please type 3.8 as your answer.

Click **Next** to confirm your answer and move to the next practice item.


The weights of four pumpkins in kilograms are: 4.22, 4.15, 3.40, 3.33. What is the average (mean) of the pumpkins' weight? Record your answer using one decimal place.

Answer: kilograms



Hot Spot Item:

Calculator

Practice Item Type #4: Hot Spot Item 

In this item type, you will be presented with a problem and a figure. You will be asked to use the mouse to select an area of the figure. To select an area, place the cursor on the area you want to select, then click on the left mouse button. An X will appear to show your answer. To deselect your answer, place the cursor on the X and click again. Your answer will be deselected. To change your answer, point the cursor to another area and click.

For the practice item below, the correct answer is Box 1. Use the mouse to select Box 1.

Click **Next** to confirm your answer and move to the next practice item.

The following figure contains four boxes. Which box is in the upper left-hand corner?

Box 1	Box 2
Box 3	Box 4

Exhibit Item:

Calculator

Practice Item Type #5: Exhibit Item

In this item type, you will be presented with a problem and an exhibit. To view the exhibit, click on the exhibit button. Each exhibit contains information behind three tabs. Click on each tab to read the information presented.

For the practice item below, the exhibit should contain the three tabs. Each tab contains the monthly receipts for purchasing bakery supplies:

- Storage/Packaging Materials
- Baking Ingredients
- Miscellaneous Supplies

The question asks you to find the most expensive item that is listed in the exhibit. The most expensive item is the storage bin, which is on the storage/packaging materials list. Therefore, option 2 below is the correct answer.

Click **Next** to confirm your answer and move to the next practice item.

Exhibit

The owner of a bakery would like to know which of the supplies is most expensive. Based upon receipts from the past month, which item was the most expensive? Click the exhibit button for additional information.

- 1. baking trays
- 2. storage bin
- 3. flour
- 4. pastry bags

Exhibit

Storage/Packaging Materials Baking Ingredients Miscellaneous Supplies

Storage/Packaging

Item	Charge
10" cake boxes	\$55.00
Paper bags - large	\$20.85
Bread bags	\$25.50
Package labels	\$10.99
Storage bin	\$175.00
TOTAL	\$287.34

Close




Drag and Drop/Ordered Response Item:

Calculator



Practice Item Type #6: Drag and Drop/Ordered Response Item

In this item type, you will be presented with a problem and a list of options. You will be asked to place the options in a specified order, such as numerical, alphabetical or chronological.

The unordered options will appear in a box on the left side of your screen. To place the options in a new order, click on an option and drag it to the box on the right side of your screen. You may also highlight the option in the left-hand box and then click the right arrow key  to move the option. To rearrange the order of options once they have been placed in the right-hand box, select the option you would like to move and click the up  or down  arrow keys. You may also click an option and drag it to a new position within the right-hand box. To complete the item, you must move all options from the left-hand box to the right-hand box.

For the practice item below, you should move the list of months (by dragging or using the arrow button) to the right so that the list is in alphabetical order: April, February, January, June, March, May. That is, April should be at the top, and May should be at the bottom. If you do not have the months in this order, please re-arrange them now.

Click **Next** to confirm your answer and proceed.

The first six months of the year appear in a list below. Please arrange these months in alphabetical order. All options must be used.

Unordered Options

January
February
March
April
May
June



Ordered Response



Audio Item:


Calculator 🗨️

Practice Item Type #7: Audio Item

In this item type, you will be presented with an audio clip. You will need to listen to the audio clip and select the option(s) that apply.

Place your headset on now.

Click the play button **below** to listen to the audio clip.

You can adjust the volume by clicking and moving the slider. 

Click the play button again to repeat the audio clip.

For the practice item below, the correct option is *Corn* (option 2). Please use your mouse to select *Corn* now.

Click **Next** to confirm your answer and move to the next practice item.

▶ ⏸ ⏹ 🔄 🔊 📏

0:00

Listen to the audio clip. The price is rising for which type of grain?

- 1. Wheat
- 2. Corn
- 3. Oats
- 4. Beans

Graphic Item:

Calculator


Practice Item Type #8: Graphic Item


In this item type, you will be presented with a question and options that are graphics instead of text. The options are preceded by circles so you can select only one option as your answer.


For the practice item below, the correct option is 1. Please use your mouse to select 1 now.


Click **Next** to confirm your answer and move to the next practice item.

Which road sign indicates a place where gas may be purchased?

1. 

2. 

3. 

4. 

To receive updated information, visit the NCSBN website at www.ncsbn.org.

IV. Item Writing Exercises

The following written exercises are designed to provide nurse educators with hands-on experience in writing NCLEX style items. Please note, not all item types are provided in the Item Writing Exercises. Refer to the NCSBN website, www.ncsbn.org, for answers to Frequently Asked Questions and additional information on alternate item formats.

NCSBN offers three online web-based courses for nursing faculty (Test Development and Item Writing, Assessment of Critical Thinking and Understanding the NCLEX-A Guide for Nursing Educators). Please utilize these web-based courses as a means of supplementing knowledge of test writing principles and of encouraging compliance with the NCLEX style of writing. The above-mentioned courses may be found at www.learningext.com.

Steps to Item Writing

A well-designed, multiple-choice item consists of three main components: a stem (asks a question or poses a statement that requires completion), a key (the correct answer/s) and distractor(s) (incorrect option/s). The following section is designed to enhance the writer's understanding of the NCLEX item writing process. Steps are provided below to assist in creating a well-designed item.

- Step 1. Select an area of the test plan for the focus of the item.**
- Step 2. Select a subcategory from the chosen area of the test plan.**
- Step 3. Select an important concept within that subcategory.**
- Step 4. Use the concept selected and write the stem.**
- Step 5. Write a key to represent important information the entry-level nurse should know.**
- Step 6. Identify common errors, misconceptions, or irrelevant information.**
- Step 7. Use the previous information and write the distractors.**
- Step 8. Complete the item using the stem, key and distractors.**

Examples Using the Steps to Item Writing

Please find below an example of how to write an item using the steps provided above.

- 1. Select an area of the test plan for the focus of the item.**
 - * Physiological Integrity
- 2. Select a subcategory from the chosen area of the test plan.**
 - *Pharmacological Therapies
- 3. Select an important concept within that subcategory.**
 - * Identify a contraindication to the administration of a prescribed over-the-counter (OTC) medication for the client.

4. Use the selected concept and write the stem.

*The nurse is reinforcing teaching with a female client who is receiving prescribed atorvastatin.
Which of the following information should the nurse reinforce?

5. Write a key to represent important information the entry-level nurse should know.

*Rhabdomyolysis
~"Report muscle aches to your primary health care provider."

6. Identify common errors, misconceptions or irrelevant information.

*Lack of knowledge about administering medication during pregnancy
*Uncertainty of diet modification while taking the medication

7. Use the previous information and write the distractors.

*"Maintain your usual diet while taking the medication."
*"Continue to take atorvastatin if you become pregnant."
*"Take the medication 1 hour before or 2 hours after a meal."

8. Complete the item using the stem, key and distractors.

*The nurse is reinforcing teaching with a female client who is receiving prescribed atorvastatin.
Which of the following information should the nurse reinforce?

1. "Maintain your usual diet while taking the medication."
2. "Continue to take atorvastatin if you become pregnant."
3. "Report muscle aches to your primary health care provider." **(key)**
4. "Take the medication 1 hour before or 2 hours after a meal."

Exercises

Case Scenarios: Using the steps listed above, create an item based on the following situations. Appendix A contains example items based on the case scenarios.

Coordinated Care

The nurse is contributing to a staff education conference about advance directives. Write an item with information the nurse should suggest to include for the education.

Safety and Infection Control

The nurse is caring for a client who has an abdominal wound infected with methicillin-resistant *Staphylococcus aureus* (MRSA). Write an item with infection control precautions the nurse should implement.

Health Promotion and Maintenance

The nurse has reinforced teaching with the parents of a 2-day-old, full-term newborn. Write an item with different statements by the parents that indicate an understanding of the teaching.

Psychosocial Integrity

The nurse is contributing to the plan of care for a client with mild Alzheimer's disease (AD) who has recently started wandering and spends around 6 hours a day sleeping. Write an item with an appropriate outcome that the nurse should recommend for the client's plan of care.

Basic Care and Comfort

The nurse is reinforcing teaching about foods high in potassium with a client. Write an item with foods to identify with the greatest amount of potassium per serving.

Pharmacological and Parenteral Therapies

The nurse has reinforced teaching with a client with schizophrenia that is prescribed olanzapine. Write an item with statements made by the client that would indicate a correct understanding of the medication.

The nurse is caring for a client with a medication prescription. Write an item that names the medication, the amount and timeframe that the client would receive the medication, the amount available, the client's weight in pounds and kilograms and how much of the medication the client should receive with each administration. The concept of the item should be that the candidate needs to perform a calculation in order to achieve the correct answer.

Reduction of Risk Potential

The nurse is caring for a client who has hypercalcemia. Write an item that includes nursing interventions for the client that would minimize complications.

Physiological Adaptation

The nurse is talking with a client that has diabetes mellitus (type 2) about the benefits of getting consistent exercise. Write an item about the benefits of consistent exercise with diabetes mellitus (type 2).

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APPENDIX A

Case Scenario Answers/Examples

Coordinated Care

The nurse is contributing to a staff education program about advance directives. Which of the following information should the nurse suggest including in the program? **Select all that apply.**

1. "A living will provides information about the client's wishes regarding medical treatment." **(key)**
2. "Health care facilities are required to provide clients with information about advance directives." **(key)**
3. "Advance directives are legally binding and cannot be changed by the client once they are written."
4. "It is unnecessary to have a power of attorney for health care if the client already has a living will."
5. "A power of attorney for health care allows a designated person to make health care decisions for the client when the client is unable to do so." **(key)**

Safety and Infection Control

The nurse is caring for a client who has an abdominal wound infected with methicillin-resistant *Staphylococcus aureus* (MRSA). Which of the following infection control precautions should the nurse implement?

1. Wear a surgical mask when changing the client's abdominal wound dressing.
2. Limit the amount of time that visitors spend with the client to 30 minutes each shift.
3. Place a surgical mask on the client when transporting the client to the radiology department.
4. Check the client's blood pressure by using a stethoscope designated for the client's use only. **(key)**

Health Promotion and Maintenance

The nurse has reinforced teaching with the parents of a 2-day-old, full-term newborn. Which of the following statements by a parent would indicate a correct understanding of the teaching?

1. "The swollen area on the side of my baby's head will go away on its own." **(key)**
2. "The primary health care provider will measure my baby's head circumference every week."
3. "The elevated, red birthmark on my baby's head will be removed if the birthmark gets bigger."
4. "The fontanel at the front of my baby's head should be indented when my baby is held upright."

Psychosocial Integrity

The nurse is contributing to the plan of care of a client with mild Alzheimer's disease (AD) who has recently started wandering and spends approximately 6 hours each day sleeping. Which of the following outcomes would be appropriate for the nurse to recommend for the client's plan of care?

1. The client will stop wandering.
2. The client will take 2 to 3 naps during the day.
3. The client will wander within designated areas. **(key)**
4. The client will identify the impact of activity on the sleep cycle.

Basic Care and Comfort

The nurse is reinforcing teaching about foods high in potassium with a client. Which of the following foods should the nurse reinforce?

1. apple
2. corn
3. baked potato **(key)**
4. cottage cheese

Pharmacological Therapies

The nurse has reinforced teaching with a client with schizophrenia who is receiving prescribed olanzapine. Which of the following statements by the client would indicate a correct understanding of the teaching?

1. "The medication may cause dry mouth." **(key)**
2. "I should consume a low-residue diet while taking olanzapine."
3. "Restlessness and agitation are common side effects of olanzapine."
4. "I will have a blood specimen obtained to monitor the therapeutic level of the medication."

The nurse is caring for client who has a prescription for gentamicin 2 mg/kg, IM, every 8 hours. The client weighs 157 lb (71.4 kg). The nurse has gentamicin 40mg/mL of solution available. How many mL should the nurse administer with each dose? **Record your answer using 1 decimal place.**

Answer: 3.6 mL

Reduction of Risk Potential

The nurse is caring for a client with hypercalcemia. The following nursing intervention should be included to minimize complications for the client.

1. cough and deep-breathe
2. increase the oral fluid intake **(key)**
3. eat high-protein, between-meal snacks
4. perform active range-of-motion (ROM) exercises

Physiological Adaptation

The nurse is reinforcing teaching about daily exercise with a client with diabetes mellitus (type 2). The nurse should reinforce which of the following as benefits of daily exercise? **Select all that apply.**

1. prevents hypoglycemia
2. improves blood circulation **(key)**
3. reduces the need for insulin **(key)**
4. decreases the need to regulate food intake
5. lowers serum cholesterol and triglyceride levels **(key)**



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