Effective April 2019

NCLEX-RN® Examination

Test Plan for the National Council Licensure
Examination for Registered Nurses

NCSBN
Leading Regulatory Excellence

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Leading Regulatory Excellence

Mission Statement

The National Council of State Boards of Nursing (NCSBN®) provides education, service and research through collaborative leadership to promote evidenced-based regulatory excellence for patient safety and public protection.

NCSBN

National Council of State Boards of Nursing

2019 NCLEX-RN® Test Plan

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Table of Contents

I. Background

The test plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) 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 in the NCLEX-RN examination.

This booklet contains the:

- *2019 NCLEX-RN® Test Plan*;
- Information on testing requirements and sample examination questions (items);
- Item writing exercises; and
- Bibliography and Appendix.

About the NCLEX-RN® Test Plan

The test plan is reviewed and approved by the NCLEX® Examination Committee every three years. Multiple resources are used, including the recent practice analysis of registered nurses (RNs), and expert opinions of the NCLEX Examination Committee (NEC), NCSBN content staff, and boards of nursing/regulatory bodies to ensure that the test plan is consistent with nurse practice acts. Following the endorsement of proposed revisions by the NCLEX Examination Committee, 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-RN examination, visit the NCSBN website at www.ncsbn.org.

II. *2019 NCLEX-RN® Test Plan*

Test Plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN® Examination)

Introduction
Entry into the practice of nursing is regulated by the licensing authorities within each of the National Council of State Boards of Nursing (NCSBN®) member board jurisdictions (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 newly licensed, entry-level RN. NCSBN develops a licensure examination, the National Council Licensure Examination for Registered Nurses (NCLEX-RN®), which is used by member board jurisdictions and most Canadian nursing regulatory bodies, to assist in making licensure decisions.

Several steps occur in the development of the NCLEX-RN Test Plan. The first step is conducting a practice analysis that is used to collect data on the current practice of the entry-level nurse (*Report of Findings from the 2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*, NCSBN, 2018). Twelve thousand newly licensed RNs are asked about the frequency and importance 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 fundamental to the practice of nursing. The second step is the development of the NCLEX-RN Test Plan, which guides the selection of content and behaviors to be tested.

The NCLEX-RN Test Plan provides a concise summary of the content and scope of the licensing 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 nurse to use in order to meet the needs of clients requiring the promotion, maintenance or 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-RN Test Plan.

Beliefs
Beliefs about people and nursing underlie the NCLEX-RN 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, 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 achieve an optimal level of health in a variety of settings.

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 knowledge 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 and potential complications; protecting, promoting, restoring, and facilitating comfort, health and dignity in dying.

The RN provides a unique, comprehensive assessment of the health status of the client. The RN applies principles of ethics, client safety, health promotion and the nursing process to develop and implement an explicit plan of care that reflects unique cultural and spiritual client preferences, the applicable standard of care and legal considerations. The nurse assists clients to promote health, cope with health problems, adapt to and/or recover from the effects of disease or injury, and support the right to a dignified death. The RN is accountable for abiding by all applicable member board jurisdiction statutes and regulations/rules related to nursing practice.

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). Since the practice of nursing requires application of knowledge, skills and abilities, the majority of items are written at the application or higher levels of cognitive ability, which requires more complex thought processing.

Test Plan Structure

The framework of Client Needs was selected for the examination because it provides a universal structure for defining entry-level nursing actions and competencies, and focuses on clients in all settings.

Client Needs

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

Safe and Effective Care Environment

- Management of Care

- Safety and Infection Control

Health Promotion and Maintenance

Psychosocial Integrity

Physiological Integrity

- Basic Care and Comfort

- Pharmacological and Parenteral Therapies

- Reduction of Risk Potential

- Physiological Adaptation

Integrated Processes

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

- *Nursing Process* – a scientific, clinical reasoning approach to client care that includes assessment, analysis, planning, implementation and evaluation.

- *Caring* – interaction of the nurse and client in an atmosphere of mutual respect and trust. In this collaborative environment, the nurse provides encouragement, hope, support and compassion to help achieve desired outcomes.

- *Communication and Documentation* – verbal and nonverbal interactions between the nurse and the client, the client's significant others, and the other members of the health care team. Events and activities associated with client care are recorded in written and/or electronic records that demonstrate adherence to the standards of practice and accountability in the provision of care.

- *Teaching/Learning* – facilitation of the acquisition of knowledge, skills and abilities promoting a change in behavior.

- *Culture and Spirituality* – interaction of the nurse and the client (individual, family or group, including significant others and populations) 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 questions assigned to each Client Needs category and subcategory of the NCLEX-RN Test Plan is based on the results of the *Report of Findings from the 2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practic*e (NCSBN, 2018) 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	
▪ Management of Care	17–23%
▪ Safety and Infection Control	9–15%
Health Promotion and Maintenance	6–12%
Psychosocial Integrity	6–12%
Physiological Integrity	
▪ Basic Care and Comfort	6–12%
▪ Pharmacological and Parenteral Therapies	12–18%
▪ Reduction of Risk Potential	9–15%
▪ Physiological Adaptation	11–17%

Distribution of Content for the NCLEX-RN® Test Plan
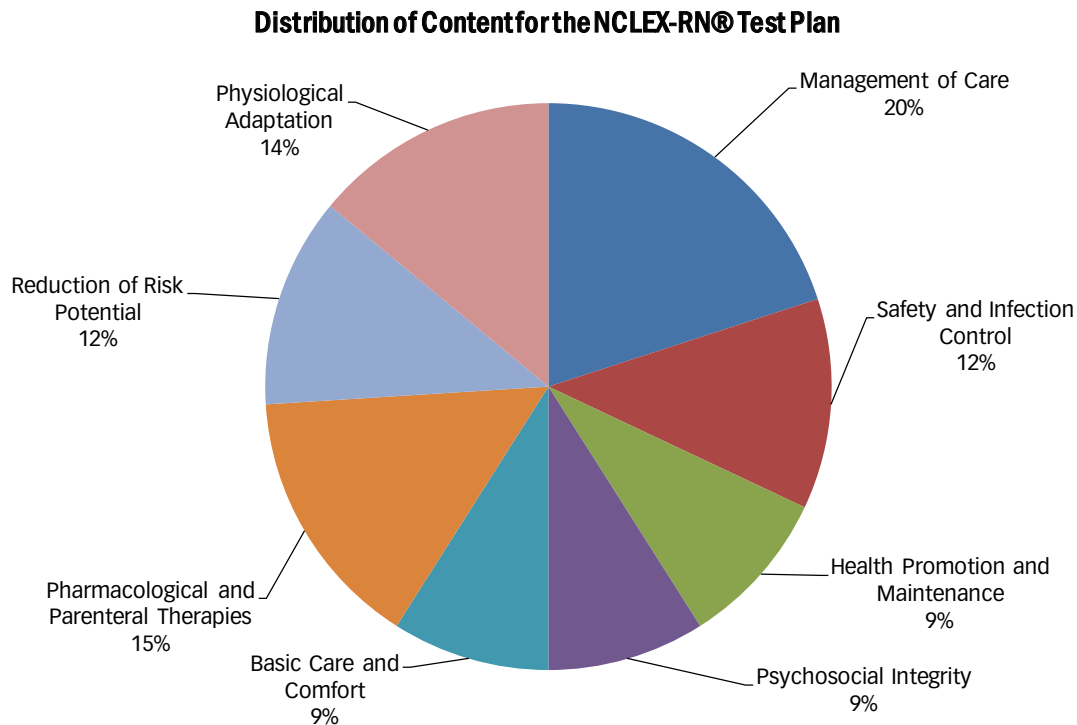
NCLEX-RN examinations are administrated adaptively in variable length format to target candidate-specific ability. To accommodate possible variations in examination length, content area distributions of the individual examinations may differ up to ±3% in each category.

Overview of Content

The activity statements used in the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2018) 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 nursing 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 registered nurses (RNs) in order to practice safe and effective care. Findings from both the 2017 RN Practice Analysis and the 2017 RN KSA survey can be found at www.ncsbn.org/1235.htm. Both documents are used in the development of the NCLEX-RN Test Plan as well as to inform item development.

All task statements in the *2019 NCLEX-RN® Test Plan* require the nurse to apply the fundamental principles of clinical decision-making and critical thinking to nursing practice. The test plan also assumes that the nurse integrates concepts from the following bodies of knowledge:

- Social Sciences (psychology and sociology);
- Biological Sciences (anatomy, physiology, biology and microbiology); and
- Physical Sciences (chemistry and physics).

In addition, the following concepts are applied throughout the four major client needs categories and subcategories of the test plan:

- 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 2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice. *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 the individual, family, or group, which includes significant others and populations. "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 care, long-term care/rehabilitation care, outpatient care and community-based/home care settings.*

Safe and Effective Care Environment

The nurse promotes achievement of client outcomes by providing and directing nursing care that enhances the care delivery setting in order to protect clients and health care personnel.

Management of Care

- **Management of Care** – the nurse provides and directs nursing care that enhances the care delivery setting to protect the client and health care personnel.

MANAGEMENT OF CARE
Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*
- Integrate advanced directives into client plan of care
- Assign and supervise care of client provided by others (e.g., LPN/VN, assistive personnel, other RNs)
- Organize workload to manage time effectively
- Practice and advocate for cost effective care
- Initiate, evaluate, and update client plan of care
- Provide education to clients and staff about client rights and responsibilities
- Advocate for client rights and needs
- Collaborate with interprofessional team members when providing client care
- Manage conflict among clients and health care staff
- Maintain client confidentiality and privacy
- Provide and receive hand off of care (report) on assigned clients
- Use approved abbreviations and standard terminology when documenting care
- Perform procedures necessary to safely admit, transfer and/or discharge a client
- Prioritize the delivery of client care
- Recognize ethical dilemmas and take appropriate action
- Practice in a manner consistent with a code of ethics for nurses
- Verify the client receives appropriate education and consents for care and procedures
- Receive and transcribe health care provider orders
- Utilize resources to enhance client care (e.g., evidenced-based research, information technology, policies and procedures)
- Recognize limitations of self and others and utilize resources
- Report client conditions as required by law (e.g., abuse/neglect, communicable disease)
- Provide care within the legal scope of practice
- Participate in performance improvement projects and quality improvement processes
- Assess the need for referrals and obtain necessary orders

*Activity Statements used in the 2017 RN Practice Analysis

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

Advance Directives/Self-Determination/Life Planning

- Assess client and/or staff member knowledge of advance directives (e.g., living will, health care agent/proxy, Power of Attorney for Health Care)

- Integrate advanced directives into client plan of care*

- Provide client with information about advance directives, self-care determination, life planning

Advocacy

- Discuss identified treatment options with client and respect their decisions

- Provide information on advocacy to staff members

- Act in the role of client advocate

- Utilize advocacy resources appropriately (e.g., social worker, chain of command, interpreter)

Assignment, Delegation and Supervision

- Identify tasks for assignment or delegation based on client needs

- Delegate and assign appropriate task based on client's needs to personnel with competency to perform task

- Assign and supervise care of client provided by others (e.g., LPN/VN, assistive personnel, other RNs)*

- Communicate tasks to be completed and report client concerns immediately

- Organize workload to manage time effectively*

- Utilize the rights of delegation (e.g., right task, right circumstances, right person, right direction/ communication, right supervision/evaluation)

- Evaluate delegated tasks to ensure correct completion of activity

- Evaluate ability of staff members to perform assigned tasks considering personnel's allowable tasks/duties, competency and ability to use sound judgment and decision-making

- Evaluate effectiveness of staff members' time management skills

Case Management

- Explore resources available to assist the client with achieving or maintaining independence

- Assess the client's need for materials and equipment (e.g., oxygen, suction machine, wound care supplies)

- Practice and advocate for cost effective care*

- Plan individualized care for client based on need (e.g., client diagnosis, self-care ability, prescribed treatments)

- Provide client with information on discharge procedures to home or community setting

- Initiate, evaluate, and update client plan of care*

*Activity Statements used in the 2017 RN Practice Analysis

Client Rights

■ Recognize the client's right to refuse treatment/procedures

■ Discuss treatment options/decisions with client

■ Provide education to clients and staff about client rights and responsibilities*

■ Evaluate client/staff understanding of client rights

■ Advocate for client rights and needs*

Collaboration with Interdisciplinary Team

■ Identify the need for interdisciplinary conferences

■ Identify significant information to report to other disciplines (e.g., health care provider, pharmacist, social worker, respiratory therapist)

■ Review plan of care to ensure continuity across disciplines

■ Collaborate with interprofessional team members when providing client care*

■ Serve as resource person to other staff

Concepts of Management

■ Identify roles/responsibilities of health care team members

■ Plan overall strategies to address client problems

■ Act as liaison between client and others (e.g., coordinate or manage care)

■ Manage conflict among clients and health care staff*

■ Evaluate management outcomes

Confidentiality/Information Security

■ Assess staff member and client understanding of confidentiality requirements

■ Maintain client confidentiality and privacy*

■ Intervene appropriately when confidentiality has been breached by staff members

Continuity of Care

■ Provide and receive hand off of care (report) on assigned clients*

■ Use documents to record and communicate client information (e.g., medical record, referral/transfer form)

■ Use approved abbreviations and standard terminology when documenting care*

■ Perform procedures necessary to safely admit, transfer and/or discharge a client*

■ Follow up on unresolved issues regarding client care (e.g., laboratory results, client requests)

*Activity Statements used in the 2017 RN Practice Analysis

Establishing Priorities

- Apply knowledge of pathophysiology when establishing priorities for interventions with multiple clients

- Prioritize the delivery of client care*

- Evaluate plan of care for multiple clients and revise plan of care as needed

Ethical Practice

- Recognize ethical dilemmas and take appropriate action*

- Inform client/staff members of ethical issues affecting client care

- Practice in a manner consistent with a code of ethics for nurses*

- Evaluate outcomes of interventions to promote ethical practice

Informed Consent

- Identify appropriate person to provide informed consent for client

- Provide written materials in client's spoken language, when possible

- Describe components of informed consent

- Participate in obtaining informed consent

- Verify the client receives appropriate education and consents for care and procedures*

Information Technology

- Receive and transcribe health care provider orders*

- Apply knowledge of facility regulations when accessing client records

- Access data for client through online databases and journals

- Enter computer documentation accurately, completely and in a timely manner

- Utilize resources to enhance client care (e.g., evidenced-based research, information technology, policies and procedures)*

Legal Rights and Responsibilities

- Identify legal issues affecting the client (e.g., refusing treatment)

- Identify and manage the client's valuables according to facility/agency policy

- Recognize limitations of self and others and utilize resources*

- Review facility policy and legal considerations prior to agreeing to serve as an interpreter for staff or primary health care provider

- Educate client/staff on legal issues

- Report client conditions as required by law (e.g., abuse/neglect, communicable disease)*

- Provide care within the legal scope of practice*

Performance Improvement (Quality Improvement)

- Define performance improvement/quality assurance activities
- Participate in performance improvement projects and quality improvement processes*
- Report identified client care issues/problems to appropriate personnel
- Utilize research and other references for performance improvement actions
- Evaluate the impact of performance improvement measures on client care and resource utilization

Referrals

- Assess the need to refer clients for assistance with actual or potential problems (e.g., physical therapy, speech therapy)
- Assess the need for referrals and obtain necessary orders*
- Identify community resources for the client (e.g., respite care, social services, shelters)
- Identify which documents to include when referring a client (e.g., medical record, referral form)

Sample Item

The nurse has been made aware of the following client situations. The nurse should **first** assess the client
 	
    1.   with diverticulitis who is reporting left lower quadrant (LLQ) pain
 	
    2.   with chronic obstructive pulmonary disease (COPD) who is reporting hemoptysis
 	
    3.   who had an evacuation of a subdural hematoma 8 hours ago and has become agitated (**key**)
 	
    4.   who had a total knee replacement 8 hours ago and whose affected extremity is internally rotated

(**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 nurse protects clients and health care personnel from health and environmental hazards.

<table>
<tr><td align="center">SAFETY AND INFECTION CONTROL

Related Activity Statements from the <i>2017 RN Practice Analysis: Linking the NCLEX-RN®
Examination to Practice</i></td></tr>
<tr><td>

- Assess client for allergies and intervene as needed (e.g., food, latex, environmental allergies)
- Protect client from injury (e.g., falls, electrical hazards)
- Ensure proper identification of client when providing care
- Verify appropriateness and accuracy of a treatment order
- Participate in emergency response plans (e.g., internal/external disaster, bomb threat, community planning)
- Use ergonomic principles when providing care (e.g., safe patient handling, proper lifting)
- Follow procedures for handling biohazardous and hazardous materials
- Educate client on safety issues
- Acknowledge and document practice errors and near misses (e.g., incident report for medication error)
- Report unsafe practice of health care personnel and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)
- Facilitate appropriate and safe use of equipment
- Follow security plan and procedures (e.g., newborn nursery security, violence, controlled access)
- Apply principles of infection control (e.g., hand hygiene, aseptic technique, isolation, sterile technique, universal/standard precautions)
- Educate client and staff regarding infection control measures
- Follow requirements for use of restraints

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

Accident/Error/Injury Prevention
- Assess client for allergies and intervene as needed (e.g., food, latex, environmental allergies)*
- Determine client/staff member knowledge of safety procedures
- Identify factors that influence accident/injury prevention (e.g., age, developmental stage, lifestyle, mental status)
- Identify deficits that may impede client safety (e.g., visual, hearing, sensory/perceptual)
- Identify and verify prescriptions for treatments that may contribute to an accident or injury (does not include medication)
- Identify and facilitate correct use of infant and child car seats

- Provide client with appropriate method to signal staff members

- Protect client from injury (e.g., falls, electrical hazards)*

- Review necessary modifications with client to reduce stress on specific muscle or skeletal groups (e.g., frequent changing of position, routine stretching of the shoulders, neck, arms, hands, fingers)

- Implement seizure precautions for at-risk clients

- Make appropriate room assignments for cognitively impaired clients

- Ensure proper identification of client when providing care*

- Verify appropriateness and accuracy of a treatment order*

Emergency Response Plan

- Determine which client(s) to recommend for discharge in a disaster situation

- Identify nursing roles in disaster planning

- Use clinical decision-making/critical thinking for emergency response plan

- Participate in emergency response plans (e.g., internal/external disaster, bomb threat, community planning)*

- Participate in disaster planning activities/drills

Ergonomic Principles

- Assess client ability to balance, transfer and use assistive devices prior to planning care (e.g., crutches, walker)

- Provide instruction and information to client about body positions that eliminate potential for repetitive stress injuries

- Use ergonomic principles when providing care (e.g., safe client handling, proper lifting)*

Handling Hazardous and Infectious Materials

- Identify biohazardous, flammable and infectious materials

- Follow procedures for handling biohazardous and hazardous materials*

- Demonstrate safe handling techniques to staff and client

- Ensure safe implementation of internal radiation therapy

Home Safety

- Assess need for client home modifications (e.g., lighting, handrails, kitchen safety)

- Apply knowledge of client pathophysiology to home safety interventions

- Educate client on safety issues*

- Encourage client to use protective equipment when using devices that can cause injury

- Evaluate client care environment for fire/environmental hazard

Reporting of Incident/Event/Irregular Occurrence/Variance

- Identify need/situation where reporting of incident/event/irregular occurrence/variance is appropriate
- Acknowledge and document practice errors and near misses (e.g., incident report for medication error)*
- Evaluate response to error/event/occurrence
- Report unsafe practice of health care personnel and intervene as appropriate (e.g., substance abuse, improper care, staffing practices)*

Safe Use of Equipment

- Inspect equipment for safety hazards (e.g., frayed electrical cords, loose/missing parts)
- Teach client about the safe use of equipment needed for health care
- Facilitate appropriate and safe use of equipment*
- Remove malfunctioning equipment from client care area and report the problem to appropriate personnel

Security Plan

- Use clinical decision making/critical thinking in situations related to security planning
- Apply principles of triage and evacuation procedures/protocols
- Follow security plan and procedures (e.g., newborn nursery security, violence, controlled access)*

Standard Precautions/Transmission-Based Precautions/Surgical Asepsis

- Assess client care area for sources of infection
- Understand communicable diseases and the modes of organism transmission (e.g., airborne, droplet, contact)
- Apply principles of infection control (e.g., hand hygiene, aseptic technique, isolation, sterile technique, universal/standard precautions)*
- Follow correct policy and procedures when reporting a client with a communicable disease
- Educate client and staff regarding infection control measures*
- Utilize appropriate precautions for immunocompromised clients
- Use appropriate technique to set up a sterile field/maintain asepsis
- Evaluate infection control precautions implemented by staff members
- Evaluate whether aseptic technique is performed correctly

Use of Restraints/Safety Devices

- Assess appropriateness of the type of restraint/safety device used
- Follow requirements for use of restraints*
- Monitor/evaluate client response to restraints/safety device

*Activity Statements used in the 2017 RN Practice Analysis

Sample Item
The nurse is assigning unlicensed assistive personnel (UAP) to assist the following clients to ambulate. It would be **most** important for the nurse to review safety precautions with the UAP prior to ambulating the 1. 44-year-old client with Ménière's disease (**key**) 2. 59-year-old client with a unilateral cataract 3. 62-year-old client with presbycusis 4. 65-year-old client with sinusitis

Health Promotion and Maintenance

- **Health Promotion and Maintenance** – the nurse provides and directs nursing care of the client that incorporates knowledge of expected growth and development; prevention and early detection of health problems, and strategies to achieve optimal health.

HEALTH PROMOTION AND MAINTENANCE

Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Provide care and education for the newborn, infant, and toddler client from birth through 2 years
- Provide care and education for the preschool, school age and adolescent client ages 3 through 17 years
- Provide care and education for the adult client ages 18 through 64 years
- Provide care and education for the adult client ages 65 years and over
- Provide prenatal care and education
- Provide care and education to an antepartum client or a client in labor
- Provide postpartum care and education
- Assess and educate clients about health risks based on family, population, and community characteristics
- Assess client's readiness to learn, learning preferences and barriers to learning
- Plan and/or participate in community health education
- Educate client about health promotion and maintenance recommendations (e.g., physician visits, immunizations)
- Perform targeted screening assessments (e.g., vision, nutrition)
- Educate client about prevention and treatment of high risk health behaviors (e.g., smoking cessation, safe sexual practices, needle exchange)
- Assess client ability to manage care in home environment and plan care accordingly
- Perform comprehensive health assessments

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

Aging Process
- Assess client's reactions to expected age-related changes
- Provide care and education for the newborn, infant and toddler client from birth through 2 years*
- Provide care and education for the preschool, school age and adolescent client ages 3 through 17 years*
- Provide care and education for the adult client ages 18 through 64 years*
- Provide care and education for the adult client ages 65 years and over*

*Activity Statements used in the 2017 RN Practice Analysis

Ante/Intra/Postpartum and Newborn Care

- Assess client's psychosocial response to pregnancy (e.g., support systems, perception of pregnancy, coping mechanisms)

- Assess client for symptoms of postpartum complications (e.g., hemorrhage, infection)

- Recognize cultural differences in childbearing practices

- Calculate expected delivery date

- Check fetal heart rate during routine prenatal exams

- Assist client with performing/learning newborn care (e.g., feeding)

- Provide prenatal care and education*

- Provide care and education to an antepartum client or a client in labor*

- Provide postpartum care and education*

- Provide discharge instructions (e.g., postpartum and newborn care)

- Evaluate client's ability to care for the newborn

Developmental Stages and Transitions

- Identify expected physical, cognitive and psychosocial stages of development

- Identify expected body image changes associated with client developmental age (e.g., aging, pregnancy)

- Identify family structures and roles of family members (e.g., nuclear, blended, adoptive)

- Compare client development to expected age/developmental stage and report any deviations

- Assess impact of change on family system (e.g., one-parent family, divorce, ill family member)

- Recognize cultural and religious influences that may impact family functioning

- Assist client to cope with life transitions (e.g., attachment to newborn, parenting, puberty, retirement)

- Modify approaches to care in accordance with client developmental stage (use age appropriate explanations of procedures and treatments)

- Provide education to client/staff members about expected age-related changes and age-specific growth and development (e.g., developmental stages)

- Evaluate client's achievement of expected developmental level (e.g., developmental milestones)

- Evaluate impact of expected body image changes on client and family

Health Promotion/Disease Prevention

- Identify risk factors for disease/illness (e.g., age, gender, ethnicity, lifestyle)

- Assess and educate clients about health risks based on family, population, and/or community characteristics*

- Assess client's readiness to learn, learning preferences and barriers to learning*

- Plan and/or participate in community health education*

*Activity Statements used in the 2017 RN Practice Analysis

- Educate client on actions to promote/maintain health and prevent disease (e.g., smoking cessation, diet, weight loss)

- Inform client of appropriate immunization schedules

- Integrate complementary therapies into health promotion activities for the well client

- Educate client about health promotion and maintenance recommendations (e.g., physician visits, immunizations)*

- Provide follow up to the client following participation in health promotion program (e.g., diet counseling)

- Assist client in maintaining an optimum level of health

- Evaluate client understanding of health promotion behaviors/activities (e.g., weight control, exercise actions)

Health Screening

- Apply knowledge of pathophysiology to health screening

- Identify risk factors linked to ethnicity (e.g., hypertension, diabetes)

- Perform health history/health and risk assessments (e.g., lifestyle, family and genetic history)

- Perform targeted screening assessments (e.g., vision, nutrition)*

- Utilize appropriate procedure and interviewing techniques when taking the client health history

High Risk Behaviors

- Assess client lifestyle practice risks that may impact health (e.g., excessive sun exposure, lack of regular exercise)

- Assist client to identify behaviors/risks that may impact health

- Educate client about prevention and treatment of high risk health behaviors (e.g., smoking cessation, safe sexual practices, needle exchange)*

Lifestyle Choices

- Assess client's lifestyle choices

- Assess client's attitudes/perceptions on sexuality

- Assess client's need/desire for contraception

- Identify contraindications to chosen contraceptive method (e.g., smoking, compliance, medical conditions)

- Identify expected outcomes for family planning methods

- Recognize client who is socially or environmentally isolated

- Educate client on sexuality issues (e.g., family planning, safe sexual practices, menopause, impotence)

- Evaluate client alternative or homeopathic health care practices (e.g., massage therapy, acupuncture, herbal medicine and minerals)

Self-Care

- Assess client ability to manage care in home environment and plan care accordingly*

- Consider client self-care needs before developing or revising care plan

- Assist primary caregivers working with the client to meet self-care goals

Techniques of Physical Assessment

- Apply knowledge of nursing procedures and psychomotor skills to techniques of physical assessment

- Choose physical assessment equipment and technique appropriate for the client (e.g., age of client, measurement of vital signs)

- Perform comprehensive health assessments*

Sample Item
The nurse is teaching clients at a community health fair about risk factors for developing cancer. The nurse should recognize that at **highest** risk is the 1. 30-year-old client who consumes a diet high in selenium and has a history of an ovarian cyst 2. 49-year-old client who drinks 2 to 3 cups of coffee daily and has a family history of fibrocystic breast conditions 3. 51-year-old client who has hypertension and teaches an aerobic exercise program 4. 62-year-old client who consumes 5 to 6 alcoholic beverages daily and is an opera singer (**key**)

Psychosocial Integrity

- **Psychosocial Integrity** – the nurse provides and directs nursing care that promotes and supports the emotional, mental and social well-being of the client experiencing stressful events, as well as clients with acute or chronic mental illness.

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PSYCHOSOCIAL INTEGRITY

Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Assess client for abuse or neglect and intervene as appropriate
- Incorporate behavioral management techniques when caring for a client
- Assess client's ability to cope with life changes and provide support
- Assess the potential for violence and use safety precautions
- Incorporate client cultural practices and beliefs when planning and providing care
- Provide end-of-life care and education to clients
- Assess family dynamics to determine plan of care
- Provide care for a client experiencing grief or loss
- Provide care and education for acute and chronic psychosocial health issues (e.g., addictions/dependencies, depression, dementia, eating disorders)
- Assess psychosocial, spiritual, and/or occupational factors affecting care and plan interventions
- Provide care for a client experiencing visual, auditory, and/or cognitive distortions
- Recognize nonverbal cues to physical and/or psychological stressors
- Assess client for substance abuse, dependency, withdrawal, or toxicities and intervene as appropriate
- Use therapeutic communication techniques
- Promote a therapeutic environment

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

Abuse/Neglect

- Assess client for abuse or neglect and intervene as appropriate*
- Identify risk factors for domestic, child, elder abuse/neglect and sexual abuse
- Plan interventions for victims/suspected victims of abuse
- Counsel victims/suspected victims of abuse and their families on coping strategies
- Provide a safe environment for the abused/neglected client
- Evaluate client response to interventions

Behavioral Interventions

- Assess client's appearance, mood and psychomotor behavior and identify/respond to inappropriate/abnormal behavior

- Assist client with achieving and maintaining self-control of behavior (e.g., behavior modification)

- Assist client to develop and use strategies to decrease anxiety

- Orient the client to reality

- Participate in group sessions (e.g., support groups)

- Incorporate behavioral management techniques when caring for a client*

- Evaluate client's response to treatment plan

Coping Mechanisms

- Assess client's support systems and available resources

- Assess client's ability to adapt to temporary/permanent role changes

- Assess client's reaction to a diagnosis of acute or chronic mental illness (e.g., rationalization, hopefulness, anger)

- Assess client's ability to cope with life changes and provide support*

- Identify situations which may necessitate role changes for a client (e.g., spouse with chronic illness, death of parent)

- Provide support to the client with unexpected altered body image (e.g., alopecia, amputation, burns)

- Evaluate the constructive use of defense mechanisms by a client

- Evaluate whether the client has successfully adapted to situational role changes (e.g., accept dependency on others)

Crisis Intervention

- Assess the potential for violence and use safety precautions*

- Identify the client in crisis

- Use crisis intervention techniques to assist the client in coping

- Apply knowledge of client psychopathology to crisis intervention

- Guide the client to resources for recovery from crisis (e.g., social supports)

Cultural Awareness/Cultural Influences on Health

- Assess the importance of client culture/ethnicity when planning/providing/evaluating care

- Recognize cultural issues that may impact the client's understanding/acceptance of psychiatric diagnosis

- Incorporate client cultural practices and beliefs when planning and providing care*

- Respect cultural background/practices of the client

- Evaluate and document how client language needs were met

*Activity Statements used in the 2017 RN Practice Analysis

End-of-Life Care

- Assess client's ability to cope with end-of-life interventions
- Identify end-of-life needs of the client (e.g., financial concerns, fear, loss of control, role changes)
- Recognize the need for and provide psychosocial support to the family/caregiver
- Assist client in resolution of end-of-life issues
- Provide end-of-life care and education to clients*

Family Dynamics

- Assess barriers/stressors that impact family functioning (e.g., meeting client care needs, divorce)
- Assess family dynamics to determine plan of care*
- Assess parental techniques related to discipline
- Encourage the client's participation in group/family therapy
- Assist client to integrate new members into family structure (e.g., new infant, blended family)
- Evaluate resources available to assist family functioning

Grief and Loss

- Provide care for a client experiencing grief or loss*
- Support the client in anticipatory grieving
- Inform the client of expected reactions to grief and loss (e.g., denial, fear)
- Provide the client with resources to adjust to loss/bereavement (e.g., individual counseling, support groups)
- Evaluate the client's coping and fears related to grief and loss

Mental Health Concepts

- Identify signs and symptoms of impaired cognition (e.g., memory loss, poor hygiene)
- Recognize signs and symptoms of acute and chronic mental illness (e.g., schizophrenia, depression, bipolar disorder)
- Recognize client use of defense mechanisms
- Assess client adherence to treatment plan
- Assess client for alterations in mood, judgment, cognition and reasoning
- Apply knowledge of client psychopathology to mental health concepts applied in individual/group/family therapy
- Provide care and education for acute and chronic psychosocial health issues (e.g., addictions/dependencies, depression, dementia, eating disorders)*
- Evaluate client's ability to adhere to treatment plan
- Evaluate client's abnormal response to the aging process (e.g., depression)

Religious and Spiritual Influences on Health

- Identify the emotional problems of client or client needs that are related to religious/spiritual beliefs (e.g., spiritual distress, conflict between recommended treatment and beliefs)

- Assess psychosocial, spiritual, and/or occupational factors affecting care and plan interventions*

- Assess and plan interventions that meet the client's emotional and spiritual needs

- Evaluate whether the client's religious/spiritual needs are met

Sensory/Perceptual Alterations

- Identify time, place, and stimuli surrounding the appearance of symptoms

- Assist client to develop strategies for dealing with sensory and thought disturbances

- Provide care for a client experiencing visual, auditory and/or cognitive distortions*

- Provide care in a nonthreatening and nonjudgmental manner

- Provide reality-based diversions

Stress Management

- Recognize nonverbal cues to physical and/or psychological stressors*

- Assess stressors, including environmental, that affect client care (e.g., noise, fear, uncertainty, change, lack of knowledge)

- Implement measures to reduce environmental stressors (e.g., noise, temperature)

- Provide information to client on stress management techniques (e.g., relaxation techniques, exercise, meditation)

- Evaluate client's use of stress management techniques

Substance Use and Other Disorders and Dependencies

- Assess client's reactions to the diagnosis/treatment of substance-related disorder

- Assess client for substance abuse, dependency, withdrawal, or toxicities and intervene as appropriate*

- Plan and provide care to clients experiencing substance-related withdrawal or toxicity (e.g., nicotine, opioid, sedative)

- Educate client on substance use diagnosis and treatment plan

- Provide care and/or support for a client with non-substance-related dependencies (e.g., gambling, sexual addiction)

- Provide symptom management for clients experiencing withdrawal or toxicity

- Encourage client to participate in support groups

- Evaluate client's response to a treatment plan and revise as needed

Support Systems

- Assist family to plan care for client with impaired cognition (e.g., Alzheimer's disease)

*Activity Statements used in the 2017 RN Practice Analysis

- Encourage client's involvement in the health care decision-making process
- Evaluate client's feelings about the diagnosis/treatment plan

Therapeutic Communication
- Assess verbal and nonverbal client communication needs
- Respect the client's personal values and beliefs
- Allow time to communicate with the client
- Use therapeutic communication techniques*
- Encourage client to verbalize feelings (e.g., fear, discomfort)
- Evaluate the effectiveness of communications with the client

Therapeutic Environment
- Identify external factors that may interfere with client recovery (e.g., stressors, family dynamics)
- Make client room assignments that support the therapeutic milieu
- Promote a therapeutic environment*

Sample Item
The nurse is talking with a client who had a colostomy created 2 days ago. Which of the following statements by the client would indicate ineffective coping? **Select all that apply**.   1. "I am not touching that disgusting bag." (**key**)   2. "I am glad I can still go to the gym just as I used to."   3. "I really like raw vegetables, and it will be hard for me to limit them."   4. "I understand the need for the colostomy, but I am afraid that the bag will leak."   5. "I do not understand why I cannot have a nurse perform the colostomy bag changes for me." (**key**)

Physiological Integrity

The nurse promotes physical health and wellness by providing care and comfort, reducing client risk potential and managing health alterations.

Basic Care and Comfort

- **Basic Care and Comfort** – the nurse provides comfort and assistance in the performance of activities of daily living.

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BASIC CARE AND COMFORT

Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)
- Assess and manage client with an alteration in elimination
- Perform irrigations (e.g., of bladder, ear, eye)
- Perform skin assessment and/or implement measures to maintain skin integrity and prevent skin breakdown
- Apply, maintain or remove orthopedic devices
- Implement measures to promote circulation (e.g., active or passive range of motion, positioning and mobilization)
- Assess client for pain and intervene as appropriate
- Recognize complementary therapies and identify potential contraindications (e.g., aromatherapy, acupressure, supplements)
- Provide non-pharmacological comfort measures
- Monitor the client's nutritional status
- Provide client nutrition through tube feedings
- Evaluate client intake and output and intervene as needed
- Assess and/or intervene in client performance of activities of daily living
- Perform postmortem care
- Assess client sleep/rest pattern and intervene as needed

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

Assistive Devices

- Assess the client for actual/potential difficulty with communication and speech/vision/hearing problems
- Assess the client's use of assistive devices (e.g., prosthetic limbs, hearing aid)
- Assist client to compensate for a physical or sensory impairment (e.g., assistive devices, positioning, compensatory techniques)*

*Activity Statements used in the 2017 RN Practice Analysis

- Manage the client who uses assistive devices or prostheses (e.g., eating utensils, telecommunication devices, dentures)

- Evaluate the correct use of assistive devices by the client

Elimination

- Assess and manage client with an alteration in elimination*

- Perform irrigations (e.g., of bladder, ear, eye)*

- Provide skin care to clients who are incontinent (e.g., wash frequently, barrier creams/ointments)

- Use alternative methods to promote voiding

- Evaluate whether the client's ability to eliminate is restored/maintained

Mobility/Immobility

- Identify complications of immobility (e.g., skin breakdown, contractures)

- Assess the client for mobility, gait, strength and motor skills

- Perform skin assessment and/or implement measures to maintain skin integrity and prevent skin breakdown*

- Apply knowledge of nursing procedures and psychomotor skills when providing care to clients with immobility

- Apply, maintain or remove orthopedic devices*

- Educate the client regarding proper methods used when repositioning an immobilized client

- Maintain the client's correct body alignment

- Maintain/correct the adjustment of client's traction device (e.g., external fixation device, halo traction, skeletal traction)

- Implement measures to promote circulation (e.g., active or passive range of motion, positioning and mobilization)*

- Evaluate the client's response to interventions to prevent complications from immobility

Non-Pharmacological Comfort Interventions

- Assess the client's need for alternative and/or complementary therapy

- Assess the client's need for palliative care/symptom management or non-curative treatments

- Assess client for pain and intervene as appropriate*

- Recognize differences in client perception and response to pain

- Apply knowledge of pathophysiology to non-pharmacological comfort/palliative care interventions

- Incorporate alternative/complementary therapies into client plan of care (e.g., music therapy, relaxation therapy)

- Recognize complementary therapies and identify potential contraindications (e.g., aromatherapy, acupressure, supplements)*

- Counsel client regarding palliative/symptom management, non-curative treatments or care

- Respect client palliative care/symptom management or non-curative treatment choices

- Assist client in receiving appropriate end-of-life physical symptom management

- Plan measures to provide comfort interventions to clients with anticipated or actual impaired comfort

- Provide non-pharmacological comfort measures*

- Evaluate the client's response to non-pharmacological interventions (e.g., pain rating scale, verbal reports)

- Evaluate the outcomes of alternative and/or complementary therapy practices

- Evaluate outcome of palliative care/symptom management or non-curative treatments

Nutrition and Oral Hydration

- Assess client ability to eat (e.g., chew, swallow)

- Assess client for actual/potential specific food and medication interactions

- Consider client choices regarding meeting nutritional requirements and/or maintaining dietary restrictions, including mention of specific food items

- Monitor client hydration status (e.g., edema, signs and symptoms of dehydration)

- Initiate calorie counts for clients

- Apply knowledge of mathematics to client nutrition (e.g., body mass index)

- Monitor the client's nutritional status*

- Promote the client's independence in eating

- Provide/maintain special diets based on the client diagnosis/nutritional needs and cultural considerations (e.g., low sodium, high protein, calorie restrictions)

- Provide nutritional supplements as needed (e.g., high protein drinks)

- Provide client nutrition through tube feedings*

- Evaluate side effects of client tube feedings and intervene as needed (e.g., diarrhea, dehydration)

- Evaluate client intake and output and intervene as needed*

- Evaluate the impact of disease/illness on nutritional status of a client

Personal Hygiene

- Assess the client for personal hygiene habits/routine

- Assess and/or intervene in client performance of activities of daily living*

- Provide information to the client on required adaptations for performing activities of daily living (e.g., shower chair, hand rails)

- Perform postmortem care*

Rest and Sleep

- Assess client sleep/rest pattern and intervene as needed*

- Apply knowledge of client pathophysiology to rest and sleep interventions

- Schedule client care activities to promote adequate rest

Sample Item
The nurse is teaching a client who had a subtotal gastrectomy about ways to prevent dumping syndrome. Which of the following foods would be appropriate for the nurse to recommend to eliminate from the client's diet?   1. cheese   2. red meat   3. ice cream (**key**)   4. yellow vegetables

Pharmacological and Parenteral Therapies

- **Pharmacological and Parenteral Therapies** – the nurse provides care related to the administration of medications and parenteral therapies.

PHARMACOLOGICAL AND PARENTERAL THERAPIES

Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Administer blood products and evaluate client response
- Access central venous access devices
- Perform calculations needed for medication administration
- Evaluate client response to medication
- Educate client about medications
- Prepare and administer medications using rights of medication administration
- Review pertinent data prior to medication administration (e.g., contraindications, lab results, allergies, potential interactions)
- Participate in medication reconciliation process
- Titrate dosage of medication based on assessment and ordered parameters
- Handle and maintain medication in a safe and controlled environment
- Evaluate appropriateness and accuracy of medication order for client
- Handle and/or administer high-risk medications
- Monitor intravenous infusion and maintain site
- Administer medications for pain management
- Handle and/or administer controlled substances within regulatory guidelines
- Administer parenteral nutrition and evaluate client response

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

Adverse Effects/Contraindications/Side Effects/Interactions

- Identify a contraindication to the administration of a medication to the client
- Identify actual and potential incompatibilities of prescribed client medications
- Identify symptoms/evidence of an allergic reaction to medications
- Assess the client for actual or potential side effects and adverse effects of medications (e.g., prescribed, over-the-counter, herbal supplements, preexisting condition)
- Provide information to the client on common side effects/adverse effects/potential interactions of medications and inform the client when to notify the primary health care provider
- Notify the primary health care provider of side effects, adverse effects and contraindications of medications and parenteral therapy
- Document side effects and adverse effects of medications and parenteral therapy

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*Activity Statements used in the 2017 RN Practice Analysis

- Monitor for anticipated interactions among the client's prescribed medications and fluids (e.g., oral, topical, subcutaneous, IM, IV)

- Evaluate and document the client's response to actions taken to counteract side effects and adverse effects of medications and parenteral therapy

Blood and Blood Products

- Identify the client according to facility/agency policy prior to administration of red blood cells/blood products (e.g., prescription for administration, correct type, correct client, cross matching complete, consent obtained)

- Check the client for appropriate venous access for red blood cell/blood product administration (e.g., correct gauge needle, integrity of access site)

- Document necessary information on the administration of red blood cells/blood products

- Administer blood products and evaluate client response*

Central Venous Access Devices

- Educate the client on the reason for and care of a venous access device

- Access central venous access devices*

- Provide care for client with a central venous access device

Dosage Calculation

- Perform calculations needed for medication administration*

- Use clinical decision making/critical thinking when calculating dosages

Expected Actions/Outcomes

- Obtain information on a client's prescribed medications (e.g., review formulary, consult pharmacist)

- Use clinical decision making/critical thinking when addressing expected effects/outcomes of medications (e.g., oral, intradermal, subcutaneous, IM, topical)

- Evaluate the client's use of medications over time (e.g., prescription, over-the-counter, home remedies)

- Evaluate client response to medication*

Medication Administration

- Educate client about medications*

- Educate client on medication self-administration procedures

- Prepare and administer medications using rights of medication administration*

- Review pertinent data prior to medication administration (e.g., contraindications, lab results, allergies, potential interactions)*

- Mix medications from two vials when necessary

- Administer and document medications given by common routes (e.g., oral, topical)

*Activity Statements used in the 2017 RN Practice Analysis

- Administer and document medications given by parenteral routes (e.g., intravenous, intramuscular, subcutaneous)

- Participate in medication reconciliation process*

- Titrate dosage of medication based on assessment and ordered parameters*

- Dispose of unused medications according to facility/agency policy

- Handle and maintain medication in a safe and controlled environment*

- Evaluate appropriateness and accuracy of medication order for client*

- Handle and/or administer high-risk medications*

Parenteral/Intravenous Therapies
- Identify appropriate veins that should be accessed for various therapies

- Educate client on the need for intermittent parenteral fluid therapy

- Apply knowledge and concepts of mathematics/nursing procedures/psychomotor skills when caring for a client receiving intravenous and parenteral therapy

- Prepare the client for intravenous catheter insertion

- Monitor the use of an infusion pump (e.g., IV, patient-controlled analgesia device)

- Monitor intravenous infusion and maintain site*

- Evaluate the client's response to intermittent parenteral fluid therapy

Pharmacological Pain Management
- Assess client need for administration of a PRN pain medication (e.g., oral, topical, subcutaneous, IM, IV)

- Administer and document pharmacological pain management appropriate for client age and diagnoses (e.g., pregnancy, children, older adults)

- Administer medications for pain management*

- Handle and/or administer controlled substances within regulatory guidelines*

- Evaluate and document the client's use and response to pain medications

Total Parenteral Nutrition (TPN)
- Identify side effects/adverse events related to TPN and intervene as appropriate (e.g., hyperglycemia, fluid imbalance, infection)

- Educate client on the need for and use of TPN

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client receiving TPN

- Apply knowledge of client pathophysiology and mathematics to TPN interventions

- Administer parenteral nutrition and evaluate client response*

*Activity Statements used in the 2017 RN Practice Analysis

Sample Item
The nurse is caring for a client who has a prescription for lactated Ringer's solution 1,000 mL, IV, to be infused over 24 hours. The nurse has tubing with a drop factor of 12 gtt/mL available. How many gtt/min should the nurse administer to the client? **Record your answer using a whole number.**   Answer: 8 gtt/min

Reduction of Risk Potential

- **Reduction of Risk Potential** – the nurse reduces the likelihood that clients will develop complications or health problems related to existing conditions, treatments or procedures.

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REDUCTION OF RISK POTENTIAL

Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN®
Examination to Practice*

- Assess and respond to changes and/or trends in client vital signs
- Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)
- Monitor the results of diagnostic testing and intervene as needed
- Obtain blood specimens (e.g., venipuncture, venous access device, central line)
- Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine)
- Insert, maintain, or remove a nasal/oral gastrointestinal tube
- Insert, maintain, or remove a urinary catheter
- Insert, maintain, or remove a peripheral intravenous line
- Maintain percutaneous feeding tube
- Apply and/or maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)
- Use precautions to prevent injury and/or complications associated with a procedure or diagnosis
- Evaluate responses to procedures and treatments
- Recognize trends and changes in client condition and intervene as needed
- Perform focused assessments
- Educate client about treatments and procedures
- Provide preoperative or postoperative education
- Provide preoperative care
- Manage client during a procedure with moderate sedation
- Manage client following a procedure with moderate sedation

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

Changes/Abnormalities in Vital Signs

- Assess and respond to changes and/or trends in client vital signs*
- Apply knowledge needed to perform related nursing procedures and psychomotor skills when assessing vital signs
- Apply knowledge of client pathophysiology when measuring vital signs
- Evaluate invasive monitoring data (e.g., pulmonary artery pressure, intracranial pressure)

*Activity Statements used in the 2017 RN Practice Analysis

Diagnostic Tests

- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing diagnostic testing

- Compare client diagnostic findings with pre-test results

- Perform diagnostic testing (e.g., electrocardiogram, oxygen saturation, glucose monitoring)*

- Perform fetal heart monitoring

- Monitor results of maternal and fetal diagnostic tests (e.g., non-stress test, amniocentesis, ultrasound)

- Monitor the results of diagnostic testing and intervene as needed*

Laboratory Values

- Identify laboratory values for ABGs (pH, PO_2, PCO_2, SaO_2, HCO_3), BUN, cholesterol (total), creatinine, glucose, glycosylated hemoglobin (HgbA$_1$C), hematocrit, hemoglobin, INR, platelets, potassium, PT, PTT & APTT, sodium, WBC

- Compare client laboratory values to normal laboratory values

- Educate client about the purpose and procedure of prescribed laboratory tests

- Obtain blood specimens (e.g., venipuncture, venous access device, central line)*

- Obtain specimens other than blood for diagnostic testing (e.g., wound, stool, urine)*

- Monitor client laboratory values (e.g., glucose testing results for the client with diabetes)

- Notify primary health care provider about laboratory test results

Potential for Alterations in Body Systems

- Identify client potential for aspiration (e.g., feeding tube, sedation, swallowing difficulties)

- Identify client potential for skin breakdown (e.g., immobility, nutritional status, incontinence)

- Identify client with increased risk for insufficient vascular perfusion (e.g., immobilized limb, post-surgery, diabetes)

- Educate client on methods to prevent complications associated with activity level/diagnosed illness/disease (e.g., contractures, foot care for client with diabetes mellitus)

- Compare current client data to baseline client data (e.g., symptoms of illness/disease)

- Monitor client output for changes from baseline (e.g., nasogastric tube, emesis, stool, urine)

Potential for Complications of Diagnostic Tests/Treatments/Procedures

- Assess client for an abnormal response following a diagnostic test/procedure (e.g., dysrhythmia following cardiac catheterization)

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client with potential for complications

- Monitor the client for signs of bleeding

- Position the client to prevent complications following tests/treatments/procedures (e.g., elevate head of bed, immobilize extremity)

- Insert, maintain, or remove a nasal/oral gastrointestinal tube*

- Insert, maintain, or remove a urinary catheter*

- Insert, maintain, or remove a peripheral intravenous line*

- Maintain tube patency (e.g., nasogastric tube for decompression, chest tubes)

- Maintain percutaneous feeding tube*

- Apply and/or maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)*

- Use precautions to prevent injury and/or complications associated with a procedure or diagnosis*

- Provide care for client undergoing electroconvulsive therapy (e.g., monitor airway, assess for side effects, teach client about procedure)

- Intervene to manage potential circulatory complications (e.g., hemorrhage, embolus, shock)

- Intervene to prevent aspiration (e.g., check nasogastric tube placement)

- Intervene to prevent potential neurological complications (e.g., foot drop, numbness, tingling)

- Evaluate responses to procedures and treatments*

Potential for Complications from Surgical Procedures and Health Alterations

- Apply knowledge of pathophysiology to monitoring for complications (e.g., recognize signs of thrombocytopenia)

- Evaluate the client's response to postoperative interventions to prevent complications (e.g., prevent aspiration, promote venous return, promote mobility)

System Specific Assessments

- Assess the client for abnormal peripheral pulses after a procedure or treatment

- Assess the client for abnormal neurological status (e.g., level of consciousness, muscle strength, mobility)

- Assess the client for peripheral edema

- Assess the client for signs of hypoglycemia or hyperglycemia

- Identify factors that result in delayed wound healing

- Recognize trends and changes in client condition and intervene as needed*

- Perform a risk assessment (e.g., sensory impairment, potential for falls, level of mobility, skin integrity)

- Perform focused assessments*

*Activity Statements used in the 2017 RN Practice Analysis

Therapeutic Procedures

- Assess client response to recovery from local, regional or general anesthesia

- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing therapeutic procedures

- Educate client about treatments and procedures*

- Educate client about home management of care

- Use precautions to prevent further injury when moving a client with a musculoskeletal condition (e.g., log-rolling, abduction pillow)

- Monitor the client before and after a procedure/surgery (e.g., casted extremity)

- Monitor effective functioning of therapeutic devices (e.g., chest tube, drainage tubes, wound drainage devices, continuous bladder irrigation)

- Provide preoperative or postoperative education*

- Provide preoperative care*

- Manage client during a procedure with moderate sedation*

- Manage client following a procedure with moderate sedation*

Sample Item

The nurse is caring for a client who is scheduled for a lumbar puncture. It would be **most** important for the nurse to assess the client for
 	
    1.   bowel and bladder function.
 	
    2.   presence of Trousseau's sign.
 	
    3.   signs of increased intracranial pressure (ICP). (**key**)
 	
    4.   circulation, movement and sensation of the legs.

Physiological Adaptation

- **Physiological Adaptation** – the nurse manages and provides care for clients with acute, chronic or life threatening physical health conditions.

PHYSIOLOGICAL ADAPTATION
Related Activity Statements from the *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*
- Assist with invasive procedures (e.g., central line, thoracentesis, bronchoscopy)   - Implement and monitor phototherapy   - Maintain optimal temperature of client   - Monitor and care for clients on a ventilator   - Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)   - Perform and manage care of client receiving peritoneal dialysis   - Perform suctioning   - Perform wound care and/or dressing change   - Provide ostomy care and/or education (e.g., tracheal, enteral)   - Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)   - Provide postoperative care   - Manage the care of the client with a fluid and electrolyte imbalance   - Monitor and maintain arterial lines   - Manage the care of a client with a pacing device   - Manage the care of a client on telemetry   - Manage the care of a client receiving hemodialysis or continuous renal replacement therapy   - Manage the care of a client with alteration in hemodynamics, tissue perfusion and/or hemostasis   - Educate client regarding an acute or chronic condition   - Manage the care of a client with impaired ventilation/oxygenation   - Evaluate the effectiveness of the treatment plan for a client with an acute or chronic diagnosis   - Perform emergency care procedures   - Identify pathophysiology related to an acute or chronic condition   - Recognize signs and symptoms of client complications and intervene

*Activity Statements used in the 2017 RN Practice Analysis

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

Alterations in Body Systems

- Assess adaptation of a client to health alteration, illness and/or disease

- Assess tube drainage during the time the client has an alteration in body systems (e.g., amount, color)

- Assess client for signs and symptoms of adverse effects of radiation therapy

- Identify signs of potential prenatal complications

- Identify signs, symptoms and incubation periods of infectious diseases

- Apply knowledge of nursing procedures, pathophysiology and psychomotor skills when caring for a client with an alteration in body systems

- Educate client about managing health problems (e.g., chronic illness)

- Assist with invasive procedures (e.g., central line, thoracentesis, bronchoscopy)*

- Implement and monitor phototherapy*

- Implement interventions to address side/adverse effects of radiation therapy (e.g., dietary modifications, avoid sunlight)

- Maintain optimal temperature of client*

- Monitor and care for clients on a ventilator*

- Monitor wounds for signs and symptoms of infection

- Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction, negative pressure wound therapy)*

- Perform and manage care of client receiving peritoneal dialysis*

- Perform suctioning*

- Perform wound care and/or dressing change*

- Promote client progress toward recovery from an alteration in body systems

- Provide ostomy care and/or education (e.g., tracheal, enteral)*

- Provide care to client who has experienced a seizure

- Provide care to a client with an infectious disease

- Provide pulmonary hygiene (e.g., chest physiotherapy, incentive spirometry)*

- Provide care for client experiencing complications of pregnancy/labor and/or delivery (e.g., eclampsia, precipitous labor, hemorrhage)

- Provide care for client experiencing increased intracranial pressure

- Provide postoperative care*

- Remove sutures or staples

- Evaluate client response to surgery

- Evaluate achievement of client treatment goals

- Evaluate client response to treatment for an infectious disease (e.g., acquired immune deficiency syndrome [AIDS], tuberculosis [TB])

- Evaluate and monitor client response to radiation therapy

Fluid and Electrolyte Imbalances

- Identify signs and symptoms of client fluid and/or electrolyte imbalance

- Apply knowledge of pathophysiology when caring for the client with fluid and electrolyte imbalances

- Manage the care of the client with a fluid and electrolyte imbalance*

- Evaluate the client's response to interventions to correct fluid or electrolyte imbalance

Hemodynamics

- Assess client for decreased cardiac output (e.g., diminished peripheral pulses, hypotension)

- Identify cardiac rhythm strip abnormalities (e.g., sinus bradycardia, premature ventricular contractions, ventricular tachycardia, atrial fibrillation, ventricular fibrillation)

- Apply knowledge of pathophysiology to interventions in response to client abnormal hemodynamics

- Provide client with strategies to manage decreased cardiac output (e.g., frequent rest periods, limit activities)

- Intervene to improve client cardiovascular status (e.g., initiate protocol to manage cardiac arrhythmias, monitor pacemaker functions)

- Monitor and maintain arterial lines*

- Manage the care of a client with a pacing device*

- Manage the care of a client on telemetry*

- Manage the care of a client receiving hemodialysis or continuous renal replacement therapy*

- Manage the care of a client with alteration in hemodynamics, tissue perfusion and/or hemostasis*

Illness Management

- Identify client data that needs to be reported immediately

- Apply knowledge of client pathophysiology to illness management

- Educate client regarding an acute or chronic condition*

- Educate client about managing illness

- Implement interventions to manage the client's recovery from an illness

- Perform gastric lavage

- Promote and provide continuity of care in illness management activities

- Manage the care of a client with impaired ventilation/oxygenation*

- Evaluate the effectiveness of the treatment plan for a client with an acute or chronic diagnosis*

*Activity Statements used in the 2017 RN Practice Analysis

Medical Emergencies

- Apply knowledge of pathophysiology when caring for a client experiencing a medical emergency

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client experiencing a medical emergency

- Explain emergency interventions to a client

- Notify primary health care provider about unexpected client response/emergency situation

- Perform emergency care procedures*

- Provide emergency care for wound disruption (e.g., dehiscence)

- Evaluate and document the client's response to emergency interventions (e.g., restoration of breathing, pulse)

Pathophysiology

- Identify pathophysiology related to an acute or chronic condition*

- Understand general principles of pathophysiology (e.g., injury and repair, immunity, cellular structure)

Unexpected Response to Therapies

- Assess the client for unexpected adverse response to therapy (e.g., increased intracranial pressure, hemorrhage)

- Recognize signs and symptoms of client complications and intervene*

- Promote recovery of the client from unexpected response to therapy (e.g., urinary tract infection)

Sample Item
The nurse is assessing a client with viral meningitis. Which of the following findings would the nurse expect to observe? **Select all that apply.** 1. nausea (**key**) 2. vomiting (**key**) 3. piloerection 4. bradycardia 5. photophobia (**key**)

III. Administration of the NCLEX-RN® Examination

The NCLEX-RN 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-RN 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-RN is a variable length computerized adaptive test and can range from 75 to 265 items. Of these items, 15 are pretest items that are not scored. Regardless of the number of items administered, the time limit for this examination is six 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 applied 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 <NEXT> 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®

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 15 pretest items on every NCLEX-RN. 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-RN®

During the administration of the NCLEX-RN, 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 spots, exhibit, ordered response, audio and graphics. 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-RN 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 at 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 (one answer):

NCLEX-RN Tutorial - Candidate Name
⏱ Time Remaining 05:59:52
1 of 8

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

Next →

Multiple Response:

NCLEX-RN Tutorial - Candidate Name   ⏱ Time Remaining 05:59:15
                                                                            🖥 2 of 8

🖩 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

← Previous │ Next →

Fill-in-the-Blank:

📋 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 ÷. 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:　[3.8]　kilograms

Calculator　　⊠

```
          3.775
```
Texas Instruments TI-108

← Previous | Next →

Hot Spot:

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

← Previous | Next →

Exhibit Item:

NCLEX-RN Tutorial - Candidate Name   ⏱ Time Remaining 05:57:26
                                                                                                              5 of 8

🗒 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

← Previous | Next →

Drag and Drop/Ordered Response Item:

Audio Item:

Graphic Item:

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 to encourage 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 which requires completion), 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.

Example Using the Above Steps

Below is an example of how to write an item using the above steps.

1. Select an area of the test plan for the focus of the item.
      * Pharmacological and Parenteral Therapies

2. Select a subcategory from the chosen area of the test plan.
      * Medication Administration

3. Select an important concept within that subcategory.
      * Educate client about medications

4. Use the selected concept and write the stem.
        * The nurse has taught a client who is receiving prescribed hydrochlorothiazide. Which of the following statements by the client would indicate a correct understanding of the teaching?

5. Write a key to represent important information the entry-level nurse should know.
        * Side effects of medication:
         ~ "I should notify my primary health care provider if I feel fatigued and nauseous."

6. Identify common errors, misconceptions or irrelevant information.
        * Lack of understanding of medication side effects
        * Uncertainty related to client symptoms and adverse effects of medications

7. Use the previous information and write the distractors.
        * "I should check my radial pulse daily before I take the medication."
        * "I will limit my intake of meat and tomatoes while I am taking the medication."
        * "I will take this medication if my weight increases more than 2 lb (0.9 kg) in 24 hours."

8. Complete the item using the stem, key and distractors.
        The nurse has taught a client who is receiving prescribed hydrochlorothiazide. Which of the following statements by the client would indicate a correct understanding of the teaching?
        1.   "I should check my radial pulse daily before I take the medication."
        2.   "I will limit my intake of meat and tomatoes while I am taking the medication."
        3.   "I should notify my primary health care provider if I feel fatigued and nauseous." (**key**)
        4.   "I will take this medication if my weight increases more than 2 lb (0.9 kg) in 24 hours."

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.

Management of Care

The nurse is caring for assigned clients. Write an item with four different client scenarios in which one client should be the priority to assess first.

Safety and Infection Control

The nurse has attended a staff education program about infection control guidelines. Write an item indicating correct understanding of the teaching based on the infection control precautions selected.

Health Promotion and Maintenance

The nurse has taught a female client about expected findings during pregnancy. Write an item that includes normal findings during pregnancy.

Psychosocial Integrity

The nurse in a psychiatric unit is caring for a client experiencing an acute or chronic mental illness. Write an item describing what would indicate that the treatment plan has been effective.

Basic Care and Comfort

The nurse is teaching a client about use of a medical device. Write an item describing information that the nurse should include about use of the selected device.

Pharmacological and Parenteral Therapies

The nurse is preparing to administer a medication via a specified route. Write an item indicating correct actions for administering the medication via the selected route.

The nurse is caring for a client with a prescription for a certain medication. 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 reviewing laboratory results for assigned clients. Write an item that includes four client scenarios where the nurse needs to determine which client results require follow-up.

Physiological Adaptation

The nurse is caring for a group of clients. Write a multiple choice item in which the nurse should recognize the client is having a complication associated with a diagnosis or treatment.

V. References

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (2014). *Standards for Educational and Psychological Testing*. Washington, D.C: AERA

Anderson, L.W., Krathwohl, D.R. (eds). (2001). *A taxonomy for learning, teaching and assessing. A revision of Bloom's taxonomy of educational objectives*. New York: Addison Wesley Longman, Inc.

Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I. Cognitive Domain*. New York: David McKay.

Browning A. & Bugbee A. (2000). *Certification: A National Organization of Competency Assurance Handbook*. Washington D.C.: National Organization of Competency Assurance.

National Council of State Boards of Nursing, Inc. (2012). *NCSBN Model Act*. Chicago: Author.

National Council of State Boards of Nursing, Inc. (2019). *NCSBN NCLEX® Examination Candidate Bulletin*. Chicago: Author.

National Council of State Boards of Nursing, Inc. (2018). *2017 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*. Chicago: Author.

National Council of State Boards of Nursing, Inc. (2018). *Report of Findings from the 2017 RN Nursing Knowledge Survey*. Chicago: Author.

APPENDIX A

Case Scenario Answers/Examples

Management of Care

The nurse has received information about assigned clients. The nurse should **first** assess the client

1. whose respirations decreased to 16 one hour after a paracentesis
2. who has expectorated blood-tinged mucus 6 hours after a bronchoscopy
3. whose left leg is cool to touch 2 hours after a cardiac catheterization via the left femoral artery (**key**)
4. who has shoulder pain rated 5 on a scale of 0 (no pain) to 10 (severe pain) 4 hours after a laparoscopic cholecystectomy

Safety and Infection Control

The nurse has attended a staff education program about infection control guidelines. Which of the following statements by the nurse would indicate a correct understanding of the program?

1. "I will wear a particulate respirator mask (N95) when feeding a client with influenza."
2. "I will wear a surgical mask when checking the pulse of a client with pulmonary tuberculosis (TB)."
3. "I should wear a protective gown when entering the room of a client with meningococcal meningitis."
4. "I should wear clean gloves when bathing a client with atopic dermatitis (eczema) who has draining lesions." (**key**)

Health Promotion and Maintenance

The nurse has taught a female client who is pregnant about expected physiological changes. The nurse should follow-up if the client states that which of the following is a normal finding during pregnancy?

1. constipation
2. painful leg cramps
3. enlargement of moles (**key**)
4. a line of pigmentation on the abdomen

Psychosocial Integrity

The nurse is evaluating the effectiveness of the treatment regimen for a client with bipolar I disorder who is experiencing a manic episode. Which of the following statements by the client would indicate that the client's treatment plan has been effective?

1. "I have my blood levels obtained regularly to monitor medication levels." (**key**)

2. "I enjoy going on shopping sprees for clothing and jewelry with friends."

3. "I avoid eating foods that contain tyramine."

4. "I am too busy to sit down and eat a meal."

Basic Care and Comfort

The home-health nurse is teaching the spouse of a client who has a prescription for anti-embolism stockings. Which of the following information should the nurse include?

1. "Remove the stockings daily to massage the client's legs."

2. "Lay the stockings on a flat surface to dry them after laundering." (**key**)

3. "Rolling down the tops of the stockings will make the client more comfortable."

4. "Applying the stockings while the client is sitting up will make the process easier."

Pharmacological and Parental Therapies

The nurse is preparing to administer prescribed otic drops to a 1-year-old client. Which of the following actions should the nurse take?

1. Gently pull the pinna upward and straight back to straighten the auditory canal.

2. Administer the drops immediately after removing them from the refrigerator to minimize the risk of bacterial growth.

3. Direct the drops along the side of the ear canal to avoid instilling the medication directly onto the eardrum. (**key**)

4. Gently massage the area immediately posterior to the ear after instilling the drops to facilitate distribution of the medication.

The nurse is caring for a client who has a prescription for vancomycin 1g, IV, every 12 hours. The nurse has 1g in 200 mL of 0.9% sodium chloride (normal saline) available. How many mL/hr should the nurse set the infusion pump to administer the medication over 120 minutes? **Record your answer using a whole number.**

Answer: 100 mL/hr

Reduction of Risk Potential

The nurse has been made aware of laboratory test results for assigned clients. Which of the following test results would require follow-up?

1. urinalysis that is negative for protein for the client who has diabetes mellitus (type 2) and is receiving insulin therapy

2. international normalized ratio (INR) of 2.9 for the client who has a deep vein thrombosis (DVT) and is receiving anticoagulation therapy

3. serum potassium level of 4.2 mEq/L (4.2 mmol/L) for the client who is receiving prescribed furosemide

4. sputum specimen that is positive for acid-fast bacillus (AFB) for the client who is receiving prescribed prophylactic isoniazid (**key**)

Physiological Adaptation

The nurse is caring for assigned clients. Which of the following clients may be experiencing a complication that the nurse should recognize?

1. the client with chronic obstructive pulmonary disease (COPD) who is performing pursed-lip breathing while sitting in a chair

2. the client who had an ileostomy created 6 hours ago and has a small amount of blood in the ileostomy drainage bag

3. the client who had a vaginal hysterectomy 2 days ago and has saturated 1 perineal pad in the past 3 hours (**key**)

4. the client with hepatic cirrhosis who has spider angiomas on the nose and cheeks and has clay-colored stools