

**NCLEX-RN®  
DETAILED  
TEST PLAN**

Effective | April 2007



# 2007 NCLEX-RN® Detailed Test Plan

**Candidate Version**

### **Mission Statement**

The National Council of State Boards of Nursing, composed of member boards, provides leadership to advance regulatory excellence for public protection.

### **Purpose and Functions**

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

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

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# National Council of State Boards of Nursing

## *2007 NCLEX-RN® Detailed Test Plan*

### Candidate Version

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National Council of State Boards of Nursing (NCSBN)

Examination Committee

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# Table of Contents

<b>I. Background</b>	<b>1</b>
<b>II. 2007 NCLEX-RN® Test Plan</b>	<b>2</b>
Introduction	2
Beliefs	2
Classification of Cognitive Levels	3
Test Plan Structure	3
■ Client Needs	3
■ Integrated Processes	4
Distribution of Content	4
Overview of Content	5
■ Safe and Effective Care Environment	5
■ Health Promotion and Maintenance	6
■ Psychosocial Integrity	7
■ Physiological Integrity	7
<b>III. 2007 NCLEX-RN® Detailed Test Plan: Categories with Related Activity Statements</b>	<b>9</b>
Safe and Effective Care Environment	9
■ Management of Care	10
■ Safety and Infection Control	15
Health Promotion and Maintenance	18
Psychosocial Integrity	24
Physiological Integrity	29
■ Basic Care and Comfort	29
■ Pharmacological and Parenteral Therapies	33
■ Reduction of Risk Potential	37
■ Physiological Adaptation	40
<b>IV. Administration of the NCLEX-RN® Examination</b>	<b>45</b>
Examination Length	45
The Passing Standard	45
Similar Items	46
Reviewing Answers and Guessing	46
Scoring the NCLEX® Examination	46
■ Computerized Adaptive Testing (CAT)	46
■ Pretest Items	47
■ Additional Constraints	47
■ Passing and Failing	48
■ Scoring Items	48
■ Tutorial	48
■ Types of Items	49
<b>V. References</b>	<b>55</b>



# I. Background

The *Detailed Test Plan for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) Candidate Version* was developed by the National Council of State Boards of Nursing, Inc. (NCSBN®). The purpose of this document is to provide more detailed information about the content areas tested in the NCLEX-RN® examination than is provided in the basic *2007 NCLEX-RN® Test Plan*.

This booklet contains the:

- *2007 NCLEX-RN® Test Plan*
- Information on testing requirements and sample examination questions (items)
- Bibliography

## **About the 2007 NCLEX-RN® Test Plan (Section II)**

The test plan is reviewed and approved by the NCSBN Examination Committee every three years. Multiple resources are used, including the recent practice analysis of registered nurses (RNs), and expert opinions of the Examination Committee, NCSBN content staff and boards of nursing (NCSBN's member boards) to ensure that the test plan is consistent with state nurse practice acts. Following the endorsement of proposed revisions by the Examination Committee, the test plan document is presented for approval to the Delegate Assembly, which is the decision-making body of NCSBN.

## **About the 2007 NCLEX-RN® Detailed Test Plan (Section III)**

The detailed 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. Two versions of the detailed test plan have been created: Item Writer/Item Reviewer/Nurse Educator Version and Candidate Version.

The Candidate Version of the detailed test plan which is provided in this document offers a more thorough and comprehensive listing of content for each client needs category and subcategory outlined in the test plan. Sample content items are provided at the end of each category, which is specific to the client needs category being reviewed in that section. The Item Writer/Item Reviewer/Nurse Educator Version of the detailed test plan provides the same comprehensive listing of content and sample items for each client needs category and subcategory outlined in the test plan. In addition, the Item Writer/Item Reviewer/Nurse Educator Version also provides an item writing tutorial with sample case scenarios to provide nurse educators with hands-on experience in writing NCLEX® style test questions.

For up-to-date information on the NCLEX-RN® examination, visit the NCLEX Examinations section on the NCSBN Web site.

## II. 2007 NCLEX-RN® Test Plan

### Introduction

Entry into the practice of nursing in the U.S. and member board jurisdictions is regulated by the licensing authorities within each jurisdiction. To ensure public protection, each jurisdiction requires candidates for licensure to pass an examination that measures the competencies needed to perform safely and effectively as a newly licensed, entry-level registered nurse (RN). The National Council of State Boards of Nursing, Inc. (NCSBN®) develops a licensure examination, the NCLEX-RN®, which is used by member board jurisdictions to assist in making licensure decisions.

Several steps occur in the development of the *2007 NCLEX-RN® Test Plan*. The first step is to conduct a practice analysis that collects data on the current practice of the entry-level nurse (*Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*, NCSBN, 2006). Six thousand newly licensed RNs are asked about the frequency and priority of performing more than 150 nursing care activities. Nursing care activities are 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 *2007 NCLEX-RN® Test Plan*, which guides the selection of content and behaviors to be tested. The *2007 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. Each NCLEX-RN® examination is based on the test plan. The NCLEX® examination assesses the knowledge, skills and abilities that are essential for the nurse to use 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 *2007 NCLEX-RN® Test Plan*.

### Beliefs

Beliefs about people and nursing underlie the *2007 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. Additionally, people have the right to make decisions regarding their health care needs and to participate in meeting those needs.

Nursing is both an art and a science, founded on a professional body of knowledge that integrates concepts from the liberal arts and the biological, physical, psychological and social sciences. It is a learned profession based on an understanding of the human condition across the life span and the relationships of an individual with others and within the environment. Nursing is a dynamic, continually evolving discipline that employs critical thinking to integrate increasingly complex knowledge, skills, and technologies and client care activities into evidence-based nursing practice. The goal of nursing for client care in any setting is preventing illness; alleviating suffering; protecting, promoting and restoring health; and promoting dignity in dying.

The RN provides a unique, comprehensive assessment of the health status of the client (individual, family or group), and then develops and implements an explicit plan of care. The nurse assists clients in the promotion of health, in coping with health problems, in adapting to and/or recovering from the effects of disease or injury, and in supporting the right to a dignified death. The RN is accountable for abiding by all applicable federal, state and territorial statutes related to nursing practice.

## Classification of Cognitive Levels

The examination consists of items that use Bloom's taxonomy for the cognitive domain as a basis for writing and coding items (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 nursing actions and competencies, and focuses on clients in all settings.

### Client Needs

The content of the *2007 NCLEX-RN® Test Plan* is organized into four major client needs categories. Two of the four categories are further divided as follows:

#### **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 problem-solving 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 validated in written and/or electronic records that reflect standards of practice and accountability in the provision of care.
- **Teaching/Learning** – facilitation of the acquisition of knowledge, skills and attitudes promoting a change in behavior.

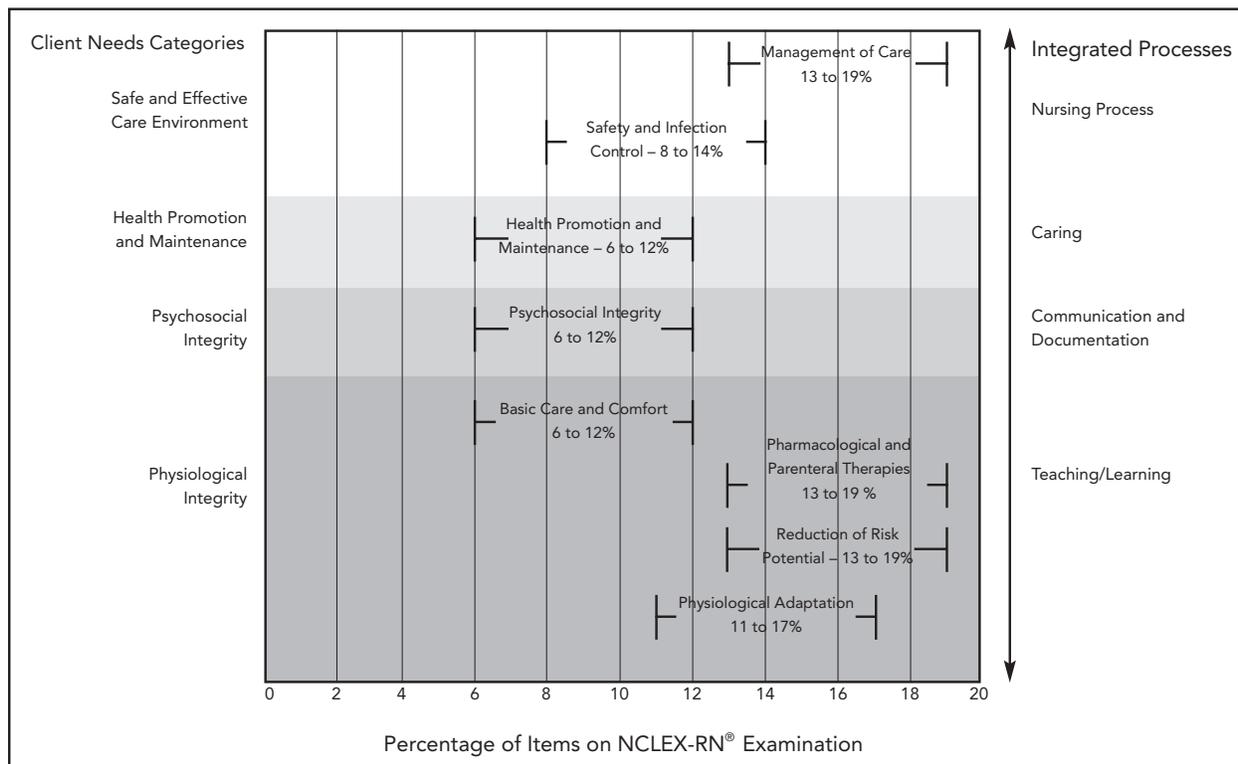
## Distribution of Content

The percentage of test questions assigned to each client needs category and subcategory of the 2007 NCLEX-RN® Test Plan is based on the results of the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2006), and expert judgment provided by members of the NCSBN Examination Committee.

Client Needs	Percentage of Items from Each Category/Subcategory
<b>Safe and Effective Care Environment</b>	
■ Management of Care	13-19%
■ Safety and Infection Control	8-14%
<b>Health Promotion and Maintenance</b>	6-12%
<b>Psychosocial Integrity</b>	6-12%
<b>Physiological Integrity</b>	
■ Basic Care and Comfort	6-12%
■ Pharmacological and Parenteral Therapies	13-19%
■ Reduction of Risk Potential	13-19%
■ Physiological Adaptation	11-17%

The following processes are integrated into all client needs categories and subcategories of the Test Plan: Nursing Process, Caring, Communication and Documentation, and Teaching and Learning.

### Distribution of Content for the NCLEX-RN® Test Plan



## Overview of Content

All content categories and subcategories reflect client needs across the life span in a variety of 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, family/significant others and other health care personnel.

- **Management of Care** – providing and directing nursing care that enhances the care delivery setting to protect clients, family/significant others and health care personnel.

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

- Advance Directives
  - Advocacy
  - Case Management
  - Client Rights
  - Collaboration with Interdisciplinary Team
  - Concepts of Management
  - Confidentiality/Information Security
  - Consultation
  - Continuity of Care
  - Delegation
  - Establishing Priorities
  - Ethical Practice
  - Informed Consent
  - Information Technology
  - Legal Rights and Responsibilities
  - Performance Improvement (Quality Improvement)
  - Referrals
  - Resource Management
  - Staff Education
  - Supervision
- **Safety and Infection Control** – protecting clients, family/significant others and health care personnel from health and environmental hazards.

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

- Accident Prevention
- Disaster Planning
- Emergency Response Plan
- Ergonomic Principles
- Error Prevention
- Handling Hazardous and Infectious Materials
- Home Safety
- Injury Prevention
- Medical and Surgical Asepsis
- Reporting of Incident/Event/Irregular Occurrence/Variance
- Safe Use of Equipment
- Security Plan
- Standard/Transmission-Based/Other Precautions
- Use of Restraints/Safety Devices

## Health Promotion and Maintenance

The nurse provides and directs nursing care of the client and family/significant others that incorporates the knowledge of expected growth and development principles, prevention and/or early detection of health problems, and strategies to achieve optimal health.

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

- Aging Process
- Ante/Intra/Postpartum and Newborn Care
- Developmental Stages and Transitions
- Disease Prevention
- Expected Body Image Changes
- Family Planning
- Family Systems
- Growth and Development
- Health and Wellness
- Health Promotion Programs
- Health Screening
- High-Risk Behaviors
- Human Sexuality
- Immunizations
- Lifestyle Choices
- Principles of Teaching/Learning
- Self-Care
- Techniques of Physical Assessment

## Psychosocial Integrity

The nurse provides and directs nursing care that promotes and supports the emotional, mental and social well-being of the client and family/significant others experiencing stressful events, as well as clients with acute or chronic mental illness.

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

- Abuse/Neglect
- Behavioral Interventions
- Chemical and Other Dependencies
- Coping Mechanisms
- Crisis Intervention
- Cultural Diversity
- End-of-Life Care
- Family Dynamics
- Grief and Loss
- Mental Health Concepts
- Psychopathology
- Religious and Spiritual Influences on Health
- Sensory/Perceptual Alterations
- Situational Role Changes
- Stress Management
- Support Systems
- Therapeutic Communications
- Therapeutic Environment
- Unexpected Body Image Changes

## 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** – providing comfort and assistance in the performance of activities of daily living.

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

- Assistive Devices
- Complementary and Alternative Therapies
- Elimination
- Mobility/Immobility
- Non-Pharmacological Comfort Interventions
- Nutrition and Oral Hydration
- Palliative/Comfort Care
- Personal Hygiene
- Rest and Sleep

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

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

- Adverse Effects/Contraindications and Side Effects
- Blood and Blood Products
- Central Venous Access Devices
- Dosage Calculation
- Expected Effects/Outcomes
- Medication Administration
- Parenteral/Intravenous Therapies
- Pharmacological Agents/Actions
- Pharmacological Interactions
- Pharmacological Pain Management
- Total Parenteral Nutrition

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

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

- Diagnostic Tests
  - Laboratory Values
  - Monitoring Conscious Sedation
  - Potential for Alterations in Body Systems
  - Potential for Complications of Diagnostic Tests/Treatments/Procedures
  - Potential for Complications from Surgical Procedures and Health Alterations
  - System Specific Assessments
  - Therapeutic Procedures
  - Vital Signs
- **Physiological Adaptation** – managing and providing care for clients with acute, chronic or life-threatening physical health conditions.

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

- Alterations in Body Systems
- Fluid and Electrolyte Imbalances
- Hemodynamics
- Illness Management
- Infectious Diseases
- Medical Emergencies
- Pathophysiology
- Radiation Therapy
- Unexpected Response to Therapies

### III. 2007 NCLEX-RN® Detailed Test Plan

The *2007 NCLEX-RN® Test Plan* in the previous section provides a general outline of the categories and sub-categories of the examination. The *2007 NCLEX-RN® Detailed Test Plan Candidate Version* is used to guide the direction of examination content to be followed by NCLEX candidates preparing to take the examination.

The activity statements used in the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice* (NCSBN, 2006) preface each of the eight content categories and are identified throughout the detailed 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 examination as a reliable, valid measure of competent, entry-level nursing practice. The practice analysis is conducted at least every three years.

All task statements in the *2007 NCLEX-RN® Detailed Test Plan* require the nurse to apply the fundamental principles of clinical decision making and critical thinking to nursing practice. The detailed test plan also makes the assumption that the nurse integrates concepts from the following bodies' of knowledge:

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

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

- Nursing process
- Caring
- Communication and documentation
- Teaching and learning

*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 Report of Findings from the 2005 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 the document.*

#### **Safe and Effective Care Environment**

##### **Includes Subcategories of Management of Care and Safety & Infection Control**

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

### MANAGEMENT OF CARE

#### Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Assess/triage client(s) to prioritize the order of care delivery
- Perform procedures necessary for admitting, transferring or discharging a client
- Educate client and family about client's rights and responsibilities
- Participate in performance improvement/quality assurance process (formally collect data or participate on a team)
- Make appropriate referrals to community resources
- Provide and receive report on assigned clients
- Collaborate with healthcare members in other disciplines when providing client care
- Supervise care provided by others (e.g., LPN/VN, assistive personnel, other RNs)
- Initiate and update plan of care, care map, clinical pathway used to guide and evaluate client care
- Receive and/or transcribe primary healthcare provider orders
- Maintain continuity of care between/among healthcare agencies
- Provide client or family with information about advance directives
- Maintain client confidentiality/privacy
- Report unsafe practice of healthcare personnel to internal/external entities (e.g., emotional or physical impairment, substance abuse, improper care)
- Recognize tasks/assignments you are not prepared to perform and seek assistance
- Ensure that client has given informed consent for treatment
- Act as a client advocate
- Comply with state and/or federal regulations for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)
- Serve as a resource person to other staff
- Participate in educating staff (e.g., in-service, orientation)
- Apply principles of conflict resolution as needed when working with healthcare staff
- Plan safe, cost-effective care for the client
- Use information technology (e.g., computer, video, books) to enhance the care provided to a client
- Integrate advance directives into client's plan of care

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

### **Advance Directives**

- Assess client/family/significant others/staff member knowledge of advance directives (e.g., living will, health care proxy, Durable Power of Attorney for Health Care [DPAHC])
- Integrate advance directives into client plan of care\*
- Provide client or family with information about advance directives\*
- Evaluate client status regarding advance directives

### **Advocacy**

- Discuss identified treatment options with client/family/significant others and respect their decisions
- Provide adequate information on advocacy to staff members
- Act as a client advocate\*
- Utilize interpreter or translator appropriately for non-English speaking clients

### **Case Management**

- Explore resources available to assist client with achieving or maintaining independence.
- Plan individualized care for client based on need (e.g., client diagnosis, self-care ability, prescribed treatments)
- Provide client/family/significant others with information on discharge procedures to home, hospice or community setting
- Initiate and update plan of care, care map or clinical pathway used to guide and evaluate client care\*
- Use research literature and resources as needed for case management
- Evaluate and revise client plan of care as needed (e.g., change in client status)

### **Client Rights**

- Recognize client right to refuse treatment/procedures
- Discuss treatment options/decisions with client/family/significant others
- Educate client and family about client rights and responsibilities\*
- Evaluate client/staff understanding of client rights

### **Collaboration with Interdisciplinary Team**

- Identify 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 healthcare members in other disciplines when providing client care\*

**Concepts of Management**

- Identify roles/responsibilities of health care team members
- Act as liaison between client and others (e.g., coordinate care, manage care)
- Review management outcomes
- Apply principles of conflict resolution as needed when working with healthcare staff\*
- Plan overall strategies to address client problems
- Supervise care provided by others (e.g., LPN/VN, assistive personnel, other RNs)\*
- Serve as resource person to other staff\*

**Confidentiality/Information Security**

- Assess staff member and client/family/significant other understanding of confidentiality requirements (e.g., HIPAA)
- Maintain client confidentiality/privacy\*
- Intervene as appropriate when confidentiality has been breached by staff members

**Consultation**

- Assess need for consultation with other health care providers
- Initiate consultations (e.g., another care provider, social services)
- Identify expected outcomes of consultation and need for revising care should client needs change
- Use clinical decision making/critical thinking in consultation situations

**Continuity of Care**

- Perform procedures necessary for admitting, transferring or discharging a client\*
- Maintain continuity of care between/among healthcare agencies\*
- Follow up on unresolved issues regarding client care (e.g., laboratory results, client requests)
- Provide and receive report on assigned clients\*
- Use documents to record and communicate client information (e.g., medical record, referral/transfer form)

**Delegation**

- Utilize five "rights" of delegation (right task, right circumstances, right person, right direction or communication, right supervision or feedback)
- Assess need for delegation based on client needs
- Ensure appropriate education, skills and experience of personnel performing delegated task
- Communicate task to be completed and client concerns to be reported immediately
- Evaluate delegated tasks to ensure correct completion of activity

**Establishing Priorities**

- Assess/triage client(s) to prioritize the order of care delivery\*
- Apply knowledge of pathophysiology when establishing priorities for interventions with multiple clients
- Evaluate plan of care for multiple clients and revise plan of care as needed

**Ethical Practice**

- Identify ethical issues affecting staff or client/family/significant others
- Inform client/family/significant others/staff members of ethical issues affecting client care
- Intervene to promote ethical practice
- Review outcomes of interventions to promote ethical practice

**Informed Consent**

- Identify appropriate person to provide informed consent for client (e.g., client, parent, legal guardian)
- Provide written materials in client spoken language when possible
- Review facility policy and state mandates prior to agreeing to serve as an interpreter for staff or health care team members
- Describe components of informed consent (e.g., purpose of procedure, risks of procedure)
- Participate in obtaining informed consent
- Ensure that client has given informed consent for treatment\*

**Information Technology**

- Use information technology (e.g., computer, video, books) to enhance the care provided to a client\*
- Apply knowledge of facility regulations when accessing client records
- Access data for client/family/staff through online databases and journals
- Enter computer documentation accurately, completely and in a timely manner
- Receive and/or transcribe primary healthcare provider orders\*

**Legal Rights and Responsibilities**

- Identify legal issues affecting client/family/significant others (e.g., refusing treatment)
- Recognize tasks/assignments you are not prepared to perform and seek assistance\*
- Identify and manage client valuables according to facility/agency policy
- Educate client/family/staff on legal and ethical issues
- Comply with state and/or federal regulations for reporting client conditions (e.g., abuse/neglect, communicable disease, gun shot wound, dog bite)\*
- Report unsafe practice of healthcare personnel to internal/external entities (e.g., emotional or physical impairment, substance abuse, improper care)\*
- Intervene appropriately when unsafe practice by staff member has been observed

**Performance Improvement (Quality Improvement)**

- Define performance improvement/assurance activities
- Report identified client care issues/problems to appropriate personnel (e.g., nurse manager, risk manager)
- Participate in performance improvement/quality assurance process (e.g., formally collect data or participate on a team)\*
- Utilize research and other references for performance improvement actions
- Evaluate the impact of performance improvement measures on client care and resource utilization

\*Activity Statements used in the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*.

**Referrals**

- Assess the need to refer clients for assistance with actual or potential problems (e.g., physical therapy, speech therapy)
- Identify community resources for client/family/significant others (e.g., respite care, social services, shelters)
- Know which documents to include when referring a client (e.g., medical record, referral form)
- Make appropriate referrals to community resources\*

**Resource Management**

- Assess client need for materials and equipment (e.g., oxygen, suction machine, wound care supplies)
- Plan safe, cost-effective care for the client\*
- Evaluate use of cost effective measures implemented by staff members

**Staff Education**

- Assess purpose of staff education activities
- Participate in educating staff (e.g., in-service, orientation)\*
- Evaluate staff education activities and whether identified outcomes have been met

**Supervision**

- Select and use strategies for interventions with staff members as necessary
- Report staff member performance
- Evaluate ability of staff members to perform assigned tasks for the position (e.g., job description, scope of practice, training, experience)
- Evaluate effectiveness of staff member's time management skills

**Sample Item**

The nurse is planning a staff development conference about advance directives. Which of the following information should the nurse include?

1. A client can change treatment decisions on an advance directive if the client's health care proxy agrees with the decision.
2. Health care facilities are required to provide educational material advising clients of the right to declare personal wishes regarding treatment decisions. **(Key)**
3. A client is required to name a Durable Power of Attorney for Health Care (DPAHC) upon admission to a health care facility.
4. Health care facilities are required to have a lawyer present when a client and the client's family member are signing a living will.

**(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, family/significant others and health care personnel from health and environmental hazards.

### SAFETY AND INFECTION CONTROL

#### Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Verify appropriateness and/or accuracy of a treatment order
- Report error/event/occurrence per protocol (e.g., medication error, client fall)
- Implement emergency response plans (e.g., internal/external disaster, fire, emergency plan)
- Participate in maintaining institution security plan (e.g., newborn nursery security, bomb threats)
- Ensure proper identification of client when providing care
- Ensure appropriate and safe use of equipment in performing client care procedures and treatments
- Teach client/family about the safe use of equipment needed for healthcare
- Educate client/family on home safety issues
- Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)
- Follow procedures for handling biohazardous materials
- Comply with federal/state/institutional policy regarding the use of client restraints and/or safety devices
- Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment)
- Educate client/family/staff on infection control measures
- Identify client allergy and intervene as needed (e.g., food, latex and other environmental allergies)
- Use ergonomic principles when providing care (e.g., assistive devices, proper lifting)

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

### **Accident Prevention**

- Determine client/family/significant other/staff member knowledge of safety procedures
- Identify factors that influence accident prevention (e.g., age, developmental stage, lifestyle)
- Identify deficits (e.g., visual, hearing, sensory/perceptual) that may impede client safety
- Identify and facilitate correct use of infant and child car seats

### **Disaster Planning**

- Identify nursing roles in disaster planning
- Determine which client(s) to recommend for discharge in a disaster situation
- Participate in disaster planning activities

### **Emergency Response Plan**

- Implement emergency response plans (e.g., internal/external disaster, fire, emergency plan)\*
- Use clinical decision making/critical thinking for emergency response plan

### **Ergonomic Principles**

- Use ergonomic principles when providing care (e.g., assistive devices, proper lifting)\*
- Assess client ability to balance, transfer and use assistive devices (e.g., crutches, walker) prior to planning care
- Provide instruction and information to client about body positions that eliminate opportunity for repetitive stress injuries
- 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)

### **Error Prevention**

- Ensure proper identification of client when providing care\*
- Identify client allergy and intervene as needed (e.g., food, latex and other environmental allergies)\*
- Verify appropriateness and/or accuracy of a treatment order\*
- Prevent treatment errors by using critical thinking and following facility/agency policies

### **Handling Hazardous and Infectious Materials**

- Identify biohazardous, flammable and infectious materials
- Control the spread of infectious agents
- Follow procedures for handling biohazardous materials\*
- Demonstrate safe handling techniques to staff and client/family/significant others

### **Home Safety**

- Involve client/family/significant others when recommending modifications (e.g., lighting, handrails, kitchen safety)
- Educate client/family on home safety issues\*
- Apply knowledge of client pathophysiology to home safety interventions

- Encourage the client to use protective equipment when using devices that can cause injury (e.g., home disposal of syringes)
- Evaluate client care environment for fire/environmental hazards

### **Injury Prevention**

- Protect client from injury (e.g., falls, electrical hazards, malfunctioning equipment)\*
- Provide client with appropriate method to signal staff members
- Question prescriptions for treatments that may contribute to an accident or injury (does not include medication)
- Implement seizure precautions for at-risk clients
- Evaluate what factors related to mental status may contribute to the client potential for accident or injury (e.g., confusion, altered thought processes, diagnosis)
- Make appropriate room assignment for cognitively impaired client

### **Medical and Surgical Asepsis**

- Assess client care area for sources of infection
- Set up a sterile field
- Use correct techniques to apply and remove mask, gloves, gown and protective eye wear
- Use appropriate supplies to maintain asepsis (e.g., gloves, mask, sterile supplies)
- Evaluate whether aseptic technique is performed correctly

### **Reporting of Incident/Event/Irregular Occurrence/Variance**

- Identify need/situation where reporting of incident/event/irregular occurrence/variance is appropriate
- Report error/event/occurrence per protocol (e.g., medication error, client fall)\*
- Evaluate response to error/event/occurrence

### **Safe Use of Equipment**

- Ensure appropriate and safe use of equipment in performing client care procedures and treatments\*
- Inspect equipment for safety hazards (e.g., frayed electrical cords, loose/missing parts)
- Teach client and families about the safe use of equipment needed for healthcare\*
- Remove malfunctioning equipment from client care area and report the problem to appropriate personnel

### **Security Plan**

- Apply principles of triage and evacuation procedures/protocols
- Participate in maintaining institution's security plan (e.g., newborn nursery security, bomb threats)\*
- Use clinical decision making/critical thinking in situations related to security planning

### **Standard/Transmission-Based/Other Precautions**

- Apply knowledge of the client pathophysiology to interventions related to standard/transmission-based/other precautions

- Apply principles of infection control (e.g., hand hygiene, room assignment, isolation, aseptic/sterile technique, universal/standard precautions)\*
- Understand communicable diseases and the modes of organism transmission (e.g., airborne, droplet, contact)
- Follow correct policy and procedures when reporting a client with a communicable disease
- Educate client/family/staff on infection control measures\*
- Utilize appropriate precautions for immunocompromised clients
- Evaluate infection control precautions implemented by staff members

#### **Use of Restraints/Safety Devices**

- Comply with federal/state/institutional policy regarding the use of client restraints and/or safety devices\*
- Apply and maintain prescribed restraints/bed alarms/safety devices according to facility/agency policy
- Monitor client response to restraints
- Evaluate appropriateness of the type of restraint used

#### **Sample Item**

The nurse is teaching a client with neutropenia about infection control procedures. Which of the following statements by the client would indicate a correct understanding of the teaching?

1. "I should avoid family members with colds." **(Key)**
2. "I may continue to work in my flower garden."
3. "I may have to return to the clinic in three days to have my hemoglobin (Hgb) checked."
4. "I can continue to volunteer at my community's child care center."

## **Health Promotion and Maintenance**

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

**HEALTH PROMOTION AND MAINTENANCE****Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice***

- Assess readiness to learn, learning preferences and barriers to learning
- Perform comprehensive health assessment (e.g., physical, psychosocial and health history)
- Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)
- Provide pre-natal care
- Provide newborn care
- Provide education on age specific growth and development to clients and family
- Provide information for prevention of high risk health behaviors (e.g., smoking cessation, safe sexual practice)
- Provide peri-natal education
- Provide information about health maintenance recommendations (e.g., physician visits, immunizations, screening exams)
- Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education, drug education, sexually transmitted diseases)
- Provide intrapartum care (e.g., care provided during labor and birth)
- Provide post-partum care
- Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity and psychosocial/behavior/physical development
- Assist client/family to cope with life transitions
- Provide care that meets the special needs of the preschool client ages 1 month to 4 years
- Provide care that meets the special needs of the school age client ages 5 to 12 years
- Provide care that meets the special needs of the adolescent client ages 13 to 18 years of age
- Provide care that meets the special needs of the adult client ages 19 to 64 years
- Provide care that meets the special needs of the older adult client ages 65 to 85 years
- Provide care that meets the special needs of the older adult, over 85 years
- Assess and intervene in client's performance of instrumental activities of daily living (e.g., using telephone, shopping, preparing meals)

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

### **Aging Process**

- Assess client/family/significant others' reactions to expected age-related changes
- Provide care that meets the special needs of the preschool client ages 1 month to 4 years\*
- Provide care that meets the special needs of the school age client ages 5 to 12 years\*
- Provide care that meets the special needs of the adolescent client ages 13 to 18 years\*
- Provide care that meets the special needs of the adult client ages 19 to 64 years\*
- Provide care that meets the special needs of the older adult client ages 65 to 85 years\*
- Provide care that meets the special needs of the older adult, over 85 years\*

### **Ante/Intra/Postpartum and Newborn Care**

- Assess client/family/significant others' psychosocial response to pregnancy (e.g., support systems, perception of pregnancy, coping mechanisms)
- Assess client for symptoms of postpartum complications (e.g., hemorrhage, infection)
- Calculate expected delivery date
- Provide pre-natal care\*
- Monitor client in labor
- Check fetal heart rate during routine prenatal exams
- Recognize cultural differences in childbearing and childrearing practices (e.g., desire for female caregiver, toilet training methods)
- Provide peri-natal education\*
- Assist client with performing/learning newborn care (e.g., feeding)
- Provide intrapartum care (e.g., care provided during labor and birth)\*
- Provide post-partum care\*
- Provide newborn care\*
- Provide discharge instructions (e.g., postpartum and newborn care)
- Evaluate client/family/significant others' ability to care for the newborn

### **Developmental Stages and Transitions**

- Assess developmental stage of client
- Identify expected physical, cognitive, psychosocial and moral stages of development
- Assist the client to achieve an appropriate outcome (e.g., attachment to newborn, parenting, puberty, retirement)
- Modify approaches to care in accordance with client developmental stage
- Inform client/family/significant others/staff members about expected age-related changes (e.g., developmental stages)
- Provide education on age specific growth and development to clients and family\*
- Evaluate client/family/significant others' achievement of expected developmental level (e.g., developmental milestones)

**Disease Prevention**

- Identify risk factors for disease/illness (e.g., age, gender, ethnicity, lifestyle)
- Inform client/family/significant others of actions to maintain health and prevent disease (e.g., smoking cessation, diet, weight loss)
- Assist client in maintaining an optimum level of health
- Evaluate incorporation of healthy behaviors into lifestyle by the client/family/significant others (e.g., screening exams, immunizations, limiting risk taking behaviors)

**Expected Body Image Changes**

- Assess occurrence of expected body image changes
- Identify expected body image changes associated with client developmental age
- Evaluate client acceptance of expected body image change (e.g., aging, pregnancy)
- Evaluate impact of expected body image changes on client and family (e.g., temperament)

**Family Planning**

- Assess client need/desire for contraception
- Consider client preference for a contraceptive method
- Identify contraindications to chosen contraceptive method (e.g., smoking, compliance, medical conditions)
- Recognize expected outcomes for family planning methods
- Support client/family/significant others in family planning

**Family Systems**

- 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
- Identify family structures and roles of family members (e.g., nuclear, blended, adoptive)
- Assist client/family to cope with life transitions\*

**Growth and Development**

- Compare client psychosocial/behavioral/physical development to norm for age/developmental stage of client
- Identify and report deviations from expected growth and development
- Assist client/family to identify/participate in activities fitting his/her age, preference, physical capacity and psychosocial/behavior/physical development\*
- Use age-appropriate explanations of procedures and treatments
- Provide information about health maintenance recommendations (e.g., physician visits, immunizations, screening exams)\*

**Health and Wellness**

- Assess client perception of health status
- Identify client health-oriented behaviors
- Apply knowledge of nutrition to assessing client weight

- Encourage client participation in appropriate behavior modification programs related to health and wellness (e.g., smoking cessation, stress management)
- Integrate complementary therapies into health promotion activities for the well client
- Evaluate client/family/significant other understanding of health promotion behaviors/activities (e.g., weight control, exercise actions)

### **Health Promotion Programs**

- Plan and/or participate in the education of individuals in the community (e.g., health fairs, school education, drug education, sexually transmitted disease)\*
- Instruct client on ways to promote health (e.g., breast/testicular self-exams)
- Provide follow-up to the client following participation in health promotion program (e.g., diet counseling)

### **Health Screening**

- Apply knowledge of pathophysiology to health screening
- Consider risk factors linked to ethnicity (e.g., hypertension, diabetes)
- Utilize appropriate procedure and interviewing techniques when taking client health history
- Perform targeted screening examination (e.g., scoliosis, vision and hearing assessments)\*
- Perform health history/health and risk assessments (e.g., lifestyle, family and genetic history)

### **High Risk Behaviors**

- Assess client/family/significant other lifestyle practice risks that may impact health (e.g., excessive sun exposure, lack of regular exercise)
- Assist client/family/significant others to identify behaviors/risks that may impact health (e.g., fatigue, calcium deficiency)
- Teach client about actions to maintain health and prevent spread of disease related to high risk behaviors (e.g., STD, needle sharing)
- Provide information for prevention of high risk health behaviors (e.g., smoking cessation, safe sexual practices)\*

### **Human Sexuality**

- Assess client/family/significant other attitudes/perceptions on sexuality
- Recognize client need to discuss sensitive issues related to sexuality
- Respect client sexual identity and personal choices/lifestyle (e.g., sexual orientation)
- Counsel client/family/significant others on sexuality issues (e.g., family planning, safe sexual practices, menopause, impotence)

### **Immunizations**

- Assess client/family/significant other knowledge of immunization schedules (does not include procedures/equipment used for immunization administration)
- Inform client/family/significant others of appropriate immunization schedules
- Identify precautions and contraindications to immunizations
- Recognize and treat side effects/allergic reactions/adverse reactions to immunizations

**Lifestyle Choices**

- Assess client lifestyle choices (e.g., child-free, home schooling, rural or urban living, recycling)
- Recognize client who is socially or environmentally isolated
- Respect client personal lifestyle choices
- Evaluate client/family/significant others alternative or homeopathic health care practices (e.g., massage therapy, acupuncture, herbal medicine and minerals)

**Principles of Teaching/Learning (including the foundation and organization for the education of client/family/significant others)**

- Assess readiness to learn, learning preferences and barriers to learning\*
- Consider age and developmental stage when teaching client
- Provide information on teaching/learning to client/family/significant others
- Select appropriate teaching principles (e.g., lecture, written materials)
- Evaluate client understanding of the information provided

**Self Care**

- Assess and intervene in client performance of instrumental activities of daily living (e.g., using telephone, shopping, preparing meals)\*
- Consider client self care needs before developing or revising care plan
- Assist primary caregivers working with 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 client (e.g., age of client, measurement of vital signs)
- Perform comprehensive health assessment (e.g., physical, psychosocial and health history)\*

**Sample Item**

The nurse is assessing a 2-year-old client. Which of the following would be an expected age related finding? **Select all that apply.**

1. Runs with a wide stance **(Key)**
2. Turns pages of a book one at a time **(Key)**
3. Holds pencil with fingers
4. Has a vocabulary of 300 words **(Key)**
5. Gives first and last name

## 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 and family/significant others experiencing stressful events, as well as clients with acute or chronic mental illness.

### PSYCHOSOCIAL INTEGRITY

#### Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Assess family dynamics (e.g., structure, bonding, communication, boundaries, coping mechanisms)
- Assess client risk for abuse/neglect
- Assess the need for, initiate, and maintain suicide precautions
- Assess client for drug/alcohol related dependencies, withdrawal, or toxicities
- Provide client and family with information about acute and chronic mental illness
- Participate in group sessions (e.g., support groups)
- Provide support to client and/or family in coping with life changes (e.g., loss, new diagnosis, role change, stress)
- Provide a therapeutic environment for clients with emotional/behavioral issues
- Assess and plan interventions that meet the client emotional and spiritual needs
- Incorporate client cultural practice and beliefs when planning and providing care
- Provide care and/or support for a client with non-substance related dependencies (e.g., gambling, sexual addiction, pornography)
- Assess psychosocial, spiritual, cultural and occupational factors affecting care
- Provide end of life care to clients and families
- Use therapeutic communication techniques to provide support to client and/or family
- Lead group therapy sessions
- Incorporate behavioral management techniques when caring for a client (e.g., positive reinforcement, setting limits)

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

### **Abuse/Neglect**

- Assess client risk for abuse/neglect\*
- Identify risk factors for domestic, child and/or elder abuse/neglect and sexual abuse
- Counsel victims/suspected victims of abuse and their families on coping strategies
- Plan interventions for victims/suspected victims of abuse
- Provide safe environment for abused/neglected client
- Evaluate client/family/significant others' response to interventions

### **Behavioral Interventions**

- Assess client appearance, mood and psychomotor behavior and identify/respond to inappropriate/abnormal behavior
- Assist client with achieving and maintaining self-control of behavior (e.g., contract, behavior modification)
- Assist client to develop and use strategies to decrease anxiety
- Orient client to reality
- Participate in group sessions (e.g., support groups)\*
- Lead group therapy sessions\*
- Incorporate behavioral management techniques when caring for a client (e.g., positive reinforcement, setting limits)\*
- Evaluate client/family/significant others response to treatment plan

### **Chemical and Other Dependencies**

- Assess client/family/significant others reactions to the diagnosis/treatment of substance-related disorder
- Assess client for drug/alcohol related dependencies, withdrawal, or toxicities\*
- Plan and provide care to client experiencing substance-related withdrawal or toxicity (e.g., nicotine, opioid, sedative)
- Provide information on substance abuse diagnosis and treatment plan to client/family/significant others
- Provide care and/or support for a client with non-substance related dependencies (e.g., gambling, sexual addiction, pornography)\*
- Encourage client/family/significant others to participate in support groups (e.g., Alcoholics Anonymous, Narcotics Anonymous)
- Provide symptom management for clients experiencing withdrawal or toxicity
- Evaluate client/family/significant others response to treatment plan and revise as needed

### **Coping Mechanisms**

- Assess client/family/significant others support systems and available resources
- Assess client response to illness (e.g., rationalization, hopefulness, anger)
- Assess the emotional reaction of family to client illness (e.g., chronic disorder, terminal illness)
- Assist client to learn strategies to deal with stress/tension (e.g., accept dependency upon others)
- Evaluate constructive use of defense mechanisms by client/family/significant others

\*Activity Statements used in the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*.

**Crisis Intervention**

- Assess the need for, initiate and maintain suicide precautions\*
- Identify client/family/significant others in crisis
- Apply knowledge of client psychopathology to crisis intervention
- Assist client to understand why the crisis occurred
- Guide client/family/significant others to resources for recovery from crisis (e.g., social supports)
- Use crisis intervention techniques to assist client in coping

**Cultural Diversity**

- Assess importance of client culture/ethnicity when planning/providing/evaluating care
- Incorporate client cultural practice and beliefs when planning and providing care\*
- Respect cultural background/practices of the client (does not include dietary preferences)
- Recognize cultural issues that may impact client/family/significant others understanding/acceptance of psychiatric diagnosis
- Identify clients who do not understand English
- Document how client language needs were met
- Use appropriate interpreters to assist in achieving client/family/significant others' understanding

**End of Life Care**

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

**Family Dynamics**

- Assess barriers/stressors that impact family functioning (e.g., meeting client care needs, divorce)
- Assess family dynamics (e.g., structure, bonding, communication, boundaries, coping mechanisms)\*
- Assess parental techniques related to discipline
- Encourage client/family/significant others' participation in group/family therapy
- Assist client/family/significant others to integrate new members into family structure (e.g., new infant, blended family)
- Assist the family in crisis and under stress to adapt and change
- Evaluate resources available to assist family functioning

**Grief and Loss**

- Assist client/family/significant others in coping with suffering, grief, loss, dying and bereavement
- Support the client/family/significant others in anticipatory grieving
- Inform client/family/significant others of expected reactions to grief and loss (e.g., denial, fear)
- Provide client/family/significant others with resources to adjust to loss/bereavement (e.g., individual counseling, support groups)
- Evaluate client/family significant others coping and fears related to grief and loss

**Mental Health Concepts**

- Apply knowledge of client psychopathology to mental health concepts applied in individual/group/family therapy
- Explore why client is refusing/not following treatment plan (e.g., nonadherence)
- Evaluate client abnormal response to the aging process (e.g., depression)
- Recognize client use of defense mechanisms
- Understand symptoms of relapse

**Psychopathology**

- Assess client for alterations in mood, judgment, cognition and reasoning as evidence of psychopathology
- Assess client/family/significant others reaction to diagnosis of acute or chronic mental illness
- Recognize signs and symptoms of acute and chronic mental illness (e.g., schizophrenia, depression, bipolar disorder)
- Identify signs and symptoms of impaired cognition (e.g., memory loss, poor hygiene)
- Assist family to plan care for client with impaired cognition (e.g., dementia, Alzheimer's disease)
- Provide client and family with information about acute and chronic mental illness\*
- Evaluate client/family/significant others' abilities to adhere to treatment plan

**Religious and Spiritual Influences on Health**

- Assess psychosocial, spiritual, cultural and occupational factors affecting care\*
- 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 and plan interventions that meet client emotional and spiritual needs\*
- Evaluate whether client/family/significant others religious/spiritual needs are met

**Sensory/Perceptual Alterations**

- Assess needs of clients with altered sensory perception (e.g., hallucinations, delirium)
- Assist client with sensory impairment to compensate (e.g., promote adaptation)
- Evaluate client with altered ability to communicate effectively and intervene to promote successful adaptation

**Situational Role Changes**

- Assess client/family/significant others ability to adapt to temporary/permanent role changes
- Identify situations which may necessitate role changes for client/family/significant others (e.g., spouse with chronic illness, death of parent)
- Provide support to client and/or family in coping with life changes (e.g., loss, new diagnosis, role change, stress)\*
- Evaluate whether client/family/significant others have successfully adapted to situational role changes

**Stress Management**

- 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, pollution)
- Provide information to client/family/significant others on stress management techniques (e.g., relaxation techniques, exercise, meditation)
- Evaluate client/family/significant other use of stress management techniques

**Support Systems**

- Encourage client/family/significant other involvement in the health care decision-making process
- Promote independence of client/family/significant others
- Evaluate client/family/significant other feelings about the diagnosis/treatment plan

**Therapeutic Communications**

- Assess verbal and nonverbal client/family/significant other communication needs
- Respect client personal values and beliefs
- Establish a trusting nurse-client relationship
- Allow time to communicate with client/family/significant others
- Develop and maintain therapeutic relationships with client/family/significant others
- Use therapeutic communication techniques to provide support to client and/or family\*
- Encourage client/family/significant others to verbalize feelings (e.g., fear, discomfort)
- Evaluate effectiveness of communications with client/family/significant others

**Therapeutic Environment**

- Identify external factors that may interfere with client recovery (e.g., stressors, family dynamics)
- Facilitate/participate at inpatient community meetings
- Make client room assignments that support the therapeutic milieu
- Provide a therapeutic environment for clients with emotional/behavioral issues\*

**Unexpected Body Image Changes**

- Assess client/family/significant other reaction to a change in body image (e.g., loss of vision, paralysis, colostomy, amputation)
- Apply knowledge of client pathophysiology when discussing unexpected body image changes with client/family/significant others
- Provide support to the client with unexpected altered body image (e.g., alopecia)

### Sample Item

The nurse is caring for a client whose spouse died 2 months ago. The client states "I want my children to have my favorite photographs because I do not need to look at them any longer." Which of the following responses would be appropriate for the nurse to make?

1. "Are you planning to kill yourself?" **(Key)**
2. "Did your children ask for the photographs?"
3. "Were your children happy that you are sharing such precious gifts?"
4. "Why do you want to give your photographs away?"

## Physiological Integrity

### Basic Care and Comfort

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

#### BASIC CARE AND COMFORT

##### *Related Activity Statements from the Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Evaluate and monitor client height and weight
- Monitor client hydration status (e.g., intake and output, edema, signs and symptoms of dehydration)
- Assess and intervene with the client who has an alteration in elimination
- Provide client nutrition through continuous or intermittent tube feedings
- Insert/remove nasogastric, urethral catheter or other tubes
- Perform post-mortem care
- Assist client in the performance of activities of daily living
- Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)
- Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts)
- Perform irrigations (e.g., of bladder, ear, eye)

- Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)
- Incorporate alternative/complementary therapies into client's plan of care (e.g., music therapy, relaxation therapy)
- Assess client need for pain management and intervene as needed using non-pharmacological comfort measures
- Assist client to compensate for a sensory impairment (e.g., assistive devices, compensatory techniques)
- Intervene with the client who has an alteration in nutritional intake (e.g., adjust diet, change delivery to include method, time and food preferences)
- Maintain client skin integrity (e.g., skin care, turn client, alternating pressure mattress)
- Assess client need for sleep/rest and intervene as needed

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

#### **Assistive Devices**

- Assess client for actual/potential difficulty with communication and speech/vision/hearing problems
- Assess client use of assistive devices (e.g., prosthetic limbs, hearing aid)
- Assist client to compensate for a sensory impairment (e.g., assistive devices, compensatory techniques)\*
- Manage client who uses assistive devices or prostheses (e.g., eating utensils, telecommunication devices, dentures)
- Evaluate correct use of assistive devices by staff/client/family

#### **Complementary and Alternative Therapies**

- Assess client need for alternative and/or complementary therapy
- Incorporate alternative/complementary therapies into client plan of care (e.g., music therapy, relaxation therapy)\*
- Apply knowledge of nursing procedures and psychomotor skills when providing alternative and complementary therapies
- Evaluate client/family/significant other outcomes of alternative and/or complementary therapy practices

#### **Elimination**

- Assess and intervene with the client who has an alteration in elimination\*
- Perform irrigations (e.g., bladder, ear, eye)\*
- Insert/remove nasogastric, urethral catheter or other tubes\*
- Provide skin care to clients who are incontinent (e.g., wash frequently, barrier creams/ointments)
- Use alternative methods to promote voiding
- Evaluate whether client elimination is restored/maintained

**Mobility/Immobility**

- Assess client for mobility, gait, strength, motor skills and use of assistive devices
- Identify complications of immobility (e.g., skin breakdown, contractures)
- Apply knowledge of nursing procedures and psychomotor skills when providing care to clients with immobility
- Apply, maintain or remove orthopedic devices (e.g., traction, splints, braces, casts)\*
- Instruct client/family regarding proper methods used when repositioning an immobilized client
- Maintain client correct body alignment
- Maintain/correct adjustment of client traction device (e.g., external fixation device, halo traction, skeletal traction)
- Apply and maintain devices used to promote venous return (e.g., anti-embolic stockings, sequential compression devices)\*
- Maintain client skin integrity (e.g., skin care, turn client, alternating pressure mattress)\*
- Manage care of client with impaired skin integrity (e.g., pressure ulcer, rash, incision, fistula, skin graft)
- Evaluate client response to interventions to prevent complications from immobility

**Nonpharmacological Comfort Interventions**

- Apply knowledge of the client pathophysiology to nonpharmacological comfort interventions
- Assess client need for pain management and intervene as needed using non-pharmacological comfort measures\*
- Recognize differences in client perception and response to pain
- Plan measures to provide comfort interventions to clients with anticipated or actual impaired comfort
- Provide therapies for comfort and treatment of inflammation, swelling (e.g., apply heat and cold treatments, elevate limb)\*
- Evaluate client response to nonpharmacological interventions (e.g., pain rating scale, verbal reports)

**Nutrition and Oral Hydration**

- Apply knowledge of mathematics to client nutrition (e.g., body mass index [BMI])
- 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., intake and output, edema, signs and symptoms of dehydration)\*
- Promote client independence in eating
- Initiate calorie counts for clients
- Provide client nutrition through continuous or intermittent tube feedings\*
- Evaluate side effects of client tube feedings and intervene as needed (e.g., diarrhea, dehydration)
- 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)
- Intervene with the client who has an alteration in nutritional intake (e.g., adjust diet, change delivery to include method, time and food preferences)\*
- Evaluate and monitor client height and weight\*
- Evaluate impact of disease/illness on nutritional status of client

### Palliative/Comfort Care

- Apply knowledge of the client pathophysiology to palliative care interventions
- Respect client palliative care choices
- Assess client need for palliative care
- Assess client symptoms related to end of life (e.g., breathing, fatigue)
- Assess client for nonverbal signs of pain/discomfort (e.g., grimacing, restlessness)
- Assess, intervene and educate client/family/significant others about pain management
- Assist client in receiving appropriate end-of-life physical symptom management
- Counsel client/family/significant others regarding palliative care
- Evaluate outcome of palliative care interventions

### Personal Hygiene

- Assess client for usual personal hygiene habits/routine
- Assist client in the performance of activities of daily living\*
- Provide information to client/family/significant others on required adaptations for performing activities of daily living (e.g., shower chair, hand rails)
- Perform post-mortem care\*

### Rest and Sleep

- Apply knowledge of client pathophysiology to rest and sleep interventions
- Assess client need for sleep/rest and intervene as needed\*
- Schedule client care activities to promote adequate rest

Sample Item
<p>The nurse is teaching a client how to ambulate using a walker. Which of the following steps should be included in the teaching? Select all that apply.</p> <ol style="list-style-type: none"> <li>1. Push off chair to come to a standing position <b>(Key)</b></li> <li>2. Hold on to the handgrips on the upper bars <b>(Key)</b></li> <li>3. Push the walker and place in front while leaning slightly backward</li> <li>4. Walk into the walker, supporting body weight on your hands <b>(Key)</b></li> <li>5. Pull the walker toward your body and take another step</li> </ol>

## 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 *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Evaluate and document client response to medication
- Evaluate appropriateness/accuracy of medication order for client
- Prepare medication for administration
- Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)
- Perform calculations needed for medication administration
- Adjust/titrate dosage of medication based on assessment of physiologic parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)
- Monitor and maintain infusion site(s) and rate(s)
- Administer blood products and evaluate client response
- Insert/remove a peripheral intravenous line
- Access implanted venous access devices
- Comply with regulations governing controlled substances, (e.g., counting narcotics, wasting narcotics)
- Start a peripherally inserted central catheter (PICC)
- Maintain epidural infusion
- Educate client/family about medications
- Administer and document medications given by parenteral routes (e.g., intravenous, intramuscular, subcutaneous)
- Administer and document medications given by common routes (e.g., oral, topical)

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

### **Adverse Effects/Contraindications and Side Effects**

- Assess 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 client/family/significant others on common side effects and management
- Provide information to client/family/significant others on adverse effects and when to notify primary health care provider
- Notify primary health care provider of side effects, adverse effects and contraindications of medications and parenteral therapy
- Identify symptoms/evidence of an allergic reaction (e.g., to medications)
- Implement procedures to counteract adverse effects of medications and parenteral therapy
- Document side effects and adverse effects of medications and parenteral therapy
- Evaluate and document client response to actions taken to counteract side effects and adverse effects of medications and parenteral therapy

### **Blood and Blood Products**

- Identify 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 client for appropriate venous access for red blood cell/blood product administration (e.g., correct gauge needle, integrity of access site)
- Administer blood products and evaluate client response\*
- Document necessary information on the administration of red blood cells/blood products

### **Central Venous Access Devices**

- Provide information to client/family/significant others on the reason for and care of venous access device
- Start a peripherally inserted central catheter (PICC)\*
- Access implanted venous access devices\*
- Provide care for client with a central venous access device (e.g., port-a-cath, Hickman)

### **Dosage Calculation**

- Perform calculations needed for medication administration\*
- Use clinical decision making/critical thinking when calculating dosages

### **Expected Effects/Outcomes**

- Obtain information on prescribed medication for client/family/significant others (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 client use of medications over time (e.g., prescription, over-the-counter, home remedies)
- Evaluate and document client response to medication\*

**Medication Administration**

- Use the six “rights” when administering client medications (right drug, right dose, right client, right time, right route, right documentation)
- Review pertinent data prior to medication administration (e.g., vital signs, lab results, allergies, potential interactions)\*
- Evaluate appropriateness/accuracy of medication order for client\*
- Administer and document medications given by common routes (e.g., oral, topical)\*
- Administer and document medications given by parenteral routes (e.g., intravenous, intramuscular, subcutaneous)\*
- Prepare medication for administration\*
- Mix medications from two vials when necessary (e.g., insulin)
- Adjust/titrate dosage of medication based on assessment of physiologic parameters (e.g., giving insulin according to blood glucose levels, titrating medication to maintain a specific blood pressure)\*
- Dispose of unused medications according to facility/agency policy
- Educate client/family about medications\*
- Instruct client on medication self-administration procedures

**Parenteral/Intravenous Therapy**

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client receiving intravenous and parenteral therapy
- Apply knowledge and concepts of mathematics when caring for a client receiving intravenous therapy and parenteral therapy
- Prepare client for intravenous catheter insertion
- Insert/remove a peripheral intravenous line\*
- Operate and monitor the use of an infusion pump (e.g., IV, patient-controlled analgesia [PCA] device)
- Maintain epidural infusion\*
- Know which of the client veins should be accessed for various therapies
- Provide client with information on the need for intermittent parenteral fluid therapy
- Monitor and maintain infusion site(s) and rate(s)\*
- Evaluate client response to intermittent parenteral fluid therapy

**Pharmacological Agents/Actions**

- Apply knowledge of pathophysiology when addressing the pharmacological agents/actions of client prescription
- Use clinical decision making/critical thinking when addressing actions of prescribed pharmacological agents on clients
- Identify a contraindication to the administration of a prescribed or over-the-counter medication to the client

**Pharmacological Interactions**

- Identify actual and potential incompatibilities of prescribed client medications
- Monitor for anticipated interactions among client prescribed medications and fluids (e.g., oral, IV, subcutaneous, IM, topical prescriptions)
- Provide client/family/significant others with information on known pharmacological interactions of medication prescriptions

**Pharmacological Pain Management**

- Determine client need for administration of a PRN pain medication (e.g., oral, topical, subcutaneous, IM, IV)
- Provide pharmacological pain management appropriate for client age and diagnoses (e.g., pregnancy, children, older adults)
- Document pain medication administration according to facility/agency policy
- Comply with regulations governing controlled substances (e.g., counting narcotics, wasting narcotics)\*
- Evaluate and document client use and response to pain medications

**Total Parenteral Nutrition**

- Administer/maintain/discontinue total parenteral nutrition (TPN)
- Apply knowledge of nursing procedures and psychomotor skills when caring for a client receiving TPN
- Apply knowledge of mathematics and statistics to client receiving TPN
- Apply knowledge of client pathophysiology to TPN interventions
- Provide client/family/significant others with information on TPN
- Monitor client for side/adverse effects of TPN (e.g., hyperglycemia, fluid imbalance, infection)

**Sample Item**

The nurse is caring for a client who has a prescription for an Intropin (Dopamine) Drip for 5 mcg/kg/min. The client weighs 200 pounds. The nurse has 400 mg per 500 ml D5W available. How many milliliters should the nurse administer to the client each hour?

**Record your answer using a whole number.**

34 ml **(Key)**

## 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.

### REDUCTION OF RISK POTENTIAL

#### Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice*

- Perform fetal heart monitoring
- Use precautions to prevent further injury when moving a client with a musculoskeletal condition (e.g., log-rolling, abduction pillow)
- Assess client vital signs
- Perform focused assessment or re-assessment (e.g., gastrointestinal, respiratory, cardiac)
- Evaluate the results of diagnostic testing and intervene as needed (e.g., lab, electrocardiogram)
- Monitor client physiologic response during and after moderate/conscious sedation
- Perform diagnostic testing (e.g., oxygen saturation, glucose monitoring, testing for occult blood, gastric pH, urine specific gravity)
- Obtain blood specimens peripherally or through central line
- Perform an electrocardiogram test
- Provide intraoperative care (e.g., positioning, maintain sterile field, operative assessment)
- Evaluate and document responses to procedures and treatments
- Implement measures to manage/prevent/lessen possible complications of client condition and/or procedure (e.g., fluid restriction, sodium restriction, raise side rails, suicide precautions)
- Provide preoperative care
- Educate client and family about treatments and procedures
- Provide pre and/or postoperative education
- Perform a risk assessment (e.g., sensory impairment, potential for falls, level of mobility, skin integrity)
- Obtain specimens other than blood for diagnostic testing (e.g., wound cultures, stool, urine specimens)
- Evaluate invasive monitoring data (e.g., pulmonary arterial pressure, intracranial pressure)
- Educate client and family about home management of care (e.g., tracheostomy and ostomy)

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

### **Diagnostic Tests**

- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing diagnostic testing
- Compare client diagnostic findings with pretest results
- Perform diagnostic testing (e.g., oxygen saturation, glucose monitoring, testing for occult blood, gastric pH, urine specific gravity)\*
- Perform an electrocardiogram test\*
- Perform fetal heart monitoring\*
- Monitor results of maternal and fetal diagnostic tests (e.g., nonstress test, amniocentesis, ultrasound)
- Evaluate the results of diagnostic testing and intervene as needed (e.g., lab, electrocardiogram)\*

### **Laboratory Values**

- Know laboratory values for ABGs (pH, PO<sub>2</sub>, PCO<sub>2</sub>, SaO<sub>2</sub>, HCO<sub>3</sub>) BUN, cholesterol (total) glucose, hematocrit, hemoglobin, hemoglobin A<sub>1c</sub> (HBA<sub>1c</sub>), platelets, potassium, RBC, sodium, urine-specific gravity and WBC
- Recognize deviations from normal for values of albumin (blood), ALT (SGPT), ammonia, AST (SGOT), bilirubin, bleeding time, calcium (total), cholesterol (HDL and LDL), creatinine, digoxin, ESR, lithium, magnesium, PTT and APTT, INR, phosphorous/phosphate, protein (total), PT, urine (alb, pH, white blood cell count [WBC] and differential)
- Obtain specimens other than blood for diagnostic testing (e.g., wound cultures, stool, urine specimens)\*
- Obtain blood specimens peripherally or through central line\*
- Notify primary health care provider about laboratory test results
- Monitor client laboratory values (e.g., glucose testing results for the client with diabetes)
- Provide client with information about the purpose and procedure of prescribed laboratory tests

### **Monitoring Conscious Sedation**

- Apply knowledge of nursing procedures and psychomotor skills when caring for client receiving conscious sedation
- Determine client/family/significant others understanding of relevant information prior to administration of conscious sedation
- Assist with preparing client for conscious sedation
- Monitor client physiologic response during and after moderate/conscious sedation\*

### **Potential for Alterations in Body Systems**

- Compare current client data to baseline client data (e.g., symptoms of illness/disease)
- Identify client potential for aspiration (e.g., feeding tube, sedation, swallowing difficulties)
- Identify client skin breakdown potential (e.g., immobility, nutritional status, incontinence)
- Recognize client with a condition that increases risk for insufficient vascular perfusion (e.g., immobilized limb, post surgery, diabetes)

- Monitor client output for changes from baseline (e.g., nasogastric [NG] tube, emesis, stools, urine)
- Provide client/family/significant others with methods to prevent complications associated with activity level/diagnosed illness/disease (e.g., contractures, foot care for client with diabetes mellitus)

### **Potential for Complications of Diagnostic Tests/Treatments/Procedures**

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client with potential for complications
- Assess client for an abnormal response following a diagnostic test/procedure (e.g., dysrhythmia following cardiac catheterization)
- Monitor client for signs of bleeding
- Position client to prevent complications following tests/treatments/procedures (e.g., elevate head of bed, immobilize extremity)
- Recommend change in test/procedure/treatment prescription based on client response
- Insert oral/nasogastric tube (e.g., decompression)
- Maintain tube patency (e.g., NG tube for decompression, chest tubes)
- Intervene to manage potential circulatory complications (e.g., hemorrhage, embolus, shock)
- Implement measures to manage/prevent/lessen possible complications of client condition and/or procedure (e.g., fluid restriction, sodium restriction, raise side rails, suicide precautions)\*
- Provide care for client undergoing electroconvulsive therapy (e.g., monitor airway, assess for side effects, teach client/family/significant others about procedure)
- Intervene to prevent aspiration (e.g., check NG tube placement)
- Intervene to prevent potential neurological complications (e.g., foot drop, numbness, tingling)
- Evaluate and document 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 such as bleeding gums or bruising)
- Evaluate client response to postoperative interventions to prevent complications (e.g., prevent aspiration, promote venous return, promote mobility)

### **System Specific Assessment**

- Assess client for abnormal peripheral pulses after a procedure or treatment
- Assess client for abnormal neurological status (e.g., level of consciousness, muscle strength, mobility)
- Assess client for peripheral edema
- Assess client for signs of hypoglycemia or hyperglycemia
- Identify factors that result in delayed wound healing
- Perform a risk assessment (e.g., sensory impairment, potential for falls, level of mobility, skin integrity)\*
- Perform focused assessment or re-assessment (e.g., gastrointestinal, respiratory, cardiac)\*

### Therapeutic Procedures

- Apply knowledge of related nursing procedures and psychomotor skills when caring for clients undergoing therapeutic procedures
- Assess client response to recovery from local, regional or general anesthesia
- Educate client and family about treatments and procedures\*
- Educate client and family about home management of care (i.e., tracheostomy and ostomy)\*
- Monitor client before, during and after a procedure/surgery (e.g., casted extremity)
- Use precautions to prevent further injury when moving a client with a musculoskeletal condition (e.g., log-rolling, abduction pillow)\*
- Monitor effective functioning of therapeutic devices (e.g., chest tube, drainage tubes, wound drainage devices, continuous bladder irrigation)
- Provide pre and/or postoperative education\*
- Provide preoperative care\*
- Provide intraoperative care (e.g., positioning, maintain sterile field, operative assessment)\*

### Vital Signs

- Assess client vital signs\*
- Intervene when client vital signs are abnormal (e.g., hypertension, bradycardia, tachypnea, fever)
- 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)\*

#### Sample Item

The nurse is teaching a client who is scheduled for a magnetic resonance imaging (MRI) of the abdomen. Which of the following information should the nurse include?

1. "Do not eat or drink anything for eight hours prior to the MRI."
2. "Do not empty your bladder prior to the MRI."
3. "Do not wear jewelry or other metal objects to the MRI." **(Key)**
4. "Do not take medications containing aspirin for 24 hours after the MRI."

### Physiological Adaptation

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

**PHYSIOLOGICAL ADAPTATION****Related Activity Statements from the *Report of Findings from the 2005 RN Practice Analysis: Linking the NCLEX-RN® Examination to Practice***

- Monitor and maintain arterial lines
- Initiate, maintain and/or evaluate telemetry monitoring
- Provide postoperative care
- Maintain desired temperature of client using external devices (e.g., cooling and/or warming blanket)
- Provide ostomy care
- Assist with invasive procedures (e.g., central line placement, biopsy, debridement)
- Monitor and maintain clients on a ventilator
- Perform or assist with dressing change (e.g., central line dressing)
- Perform tracheostomy care
- Administer oxygen therapy and evaluate response
- Perform oral or nasopharyngeal suctioning
- Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction)
- Perform emergency care procedures (e.g., cardio-pulmonary resuscitation, Heimlich maneuver, respiratory support, automated external defibrillator)
- Perform gastric lavage
- Implement and monitor phototherapy
- Remove sutures or staples
- Perform peritoneal dialysis
- Connect and maintain pacing devices (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)
- Perform suctioning via endotracheal or tracheostomy tube
- Provide pulmonary hygiene (e.g., chest physiotherapy, spirometry)
- Provide wound care

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

### **Alterations in Body Systems**

- Assess adaptation of client/family/significant others to health alteration, illness and/or disease
- Assess tube drainage during the time the client has an alteration in body system (e.g., amount, color)
- Monitor and maintain client on a ventilator\*
- Counsel/teach client/family/significant others about managing client health problem (e.g., chronic illness)
- Maintain desired temperature of client using external devices (e.g., cooling and/or warming blanket)\*
- Implement and monitor phototherapy\*
- Identify signs of potential prenatal complications
- Monitor wounds for signs and symptoms of infection
- Provide wound care\*
- Perform or assist with dressing change (e.g., central line dressing)\*
- Remove sutures or staples\*
- Promote client wound healing (e.g., turning, hydration, nutrition, skin care)
- Monitor and maintain devices and equipment used for drainage (e.g., surgical wound drains, chest tube suction)\*
- Provide ostomy care\*
- Provide care to client who has experienced a seizure
- Assist with invasive procedures (e.g., central line placement, biopsy, debridement)\*
- Perform peritoneal dialysis\*
- Provide pulmonary hygiene (e.g., chest physiotherapy, spirometry)\*
- Perform oral or nasopharyngeal suctioning\*
- Perform suctioning via endotracheal or tracheostomy tube\*
- Perform tracheostomy care\*
- Promote client progress toward recovery from an alteration in body systems
- 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\*
- Assess client response to surgery
- Evaluate achievement of client treatment goals (e.g., improved chest tube functioning)

### **Fluid and Electrolyte Imbalances**

- Apply knowledge of pathophysiology when caring for client with fluid and electrolyte imbalances
- Identify signs and symptoms of client fluid and/or electrolyte imbalance
- Implement interventions to restore client fluid and/or electrolyte balance
- Evaluate client response to interventions to correct fluid and electrolyte imbalance

**Hemodynamics**

- Apply knowledge of pathophysiology to interventions in response to client abnormal 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 [PVCs], ventricular tachycardia, fibrillation)
- Monitor and maintain arterial lines\*
- Connect and maintain pacing devices (e.g., pacemaker, biventricular pacemaker, implantable cardioverter defibrillator)\*
- Initiate, maintain and/or evaluate telemetry monitoring\*
- Intervene to improve client cardiovascular status (e.g., modify activity schedule, initiate protocol to manage cardiac arrhythmias, monitor pacemaker functions)
- Provide care for client with vascular access for hemodialysis (e.g., arteriovenous [AV] shunt, fistula, graft)
- Provide client/family/significant others with strategies to manage decreased cardiac output (e.g., frequent rest periods, limit activities)

**Illness Management**

- Apply knowledge of client pathophysiology to illness management
- Implement interventions to manage client recovering from an illness
- Interpret client data that needs to be reported immediately
- Teach client about managing illness (e.g., acquired immune deficiency syndrome [AIDS], chronic illnesses)
- Perform gastric lavage\*
- Promote and provide continuity of care in illness management activities (e.g., cast placement)
- Administer oxygen therapy and evaluate response\*
- Evaluate and document client response to interventions

**Infectious Disease**

- Apply knowledge of client pathophysiology when managing infectious disease
- Recognize signs and symptoms of infectious diseases
- Understand incubation periods for infectious diseases
- Provide care for client with an infectious disease
- Evaluate client response to treatment for an infectious disease (e.g., AIDS, tuberculosis [TB])

**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 client/family/significant others, as appropriate
- Perform emergency care procedures (e.g., cardiopulmonary resuscitation, Heimlich maneuver, respiratory support, automated external defibrillator)\*

- Monitor and maintain client on a ventilator
- Notify primary health care provider about client unexpected response/emergency situation
- Provide emergency care for wound disruption (e.g., evisceration, dehiscence)
- Evaluate and document client response to emergency interventions (e.g., restoration of breathing, pulse)

### **Pathophysiology**

- Identify client status based upon pathophysiology
- Understand general principles of pathophysiology (e.g., injury and repair, immunity, cellular structure)

### **Radiation Therapy**

- Apply knowledge of nursing procedures and psychomotor skills when caring for a client receiving radiation therapy
- Apply knowledge of pathophysiology when discussing radiation therapy with client/family/significant others
- Assess client for signs and symptoms of adverse effects of radiation therapy
- Implement interventions to address side/adverse effects of radiation therapy (e.g., dietary modifications, avoid sun)
- Evaluate and monitor client response to radiation therapy

### **Unexpected Response to Therapies**

- Assess client for unexpected adverse response to therapy (e.g., increased intracranial pressure, hemorrhage)
- Intervene in response to client unexpected response to therapy (e.g., unexpected hematopoietic changes)
- Promote recovery of client from unexpected response to therapy (e.g., urinary tract infection)

#### **Sample Item**

The nurse is assessing a client with suspected Crohn's disease. Which of the following findings would support a diagnosis of Crohn's disease? Select all that apply.

1. Diarrhea and lower right quadrant pain **(Key)**
2. Weight loss and anorexia **(Key)**
3. Rectal bleeding and cramping **(Key)**
4. Abdominal distention and increased flatus
5. Low-grade fever and fatigue

## IV. Administration of the NCLEX-RN® Examination

### Examination Length

The NCLEX-RN® examination is a variable length adaptive test. It is not offered in paper-and-pencil or oral examination formats and can be anywhere from 75 to 265 items long. Of these items, 15 are pretest items that are not scored. The time limit for the exam is specified in the Candidate Bulletin. It is important to note that the time allotted for the examination includes the tutorial, the sample items, all breaks (restroom, stretching, etc.) and the examination. All breaks are optional.

The length of the examination is determined by the candidate's responses to the items. Once the minimum number of items has been answered, testing stops when the candidate's ability is determined to be either above or below the passing standard with 95 percent certainty. Depending upon the particular pattern of correct and incorrect responses, different candidates will take different numbers of items and therefore use varying amounts of time. The examination will stop when the maximum number of items has been taken or when the time limit has been reached. Remember, it is in the candidate's best interest to maintain a reasonable pace of spending only one or two minutes on each item. The candidates should select a pace that will permit them to complete the examination within the allotted time should the maximum number of items be administered.

It is important to understand that the length of an examination is not an indication of a pass or fail result. A candidate with a relatively short examination may pass or fail just as the candidate with a long examination may pass or fail. Regardless of the length of the examination, each candidate is given an examination that conforms to the *NCLEX-RN® Test Plan* and offers ample opportunity to demonstrate his or her ability.

### The Passing Standard

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

To assist the Board of Directors in making this decision, the Board is provided with information on:

1. The results of a standard-setting exercise performed by a panel of experts with the assistance of professional 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;
4. Information describing the educational readiness of high school graduates who express an interest in nursing.

Once the passing standard is set, it is imposed uniformly on every test record according to the procedures laid out in the Scoring the NCLEX Examination section (detailed on page 46). To pass an NCLEX examination, 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 could happen for a variety of reasons. For example, several items could be about similar symptoms, diseases, or disorders, yet address different phases of the nursing process. Alternatively, a pretest (unscored) item could be about content similar to an operational (scored) item. It is incorrect to assume that a second item, which is similar in content to a previously administered item, is administered 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. All examinations conform to their respective test plan.

## Reviewing Answers and Guessing

The items are presented to the candidate one at a time on a computer screen. Each item can be viewed as long as the candidate likes, but it is not possible to go back to a previous item once the answer is selected and confirmed by pressing the <NEXT> button. Every item must be answered even if the candidate is not sure of the right answer. The computer will not allow the candidate to go on to the next item without answering the one on the screen. If the candidate is unsure of the correct answer, the best guess is made and the candidate moves on to the next item. After an answer to an item is selected, the candidate has a chance to think about the answer and change it as is necessary. However, once the candidate confirms the answer and goes on to the next item, the candidate will not be allowed to go back to any previous item on the examination.

Please note that rapid guessing can drastically lower the score. Some test preparation companies have realized that on certain paper-and-pencil tests, unanswered items are marked as wrong. To improve the candidate's score when they are running out of time, these companies sometimes advocate rapid guessing (perhaps without even reading the item) in the hope that the candidate will get at least a few items correct. On any adaptive test, this can be disastrous! It has the effect of giving the candidate easier items, which he or she will likely also get wrong. The best advice is to (1) maintain a reasonable pace, perhaps one item every minute or two, and (2) carefully read and consider each item before answering. It is better to run out of time than to engage in rapid guessing.

## Scoring the NCLEX® Examination

### Computerized Adaptive Testing (CAT)

The NCLEX® examination is different than a traditional paper-and-pencil examination. Typically, paper-and-pencil examinations administer the same items to every candidate, thus ensuring that the difficulty of the examination is the same across the board. Because the difficulty of the examination is constant, the percentage correct is the indicator of the candidate's ability. One disadvantage of this approach is that it is inefficient. It requires the high ability candidates to answer all the easy items on the examination. Obviously asking high ability candidates easy items provides very little information about his or her ability. Another disadvantage is that guessing can artificially inflate the scores of low ability candidates. This happens because low ability candidates will be given some difficult items. In the case of multiple-choice items, candidates can answer these items correctly 25 percent of the time for reasons that have nothing to do with his or her ability because there are only four choices.

Instead, the NCLEX examination uses computerized adaptive testing (CAT) to administer the items. CAT is able to produce test results that are more stable using fewer items by targeting items to the candidate's ability. Although everyone's first item is relatively easy, subsequent items are better targeted. This is accomplished by re-estimating the candidate's ability every time an item is answered. Using the candidate's most current ability estimate, the computer searches the item bank for an item that has a degree of difficulty that is approximately equal to that ability estimate. As a result, the candidate should have a 50-50 chance of answering this item correctly. After the candidate answers this item, the computer reestimates the candidate's ability and selects the next item using the same procedures. This process continues until it is clear (with 95 percent certainty) that the candidate's ability is above or below the passing standard. Be aware that both those who pass and those who fail tend to answer approximately 50 percent of the items correctly. This is because the computer presents all candidates with items that are matched to his or her ability.

The candidate's ability estimate is based upon both the percentage that was answered correctly (approximately 50 percent in most cases) and the difficulty of the items that were administered. Imagine the items lined up, from easiest to most difficult. If we asked candidates the easiest items, they would answer most of them correctly. If we asked them the most difficult items, they would probably answer most of them incorrectly. Somewhere between those two extremes is a point at which each candidate goes from getting more answers right than wrong. This is the point at which each candidate answers 50 percent correctly. Items harder than that would probably be answered incorrectly; items easier than that would probably be answered correctly. CAT procedures permit that point to be found for each candidate without having to ask all the items in the extremes.

## Pretest Items

Of course for CAT to work, 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. Because the difficulty of these pretest items is not known in advance, these items are not included when estimating the candidate's ability or making pass-fail decisions. When enough responses are collected, the pretest items are statistically analyzed and calibrated. If they meet the NCLEX statistical standards, they can be administered in future examinations as scored items. There are 15 pretest items on every NCLEX-RN examination. It is impossible to distinguish operational items from pretest items, so candidates are asked to do their best on every item.

## Additional Constraints

In addition to targeting items to the candidate's ability, the computer implements two additional constraints. First, it prevents a candidate from receiving for a second time any item that he or she has seen within the last year (on a previous attempt). Second, it ensures that the items administered to the candidate meet the test plan specifications with regard to the proportion of items that must be drawn from the different test plan categories. Every test must meet the test plan specifications.

## Passing and Failing

As mentioned earlier, to pass the NCLEX, the candidate's performance on the examination must be above the passing standard. Ideally, NCSBN wants to be at least 95 percent certain of pass-fail decisions. Therefore after the minimum number of items has been answered, the computer will stop when it is 95 percent certain that the candidate's ability is above or below the passing standard. If the ability is below the standard, the candidate fails. Candidates with very high or very low abilities tend to receive minimum length tests.

However, some candidates will have a true ability that is so close to the passing standard that even 1,000 items would not be enough to arrive at a decision with 95 percent confidence. It would also be impractical to administer 1,000 items. Therefore, a maximum number of items has been established (see Examination Length) for each type of examination. When these candidates answer the maximum of items, their ability estimates are rather precise, but not enough to make a decision with 95 percent certainty. Because in these cases the precision is quite good, the 95 percent certainty requirement is waived. If a candidate's ability estimate is above the passing standard, he or she passes; if it is at or below the passing standard, the candidate fails.

If the examination ends because time runs out, it means that the candidate has not demonstrated with 95 percent certainty that he or she is clearly above or below the passing standard, nor has the candidate answered the maximum number of items. Because the primary mission of boards of nursing is to protect the public, it can be argued that candidates should not pass when they have not demonstrated that they are competent. However, the response patterns for some of these people have indicated that there are candidates that have appeared to have a "true ability" that is above passing and who have been performing consistently above the passing standard. A mechanism is provided for these candidates to pass. The key word here is consistently. If a candidate's performance has been consistently above the passing standard, then he or she will pass, despite having run out of time.

## Scoring Items

The majority of items in the NCLEX examination are multiple-choice, but there are other formats as well. Items are scored as either right or wrong. There is no partial credit. Updated information on the administration of the examination is accessible on the NCLEX Examinations section of NCSBN's Web site.

## 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 on Pearson Vue's Web site at [www.pearsonvue.com/nclex/#tutorial](http://www.pearsonvue.com/nclex/#tutorial).

## Types of Items

During the administration of the NCLEX-RN® examination candidates will be required to respond to items in a variety of formats. The majority of the items are multiple-choice, but there are other formats. All item formats may include charts, tables or graphic images. For more information, access NCSBN's Web site to review information about alternate item formats. The sample items on the next pages are examples of the types of item formats that may be on the NCLEX-RN® examination.

### Multiple-Choice (one answer):

**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 (N)** to confirm your answer and move to the next practice item.

What color is an orange?

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

Select the best response. Click the Next (N) button or the Enter key to confirm answer and proceed.

Item 1 of 5

Next (N)      Calculate (C)

## Multiple-Response:

**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 that there may be one or more correct answers. So, you must select all 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 (N)** to confirm your answer and move to the next practice item.

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

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

Select all that apply. Click the Next (N) button or the Enter key to confirm answer and proceed.

Item 2 of 5

Previous (P)      Next (N)      Calculate (C)

### Fill-in-the-Blank:

**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. **Note that you will not be permitted to enter any characters other than those needed to form a number. 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 bottom right 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. Enter the numbers slowly. If you double click too quickly to enter a number like "33", the calculator may not register that second "3". When you are finished with the calculator, you can close the calculator by clicking on the X in the top right corner of the calculator.

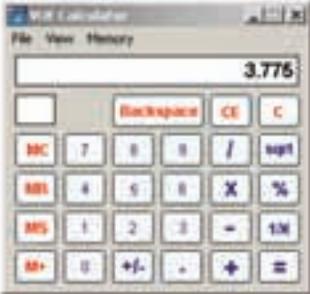
For the practice item below, first open the calculator. Second, compute a total weight by adding the weight of four pumpkins. Third, compute the average by dividing the total weight by the number of pumpkins (4). The division symbol is  $\div$ . Your calculator should now read 3.775.

Note that you do not have to type in the unit of measurement, "kilograms" in this example. **Also, should rounding be necessary, perform the rounding at the end of the calculation.** Please type 3.8 as your answer.

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

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

Answer:  kilograms.



Click the Next (N) button or the Enter key to confirm answer and proceed

Item 3 of 6

Previous (P)      Next (N)      Calculate (C)

## Hot Spot:

**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 (N)** 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

Click in the figure to indicate your selection. Click the **Next (N)** button or the Enter key to confirm answer and proceed.

Item 4 of 5

Previous (P)    Next (N)    Calculate (C)

## Exhibit:

**Practice Item Type #5: Exhibit Item**

In this item type, you will be presented with a problem and an exhibit. You will need to read the information in the exhibit to answer the problem. Click on the Exhibit button at the bottom of the screen. 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 listed below. 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 (N)** to confirm your answer and move to the next practice item.

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 on the exhibit button below for additional information.

1. baking trays  
 2. storage bin  
 3. flour  
 4. pastry molds

Storage/Packaging Materials | Baking Ingredients | Miscellaneous Supplies | 1 of 3

Close (X)

Tab (T)

**Storage/Packaging**

Item	Charge
10" cake boxes	\$65.00
Paper bags - large	\$20.85
Bread bags	\$26.50
Package labels	\$10.99
Storage bin	\$175.00
<b>TOTAL</b>	<b>\$298.34</b>

Select the best response. Click the Next (N) button or the Enter key to confirm answer and proceed. Item 5 of 6

## Drag and Drop/Ordered Response Item:

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

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

The unordered options will appear in a box on the left side of your screen. To place the options in a new order, click on an option and drag it to the box on the right side of your screen. You may also highlight the option in the left hand box and then click the arrow key that points to the box on the right to move the option. These two methods may also be used to rearrange the order of options once they have been placed in the right hand box. To complete the item, you must move **all** options from the left hand box to the right hand box.

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

Click **Next (N)** to confirm your answer and proceed.

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

Unordered Options

March

May

Ordered Response

April

February

January

June

← →

Click the Next (N) button or the Enter key to confirm answer and proceed.

Previous (P)Next (N)Calculator (C)

Item 6 of 6

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