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# Copyright

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# Dedication

In loving memory of Linda's parents and Angela's grandparents,

ARNOLD LAWRENCE AND FRANCES MARY

Our memories of their love, support, and words of

encouragement will remain in our hearts forever!

# About the Authors

**Linda Anne Silvestri**



Photo by Laurent W. Valliere

    Linda is a well-known author, nurse educator, entrepreneur, and philanthropist whose professional aspirations focus on assisting nursing students to become successful. She has been teaching at all levels of nursing education for many years. Linda is currently a nursing instructor and nursing course developer at the University of Nevada, Las Vegas (UNLV). She earned her PhD in Nursing from UNLV and conducted research on self-efficacy and the predictors of

NCLEX® success. Her research findings are published in the *Journal of Nursing Education and Practice.*

Dr. Silvestri has received several awards and honors. In 2019 she was inducted as a Fellow in the American Academy of Nursing. In 2012 she received the UNLV School of Nursing Alumna of the Year Award. And in 2010 she received the School of Nursing's Certificate of Recognition for Outstanding PhD Student. Linda is a member of several national nursing organizations, including the Honor Society of Nursing, Sigma Theta Tau International, the National League for Nursing, the America Nurses Association, Phi Kappa Phi, the Western Institute of Nursing, and the Golden Key International Honour Society. Additionally, she is a Fellow in the American Academy of Nursing and will be inducted as a Fellow in the National League for Nursing Academy of Nursing Education in the Fall of 2023. Dr. Silvestri is the successful Elsevier author of numerous best-selling national and international NCLEX® preparation resources. She is also co-author of *Strategies for Student Success on the Next Generation NCLEX® (NGN)* and serves as an Elsevier Thought Leader and Subject Matter Expert for the Next Generation NCLEX® (NGN). Linda has presented numerous faculty and student webinars on NCLEX® and NGN preparation and success. She is the President and Owner of Nursing Reviews, Inc., and Director and Owner of Professional Nursing Seminars, Inc. Both companies are dedicated to helping nursing students and graduates achieve their goals of becoming licensed nurses.

**Angela Elizabeth Silvestri**

Angela is a well-known nurse educator, researcher, and author. She has been teaching and working in university administrative roles for many years at all levels of nursing education. She has experience teaching in classroom and clinical settings and in working with graduate students on their culminating projects and research dissertations. She currently serves as the Associate Dean for Entry and Prelicensure Education at the University of Nevada, Las Vegas (UNLV). Dr. Silvestri is a successful Elsevier author of numerous best-selling NCLEX® preparation resources on the national and international levels. She also serves as an Elsevier Subject Matter Expert for the Next Generation NCLEX® (NGN).

Angela earned her bachelor's degree in nursing and in sociology from Salve Regina University in Newport, Rhode Island; she earned her master's degree with a focus in nursing education and her PhD from the University of Nevada, Las Vegas. She also has a post-master's graduate certificate in advanced practice and is a board-certified family nurse practitioner. She is a scholar in Sigma Theta Tau's New Academic Leadership Academy. Dr. Silvestri is passionate about college students' success. She works with faculty, staff, and

students on managing primary and episodic health care needs at UNLV's Student Wellness Center and Faculty and Staff Treatment Center as a family nurse practitioner. This passion also comes through in her work at the School of Nursing, where she teaches medical-surgical nursing and pharmacology, and in the publication of her research and best-selling licensure exam review resources at the national and international levels.

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# Preface

*"Success is climbing a mountain, facing the challenge of obstacles, and reaching the top of the mountain."*

*Linda Anne Silvestri, PhD, RN, FAAN*

*"Success is never an accident. To be successful is to have been perseverate, to have sacrificed, and to have loved what you are cultivating to become successful."*

*Angela Elizabeth Silvestri, PhD, APRN, FNP-BC, CNE*

**Welcome to** *Saunders Pyramid to Success!*

## An Essential Resource for Test Success

*Saunders Q&A Review for the NCLEX-RN® Examination* is one in a series of products designed to assist you in achieving your goal of becoming a registered nurse. This text and Evolve site package provide you with more than 6000 practice NCLEX-RN test questions based on the current NCLEX-RN test plan.

The current test plan for the NCLEX-RN identifies a framework based on *Client Needs*. The Client Needs categories include Physiological Integrity, Safe and Effective Care Environment, Health Promotion and Maintenance, and Psychosocial Integrity. *Integrated Processes* are also identified as a component of the test plan. These include Caring, Clinical Judgment, Communication and Documentation, Culture and Spirituality, Nursing Process, and Teaching and Learning. This book has been uniquely designed and includes chapters that describe each specific component of the

NCLEX-RN test plan framework and five practice tests that contain NCLEX-style questions specific to each component.

## NCLEX-RN® Test Preparation

This book begins with information regarding NCLEX-RN preparation. **Chapter 1** , *Clinical Judgment and the NCLEX-RN® Examination,* addresses information about clinical judgment and the related cognitive processes/skills as defined by the National Council of State Boards of Nursing (NCSBN) and all of the information related to the NCLEX-RN test plan and the examination testing procedures. This chapter answers all of the questions that you may have regarding this information.

   **Chapter 2** , *Self-Efficacy and Profiles to Success,* discusses the NCLEX-RN from a nonacademic viewpoint and emphasizes a holistic approach for your individual test preparation. This chapter discusses self-efficacy, the components of a structured study plan, anxiety-reducing techniques, and personal focus issues. Nursing students also want to hear what other students have to say about their experiences with the NCLEX-RN and what it is really like to take this examination. **Chapter 3** , *The NCLEX-RN® Examination: A Graduate's Perspective,* is a story of success written by a nursing graduate who recently took the NCLEX-RN and addresses the issue of what the examination is all about.

   **Chapter 4** , *Clinical Judgment and Test-Taking Strategies,* includes information about using clinical judgment and the six cognitive processes/skills to answer questions and all of the strategies that will assist in teaching you how to read a question, how not to read into a question, and how to use the process of elimination and various other strategies to select the correct response from the options presented.

## Client Needs

**Chapters 5** through **9** address the NCLEX-RN test plan component, *Client Needs.* **Chapter 5** , *Client Needs and the NCLEX-RN® Test Plan* describes each category of Client Needs as identified by the test plan and lists any subcategories, the percentage of test questions for

each category, and some of the content included on the NCLEX-RN. **Chapters 6** through **9** contain practice test questions related specifically to each category of Client Needs. **Chapter 6** comprises questions related to Physiological Integrity; **Chapter 7** contains questions dealing with Safe and Effective Care Environment; **Chapter 8** is made up of questions concerned with Health Promotion and Maintenance; and **Chapter 9** contains Psychosocial Integrity questions.

## Integrated Processes

**Chapters 10** and **11** address the Integrated Processes as identified in the NCLEX-RN test plan. **Chapter 10** , *Integrated Processes and the NCLEX-RN® Test Plan,* describes each Integrated Process. **Chapter 11** contains practice test questions related specifically to each Integrated Process, including Caring, Communication and Documentation, Culture and Spirituality, Nursing Process, and Teaching and Learning. Clinical Judgment is addressed with practice questions.

## Special Features of the Book

## Book Design

The book is designed with a unique two-column format. The left column presents the practice questions, answer options, and coding areas, while the right column provides the corresponding answers, rationales, priority nursing tips, test-taking strategies, and references. The two-column format makes the review easier because you do not have to flip through pages in search of answers and rationales. A bookmark accompanies this book, and you can use it to hide the right column with the answer section as you are practicing questions.

## Special Features Found on Evolve

## Pretest and Study Calendar

The accompanying Evolve site contains a pretest that provides you with feedback on your strengths and weaknesses. The results of your

pretest will generate an individualized study calendar to guide you in your preparation for the NCLEX examination. A post-test is generated after the pretest is taken and is intended to be completed after using other features of the product.

## Heart, Lung, and Bowel Sound Questions

The accompanying Evolve site contains *Audio Questions* representative of content addressed in the current test plan for the NCLEX-RN exam. These questions are in NCLEX-style format, and each question presents an audio sound as a component of the question.

## Podcasts

The companion Evolve site includes three *Podcasts,* which cover challenging subject areas under the current NCLEX-RN test plan, including *Pharmacology, Acid-Base Balance,* and *Fluids and Electrolytes.* Information on accessing the podcasts is located in **Chapter 4**.

## Next Generation NCLEX® (NGN) Case Studies and NGN Test Questions

The accompanying Evolve site contains single-episode case studies and unfolding case studies. These case studies are accompanied by NGN test questions representative of the NGN testing format. The single-episode case studies are accompanied by one NGN test question that measures one of the cognitive processes/skills of the NCSBN Clinical Judgment Measurement Model (NCJMM). The unfolding case studies are accompanied by six NGN test questions, and the questions measure all six cognitive processes/skills of the NCJMM. These cognitive processes/skills include Recognize Cues, Analyze Cues, Prioritize Hypotheses, Generate Solutions, Take Action, and Evaluate Outcomes.

## Practice Questions

# Multiple Choice and Alternate Item Format Questions

While preparing for the NCLEX-RN, students need to review practice test questions. This book contains practice questions that are in the multiple choice format or in alternate item test question formats used in the NCLEX-RN examination.

The accompanying Evolve site contains more than 6000 questions: all the questions from the book, plus new questions, including all types of alternate item formats. The alternate item format questions in the book and on the accompanying Evolve site may be presented as one of the following:

- Fill-in-the-blank question
- Multiple response question (select all that apply)
- Prioritizing (ordered response) question
- Figure/illustration question
- Graphic options question, in which each option contains a figure or illustration
- Scenario/exhibit question
- Audio question that includes a heart, lung, or bowel sound
- NGN® Case Studies and NGN test questions

These questions provide you with practice in prioritizing, decision-making and critical thinking, and strengthening your clinical judgment skills. In addition, each practice question provides a review button that links you to common laboratory values for your reference while studying on the Evolve site.

# Answer Sections for Practice Questions

Each practice question is accompanied by the correct answer, rationale, priority nursing tip, test-taking strategy, question categories, and reference source. The structure of the answer section is unique and provides the following information for every question:

- **Rationale:** The rationale provides you significant information regarding both correct and incorrect options.

- **Priority Nursing Tip:** The priority nursing tip provides you with an important piece of information that will be helpful to you when answering practice questions and questions on the NCLEX.
- **Test-Taking Strategy:** The test-taking strategy provides a logical path for selecting the correct option and helps you select an answer to a question for which you otherwise might have to guess. In each practice question, the specific strategy that will assist in answering the question correctly is highlighted in bold blue type. The highlighted specific test-taking strategies in the practice questions will guide you on what topics to review for further remediation in *Saunders Clinical Judgment and Test-Taking Strategies: Passing Nursing School and the NCLEX® Exam, Saunders Comprehensive Review for the NCLEX-RN® Exam,* and the *Saunders/HESI Online Review for the NCLEX-RN® Exam.*
- **Question Categories:** Each question on the accompanying Evolve site is identified based on the categories used by the NCLEX-RN test plan. Both Content Area and Health Problem categories are also provided with each question to assist you in identifying areas in need of review. In addition, Priority Concepts codes are included, which provide the specific concept related to nursing practice. This code is especially helpful to students learning in a concept-based curriculum. The categories identified with each question include Level of Cognitive Ability, Client Needs, Clinical Judgment/Cognitive Skill, Integrated Process, Content Area, Health Problem, and Priority Concepts. All categories are identified by their full names so that you do not need to memorize codes or abbreviations.
- **Reference:** The reference source and page number are listed for you so that you can easily find the information you need to review in your undergraduate nursing textbooks.

## How to Use This Book

*Saunders Q&A Review for the NCLEX-RN® Examination* is specially designed to help you with your successful journey to the peak of the Pyramid to Success: becoming a registered nurse. As you

begin your journey through this book, you will be introduced to all of the important points regarding the NCLEX-RN examination, the process of testing, and the unique and special tips regarding how to prepare yourself both academically and nonacademically for this important examination. Read the chapter from the nursing graduate who recently passed the NCLEX-RN and consider what the graduate had to say about the examination. The test-taking strategy chapter will provide you with important strategies that will guide you in applying clinical judgment and selecting the correct option(s). Read this chapter and practice these strategies as you proceed through your journey with this book.

Once you have read the introductory components of this book, it is time to begin the practice questions. As you read through each question and select an answer, be sure to read the rationale, the priority nursing tip, and the test-taking strategy. The rationale provides significant information regarding both the correct and incorrect options. The priority nursing tip provides a piece of important information to remember that will help answer questions on the NCLEX, and the test-taking strategy provides the logic for selecting the correct option. Use the reference source provided so that you can easily find the information you need to review.

## Climbing the Pyramid to Success

This step on the *Pyramid to Success* is to get additional practice with a **Q&A review** product. *Saunders Q&A Review for the NCLEX-RN® Examination* offers more than 6000 unique practice questions in the book and on the companion Evolve site. The questions are focused on the Client Needs and Integrated Processes of the NCLEX test plan, making it easy to access your study area of choice.

As you work your way through *Saunders Q&A Review for the NCLEX-RN® Examination* and identify your areas of strength and weakness, you can return to the companion book, *Saunders Comprehensive Review for the NCLEX-RN® Examination,* to focus your study on these areas. The purpose of the *Saunders Comprehensive Review for the NCLEX-RN® Examination* is to provide a **comprehensive review** of the nursing content you will be tested on during the NCLEX-RN examination. However,

*Saunders Comprehensive Review for the NCLEX-RN®
Examination* is intended to do more than simply prepare you for the
rigors of the NCLEX; this book is also meant to serve as a valuable
study tool that you can refer to throughout your nursing program,
with customizable Evolve site selections to help identify and
reinforce key content and health problem areas. Your final step on
the Pyramid to Success is to master the **online
review.** *HESI/Saunders Online Review for the NCLEX-RN®
Examination* provides an interactive and individualized platform to
get you ready for your final licensure exam. This online course
provides 10 high-level content modules, supplemented with
instructional videos and accompanying NGN test items, animations,
audio, illustrations, case studies, and several subject matter exams.
End-of-module practice tests are provided along with several
Crossing the Finish Line: Practice Tests and three Test Yourself
Quizzes. In addition, you can assess your strengths and areas in need
of improvement with a pretest that generates a study calendar
providing guidance on how to proceed through the course and a
comprehensive exam in a computerized environment that prepares
you for the actual NCLEX-RN exam.

At the base of the Pyramid to Success are our **test-taking
strategies,** which provide a foundation for understanding and
unpacking the complexities of NCLEX exam questions, including
alternate item formats and NGN test items. *Saunders Clinical
Judgment and Test-Taking Strategies: Passing Nursing School and
the NCLEX® Exam* takes a detailed look at all the test-taking
strategies you will need to know to pass any nursing examination,
including the NCLEX. Special tips are integrated for nursing
students, and there are more than 1200 practice questions included
so that you can apply the testing strategies.

To obtain any of these resources that will prepare you for your
nursing exams and the NCLEX-RN exam, visit the Elsevier Health
Sciences website: **www.elsevierhealth.com**. You can also visit the
Apple App Store and Google Play to locate the app for both this
resource and the Saunders Comprehensive Review for the NCLEX-
RN® Examination.

Good luck with your journey through the *Saunders Pyramid to Success*. We wish you continued success throughout your new career as a Registered Nurse!

**Linda Anne Silvestri, PhD, RN, FAAN**

**Angela Elizabeth Silvestri, PhD, APRN, FNP-BC, CNE**

# HTU

To All Future Registered Nurses,

Congratulations to you!

You should be very proud of and pleased with yourself for your accomplishments in nursing, as well as for your well-deserved success in completing your nursing program to become a registered nurse. We know you have worked very hard to be successful and that you have proven to yourself that indeed you can achieve your goals.

You are about to enter what is, in our opinion, the most wonderful and rewarding profession. Your willingness, desire, and ability to assist those who need nursing care will bring you great satisfaction. In the profession of nursing, learning is a lifelong process, which makes the profession stimulating and dynamic and ensures that your learning will continue to expand and grow as the profession continues to evolve. Your next very important endeavor will be the learning process needed to achieve success in your examination to become a registered nurse.

We are excited and pleased to be able to provide you with the *Saunders Pyramid to Success* products, which will help you prepare for your next important professional goal: becoming a registered nurse. We want to thank all of our former nursing students whom we have assisted in studying for the NCLEX-RN exam for their willingness to offer ideas for preparing for licensure. Student input certainly is a unique benefit to all of the products available in the *Saunders Pyramid to Success*.

*Saunders Pyramid to Success* products provide you with everything that you need to ready yourself for the NCLEX-RN exam. These products include material that is required for the NCLEX-RN exam for all nursing students regardless of educational background,

specific strengths, areas in need of improvement, or clinical experience during the nursing program.

So let's get started and begin our journey through the *Saunders Pyramid to Success,* and welcome to the wonderful profession of nursing!

Sincerely,

Linda Anne Silvestri, PhD, RN, FAAN

Angela Silvestri, PhD, APRN, FNP-BC, CNE

# Acknowledgments

## A Few Words From Linda

There are many individuals who, in their own ways, have contributed to my success in making my professional dreams become a reality. I extend my sincere appreciation and warmest thanks to all of them.

First, I want to acknowledge my parents, who opened my door of opportunity in education and encouraged and supported me through my profession to work hard to reach my goals. I thank my mother, Frances Mary, for all of her love, support, and assistance as I continuously worked to achieve my professional goals. I thank my father, Arnold Lawrence, who always provided insightful words of encouragement. I miss you both so dearly, and my memories of your love and support will always remain in my heart. I also thank my best friend and the love of my life, my husband, Larry, for always being there for me for whatever I needed; my sister, Dianne Elodia, and her husband, Lawrence, and my brother, Lawrence Peter, and my sister-in-law, Mary Elizabeth, for all their love and continuous support. And I thank all my nieces and nephews, who were continuously supportive, giving, and helpful during my research and preparation of this publication. But I especially want to thank my niece and co-author, Angela, for her love and continuous support and for always being there when I need her.

I want to thank my nursing students at the Community College of Rhode Island who approached me in 1991 and persuaded me to assist them in preparing to take the NCLEX-RN examination. Their enthusiasm and inspiration led to the commencement of my professional endeavors in conducting review courses for the NCLEX-RN exam and writing NCLEX preparation resources for nursing students. I also thank the numerous nursing students who have

attended my review courses for their willingness to share their needs and ideas. Their input has certainly added a special uniqueness to this publication.

I wish to acknowledge all of the nursing faculty who taught in my review courses for the NCLEX-RN exam. Their commitment, dedication, and expertise have certainly assisted nursing students in achieving success with the NCLEX-RN exam. Additionally, I want to especially acknowledge my husband, Larry (Laurent W. Valliere), for his contribution to this publication, for teaching in my review courses for the NCLEX-RN exam, and for his commitment and dedication in assisting my nursing students to prepare for the exam from a nonacademic point of view. I also want to extend a very special thank you to my niece, Angela, for joining me in preparing and authoring these NCLEX resources. Angela is so wonderful to work with. Her ideas and her expertise have certainly added to the content of this publication and all of our NCLEX publications. She is dedicated to promoting and ensuring student success. Thank you, Angela! And finally, I again want to thank my husband, Larry, for all of his continuous support as I moved through my personal challenges and professional endeavors; he has been my rock of support!

## A Few Words From Angela

There are many people that contributed to my success in my work on this product. I am very grateful for their continued support in all of my endeavors.

First and foremost, I would like to thank my husband, Brent, for his lighthearted and positive attitude. He always knows how to make me laugh, especially when I'm stressed. All of this would not be possible without him!

I would also like to thank my parents, Mary and Larry, for their continued support throughout the years. Their words of encouragement and wisdom have been tremendously important to my success. I also don't know what I would do without their support in caring for my kids!

I would like to thank my sister, Katie, who is a wonderful nurse. Her ambitions as a nursing student are inspiring and remind me every day about why I'm so passionate about being an educator. Thank you to my brother, Nick, who always is positive and encouraging about my work. His wit and sarcasm are always a great way to lift my mood at the end of the day.

I want to extend a special thank you to Linda for her collaboration, guidance, and expertise. Without her, I would not be where I am today. Thank you, Linda!

## A Few Words From Both Linda and Angela

We want to thank our Associate Editors, Eileen Gray and Allison Bowser, for all of their dedication and hard work in editing and preparing the entire manuscript for this edition. Their expertise and close attention to detail have certainly added to the quality of this resource. Eileen and Allison, thank you so much!

We also want to acknowledge and thank Laurent W. Valliere for writing a chapter addressing important nonacademic test preparation issues.

In addition, we also sincerely thank Natalie Filer, RN, BSN and Madison Drew Mahon, BSN, RN, for writing a chapter for this book about their experience preparing for and taking the NCLEX-RN examination.

A special thank you and acknowledgment also go to all of the previous contributors who provided contributions to this book. And a very special thank you goes to Katherine Silvestri, MSN, APRN, FNP-BC, CNE, for her work in reviewing, editing, and coding practice questions.

We especially thank Dianne E. Fiorentino for her continuous and endless support and dedication to our work and in her reference support and other secretarial responsibilities for the ninth edition of this book. As well, we thank Karen Hoem for her continuous and endless support and dedication to our work and for all of her expert organizational skills, review, and editing. We thank Jimmy Guibault for reviewing all of the medication questions and providing medication research support.

# UNIT I
# NCLEX-RN® Preparation

## OUTLINE

# UNIT I

# NCLEX-RN® Preparation

# Chapter 1: Clinical Judgment and the NCLEX-RN® Examination

## The Pyramid to Success

Welcome to *Saunders Q&A Review for the NCLEX-RN® Examination,* the second component of the Pyramid to Success! At this time, you have completed your first path toward the peak of the pyramid with *Saunders Comprehensive Review for the NCLEX-RN® Examination.* Now it is time to continue that journey to become a registered nurse with *Saunders Q&A Review for the NCLEX-RN® Examination.*

As you begin your journey through this book, you will be introduced to all of the important points regarding the NCLEX-RN examination, including the process of testing and unique and special tips for preparing yourself both academically and nonacademically for this important examination. You will read what a nursing graduate who recently passed the NCLEX-RN examination has to say about the test. Important test-taking strategies guide you in selecting the correct option, assist you in making an educated guess if you are not entirely sure about the correct answer, and guide you in ways to answer the Next Generation NCLEX® (NGN) test items. Additionally, the Cognitive Skills presented in the National Council of State Boards of Nursing (NCSBN) Clinical Judgment Measurement Model (NCJMM) are identified in practice questions.

## About This Resource

*Saunders Q&A Review for the NCLEX-RN® Examination* contains more than 6000 NCLEX-style practice questions. Question types include multiple choice; multiple response (select all that apply [SATA]); fill in the blank; prioritizing (ordered response); image

("hot spot") questions; scenario/exhibit questions; graphic options; and audio questions. The Evolve site also includes podcasts for audio review on test-taking strategies for pharmacology, fluids and electrolytes, and acid-base balance. NGN-style questions are also included on the Evolve site. The chapters in the book have been developed to provide a description of the components of the NCLEX-RN test plan, including Client Needs and the Integrated Processes. In addition, chapters have been prepared to contain practice questions specific to each category of Client Needs and the Integrated Processes.

A rationale, priority nursing tip, test-taking strategy, and reference source containing a page number are provided with each question. Each question is coded on the basis of the Level of Cognitive Ability, Client Needs category, Integrated Process, Content Area being tested, Health Problem if applicable, and the Cognitive Skills/Processes of the National Council of State Boards of Nursing (NCSBN) Clinical Judgment Measurement Model (NCJMM). In addition, two Priority Concepts that relate to the content of the question are identified. This code is helpful specifically for students whose curriculum is concept based. The rationale contains significant information regarding both the correct and incorrect options. The priority nursing tip provides key information to remember about a nursing point. The test-taking strategy maps out a logical path for selecting the correct option, if necessary. The reference source and page number provide easy access to the information that you need to review. The Health Problem code is a unique and helpful feature that allows you to filter and select questions based on a disease process when you are practicing questions on Evolve. For example, if heart failure is your area of interest, you can select "Adult Health, Cardiovascular, Heart Failure" on the Evolve site, and all questions on this content will be generated for practice. Additionally, information about all of the special features of this resource and the question types is located in the preface of this book.

## Other Resources in the Saunders Pyramid to Success

There are several other resources in the Saunders Pyramid to Success program. These include the following: The *Saunders Comprehensive Review for the NCLEX-RN® Examination*, *Saunders Clinical Judgment and Test-Taking Strategies: Passing Nursing School and the NCLEX® Exam*, *Strategies for Student Success on the Next Generation NCLEX® (NGN) Test Items*, *The HESI/Saunders Online Review for the NCLEX-RN® Examination*, *Saunders Q&A Review Cards for the NCLEX-RN® Exam*, and *Saunders RNtertainment for the NCLEX-RN® Examination Review Game*. The HESI® Compass<sup>TM</sup> Course is also a resource for NCLEX preparation and provides you with an individual coach to guide you in your preparation. Ask your nursing instructors about institutional access to this course.

All of these resources in the Saunders Pyramid to Success are described in the preface of this book and can be obtained online by visiting **http://elsevierhealth.com** or by calling 1-800-545-2522.

Let's begin our journey through the Pyramid to Success.

# Clinical Judgment

⚠️ Clinical judgment is the observed outcome of critical thinking and decision-making (Dickison, Haerling, & Lasater, 2019).

In recent years, heightened attention has been paid to clinical judgment as a means of teaching, learning, and assessment and testing. The Next Generation NCLEX-RN examination requires candidates to demonstrate a higher level of ability in applying clinical judgment in the delivery of client care. Clinical judgment can also be used as a test-taking strategy to answer test questions (see **Chapter 4**). The NCSBN has created a Clinical Judgment Measurement Model (NCJMM) that consists of applying six cognitive skills or processes. These include: (1) recognizing cues; (2) analyzing cues; (3) prioritizing hypotheses; (4) generating solutions; (5) taking actions; and (6) evaluating outcomes (Dickison et al., 2019). **Table 1.1** provides a description of these six cognitive skills/processes identified in the NCJMM. The NCJMM also serves as a guide for the NCSBN to create NGN questions. The NGN was launched in April 2023. Scored stand-alone test items (Bowtie and Trend items) and unfolding case studies are presented in the NGN. Some of these NGN item types can be found on the Evolve site

accompanying this book, and an example of an NGN item is located in **Chapter 4**, **Box 4.26**. We strongly encourage you to frequently access the NCSBN website at **https://www.ncsbn.org** for updates.

## The Examination Process

An important step in the Pyramid to Success is to become as familiar as possible with the examination process. Candidates facing the challenge of this examination can experience significant anxiety. Knowing what the examination is all about and knowing what you will encounter during the process of testing will assist in alleviating fear and anxiety. The information contained in this chapter was obtained from the NCSBN website (**http://www.ncsbn.org**) and from the NCSBN 2023 test plan for the NCLEX-RN. It includes some procedures related to registering for the examination, testing procedures, and the answers to the questions most commonly asked by nursing students and graduates preparing to take the NCLEX-RN. You can obtain additional information regarding the test and its development by accessing the NCSBN website and clicking on the NCLEX® & Other Exams tab or by writing to the National Council of State Boards of Nursing, 111 East Wacker Drive, Suite 2900, Chicago, IL 60601. You are encouraged to access the NCSBN website, because this site provides you with valuable information about the NCLEX, the test plan, and other resources available to an NCLEX candidate. You are also encouraged to access the most up-to-date *Candidate Bulletin*. This document provides you with everything you need to know about registration procedures and scheduling a test date.

TABLE 1.1

**Cognitive Skills/Processes and Descriptions**

| Cognitive Skill/Process | Description |
|---|---|
| **Recognize cues** | Identifying significant data; data can be from many sources (assessment) |
| **Analyze cues** | Connecting data to the client's clinical presentation—determining if the data is expected? Unexpected? (analysis) |
| **Prioritize hypotheses** | Ranking hypotheses; what are the concerns or client needs/problems and their priority? (analysis) |
| **Generate solutions** | Using hypotheses or client needs to determine interventions for an expected outcome (planning) |
| **Take actions** | Implementing the generated solutions addressing the highest priorities or hypotheses (implementation) |
| **Evaluate outcomes** | Comparing observed outcomes with expected ones (evaluation) |

From: Dickison, P., Haerling, K.A., & Lasater. K. (2019). Integrating the National Council of State Boards of Nursing Clinical Judgment Model into Nursing Educational Frameworks, *Journal of Nursing Education, 58* (2), 72–78.

# Computer Adaptive Testing

The acronym *CAT* stands for computerized adaptive test, which means that the examination is created as the test-taker answers each question. All the test questions are categorized on the basis of the test plan structure and the level of difficulty of the question. As you

answer a question, the computer determines your competency based on the answer you selected. If you selected a correct answer, the computer scans the question bank and selects a more difficult question. If you selected an incorrect answer, the computer scans the question bank and selects an easier question. This process continues until all test plan requirements are met and a reliable pass-or-fail decision is made.

When you take a CAT, once an answer is recorded, all subsequent questions administered depend, to an extent, on the answer selected for that question. Skipping and returning to earlier questions are not compatible with the logical methodology of a CAT. The inability to skip questions or go back to change previous answers will not be a disadvantage to you; you will not fall into that "trap" of changing a correct answer to an incorrect one with the CAT system.

If you are faced with a question that contains unfamiliar content, you may need to guess at the answer. Although guessing is discouraged when taking any examination, there is no penalty for guessing on the NCLEX. Remember, in almost all of the questions, the answer will be right there in front of you. If you need to guess, use your nursing knowledge, clinical experiences, and clinical judgment skills to their fullest extent and all of the test-taking strategies you have practiced in this review program. Refer to **Chapter 4** for information on clinical judgment and test-taking strategies.

You do not need any computer experience to take this examination. A keyboard tutorial is provided and administered to all test-takers at the start of the examination. The tutorial provides instructions for the use of the on-screen optional calculator and the mouse and for recording an answer. The tutorial provides instructions on how to respond to all question types on this examination. This tutorial is on the NCSBN website; you are encouraged to view the tutorial when you are preparing for the NCLEX examination. In addition, at the testing site, a test administrator is present to assist in explaining the use of the computer to ensure your full understanding of how to proceed.

The CAT model will not be used for the NGN items. Instead, the NCSBN will be using selected scoring models that will be applied to your test responses. In addition, you will not be able to skip NGN questions or return to earlier questions. For specific information on

the scoring models, refer to the NCSBN website at **https://www.ncsbn.org** and the National Council of State Boards of Nursing 2021 *Next Generation NCLEX News* at **https://www.ncsbn.org/public-files/NGN_Summer21_ENG.pdf**.

# Development of the Test Plan

The test plan for the NCLEX-RN examination is developed by the NCSBN. The examination is a national examination; the NCSBN considers the legal scope of nursing practice as governed by state laws and regulations, including the Nurse Practice Act, and uses these laws to define the areas on the examination that will assess the competence of the test-taker for licensure.

The NCSBN also conducts an important study every 3 years, known as a *practice analysis study*. The results of this study determine the framework for the test plan for the examination. The participants in this study include newly licensed registered nurses from all types of generalist nursing education programs. Participants of this study provide valuable information about work settings. From a list of nursing care activities (activity statements) provided, the participants are asked about the applicability, frequency, and importance of performing these activities in relation to client safety. A panel of content experts at the NCSBN analyze the results of the study and make decisions regarding the test plan framework. The results of this recently conducted study provided the structure for the test plan implemented in April 2023.

# The Test Plan

The content of the NCLEX-RN examination reflects the activities identified in the practice analysis study conducted by the NCSBN. Exam questions are written based on the test plan framework and these activities *rather than* on content areas such as adult health, maternity, pediatrics, and mental health. The questions address Level of Cognitive Ability, Client Needs, and Integrated Processes as identified in the test plan developed by the NCSBN.

# Level of Cognitive Ability

Levels of cognitive ability include remembering, understanding, applying, analyzing, evaluating, and creating. The practice of nursing requires complex thought processing and critical thinking in decision-making and in making clinical judgments. Therefore, you will not encounter any remembering or understanding questions on the NCLEX. **Table 1.2** provides descriptions and examples of each level of cognitive ability. **Box 1.1** presents an example of an applying question.

# Client Needs

In the test plan implemented in April 2023, the NCSBN applied a test plan framework based on Client Needs. The NCSBN identifies four major categories of Client Needs, which are Safe and Effective Care Environment, Health Promotion and Maintenance, Psychosocial Integrity, and Physiological Integrity. Some of these categories are further divided into subcategories. Refer to **Chapter 5** for a detailed description of the categories of Client Needs and the NCLEX-RN examination, and refer to **Table 1.3** for the percentages of questions from each Client Needs category.

TABLE 1.2

## Levels of Cognitive Ability: Descriptions and Examples

| Level | Description and Example |
| --- | --- |
| **Remembering** | Recalling, retrieving information from memorization, previous learning, or long-term memory<br>Example: A normal blood glucose level is 70–99 mg/dL (3.9–5.5 mmol/L). |
| **Understanding** | Determining the meaning of information<br>Example: A blood glucose level of 60 mg/dL (3.34 mmol/L) is lower than the normal reference range. |
| **Applying** | Carrying out an appropriate action based on information<br>Example: Administering 10–15 g of carbohydrate such as a ½ glass of fruit juice to treat mild hypoglycemia |
| **Analyzing** | Examining concepts or data and interpreting how the concepts or data connect or relate to one another<br>Example: The concept is mild hypoglycemia and the connecting data are the signs and symptoms of mild hypoglycemia, such as hunger, irritability, weakness, headache, blood glucose level lower than 70 mg/dL (3.9 mmol/L). |
| **Evaluating** | Making judgments, conclusions, or validations based on evidence<br>Example: Determining that treatment for mild hypoglycemia was effective if the blood glucose level returned to a normal level between 70–99 mg/dL (3.9–5.5 mmol/L) |

| Level | Description and Example |
|-------|------------------------|
| **Creating** | Generating or producing a new outcome or plan of care by putting parts of information together<br>Example: Designing a safe and individualized plan of care with the interprofessional health care team for a client with diabetes mellitus that meets the client's physiological, psychosocial, and health maintenance needs |

Adapted from: Understanding Bloom's (and Anderson and Krathwohl's) Taxonomy, 2015, ProEdit, Inc. **http://www.proedit.com/understanding-blooms-and-anderson-and-krathwohls-taxonomy/**

## Integrated Processes

The NCSBN identifies six processes in the test plan that are foundational to the practice of nursing. These processes are incorporated throughout the major categories of Client Needs. The Integrated Process subcategories are Caring, Clinical Judgment, Communication and Documentation, Culture and Spirituality, Nursing Process (Assessment, Analysis, Planning, Implementation, and Evaluation), and Teaching and Learning. Refer to Chapter 10 for a detailed description of the Integrated Processes and the NCLEX-RN examination.

## Types of Questions on the Examination and Scoring

The types of questions on the current NCLEX include multiple choice; fill-in-the-blank; multiple response; ordered response (prioritizing); image (hot spot) questions; figure, scenario/exhibit, or graphic option items; and audio formats. These question types will continue to be a part of the NCLEX examination, and, except for the multiple response questions, each of these question types will be

scored as either correct or incorrect, known as *dichotomous scoring*. No partial credit is given. Thus, the possible points for these question types will be 0 or 1 point. Partial credit will be given for the multiple response questions.

## TABLE 1.3

From: National Council of State Boards of Nursing. (2023). *Next Generation NCLEX® , NCLEX-RN test plan*, National Council of State Boards of Nursing.

### BOX 1.1 Level of Cognitive Ability: Applying

A client at 32 weeks' gestation is brought into the emergency department after an automobile crash. The client is bleeding vaginally, and fetal assessment indicates moderate fetal distress. Which action would the nurse take **first** in an attempt to reduce the stress on the fetus?

1. Start intravenous (IV) fluids at a keep open rate.
2. Set up for an immediate cesarean section delivery.
3. Elevate the head of the bed to a semi-Fowler's position.
4. Administer oxygen via a face mask at 7 to 10 liters per minute.

**Answer: 4**

Note the **strategic word,** *first*. This question requires you to identify the *first* nursing action that you will take. Also use the **ABCs—airway, breathing, and circulation**—to answer correctly. Administering oxygen will increase the amount of oxygen for transport to the fetus, partially compensating for the loss of circulating blood volume. This action is essential regardless of the cause or amount of bleeding. IV fluids will also be initiated. Although a cesarean delivery may be needed, there are no data that indicate it is necessary at this time. The client will be positioned based on the cause of fetal distress and per primary health care provider's prescription.

⚠️ The NGN item types use a case study approach as stand-alone cases and unfolding case studies. The stand-alone cases will be accompanied by a question that tests more than one cognitive skill. The unfolding case studies will be accompanied by six NGN item type questions, and each cognitive skill will be tested.

Examples of NGN items can be located on the Evolve site accompanying this book. These are specially designed to simulate the NCLEX experience of testing for these NGN item types. **Chapter 4**, **Box 4.26**, provides an example of a Bowtie NGN question. **Table 1.4** provides a list of the NGN question types. The NCSBN also identifies three scoring methods for NGN items. These scoring methods are described in **Table 1.5**.

The NCSBN provides specific directions for you to follow with all question types to guide you through the testing process. Be sure to read these directions as they appear on the computer screen. Examples of some of these types of questions are noted in this chapter. Most question types are also placed in this book, and all types, including the NGN items, are on the accompanying Evolve site.

## Multiple Choice Questions

Many of the questions that you will be asked to answer will be in the multiple choice format. These questions provide you with data about a client situation and four answers, or options

## Fill-in-the-Blank Questions

Fill-in-the-blank questions may ask you to perform a medication calculation, determine an intravenous flow rate, or calculate an intake or output record on a client. You will need to type only a number (your answer) in the answer box. If the question requires rounding the answer, this needs to be performed at the end of the calculation. The rules for rounding an answer are described in the tutorial provided by the NCSBN and are also provided in the specific question on the computer screen. In addition, you must type a

decimal point if necessary and noted in the question directions. See **Box 1.2** for an example of a fill-in-the-blank question.

## Multiple Response Questions

For a multiple response question, you will be asked to select or check all of the options, such as nursing interventions, that relate to the information in the question. In this question type, there will be five to ten possible options, and there may be one or more correct answers. Partial credit is given for correct selections. See **Box 1.3** for an example.

## Ordered Response (Prioritizing) Questions

In ordered response (prioritizing) questions you will be asked to place nursing actions in order of priority. Information will be presented in a question and, based on the data, you need to determine what you will do first, second, third, and so forth. Specific directions for answering are provided with the question. See **Fig. 1.1** for an example. Examples of this question type are located on the accompanying Evolve site.

## Figure Questions

A question with a picture or graphic will ask you to answer the question based on the picture or graphic. The question could contain a chart, a table, or a figure or illustration. You also may be asked to use the computer mouse to point and click on a specific area in the visual. A figure or illustration may appear in any type of question, including a multiple choice question. See **Box 1.4** for an example.

## TABLE 1.4

## NGN Item Types

| Type of Case Scenario | Description | Item Types |
|---|---|---|
| **Stand-alone** | A stand-alone case will include a short scenario about a client and will be accompanied by one question that tests more than one cognitive skill. | Bowtie Trend |
| **Unfolding** | An unfolding case study will include phases as the story about the client unfolds and changes. This will be accompanied by six NGN item type questions, and each of the six cognitive skills will be tested. | Highlight in Text Highlight in Table Matrix Multiple Choice Matrix Multiple Response Multiple Response Select N Multiple Response Select All That Apply Multiple Response Grouping |

| Type of Case Scenario | Description | Item Types |
|---|---|---|
|  |  | Drag and Drop Cloze |
|  |  | Drag and Drop Rationale |
|  |  | Drop Down Cloze |
|  |  | Drop Down Rationale |
|  |  | Drop Down in Table |

From: Petersen, E., Betts, J., & Muntean, W. (December 2020). *Next Generation NCLEX® (NGN) Webinar*. NCSBN; National Council of State Boards of Nursing. (2021). *Next Generation NCLEX News*. **https://www.ncsbn.org/NGN_summer21_Eng.pdf**

## TABLE 1.5

## NGN Scoring Methods

| Method | Description |
| --- | --- |
| **Plus-Minus (+/−) Scoring** | One point is given for each correct response<br>One point is subtracted for each incorrect response<br>If the sum is negative, a zero is assigned<br>Used when the test-taker can select any number of options such as a multiple response, select all that apply, matrix multiple response, highlight in text, highlight in table, multiple response grouping |
| **One-Zero (1/0) Scoring** | One point is given for each correct response<br>Points are NOT subtracted for incorrect responses<br>Used for items such as Bowtie, matrix multiple choice, Select N, drop down cloze, drag and drop cloze, or drop down table |
| **Rationale Scoring** | One point is given for each correct grouping of response elements<br>Used when elements of a response are linked such as drop down rationale or drag and drop rationale items |

From: National Council of State Boards of Nursing. (2021). *Next Generation NCLEX News*.
**https://www.ncsbn.org/NGN_Summer21_Eng.pdf**; National Council of State Boards of Nursing. (2021). *Braving new pathways: Leading the way for regulatory transformation*, 2021 NCSBN Annual Meeting.

# Scenario/Exhibit Questions

In this type of question, you will be presented with a problem and a scenario or exhibit. You will be provided with three or more tabs or buttons that you need to click to obtain the information needed to answer the question. A prompt or message will appear that will indicate the need to click on a tab or button. See **Box 1.5** for an example.

## BOX 1.2    Fill-in-the-Blank Question

The physician prescribes 12 mEq of liquid potassium chloride. The medication label reads 20 mEq/15 mL. The nurse needs to administer how many milliliters (mL) to the client?

### Answer: 9 mL

Focus on the **subject,** the amount of mL to be administered, and on the **data in the question.** For this fill-in-the-blank question, use the formula for calculating medication doses. Once the dose is determined, you will need to type your numeric answer in the answer box. Always follow the specific directions noted on the computer screen when answering a question. Also, remember that there will be an on-screen calculator on the computer for your use to confirm your answer.

Formula:

$$\frac{Desired}{Available} \times mL = mL \text{ per dose}$$

$$\frac{12 \text{ mEq}}{20 \text{ mEq}} \times 15 \text{ mL} = 9 \text{ mL}$$

# Graphic Option Questions

In graphic option questions the option selections will be pictures rather than text. You will select the option that represents your answer choice. See **Box 1.6** for an example.

# Audio Questions

Audio questions will require listening to a sound to answer the question. These questions will prompt you to use the headset provided and to click on the sound icon. You will be able to click on the volume button to adjust the volume to your comfort level, and you will be able to listen to the sound as many times as necessary. Content examples include, but are not limited to, various lung sounds, heart sounds, or bowel sounds. Examples of this question type are located on the accompanying Evolve site (**Fig. 1.2**).

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**BOX 1.3   Multiple Response Question**

The nurse is caring for a client with a terminal condition who is dying. Which respiratory assessment findings would indicate to the nurse that death is imminent? **Select all that apply.**

- ☑ 1. Dyspnea
- ☑ 2. Cyanosis
- ☐ 3. Kussmaul's respiration
- ☐ 4. Tachypnea without apnea
- ☑ 5. Irregular respiratory pattern
- ☑ 6. Adventitious bubbling lung sounds

**Answer: 1, 2, 5, 6**

Focus on the **subject,** assessment findings in a client who is dying. In a multiple response question, you will be asked to select or check all the options, such as signs and symptoms or interventions that relate to the information in the question. Be sure to follow the specific directions given on the computer screen. Partial credit is given for multiple response questions. To answer this question, think about the respiratory assessment findings that indicate death is imminent. These include altered patterns of

respiration, such as slow, labored, irregular, or Cheyne-Stokes pattern (alternating periods of apnea and deep, rapid breathing); increased respiratory secretions and adventitious bubbling lung sounds (death rattle); irritation of the tracheobronchial airway as evidenced by hiccups, chest pain, respiratory fatigue, or exhaustion; and poor gas exchange as evidenced by hypoxia, dyspnea, or cyanosis. Kussmaul's respirations are abnormally deep, very rapid sighing respirations characteristic of diabetic ketoacidosis.

# Case Study Questions

Case study questions are the format for the NGN-style items. These case studies may be stand-alone or unfolding cases. The stand-alone case studies will be accompanied by one NGN-style question, and the unfolding case studies will be accompanied by six questions in NGN style. Each type of case study is aimed at testing one or more of the cognitive skills or processes associated with the NCSBN Clinical Judgment Measurement Model (see **Table 1.1**). Examples of these NGN item types can be located on the Evolve site accompanying this book.

# Registering to Take the Examination

It is important to obtain an NCLEX® Examination Candidate Bulletin from the NCSBN website at **https://www.ncsbn.org**, because this bulletin provides all of the information you need to register for and schedule your examination. It also provides you with website and telephone information for NCLEX Examination contacts. The initial step in the registration process is to submit an application to the state board of nursing in the state in which you intend to obtain licensure. You need to obtain information from the board of nursing regarding the specific registration process because the process may vary from state to state. Then, use the NCLEX® Examination Candidate Bulletin as your guide to complete the registration process.

   Following the registration instructions and completing the registration forms precisely and accurately are important. Registration forms not properly completed or not accompanied by

the proper fees in the required method of payment will be returned to you and will delay testing. You must pay a fee for taking the examination; you also may have to pay additional fees to the board of nursing in the state in which you are applying.
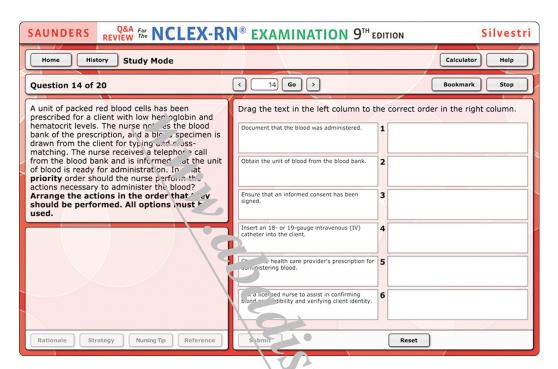


**FIGURE 1.1**  Example of an ordered response question.

## BOX 1.4  Figure Question

The nurse performs client rounds and notes that a client with a respiratory disorder is wearing this oxygen device (refer to figure). The nurse would document that the client is receiving oxygen by which type of low-flow oxygen delivery system? **Refer to figure.**

Figure from Potter, P., Perry, A., Stockert, P. & Hall, A. [2017]. *Fundamentals of nursing.* [9th ed.] Mosby.

1. Venturi mask
2. Nasal cannula
3. Simple face mask
4. Partial rebreather mask

**Answer: 3**

Focus on the **subject,** the type of face mask that the client is wearing. For some of these question types, you need to use the computer mouse and point and click at a designated area to answer the question. For this question, use of the computer mouse is not necessary. A simple face mask is used to deliver low-flow oxygen concentrations of 40% to 60% for short-term oxygen therapy. It also may be used in an emergency. A minimum flow rate of 5 L/min is needed to prevent the rebreathing of exhaled air.