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# Introductory Maternity & Pediatric Nursing

EDITION 5

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**To John**

*My partner, my best friend; you are the light and love of my life!*

**To Mikayla, Jeff, Greg, and Chelsea**

*You continue to show me that children bring happiness, joy, and love to a mother—  
even when those children are adults and parents themselves!*

**To Sierra, Jaymin, Riley, Hayley, Jettison, Jia, and Jagger**

*Being your Nana brings me new understanding, every single day, of the  
depth and meaning of love!*

**In Memory of my Dad, Edgar A. Thomas, and my Mother, Lucy L. Thomas**

*Dad and Mom, I miss you so much. I feel so fortunate to have the gift of  
being able to look at the beauty that surrounds me and see how much you  
both continue to bless me. Your unconditional love allowed me to be the child  
I was and the adult I am. My love for you is unending!*

~Nancy

**To Kinley**

*You are a true gift of grace and a beautiful example of peace. I love you!*

**To Margot and in Memory of Zern**

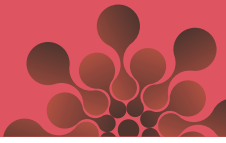
*You are a timeless illustration of love and friendship. Margot, your strength and  
courage is amazing and your love for my family is heart-warming. Zern, you are  
loved and missed.*

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*You model faith and marriage daily. You “young pups” are a joy and a treasure  
and bless all who know you. Flossie you are an inspiration. Lester, thank you for  
your military service and laughter.*

~Cynthia

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# Preface

This fifth edition of *Introductory Maternity & Pediatric Nursing* reflects the underlying philosophy of love, caring, and support for childbearing women, their children, and their families. The content has been updated and revised according to the most current information available. Our goal in this text is to keep the readability of the text at a level with which the student can be comfortable because we recognize that the nursing student has limited time to study and learn maternity and pediatric nursing content. This fifth edition was carefully reviewed, edited, and developed in format to make what was a very readable text even more readable and easy to follow.

In this text, we recognize that cultural sensitivity and awareness are important aspects of caring for childbearing and child-rearing families. We also recognize that many children and pregnant people live in families other than two-parent family homes and therefore refer to reinforcing teaching and supporting childbearing clients and family caregivers of children in all situations and family structures.

Maternal–child healthcare has seen a shift from the hospital setting into community and home settings. More responsibility has fallen on the family and family caregivers to look after the pregnant client or ill child. We stress the importance of reinforcing teaching with the client, the family, and the child, with an emphasis on prevention.

We have attempted to identify all possible unfamiliar terms and define them within the text in recognition of the frustrations that can result from having to turn to a dictionary or glossary for words that are unfamiliar. This increases reading ease for students, decreases time necessary to complete assigned readings, and enhances understanding of the information.

The nursing process is used as the foundation for presenting nursing care. Nursing care plans are included that support the student in the clinical setting in recognizing potential concerns of their clients. Implementation information is presented in a narrative format to enable discussion of how planning, goal setting, and evaluation can be put into action. In the nursing process sections, nursing care focus is used instead of “nursing diagnosis” to more accurately reflect what the nurse is doing—that is, focusing on nursing care.

A full-color format, current photos, drawings, tables, and diagrams further aid students in using this text. Hundreds of drawings and photos are included in this fifth edition.

## CLINICAL JUDGMENT

When caring for clients, the nurse uses their nursing knowledge and goes through a decision-making process to determine client needs. The nurse recognizes and prioritizes client concerns and takes action to help the client attain goals and have positive outcomes. The nurse uses clinical reasoning and clinical judgment throughout this process.

An important aspect of the National Council Licensing Exam (NCLEX) is to measure the ability of the nurse to use critical thinking skills and good clinical judgment to provide safe, effective, and quality care for every client. A goal in this text is to give the student opportunities and support to help in developing those clinical judgment skills.

## RECURRING FEATURES

In an effort to provide the student opportunities to develop those clinical judgment skills and to offer the student and instructor a text that is informative, exciting, and easy to use, we have incorporated a number of special features throughout the text, many of which are included in each chapter.

### Unfolding Case Studies

A short client-based clinical scenario is presented at the beginning of each chapter. The student is provided relevant information so they have the opportunity to critically evaluate the appropriate course of action. The student is challenged to think about the information introduced in the case study as they read the chapter. A mid-chapter scenario helps keep the student engaged and offers an opportunity to review content and again use critical thinking and clinical judgment skills. At the end of the chapter, the student is reminded of the clinical scenario from the beginning and mid-chapter and posed questions to promote critical thinking, review understanding of content material found in the chapter, and use clinical judgment to determine appropriate actions in caring for this client.

### Learning Objectives

Measurable, student-oriented objectives are included at the beginning of each chapter. These help guide the student in recognizing what is important and why, and they provide the instructor with guidance for evaluating student understanding of the information presented in the chapter.

### Key Terms

A list of terms that may be unfamiliar to students but essential to understanding the chapter's content are found at the beginning of each chapter. The first appearance of these terms in the chapter is in boldface type alongside the definition as part of the paragraph. All key terms can be found in the glossary at the end of the text.

### Nursing Process and Care Plans

The nursing process serves as an organizing structure for the discussion of nursing care covered in the text. This feature provides the student with a foundation from which individualized nursing care plans can be developed. Throughout the text, Nursing Process and Care Plan sections provide students with a model to follow when using the information from the nursing process to develop specific nursing care plans for use in their clinical experiences. Each of these sections includes nursing assessment (data collection), outcome identification and planning, relevant nursing care focuses, implementations, and evaluation of the goals and desired outcomes. Emphasis is placed on the importance of involving the family and family caregivers in the assessment (data collection) process. In the Nursing Process and Care Plan sections, we have used terminology from Lippincott Advisor's Problem-based Care Plans. These are used to represent appropriate concerns for a particular condition, but we do not attempt to include all problems that could be identified. The student will find the goals specific, measurable, and realistic and will be able to relate the goals to client situations and care plan development. The evaluation of the goal and desired outcome provide a goal for each nursing care focus and criteria to measure the successful accomplishment of that goal.

### Nursing Procedures

Nursing Procedures detail needed equipment and step-by-step instructions to help the students understand procedure they will encounter as nurses. These instructions can be easily used in a clinical setting to perform nursing procedures.

### Concept Mastery Alerts

Concept Mastery Alerts are placed in select locations throughout the texts and highlight commonly misunderstood concepts. They also provide students with helpful explanations to clarify the concepts.

### Tips for Reinforcing Family Teaching

Information that the student can use in reinforcing teaching with maternity clients, family caregivers, and children is presented in highlighted boxes ready for use.

### Clinical Secrets

This is a recurring feature that shows a nurse who provides brief clinical pearls that students will find valuable in caring for clients in clinical settings. Examples of the types of important issues highlighted include safety, nutrition, and pharmacology concerns, as well as cultural and communication tips.



### Personal Glimpse With Learning Opportunity

Personal Glimpses, included in every chapter, present actual first-person narratives that are unedited and just as the individual wrote them. Personal Glimpses offer the student an individual's view of an experience they had and expounds upon that person's feelings about or during the incident. These narratives are presented to enhance student understanding and appreciation for others' feelings. A Learning Opportunity at the end of each Personal Glimpse encourages students to think of how they might react or respond in the situation presented. These questions further enhance the student's critical thinking skills.

### Cultural Snapshot

These boxes highlight issues and topics with cultural considerations. The student is encouraged to think about cultural differences and stress the importance of accepting the attitudes and beliefs of individuals from cultures other than their own.

### Tables, Drawings, and Photographs

These important aspects of the text have been updated and developed in an effort to help the student visualize the covered content. Many color photographs in a variety of settings are included.

### Key Points

Key Points listed at the end of each chapter help students focus on important aspects of the chapter. Key Points provide a quick review of essential content and address all Learning Objectives stated at the beginning of the chapter.

### Internet Resources

Current websites are included at the end of each chapter as starting-point resources to help students gather information on certain conditions, diseases, and disorders. Websites that offer support and information for families are listed as well.

## LEARNING OPPORTUNITIES

In order to offer students opportunities to check their understanding of material they have read and studied, we have included many learning opportunities throughout the text.

### Test Yourself

These questions are interspersed throughout each chapter and are designed to test understanding and recall of the material presented. The student will quickly determine if a review of what was just read is needed.

### Developing Clinical Judgment—Chapter Workbook

At the end of each chapter, the student will find a workbook section to help bolster development of clinical judgment and mastery of critical thinking needed to care for maternity and pediatric clients. This section includes:

- **NCLEX-Style Review Questions** written to test the student's ability to apply the material from the chapter. These questions use the client–nurse format to encourage the student to critically think about client situations as well as the nurse's response or action. Alternate format style questions, including multiple response questions, are included.
- **Study Activities** which are interactive activities that require the student to participate in the learning process. Important material from the chapter is incorporated into this section to help the student review and synthesize chapter content. Instructors will find many of the activities appropriate for individual or class assignments.
  - » Within the Study Activities, many chapters include an **Internet Activity** that guides students in exploring the internet. Each activity takes the student step-by-step into a website where they can access new and updated information as well as resources to share with clients and families. Some websites include fun activities to use with pediatric clients. These activities may require the use of Acrobat Reader, which can be downloaded free of charge.
- **Critical Thinking: What Would You Do?** which present real-life situations and encourage the student to think about the chapter content in practical terms. These situations require students



to incorporate knowledge gained from the chapter and apply it to real-life problems using clinical judgment skills. Questions provide the student with opportunities to problem solve, think critically, and discover their own ideas and feelings. The instructor can also use the questions as tools to stimulate class discussion.

» **Dosage Calculations** are found in the workbook section of each pediatric chapter where diseases and disorders are covered. These questions ask students to practice dosage calculations. This skill can be directly applied in a clinical setting.

## ORGANIZATION

The text is divided into 10 units to provide content in an orderly approach. The first unit helps build a foundation for students who are beginning their study of maternity and pediatric nursing. This unit introduces the student to caring for childbearing women and children in various settings.

Maternity nursing content is covered in Units 2 to 6. Maternity topics that address low-risk women are covered first in Units 2 to 5. Unit 6 addresses issues related to at-risk pregnancy, childbirth, and newborn care. The instructor may choose to teach the normal content of pregnancy followed by the at-risk pregnancy chapters. The authors designed the content so that normal considerations would be covered first by instructors and then followed by discussion of the at-risk woman, fetus, and neonate with the hope that this grouping will ensure all normal content is covered before any at-risk topics are addressed, thereby reducing the need for parenthetical content in the at-risk chapters. It also encourages the student to review the normal chapters alongside studying at-risk content. This repetition of content is designed to help cement student understanding of the material. In Unit 6, the at-risk disorders are organized so that an explanation of the disorder is covered first and then followed by a discussion of medical treatment and nursing care.

Pediatric nursing content comprises Units 7 through 10. The basic approach to the study of caring for children is organized within a unit discussing health promotion for normal growth and development in each age group. Subsequent units discuss foundational pediatric nursing topics as well as special concerns. Finally, the specific health problems seen in children are covered using a body systems approach. This user-friendly approach to the study of nursing care of children is often used in nursing education curricula.

### Unit 1, Overview of Maternal and Pediatric Healthcare

Unit 1 introduces the student to a brief history of maternity and pediatric nursing in Chapter 1 and discusses current trends in maternal-child healthcare in addition to maternal-child health status concerns. A discussion of the nursing process is also included. This edition uses Lippincott Advisor's Problem-based Care Plans as the foundation for developing and defining the nursing care focuses for each nursing care plan. Chapter 2 follows with a discussion of the family, its structure, and family factors that influence childbearing and child-rearing. The chapter introduces community-based healthcare and discusses various settings in the community through which healthcare is provided for maternity clients and children.

### Unit 2, Foundations of Maternity Nursing

Unit 2 introduces the student in Chapter 3 to male and female reproductive anatomy, which is essential to the understanding of maternity nursing. The menstrual cycle and the sexual response cycle are also addressed. (Note: Pelvic anatomy is addressed in Chapter 8, and breast anatomy is addressed in Chapter 15.) Chapter 4 continues with a discussion of special reproductive issues to include family planning, elective termination of pregnancy, and issues of fertility.

### Unit 3, Pregnancy

Unit 3 begins in Chapter 5 with a discussion of fetal development from fertilization through the fetal period. Chapter 6 introduces the student to how pregnancy is determined and physiologic and psychological adaptations of women during pregnancy; the chapter ends by outlining nutritional requirements of pregnancy. Chapter 7 covers the nurse's role in prenatal care and common fetal assessment tests. This chapter also discusses common discomforts of pregnancy women may experience, elements of self-care during pregnancy that the nurse needs to inform women about, substance use during pregnancy, and information to help women prepare for labor, birth, and parenthood.

### **Unit 4, Labor and Birth**

Unit 4 begins with a discussion of the labor process in Chapter 8. The four components of birth, the process of labor, and maternal and fetal adaptations to labor are covered. Female pelvic anatomy is discussed here. Chapter 9 introduces the student to concepts of pain management during labor and birth. The chapter begins with an overview of the characteristics and nature of labor pain as well as general principles of labor pain management. Nonpharmacologic and pharmacologic methods of pain management are reviewed. Chapter 10 covers the nurse's role during labor and birth to include observation of uterine contractions and fetal heart rate. Chapter 11 discusses procedures the health care provider may utilize to assist in delivery of the fetus. Topics covered include induction and augmentation of labor, assisted delivery (episiotomy, vacuum, and forceps delivery), cesarean birth, and vaginal birth after cesarean.

### **Unit 5, Postpartum and Newborn**

Unit 5 begins with a discussion of normal postpartum adaptation, nursing assessment, and nursing care in Chapter 12. Chapter 13 covers topics related to normal transition of the neonate to extrauterine life, general characteristics of the neonate, and the initial nursing assessment of the newborn. Chapter 14 presents the nurse's role in caring for the normal newborn and includes nursing care considerations in the stabilization and transition of the newborn, normal newborn care, assessment and facilitation of family interaction and adjustment, and discharge considerations. An emphasis is placed on teaching new parents how to care for their newborn. Chapter 15 explores issues related to infant nutrition. Breast-feeding and formula-feeding are presented, along with factors that affect a woman's selection of a feeding method. Advantages and disadvantages of each method are presented. Physiology of breast-feeding, including breast anatomy, is covered here. The nurse's role in assisting women who are breast-feeding and who are formula-feeding is discussed.

### **Unit 6, Childbearing at Risk**

Unit 6 begins with Chapter 16 and focuses on the pregnancy that is placed at risk by preexisting and chronic medical conditions of the woman. This chapter covers the major medical conditions, such as diabetes and heart disease, as well as exposure to infectious agents harmful to the fetus, threats from intimate partner violence, and age-related concerns on either end of the age spectrum. Chapter 17 introduces the student to the pregnancy that becomes at-risk because of pregnancy-related complications and disorders. Threats from hyperemesis, blood incompatibilities, bleeding disorders of pregnancy, and hypertensive disorders are presented. Chapter 18 covers topics associated with the at-risk labor, such as dysfunctional labor, preterm labor, postterm labor, placental abnormalities, and emergencies associated with labor and birth. Chapter 19 looks at conditions that place the postpartum woman at risk. Postpartum hemorrhage, infection, venous thromboembolism, and postpartum mental health issues are addressed. In Chapter 20, gestational concerns and acquired disorders of the newborn are discussed. Chapter 21 addresses congenital disorders of the newborn, including congenital malformations, inborn errors of metabolism, and chromosomal abnormalities.

### **Unit 7, Health Promotion for Normal Growth and Development**

Unit 7 begins with Chapter 22, Principles of Growth and Development, which provides a foundation for discussion of growth and development in later chapters. The issues of children of divorce, latchkey children, runaway children, and homeless children and families are examined. Influences on and theories of growth and development are presented. The rest of this unit is organized by developmental stages from infancy through adolescence. It includes aspects of normal growth and development.

### **Unit 8, Foundations of Pediatric Nursing**

Unit 8 presents Chapter 28, which covers collecting subjective and objective data from children and families. The chapter also includes interviewing and obtaining a history, general physical assessments and examinations, and assisting with diagnostic tests. Chapter 29 presents the pediatric unit, infection control in the pediatric setting, admission and discharge, children undergoing surgery, pain management, the hospital play program, and safety in the hospital. Chapter 30 covers specific procedures for pediatric clients as well as the role of the nurse in assisting with procedures

and treatments. Chapter 31 includes dosage calculation, administration of medications by various routes, and intravenous therapy.

### Unit 9, Special Concerns of Pediatric Nursing

Unit 9 begins with Chapter 32, which presents concerns that face the family of a child with a chronic condition. The chapter discusses the impact on families caring for a child with a chronic condition and the nurse's role in assisting and supporting them. Chapter 33 explores the serious issue of child abuse in its many forms. It addresses the problems of domestic violence and parental substance abuse and the impact that they have on children. This chapter also includes issues surrounding children who are the victim of bullying. Chapter 34 concludes this unit with the dying child. A teaching aid is included in this chapter to help the nurse perform a self-examination to help reflect on their personal attitudes about death and dying, as well as concrete guidelines to use when interacting with a grieving child or adult.

### Unit 10, The Child With a Health Disorder

Unit 10 is structured according to a body systems approach as the basis for discussion of diseases and disorders seen in children. Each chapter begins with a brief review of basic anatomy and physiology of the discussed body system. Throughout the text, family-centered care is stressed. Nursing process and care plans are integrated throughout this unit. Developmental enrichment and stimulation are stressed in sections on nursing process. The basic premise of each child's self-worth is fundamental in all of the nursing care presented.

### Appendices, Glossary, and References

Seven appendices are included at the back of the text and contain important information for the nursing student in maternity and pediatrics courses. **Appendices** include:

- Appendix A: Standard and Transmission-Based Precautions
- Appendix B: Good Sources of Essential Nutrients
- Appendix C: Breast-Feeding and Medication Use
- Appendix D: Cervical Dilation Chart
- Appendix E: Growth Charts
- Appendix F: Pulse, Respiration, and Blood Pressure Values for Children
- Appendix G: Temperature and Weight Conversion Charts

The text concludes with a **Glossary** of key terms, an **English–Spanish Glossary** of maternity and pediatric phrases, and a listing of **References and Selected Readings**.

## TEACHING AND LEARNING RESOURCES

### Resources for Instructors

Tools to assist you with teaching your course are available on the Instructor Resources on **thePoint** at <https://thePoint.lww.com/Hatfield5e>. Resources include:

- A **Test Generator** that lets you put together exclusive new tests from a bank containing over 1,200 questions that span the text's topics in both maternity and pediatrics and is meant to help you assess student understanding of the material.
- An extensive collection of materials is provided for each book chapter.
  1. **Pre-lecture Quizzes** (and answers) are quick, knowledge-based assessments that allow you to check student reading.
  2. **PowerPoint Presentations** provide an easy way for you to integrate the textbook into the classroom experience, either via slide shows or handouts.
  3. **Guided Lecture Notes** walk you through the chapters, objective by objective, and provide you with corresponding PowerPoint slide numbers.
  4. **Discussion Topics** (and suggested answers) can be used as conversation starters or in online discussion boards.
  5. **Assignments** (and suggested answers) include group, written, clinical, and web assignments.
  6. **Case Studies** with related questions (and suggested answers) give students an opportunity to apply their knowledge to a client case similar to one they might encounter in practice.

- An **Image Bank** lets you use the photographs and illustrations from this textbook in your own presentation materials for your course.
- **Answers to Workbook Questions** from the book are provided and may be given to students.
- A sample **syllabus** provides guidance for structuring your maternity and pediatric nursing course.

### Resources for Students

Valuable learning tools for students are available on **thePoint** at <https://thePoint.lww.com/Hatfield5e>. Resources include:

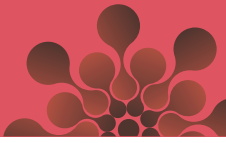
- **NCLEX-style Review Questions** that correspond with each book chapter help students review important concepts and practice for the NCLEX.
- **Watch and Learn Videos** demonstrate important concepts related to the developmental tasks of pregnancy, cesarean delivery, breast-feeding, care of the hospitalized child, medication administration, and developmental considerations in caring for children. Icons appear in the text to direct students to relevant video clips.
- A **Spanish–English Audio Glossary** provides helpful terms and phrases for communicating with clients who speak Spanish.
- **Learning Objectives** from each chapter, **Heart & Breath Sounds**, and **CDC Immunization Schedule** for children are also included.

### Lippincott **CoursePoint+**

*Lippincott® CoursePoint* is an integrated, digital curriculum solution for nursing education that provides a completely interactive and adaptive experience geared to help students understand, retain, and apply their course knowledge and be prepared for practice. The time-tested, easy-to-use, and trusted solution includes engaging learning tools, evidence-based practice, case studies, and in-depth reporting to meet students where they are in their learning, combined with the most trusted nursing education content on the market to help prepare students for practice. This easy-to-use digital learning solution of *Lippincott® CoursePoint*, combined with unmatched support, gives instructors and students everything they need for course and curriculum success!

*Lippincott® CoursePoint* includes:

- Engaging course content with a variety of learning tools to engage students of all learning styles.
- Adaptive and personalized learning helps students learn the critical thinking and clinical judgment skills needed to help them become practice-ready nurses.
- Immediate, evidence-based, online nursing clinical-decision support with Lippincott Advisor for Education.
- Unparalleled reporting provides in-depth dashboards with several data points to track student progress and help identify strengths and weaknesses.
- Unmatched support includes training coaches, product trainers, and nursing education consultants to help educators and students implement *Lippincott® CoursePoint* with ease.



# Acknowledgments

As we began the exciting process of revising and updating this fifth edition of *Introductory Maternity & Pediatric Nursing*, thinking of the students who will use this text was always our top priority. Our goal was to continue to provide the student with an accessible, user-friendly textbook in order to easily read, comprehend, and enjoy learning about childbearing women, children, and their families. Many people were involved in the creation of this project. With gratitude and appreciation, we would like to express our thanks to all of the Wolters Kluwer team whether they had a small or a large part in the process of publishing this textbook:

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Cynthia A. Kincheloe*

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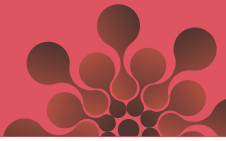
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*Cynthia*

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# UNIT 1

## Overview of Maternal and Pediatric Health Care



The Nurse's Role in a Changing Maternal–Child Healthcare Environment 2

2

Family-Centered and Community-Based Maternal and Pediatric Nursing 18

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# 1

# The Nurse's Role in a Changing Maternal–Child Healthcare Environment

## Key Terms

actual nursing focus  
case management  
critical pathways  
dependent nursing actions  
independent nursing actions  
infant mortality rate  
interdependent nursing actions  
maternal mortality rate  
morbidity  
nursing process  
objective data  
outcomes  
puerperal fever  
risk nursing focus  
subjective data  
wellness nursing focus

## Learning Objectives

*At the conclusion of this chapter, you will:*

1. Discuss factors influencing the development of maternity and pediatric care in the United States.
2. Describe how current trends in maternal–child care have affected the delivery of care to mothers, infants, and children in the United States.
3. Name three ways that nurses contribute to cost containment in the United States.
4. Discuss maternal–child health status in the United States.
5. Discuss two possible reasons the United States lags behind other developed countries in terms of infant mortality rate.
6. Discuss major objectives of Healthy People 2020 as they relate to maternal and pediatric nursing.
7. List new roles of nurses providing maternal and pediatric nursing care.
8. Discuss how nurses use critical thinking skills in maternal and pediatric nursing.
9. List the five steps of the nursing process.
10. Explain the importance of complete and accurate documentation.

After doing a home pregnancy test, **Carmin**, age 26, and **Wesley Buronski**, age 28, have discovered that Carmin is pregnant with their third child. They have a 2-year-old girl and a 6-year-old boy. Wesley has just been laid off from his job and no longer has health insurance. Carmin has a part-time job with no benefits. As you read this chapter, consider what issues and concerns will likely affect this couple in relationship to the pregnancy and to the health concerns of their family.

**A**s a nurse preparing to care for childbearing and child-rearing families, you face vastly different responsibilities and challenges than did earlier maternal and pediatric nurses. Nurses, and other healthcare professionals, are becoming increasingly concerned with much more than the care of pregnancies and sick children. Health teaching, preventing illness, and promoting optimal (most desirable or satisfactory) physical, developmental, and emotional health have become a significant part of contemporary nursing.

Scientific and technologic advances have reduced the incidence of communicable disease while also helping control medical disorders such as diabetes. As a result, health care providers increasingly provide





care outside the hospital. Clients now receive healthcare not only from their primary care providers but also in the home, at schools, clinics, and at mobile clinic sites such as at a homeless shelter. Prenatal diagnosis of birth defects, transfusions and other treatments for the unborn fetus, and improved life support systems for premature infants are but a few examples of the rapid progress in fetal and neonatal care.

Ethical discussions exist in maternal–child health surrounding issues such as abortion, infertility treatments, treating cancer in pregnant women, research on umbilical cord blood, and treatment of extremely premature infants. Maternal–child nurses are faced with caring for their clients while also facing some of these ethical issues.

Tremendous sociologic changes have also affected concepts in maternal–child health. American society is largely suburban with a population of highly mobile persons and families. The structure of families has changed because of factors such as single-parent families, mothers working outside the home, divorce, changes in attitudes toward gender roles, and artificial insemination or adoption by single adults. Consumers of healthcare expect to receive quality care for their medical dollars spent or their insurance payments. In addition, the demand for financial responsibility in healthcare has contributed to shortened hospital stays and alternative methods of healthcare delivery.

The reduction in the incidence of communicable and infectious diseases has made it possible to devote more attention to such critical problems as preterm birth, congenital anomalies, child abuse, learning and behavior disorders, developmental disabilities, and chronic illness. Research in these areas continues. As these findings become available, nurses will be among the individuals who will help translate this research into improved healthcare for pregnant women, children, and families.

However, in order to translate relevant research into nursing practice, you must understand the predictable but variable phases of pregnancy and of a child's growth and development. It is also necessary to be understanding of and sensitive to the importance of family interactions.

## CHANGING CONCEPTS IN MATERNAL–CHILD HEALTHCARE

Maternity care has changed dramatically throughout the years as attitudes and opinions have altered. Historically, maternity care was a function of lay midwives, and most births occurred in the home setting. As knowledge increased about birth interventions, the family physician became the provider of choice for prenatal care and delivery, whereas hospitals, instead of homes, became the accepted place to give birth.

In today's society two different trends have emerged. On one hand, maternity care has become increasingly specialized. Obstetricians often provide routine prenatal and delivery care while a perinatologist, a physician who specializes in the care of women with high-risk pregnancies, follows the

at-risk client and neonatologists provide expert specialized care to at-risk newborns. On the other hand, there is the view that birth is a natural process in which little intervention is required. Therefore, some women choose midwives to provide maternity care, and some elect to deliver at home or in birth centers, which provide a homelike atmosphere.

Pediatrics has evolved from a subset of internal medicine to a specialty that focuses on the child in health and illness through all phases of development. Technologic advances account for many changes in pediatrics in the last 50 years, but sociologic changes, particularly society's view of the child and the child's needs, have been just as important.

The U.S. Department of Health & Human Services website has a timeline that highlights important events and developments in maternal–child health. The timeline can be found at <http://mchb.hrsa.gov/about/timeline/index.asp>.

## Development of Maternity Care

Historically most births occurred at home. The lay midwife, who had no formal education, attended the woman throughout labor and birth. Women of the community shared experience and knowledge about childbirth. Childbirth was truly a woman's affair.

As physicians became educated in maternity practices and began to use instruments such as forceps, to which the midwives had no access, physicians began to replace lay midwives as the attendant at deliveries. Few women at that time became physicians because of the cultural pressures for a woman to fulfill the roles of housewife and mother.

Physicians began to rely increasingly on interventions to assist the natural process of labor and hasten delivery. Lay midwives mainly provided support and encouragement to a woman during her labor and relied on nature to take its course. Therefore, as more physicians began to attend deliveries, labor came to be viewed as an illness, or at the very least, a condition that required the skillful intervention of a physician. Two major developments greatly influenced the way maternity care was practiced in the United States—acceptance of the germ theory and development of anesthesia to decrease the pain of childbirth.

## Acceptance of the Germ Theory

Before scientists knew the principles of infection transmission, it was common for a woman to develop **puerperal fever**, an illness marked by high fever caused by infection of the reproductive tract after the birth of a child. Puerperal fever was often fatal. Although rates of infection and mortality (deaths) were much higher in hospitals, women who delivered at home were also susceptible to puerperal fever.

In the late 1700s, Alexander Gordon, a Scottish physician, was the first to recognize that puerperal fever was an infection transmitted to clients by physicians and nurses as they moved between treating clients with puerperal fever and attending births or caring for women who had already delivered. The work of two other men confirmed Gordon's infection theory.

In 1842, Oliver Wendell Holmes, wrote an essay on puerperal fever based on conclusions he made after observing physicians in clinical practice. He strongly advocated that a physician who performed autopsies on individuals who died of infection should not attend women during childbirth. In 1848, Ignaz Philipp Semmelweis made similar observations in his practice. He noticed a dramatic difference in rates of puerperal fever between two maternity wards, one in which medical students practiced, the other run by midwives. The death rate in the ward attended by medical students was two to three times higher than that of the ward in which the midwives delivered. He noticed that the only difference between the two wards was that the medical students would dissect cadavers and then go immediately to the maternity ward to examine clients. The midwives, of course, did not dissect cadavers. Also at this time, a physician from the hospital died from an infected hand wound received from examining a woman who died of puerperal fever. These observations convinced Semmelweis that the puerperal fever was spread by the hands of the physicians. He began requiring medical students to wash their hands in a chlorinated lime solution between examinations. Immediately, the mortality rate fell from approximately 18% to 1%, equivalent to the death rate in midwife wards.

The topic of “infection” did not become important to the medical community until Louis Pasteur, a French chemist and microbiologist, proved that microorganisms cause infection. Joseph Lister, a British surgeon, embraced Pasteur’s theory and used carbolic acid as an antiseptic during surgery which greatly improved the survival rates of his surgical clients. This led to general acceptance of the germ theory by physicians in Europe and the United States. As physicians began to use antiseptic techniques during the childbirth process, maternal mortality rates fell.

### Easing the Pain of Childbirth

The development and use of anesthesia during childbirth was a change that influenced wealthy and middle class women to begin delivering their children in hospitals, rather than at home. In the 1920s and 1930s, a method called “twilight sleep” greatly increased the number of women who chose to deliver in hospitals. Physicians administered morphine and scopolamine at the beginning of labor to induce twilight sleep. Morphine eased the pain of labor, and scopolamine, an amnesiac, induced a hypnotic-like state that caused the woman to be unable to recall the pain of labor. This development allowed women to experience painless childbirth and gave the physician more control over the birth process. Therefore, the public came to view the hospital as the safest and most humane place in which to deliver a baby.

### Development of Pediatric Care

Prior to the development of antibiotics and immunizations, epidemics were common, and many children died in infancy or childhood. In some cases, disease wiped out entire families. Families were large to compensate for the children

who did not live to adulthood. Society viewed children as additional hands to help with the family farm chores or as contributors to family income. Sick children were often cared for by the adults in the family or by a neighbor with a reputation of being able to care for the sick.

Physicians treated hospitalized children as small adults. Often, children were treated on the same hospital units with adults. Unfortunately, early institutions for children were notorious for their unsanitary conditions, neglect, and lack of proper infant nutrition. Well into the 19th century, mortality rates were very high among institutionalized children in asylums or hospitals.

Many view the physician Arthur Jacobi as the father of pediatrics. Under his direction, several New York hospitals opened pediatric units. He helped found the American Pediatric Society in 1888. During the early 1900s, diarrhea was a primary cause of death in children’s institutions. Initiation of the simple practices of boiling milk and isolating children with septic conditions lowered the incidence of diarrhea. The practice of pasteurizing milk was instrumental in decreasing the rate of death in children.

After World War I, a period of strict asepsis for newborns and pediatrics began. Institutions provided individual cubicles for babies and strictly forbade nurses to pick up the children, except when necessary. Nurses draped clean sheets over the crib sides, leaving infants with nothing to do but stare at the ceiling. These practices did not consider the now recognized importance of toys in a child’s environment; as the prevailing thought was that such objects could transmit infection. Also lacking was stimulation from human interactions. Parents could only visit for brief time periods and were often prevented from picking up and holding their child.

Despite these precautions, high infant mortality rates continued. One of the first people to suspect the cause was Joseph Brennaman. In 1932, he suggested that the infants suffered from a lack of stimulation. Other researchers and physicians studied this and concluded that a lack of maternal interaction or institutionalized care was harmful to infants both physically and psychologically.

In 1951, John Bowlby received worldwide attention, with his study that revealed the negative results of the separation of child and mother because of hospitalization. His work led to a reevaluation and liberalization of hospital visiting policies for children.

In the 1970s and 1980s, physicians Marshall Klaus and John Kennell carried out important studies on the effect of the separation of newborns and parents. They established that early separation may have long-term effects on family relationships and that offering the new family an opportunity to be together at birth and for a significant period after birth may provide benefits that last well into early childhood (Fig. 1-1). These findings have also helped to modify hospital policies. Hospital regulations changed slowly, but they gradually began to reflect the needs of children and their families. Isolation practices have been relaxed for children who do not have infectious diseases; children are encouraged to ambulate as early as possible and to visit the





**FIGURE 1-1** The mother, father, and infant son soon after birth. (Photo by Joe Mitchell.)

playroom, where they can be with other children. Nurses at all levels who work with children are prepared to understand, value, and use play as a therapeutic tool in the daily care of children.

## CURRENT TRENDS IN MATERNAL-CHILD HEALTHCARE

### Family-Centered Care

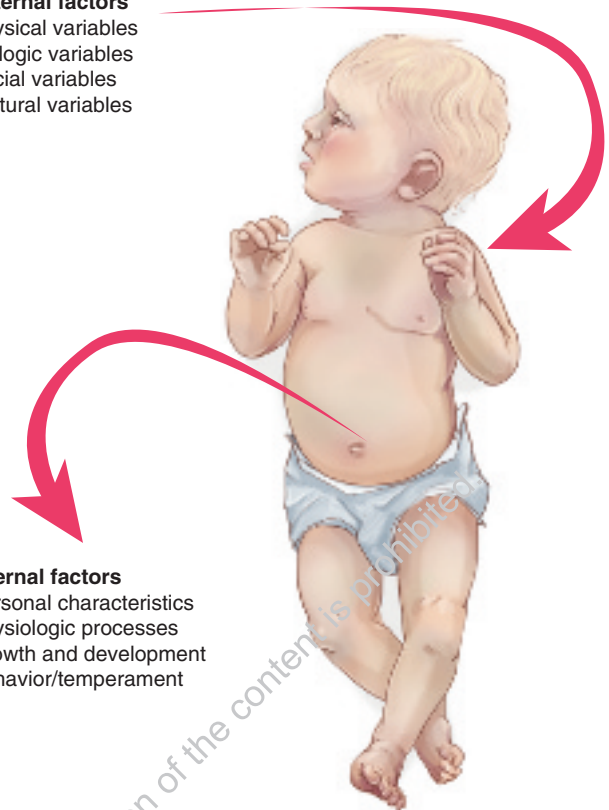
Society began to view childbirth as a safe and natural process as maternal and infant mortality rates began to fall. Women questioned the need for intense intervention in every birth. Also in question were the effects that medications and anesthesia had on the fetus and the newborn. Many women began to insist on natural childbirth methods that allowed nature to take its course with minimal medical involvement. Some women voiced the desire for increased control over decisions about the timing and extent of interventions during labor and birth.

These efforts led to family-centered maternity care, which has now become the norm for American hospitals. Physicians and other health care providers began to respect the rights of women to participate in planning the type of care given to them during labor and birth. Fathers were at first allowed, and later encouraged, to participate in the birth process. Hospitals allowed siblings greater access to the mother and the newborn. Birthing rooms and later, labor-delivery-recovery rooms (LDRs) replaced the old assembly-line system of moving the woman in labor from a labor room, to a delivery room, to a recovery room then to the postpartum unit. Many hospitals provide couplet care where mothers and newborns remain together in the same room and receive care from one nurse. This type of postpartum care takes the place of the older model, in which a nursery nurse cared for the newborn in the nursery and a postpartum nurse took care of the mother on a separate unit.

Family-centered pediatric nursing is a new and broadened concept in the healthcare system of the United States. It is no longer acceptable to treat children with attention given exclusively to their medical problems. Instead, health care providers recognize that children belong to a family, a

### External factors

Physical variables  
Biologic variables  
Social variables  
Cultural variables



### Internal factors

Personal characteristics  
Physiologic processes  
Growth and development  
Behavior/temperament

**FIGURE 1-2** Internal and external factors that influence the health and illness patterns of the child.

community, and a particular way of life or culture and that these factors influence the child's health (Fig. 1-2). Even if nursing care is delivered entirely inside the hospital, family-centered care pays attention to each child's unique emotional, developmental, social, scholastic, and physical needs. Family-centered nursing care also strives to help family members to cope, function normally, understand the child's condition and their role in the healing process, and also to alleviate their fears and anxieties (see Chapter 2).

### Centralized Care

During the past several decades, there has been a definite trend toward centralization of maternity and pediatric services. Providing high-quality medical care for the at-risk client necessitates transporting the pregnant woman or the child to large medical centers with the best resources for diagnosis and treatment. The centralized location includes such specialists as maternal–fetal medicine specialists, neonatologists, pediatric neurologists, geneticists, pediatric oncologists, play therapists, child psychiatrists, neonatal nurse practitioners (NNPs), pediatric nurse practitioners (PNPs), and clinical nurse specialists (CNSs). These large regional centers have specialized units such as at-risk antenatal units, neonatal intensive care units (NICUs), burn care units, and also have highly specialized equipment such as computed tomography (CT) and MRI scanners.

Centralized care often takes the maternity, neonatal, and pediatric client far from home. Family caregivers must travel

a longer distance to visit than if the client were at a local suburban hospital. Family-centered care becomes even more important under these circumstances. Measures are taken to keep the hospitalization as brief as possible and the family close and directly involved in the client's care. For the child in particular, separation from the family is traumatic and may actually slow recovery. Many of these centralized medical centers have accommodations where families may stay during the hospitalization of the pregnant woman, the neonate, or the child.

### Advances in Research

Huge technologic and scientific advances emerged at the same time the movement for family-centered care was gaining momentum. Researchers and health care providers have made much progress in understanding and treating infertility. Diagnostic techniques have been perfected to detect congenital and acquired diseases. Surgical procedures to correct life-threatening deformities (e.g., diaphragmatic hernia) on the fetus while in utero have been developed. New research and techniques make it possible to treat children born with congenital problems and disorders almost immediately after birth. Pediatric specialists and specialty units have the ability to treat childhood disorders.

Two areas of intense scientific inquiry are the prediction and prevention of preterm labor and the causes, prevention, and treatment of preeclampsia, a condition exclusively found in pregnancy marked by high blood pressure, edema, and high levels of protein in the urine. Progress in the prevention and treatment of these disorders would help to further decrease maternal and infant mortality rates.

Scientists are studying ways to prevent and treat genetic disorders with gene therapy. Many animal, human, and stem cell studies are underway to better understand and treat a variety of obstetric and congenital disorders.

### Bioethical Issues

An ethical issue is one in which there is no one "right" solution that applies to all instances of the issue. Ethical decision-making is a complex process that should involve many groups of individuals with varying experiences and perspectives. Recent scientific and medical advances have raised bioethical issues that previously did not exist. Examples of bioethical issues that are present in our world today include the Human Genome Project (HGP), prenatal genetic testing, surrogate motherhood, and the treatment of extremely premature infants.

The HGP began in 1990 with the purpose of studying all of the human genes and how they function. New concepts and ideas regarding many aspects of health and disease emerge as research continues. Identification of gene mutations in people who may be carriers of genetic disorders or who may be at risk for developing inherited disorders later in life has been a big part of the research findings in the project. Genetic testing and counseling is one area greatly affected by the HGP. Another focus of the HGP is to detect predisposition to certain diseases that do not become evident until adulthood. The ability to study the human genes and

factors related to the inheritance of disease and disorders has an impact on the future health of all individuals.

Today it is possible to know many factors about a child before birth. Ultrasound can reveal the gender of the fetus and certain abnormalities early in pregnancy. Genetic testing of the fetus, done via amniocentesis or chorionic villus sampling, can allow for diagnosis of many chromosomal abnormalities during the pregnancy. This knowledge allows the parents to make decisions about continuing the pregnancy or preparing to cope with a child who has a genetic disorder. Some parents want to know everything possible before the child is born, whereas others do not wish to interfere with the natural order of things and decline any type of prenatal testing.

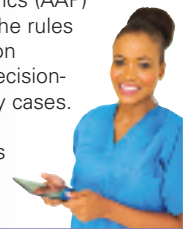
Many ethical questions surround prenatal testing. Is it right to end a pregnancy because a child has a mild genetic abnormality or even the probability of a genetic abnormality? Will we become a society in which parents can choose or reject an unborn child based on their genetic code or sex? Is it right to bring a child into the world with a severe defect, which may cause them and their family caregivers untold pain and suffering? Is it OK to make life and death decisions based on quality of life? Or is any form of life sacred regardless of someone else's definition of quality of life? Because of technology that makes prenatal diagnosis possible, these and other ethical questions abound.

Surrogacy is an arrangement whereby a woman or a couple who is infertile contract with a fertile woman to carry a child. The fetus may result from in vitro fertilization techniques; then the embryos created from such techniques are implanted in the surrogate woman's womb. At other times, the surrogate mother becomes pregnant by artificial insemination with the sperm of the man or with the sperm of an unknown donor. Surrogate motherhood is a situation filled with ethical dilemmas. Questions that surround this issue include the following: Who has the right to make decisions about the pregnancy? Who is legally obligated to the unborn child? What if one or the other of the parties changes their minds before the end of the pregnancy? What happens if the infant is born with a genetic disorder that leaves them physically or mentally disabled?

Advances in neonatal care have made it possible for premature infants to survive outside the womb at younger gestational ages. With advanced technological care, these very premature infants are able to survive, but some have severe conditions because of the medical interventions that saved their lives. Some of these conditions, such as blindness and shortened intestinal tracts, will last a lifetime. Questions that surround this issue include: Is it right to spend enormous amounts of finances and money on saving the life of a child who will continue to need

#### Did You Know?

Many professional organizations have developed guiding principles for making certain ethical decisions. For example, the American Academy of Pediatrics (AAP) recommends that the rules surrounding adoption be used to guide decision-making in surrogacy cases. This principle helps safeguard the rights of the child in this unusual situation.



lifelong and expensive medical care? Who will pay for the medical and nursing care of this child throughout their lifetime? At what cost is it worth to save a life?

## Demographic Trends

Several demographic trends are influencing the delivery of maternal–child healthcare in the United States. The aging of society and the tendency of American families to have fewer children have caused a shift in focus from the needs of women and children to those of older adults. Relocating to different parts of a city, or to a different state, or even a change in insurance plans can lead to choosing different health care providers, which can cause an interruption in or lack of healthcare services such as immunizations or screenings.

Nurses and other health care providers need to provide culturally appropriate care. Health care providers must assess the use of nontraditional methods of healing and traditional remedies and integrate these methods into the plan of care as appropriate.

## Poverty

One social issue that greatly influences maternity and pediatric care is that of poverty. A woman who lives in poverty is less likely to have access to adequate prenatal care. Poverty also has a negative impact on the ability of a woman and her children to be adequately nourished and sheltered and increases the risk for substance abuse and exposure to diseases such as tuberculosis, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), and other sexually transmitted infections. Each of these factors increases the chance of adverse outcomes for childbearing women and their children.

## Cost Containment

Cost containment refers to strategies developed to reduce inefficiencies in the healthcare system. Inefficiencies can occur in the way consumers use healthcare. For example, taking a child to the emergency department (ED) for treatment of a cold is an inefficient use of resources and finances. It would be more efficient to treat the child's cold at a clinic.

Inefficiencies can also relate to the setting in which healthcare is given. For example, in the past, physicians admitted all surgical clients to the hospital the night or sometimes even several days before the scheduled procedure. This practice demonstrates an inefficient use of the hospital setting. Preparation of the client for surgery takes place more efficiently on an outpatient basis without reducing quality.

Inefficiencies can also exist in the delivery of health services. For example, a NICU is a highly specialized, costly unit to operate. If every hospital in a large city were to operate a NICU, this would be an inefficient delivery of health services. It is more cost effective to have one large centralized NICU.

Costs can also be controlled by providing alternative delivery systems. Many hospitals found that it is cost efficient to send a client home earlier and provide follow-up care using a home health agency. Skilled and intermediate nursing and rehabilitation facilities and hospice programs are other examples of alternative delivery systems.

Nurses are instrumental in providing care via several specific cost-containment strategies. These include health promotion and screenings, case management, and the use of critical care paths. Nurses have long advocated health promotion activities as a valuable way to control healthcare costs. Health promotion involves helping people make lifestyle changes to move them to higher levels of wellness. Health promotion includes all aspects of health: physical, mental, emotional, social, and spiritual. Many nurses and nursing organizations lobby for increased spending on health promotion and illness prevention activities. For example, nurses may testify at a public hearing that it is more cost effective to provide comprehensive prenatal care for low-income women than to pay the high cost of highly specialized care in a NICU for a preterm newborn. Nurses may also lobby for low-cost programs to provide periodic screening examinations in schools. The belief is that it is cheaper to screen for illness and provide early treatment than to provide care when a disease is well advanced and harder to treat.

Although nurses are not the only licensed professionals qualified to provide case management, many case managers are nurses. **Case management** involves monitoring and coordinating care for individuals who need high-cost or extensive healthcare services. An at-risk pregnant woman with diabetes is a good candidate for case management because she requires frequent monitoring of her blood sugar and the coordination of several health care providers. Case management is used to prevent overlapping of services or diagnostic tests from different health care providers who are medically managing the client.

Concerns about cost containment, quality improvement, and managed care have led many facilities to use a system of standard guidelines, termed critical pathways. **Critical pathways** are standard care plans used by the entire multidisciplinary team to organize and monitor the care provided. It provides outcome-based guidelines within a designated length of stay. A critical pathway includes all aspects of care such as diagnostic tests, consultations, treatments, activities, procedures, teaching, and discharge planning (Table 1-1). Other names for critical pathways are care maps, collaborative care plans, case management plans, clinical paths, and multidisciplinary plans. To ensure success, the critical pathways must be a collaborative effort of all disciplines involved, and all members of the health team must follow them. The nursing process is part of the underlying framework of critical pathways. Documentation of nursing interventions and outcomes is essential to the overall process.

### TEST YOURSELF

- ✓ Name two major developments that contributed to the modernization of maternity care in the United States.
- ✓ Describe what is meant by family centered care.
- ✓ Identify two bioethical issues facing maternal–child nurses.



**TABLE 1-1** Critical Path for School-Age Child With Long-Leg Cast After Fracture

	DAY 1	DAY 2
<b>Diagnostic Tests</b>	CBC. X-ray left leg.	
<b>Assessments</b>	Establish baseline neurovascular status, then neurovascular checks every 2 hours. Inspect cast. Assess head, chest, and abdomen for other injuries. Assess skin integrity.	Perform neurovascular checks every 4 hours. Demonstrate to family how to perform neurovascular checks. Inspect cast. Show family how to do cast inspection. Assess skin integrity. Observe family perform skin integrity assessment.
<b>Diet</b>	Diet as tolerated.	Diet as tolerated. Provide instruction on adding foods rich in protein.
<b>Activity</b>	Elevate leg when lying or sitting. Start non-weight-bearing crutch walking. Initiate safety precautions.	Elevate leg when lying or sitting. Assess ability to use non-weight-bearing crutch walking for discharge. Maintain safety precautions.
<b>Medications</b>	Tylenol with codeine for pain as ordered.	Tylenol with codeine for pain as ordered. Tylenol for pain as ordered.
<b>Psychosocial</b>	Assess developmental status. Promote self-care (bathing, dressing, grooming, etc.). Provide diversional activities. Assist in continuing school work. Reinforce safety.	Provide instruction on diversional activities for home. Instruct family on how to promote self-care. Reinforce safety information.
<b>Discharge Planning</b>	Reinforce cast care. Demonstrate and observe crutch walking. Arrange for home tutoring.	Provide written instructions and obtain feedback on cast care. Provide written instructions and obtain feedback on crutch walking. Provide written instructions for home tutoring. Include family and child in activities and instructions. Arrange for follow-up appointment.

## PAYMENT FOR HEALTH SERVICES

Healthcare insurance often facilitates access to and use of healthcare services. Typically, families with healthcare insurance are more likely to have a primary health care provider and to participate in appropriate preventive care.

Most employers provide some form of medical insurance for employees and their families; or families may elect to purchase their own insurance apart from an employer. In either situation, this type of insurance is called private insurance. For those who are uninsured, the federal and state governments provide means to access healthcare services. In addition, specialized services, often funded by local, state, or federal governments or administered by private organizations, are available.

### Federally Funded Sources

#### Medicaid

Medicaid was founded in 1965 under Title XIX of the Social Security Act. This federal program supplies grants to states to provide healthcare for individuals who have low incomes and meet other eligibility criteria. Under broad federal guidelines, each state develops and administers its own Medicaid program; therefore, eligibility requirements and application processes vary from state to state. Pregnant

women and children who meet the income guidelines qualify for this program.

#### State Child Health Insurance Program

Many families make too much money to qualify for Medicaid; however, health insurance is not available or affordable to them. Because of this, many pregnant women and children are not able to get preventive care such as prenatal care, well-child visits, and immunizations. In response to this need, the federal government instituted another grant program to states under Title XXI of the Social Security Act. The State Child Health Insurance Program, first known by its acronym “SCHIP” now referred to as “CHIP,” was enacted in 1997. CHIP provides health insurance to newborns and children in low-income families who do not otherwise qualify for Medicaid and are uninsured.

#### Special Supplemental Nutrition Program for Women, Infants, and Children

One federally funded program that continues to successfully meet its goal to enhance the nutritional status for women and children is the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). WIC began serving low-income, nutritionally at-risk pregnant, breast-feeding, and postpartum women and their children (as old as 5 years)



**FIGURE 1-3** A trained registered nurse screens a woman and her child at a WIC clinic.

in 1974 (Fig. 1-3). Nutritional risk factors are categorized as medically based risk and diet-based risk. Examples of medical risk factors include conditions such as young maternal age, anemia, poor pregnancy outcomes, and being underweight. Diet-based risk includes diets with deficiencies in any of the major food groups, vitamins, or minerals.

Eligible women and their children receive food vouchers to redeem at participating grocery stores. The vouchers allow the woman to purchase foods that are high in at least one of the following nutrients: protein, iron, calcium, and vitamins A and C. Fortified cereals, milk, eggs, cheese, peanut butter, and legumes are examples of eligible foods. Breast-feeding is encouraged; however if a participant chooses to bottle-feed, the WIC program provides some formula assistance.

### Specialized Services

Other institutions and organizations across the United States provide healthcare services to children for special conditions. Examples include the Shriners Hospital for Children, Easterseals, and St. Jude Children's Research Hospital. The Shriners Hospital provides a wide variety of services to children with orthopedic disorders, burns, spinal cord injuries, and cleft lip and palate. Easterseals is a healthcare organization that focuses on the needs of people with disabilities, and other diagnosis, throughout the lifespan and includes helping veterans. St. Jude Children's Research Hospital focuses on treating children with cancer. There are national support networks, online or in-person, for many specific conditions. Examples of these include the National Down Syndrome Society (NDSS), The Compassionate Friends (support for family after a child's death), and the Substance Abuse and Mental Health Services Administration (SAMHSA). In addition, there are local support groups based out of community groups or hospitals.

#### Here's How You Can Help!

Provide the client and family with a list of available resources. This information can be of great help, especially if the family needs financial assistance to afford adequate medical treatment.



### BOX 1-1 Selected Vital Statistics Definitions

*Birth rate:* The number of live births per 1,000 population (in a calendar year).

*Neonatal mortality rate:* The number of infant deaths during the first 28 days of life for every 1,000 live births.

*Infant death:* Death of a live-born child before their first birthday (includes neonatal death).

*Infant mortality rate:* The number of infant deaths per 1,000 live births within a calendar year (includes neonatal mortality rate).

*Maternal mortality rate:* The number of maternal deaths per 100,000 live births caused by a pregnancy-related complication that occurs during pregnancy or during the 42 days after pregnancy.

Remember **Carmin** and **Wesley Buronski** from the beginning of the chapter. What are some resources you might suggest to this couple to help them investigate what is available for their family?

## MATERNAL–CHILD HEALTH TODAY

The Centers for Disease Control (CDC) and the National Centers for Health Statistics track statistics that are measures of our nation's health. Birth and death rates, life expectancy, and morbidity rates are examples of health statistics that are tracked. The statistics of particular interest to the maternity and pediatric nurse include maternal, infant, and child mortality rates. In addition to tracking statistics, the CDC develops and supports programs and interventions to improve maternal–child health.

### Maternal–Infant Health Status

Mortality (death) rates are statistics recorded as the ratio of deaths in a given category to the number of individuals in that category of the population. The CDC reports all mortality rates relating to the fetus, neonate, and infant as the number of deaths for every 1,000 live births. Maternal deaths are reported per 100,000 live births. Box 1-1 defines selected terms used in vital statistics. Box 1-2 lists the leading causes of infant and maternal deaths.

Both infant and maternal mortality rates have fallen dramatically since the early 1900s. At that time, for every 1,000 live births, approximately 100 infants died before they reached their first birthdays. In 1940, that number had dropped to a little less than 50 deaths per 1,000 live births. Between 1940 and 2009 the **infant mortality rate** (the number of infant deaths per 1,000 live births within a calendar year) steadily decreased and in 2018 it was at 5.79 deaths per 1,000 live births (Centers for Disease Control and Prevention, 2020) (Fig. 1-4).

**Maternal mortality rates** (the number of maternal deaths per 100,000 live births caused by a pregnancy-related complication that occurs during pregnancy or anytime within the 42 days after pregnancy) at the turn of the century ranged between 600 and 900 deaths per 100,000 live births, and in 2016, there were approximately 16.9 deaths

### BOX 1-2 Leading Causes of Infant and Maternal Mortality in the United States

#### Infant Mortality<sup>a</sup>

1. Congenital malformations, deformations, and chromosomal abnormalities
2. Disorders related to short gestation and low birth weight
3. Newborns affected by maternal complications of pregnancy

#### Maternal Mortality<sup>b</sup>

1. Hemorrhage
2. Sepsis
3. Hypertensive disorders

<sup>a</sup>Kochanek, K. D., Murphy, S. L., Xu, J., & Arias, E. (2019). Deaths: Final data for 2017. *National Vital Statistics Reports*, 68(9):1–77. [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_09-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf).

<sup>b</sup>World Health Organization (2019). Maternal Mortality. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>

per 100,000 live births (CDC, 2019). A number of factors, including variables in the way causes of death are reported and recorded and increasing numbers of woman who have chronic health conditions which make them higher pregnancy risks, contribute to making maternal deaths related to pregnancy difficult to trend.

The United States lags behind other industrialized nations with regard to infant mortality. Two factors which contribute to these rates include the large number of preterm births in the United States—1 in 8 births compared to 1 in 18 births in other countries—and the differences in reporting of live births in various countries.

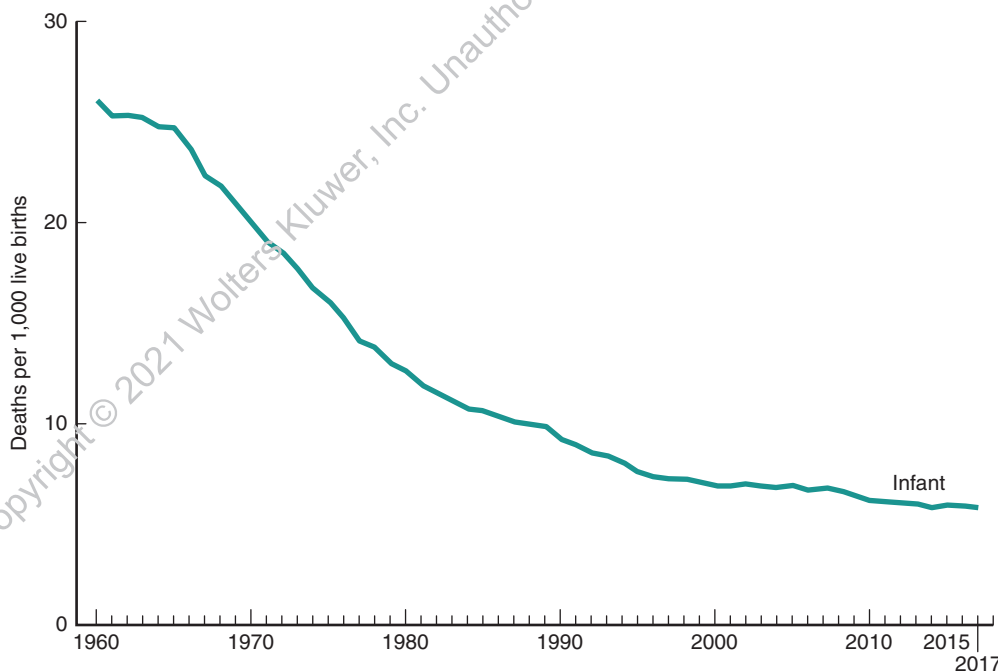
### Concept Mastery Alert

The infant mortality rate is a good indicator of the overall health of the nation. Maternal mortality rate has decreased because more pregnant women get good prenatal care. Rates go up when this care is not available.

Many factors may be associated with high infant mortality rates and poor health. Low birth weight and late or nonexistent prenatal care are factors in the poor rankings in infant mortality. Other major factors that compromise infant health include congenital anomalies, sudden infant death syndrome (SIDS), respiratory distress syndrome, and increasing rates of HIV. Low birth weight and other causes of infant death and chronic illness are often linked to maternal factors, such as lack of prenatal care, smoking, use of alcohol and illicit drugs, pregnancy before age 18 or after age 40, poor nutrition, lower socioeconomic status, lower educational levels, and environmental hazards.

### Child and Adolescent Health Status

In the first half of the 20th century, many children died during or after childbirth or in early childhood because of disease, infections, or injuries. Infectious diseases such as polio, diphtheria, scarlet fever, measles, and whooping cough once posed the greatest threat to children. Technologic and socioeconomic changes have influenced both the health problems today's children face and the healthcare they receive. Communicable diseases of childhood and their complications are no longer a serious threat to the health of



**FIGURE 1-4** U.S. infant mortality rates from 1960 to 2017. (Redrawn from Kochanek, K. D., Murphy, S. L., Xu, J., & Arias, E. (2019). Deaths: Final data for 2017. *National Vital Statistics Reports*, 68(9):1–77. [https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68\\_09-508.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf). Xu J., Murphy S.L., Kochanek K.D., & Arias E. (2020 January). Mortality on the United States, 2018. *NCHS Data Brief No. 355*. <https://www.cdc.gov/nchs/products/databriefs/db355.htm>)

children. However, today, the largest risk to all children and adolescents is unintentional (accidental) injury, frequently the result of motor vehicle accidents. Other unintentional injuries include drowning, falls, poisonings, and fires. Currently, health problems for children focus more on social concerns including substance abuse, violence, abuse, and mental health issues. Families, communities, and government agencies minimize the risks of injury-related death through protection and safety measures. Children who are uninsured often lack preventative healthcare such as routine check-ups, immunizations, and hearing and vision screenings. These children may not have a regular health care provider. Healthcare for children is provided by clinics, school nurses, and EDs. Additionally, parents may rely on culturally based remedies, procedures, or the use of traditional healers before ever seeking care from medical personnel. **Morbidity** refers to the number of persons afflicted with the same disease condition per a certain population. Morbidity rates among children are often associated with environmental and socioeconomic issues. Increasing complexity in the environment seems to have created new morbidities that greatly affect the child's psychosocial development. These include the following:

- School problems, including learning disabilities and attention difficulties
- Child and adolescent mood and anxiety disorders
- Increasing rates of adolescent suicide and homicide
- Firearms in home
- School violence
- Drug and alcohol abuse
- HIV and AIDS
- Effects of media on violence, obesity, and sexual activity

Historically, disease conditions affecting children were very different from those affecting adults. Today, an increasing number of health conditions that used to be seen only in adults are occurring in children. For example, hyperlipidemia and hypercholesterolemia are appearing more frequently in children. There is an increase in the number of children older than 12 years identified with hypertension (elevated blood pressure). Obesity is another major health concern in children. In addition, children are now included in the statistics for clients experiencing depression.

Developmental problems related to socioeconomic factors are on the rise, including intellectual disability (formerly called mental retardation), learning disorders, emotional and behavioral problems, and speech and vision impairments. Lead poisoning appears to be a major threat to the child's developmental well-being. Although strict laws have minimized the amount of lead in gas, air, food, and industrial emissions, many children live and play in substandard housing areas where exposure to old, chipped, lead-based paint, dust, and soil often occurs.

Other prevalent factors that affect children's health include respiratory illness, violence toward children in the form of child abuse and neglect, homicide, suicide, cigarette smoking, alcohol and illicit drug use, risky sexual behavior, obesity, and lack of exercise.

Establishment of healthy living habits takes place in early childhood. Many schools educate students about the hazards of tobacco, drugs, and the importance of exercise, nutrition, and safe sex. Many also provide immunization and screening programs.

### Campaigns to Improve Maternal–Child Health Status

The United States has successfully improved the health of women and their children in many areas. Examples include the Newborn Hearing Screening program to reduce preventable complications of early hearing loss. Another success is the 50% reduction in cases of SIDS after initiation of the Back to Sleep campaign. Breast-feeding Friendly Workplace initiatives and the U.S. Surgeon General's Call to Action to Support Breast-feeding further support breast-feeding mothers. Immunization against infectious diseases was one of the most significant public health achievements of the 20th century. The CDC sponsors National Immunization Awareness Month (NIAM), with the goal of increasing awareness about immunizations across the lifespan and promoting the benefits of immunization.

Prevention measures to reduce maternal and infant mortality and to promote the health of all childbearing-aged women and their newborns should start before conception and continue through the postpartum period. Box 1-3 lists ways to continue to decrease maternal and infant mortality.

### Healthy People 2030

In 1990, the U.S. government developed Healthy People, a national initiative with goals related to preventing illness, promoting health, increasing quality of life, and eliminating health disparities so that people live long, healthy lives. Healthy People 2000 was the initial document published. The current document is Healthy People 2030.

Prevention of illness, or health promotion, is the underlying theme of the goals. Each goal was further broken down into focus areas with specific objectives. The objective was a measurable component to evaluate if the goal was met or not. Many of the focus areas and goals directly relate to pregnant women and children and their healthcare. Box 1-4 identifies some of the maternal–child specific focus areas and goals from Healthy People 2030. Nurses caring for pregnant women and children use these objectives as underlying guidelines in planning care. The complete list of topics and objectives can be found at <https://health.gov/healthypeople/objectives-and-data/browse-objectives>.

#### TEST YOURSELF

- ✓ Name some of the causes of maternal mortality in the United States.
- ✓ Name one healthcare milestone related to women or children for each decade of the 20th century.
- ✓ What is the vision for the Healthy People 2030 initiative?



**BOX 1-3 Opportunities to Reduce Maternal and Infant Mortality****Before Conception**

- Screen women for health risks and preexisting chronic conditions, such as diabetes, hypertension, and sexually transmitted diseases.
- Counsel women about contraception and provide access to effective family planning services (to prevent unintended pregnancies and unnecessary abortions).
- Counsel women about the benefits of good nutrition; encourage women, especially, to consume adequate amounts of folic acid supplements (to prevent neural tube defects) and iron.
- Advise women to avoid alcohol, tobacco, and illicit drugs.
- Advise women about the value of regular physical exercise.

**During Pregnancy**

- Provide women with early access to high-quality care throughout pregnancy, labor, and delivery. Such care includes risk-appropriate care, treatment for complications, and the use of antenatal corticosteroids when appropriate.
- Monitor and when appropriate, treat preexisting chronic conditions.

- Screen for and when appropriate, treat reproductive tract infections including bacterial vaginosis, group B streptococcus infections, and human immunodeficiency virus.
- Vaccinate women against influenza, if appropriate.
- Continue counseling against use of tobacco, alcohol, and illicit drugs.
- Continue counseling about nutrition and physical exercise.
- Educate women about the early signs of pregnancy-related problems.

**During Postpartum Period**

- Vaccinate newborns at age-appropriate times.
- Provide information about well-baby care and benefits of breast feeding.
- Warn parents about exposing infants to second-hand smoke.
- Counsel parents about placing infants to sleep on their backs.
- Educate parents about how to protect their infants from exposure to infectious diseases and harmful substances.

**BOX 1-4 Excerpt from: Healthy People 2030 Topics Related to Childbearing Women and Children****Topic:** Family Planning

**Goal:** Improve pregnancy planning and prevent unintended pregnancy

- Reduce the proportion of unintended pregnancies
- Increase the proportion of adolescents who have never had sex
- Reduce the proportion of pregnancies conceived within 18 months of a previous birth
- Reduce pregnancies in adolescents
- Increase the proportion of adolescent males who used a condom the last time they had sex

**Topic:** Vaccination

**Goal:** Increase vaccination rates

- Maintain the elimination of measles, rubella, congenital rubella syndrome, and polio
- Maintain the vaccination coverage level of one dose of the measles-mumps-rubella (MMR) vaccine in children by age 2 years
- Increase the proportion of people who get the flu vaccine every year
- Increase the proportion of adolescents who get recommended doses of the HPV vaccine

**Topic:** Injury Prevention

**Goal:** Prevent injuries

- Reduce unintentional injury deaths
- Reduce emergency department visits for medication overdoses in children under 5 years
- Reduce deaths from motor vehicle crashes

**Topic:** Violence Prevention

**Goal:** Prevent violence and related injuries and deaths

- Reduce intimate partner violence
- Reduce child abuse and neglect deaths
- Reduce firearm-related deaths

**Topic:** Pregnancy and Childbirth

**Goal:** Prevent pregnancy complications and maternal deaths and improve women's health before, during, and after pregnancy

- Reduce preterm births
- Increase the proportion of women who get screened for postpartum depression
- Increase the proportion of women of childbearing age who get enough folic acid

Note: This is not a comprehensive list.

Adapted from Office of Disease Prevention and Health Promotion. (January 16, 2020). *Topics and objectives*. <https://health.gov/healthypeople/objectives-and-data/browse-objectives>



## A Personal Glimpse

My grandpa's eyes gave me my first vision of nursing. An LPN, he filled my head with hospital stories and my belly with chocolate milk. He saw people hurt by pain and fear, and he made them feel better. I wasn't much bigger than the children he saw, but I knew I wanted to make them feel better too. So I went to nursing school in the same hospital where I shared chocolate milk with Grandpa.

My pediatric nursing career started at graduation 35 years ago. Back then, the community pediatric unit was always filled to capacity. Outpatient and critical care services for children were minimal, so disorders ranged from the mild to the severe. Newborns through teens were treated for everything from mild diarrhea to significant trauma. But two things remained constant regardless of age or diagnosis: the pain and the fear.

Soon, helping sick children feel better was no longer enough. I realized early in my career that the best way to help was to prevent children from getting sick in the first place. So I went back to school to get baccalaureate and master's degrees to become a PNP. Twenty years later, I still practice as a PNP in a rural community.

Changes in healthcare have put more emphasis on various nonhospital settings, where most children receive care. Healthy children are less likely to become ill and more likely to become healthy adults. Prevention and health promotion are essential. They should be part of the care of all children (and adults!), including those who are hospitalized. I always take the time to teach the importance of immunizations, proper nutrition, growth, and development. A little goes a long way, and there is tremendous satisfaction in knowing that I've helped to ease pain and fear before they've had a chance to get started.

Mary

**Learning Opportunity:** What are the challenges for the nurse caring for the child in a community health setting? Describe the priorities of the pediatric nurse in health promotion and disease prevention.

## CRITICAL THINKING

In all nursing roles it is important to use clinical judgment and purposeful thought and reasoning to make decisions; doing so leads to positive outcomes for the client. This process is called critical thinking. The nurse collects data and uses skills and knowledge to make a conscious plan to care for the client and family. As the plan is carried out, the care of the client is continually evaluated, always keeping the desired outcomes in mind. By using critical thinking, the nurse is more effective at meeting the needs of the client. Critical thinking involves a systematic process and is refined through experience. A critical thinker realizes there is often more than one solution to a problem and that the client's needs are ever changing.

## THE NURSING PROCESS

The **nursing process** is a proven form of problem solving based on the scientific method. The nursing process consists of five components:

- Assessment (data collection)
- Nursing care focus (sometimes called nursing diagnosis)
- Outcome identification and planning
- Implementation
- Evaluation

Based on the data collected during the assessment, nurses determine the nursing care focuses (nursing diagnoses), plan and implement nursing care, and evaluate the results. The process does not end here but continues through reassessment, establishment of new nursing care focuses, additional plans, implementation, and evaluation. The goal is to identify and deal with all the client's nursing problems (Fig. 1-5).

### Assessment (Data Collection)

Nursing assessment is a skill that is practiced and perfected through study and experience. The licensed practical–vocational (LPN/LVN) nurse collects data that contribute to the client's assessment. It is important to be skilled in understanding the concepts of verbal and nonverbal communication; concepts of growth and development; anatomy, physiology, and pathophysiology; and the influence of cultural heritage and family social structure. Data collected form the basis of all nursing care for the client.

Data collection begins with the admission interview and physical examination. During this phase, a relationship



FIGURE 1-5 Diagram showing the nursing process.

of trust begins to build between the nurse, the client, and the family. This relationship forms more quickly when the nurse is sensitive to the client's cultural background. Careful listening and recording of **subjective data** (data spoken by the client or family) and careful observation and recording of **objective data** (data the nurse observes) are essential to obtaining a complete picture of the client.

### Nursing Care Focus (Nursing Diagnosis)

The process of determining a nursing care focus begins with analysis of information (data) gathered. Along with the RN, the LPN/LVN participates in the development of a nursing care focus based on actual or potential health problems that fall within the range of nursing practice. These nursing care focuses are not medical diagnoses; rather, nursing care focuses describe the client's response to a disease process, condition, or situation. Nursing care focuses change as the client's responses change; therefore, nursing care focuses are in a continual state of reevaluation and modification.

Nursing care focuses can relate to actual, risk, and wellness concerns for the client. **Actual nursing focuses** identify existing health problems. For example, a child who has asthma may have an actual nursing care focus stated as *ineffective airway clearance related to increased mucus production as evidenced by dyspnea and wheezing*. This statement identifies a health problem the child actually has (ineffective airway clearance); the etiology which is the factor that contributes to its cause (increased mucus production); and the signs and symptoms. This is an actual nursing care focus because of the presence of signs and symptoms and the child's inability to clear the airway effectively.

**Risk nursing focuses** identify health problems to which the client is especially vulnerable. These identify clients at high risk for a particular problem or problems. An example of a risk nursing care focus is *injury risk related to repeated falls secondary to crutch walking*.

**Wellness nursing focuses** identify the potential of a person, family, or community to move from one level of wellness to a higher level. For example, a wellness nursing care focus for a family adapting well to the birth of a second child might be *appropriate psychosocial adaptation*.

### Outcome Identification and Planning

To plan nursing care for the client, data must be collected (the assessment component of the nursing process) and analyzed (the nursing care focus component of the nursing process) and outcomes identified in cooperation with the child and family caregiver. These **outcomes** (goals) should be client-focused (specific), stated in measurable terms, attainable, and realistic and include a time frame in which the goal should be accomplished. For example, a short-term expected outcome for a child with asthma could be "The child will demonstrate use of metered-dose inhaler within 2 days." Although the RN may identify a number of possible nursing care focuses and outcomes, they must review them, rank them by urgency and client input, and select those that require immediate attention. If the client does not have input

into their plan of care, they are less likely to follow with the plan.

To accomplish the goals, the nurse must propose nursing interventions to achieve them. This is the planning component of the nursing process. These nursing interventions may be based on evidence-based nursing research, clinical experience, knowledge of the health problem, standards of care, standard care plans, or other resources. Interventions must be discussed with the client and family to determine if they are practical and workable. Interventions are modified to fit the individual client. If standardized care plans are used, they must be individualized to reflect the client's developmental and cognitive levels and family, economic, and cultural influences.

### Implementation

Implementation is the process of putting the nursing care plan into action. This is when the nurse is performing the planned interventions for and with the client. The interventions may be independent, dependent, or interdependent.

**Independent nursing actions** are actions that may be performed based on the nurse's own clinical judgment, for example, initiating protective skin care for an area that might break down. **Dependent nursing actions**, such as administering analgesics for pain, are actions that the nurse performs as a result of a health care provider's order.

**Interdependent nursing actions** are actions that the nurse must accomplish in conjunction with other health team members, such as meal planning with the dietary therapist and reinforcing breathing exercises with the respiratory therapist.

### Evaluation

Evaluation is a vital part of the nursing process. The LPN/LVN participates with other members of the healthcare team in the client's evaluation. Evaluation measures if the nursing plan of care was successful or not. Success is determined if the client met the identified outcomes or not. Like assessment, evaluation is an ongoing process. If the goals have not been met in the specified time, or if implementation is unsuccessful, the nurse needs to reevaluate and revise part of the care plan. Possibly the outcome is unrealistic and needs to be discarded or adjusted. Both objective data (measurable) and subjective data (based on responses from the client and family) are used in the evaluation and the nursing process continues.

### DOCUMENTATION

One of the most important parts of nursing care is recording information about the client on the permanent record. This record, the client's chart, is a legal document and must be accurate and complete. In it are nurse observations and findings. Nursing care is provided and documented and then the client's responses to care are also documented. This helps explain and justify the nurse's actions. In maternity and pediatric settings, documentation is extremely important

because records can be used in legal situations many years after the fact.

You may complete various forms of documentation, including admission assessments, nurse's or progress notes, graphic sheets, checklists, medication records, and discharge checklists or summaries. Many healthcare settings use computerized or bedside documentation records. Whatever the system or form used, it is important to document concise and factual information. Everything handwritten must be legible and clear and include the date and time. Document nursing actions, such as medication administration, as soon as possible after the intervention to ensure the action is communicated to all members of the healthcare team, especially in the care of childbearing women and children.

### TEST YOURSELF

- ✓ During the nursing process, analysis of information (data) gathered during the assessment is done in order to determine the \_\_\_\_\_ (two words).
- ✓ In which part of the nursing process is it determined whether or not identified outcomes have been met?
- ✓ Name at least one important criterion the nurse must meet when documenting health information.

Think back to **Carmin** and **Wesley Buronski** from the beginning of the chapter. What are some of the issues and concerns you think might affect this family in relationship to their health and well-being?

### KEY POINTS

- Two major developments that changed maternity care in the United States were acceptance of the germ theory that led to decreased deaths from infection and the development of obstetric anesthesia to ease the pain of childbirth.
- Many changes have taken place in the care of children in the past century. Until the early part of the 20th century, society viewed children as miniature adults and expected them to behave that way.
- The concept of family-centered care developed in conjunction with the consumer movement that led childbirth to be viewed as a safe and natural process. Family-centered pediatric care recognizes that children should receive care within the context of their families and cultural norms.
- Centralization of care contributes to economic responsibility by avoiding duplication of services and expensive equipment.
- Ethical dilemmas are by definition difficult to decide and involve complex choices and conflicts. Ethical decision-making requires careful consideration and input from a variety of sources.
- Recent advances in research have led to new ethical dilemmas that must be addressed by health care providers. Examples include the Human Genome Project, prenatal genetic testing, surrogate motherhood, and the treatment of very premature newborns.
- The increase in the number of older Americans, the tendency for American families to limit the number of children, and changes in government funding have influenced a shift in focus away from programs for childbearing women and their infants.
- Poverty has negative impacts on the health of childbearing women and children and increases the chance that complications will occur.
- Nurses have been especially helpful with the cost-containment strategies of health promotion activities, use of critical care pathways, and case management.
- Payment for health services for pregnant women and children may be provided through private insurance; federally funded programs such as Medicaid, CHIP, or WIC; and specialized programs that offer services to children with special conditions.
- One way in which the health status of a nation is measured is through morbidity (illness) and mortality (death) rates. Measures particularly useful to maternity and pediatric health include maternal and pediatric mortality rates.
- The three leading causes of infant mortality are congenital disorders, prematurity and low birth weight, and maternal complications from pregnancy. The three leading causes of maternal mortality are hemorrhage, hypertensive disorders, and sepsis.
- Although its infant mortality rate is improving, the United States still remains behind other industrialized countries. Low birth weight and lack of or inadequate prenatal care are two major causes of this problem.
- Technologic and socioeconomic changes have influenced child health status. Many previous health concerns, such as communicable diseases of childhood have been eliminated. Health problems for children today focus more on social concerns.
- *Healthy People 2030* set goals for healthcare with a focus on health promotion and prevention of illness.
- The role of the nurse has changed to include the responsibilities of educator, adviser, resource person, advocate, and researcher, as well as care provider.
- Critical thinking skills must be used to take data collected and use them to develop a plan to meet the desired outcomes for the client.
- The nursing process is essential in the problem-solving process necessary to plan nursing care. The five steps of the nursing process include assessment (data collection), nursing care focus, outcome identification and planning, implementation, and evaluation.
- Accurate and timely documentation is essential for providing a legal record of care given. This is particularly

important to the maternity and pediatric nurse because legal action can occur many years after an event.

## INTERNET RESOURCES

### U.S. Statistics on Health

<http://www.cdc.gov/nchs/fastats/Default.htm>  
[www.childstats.gov](http://www.childstats.gov)

### USDA Food and Nutrition Service

[www.fns.usda.gov/wic](http://www.fns.usda.gov/wic)

### Healthy People 2020

<https://www.healthypeople.gov/>

### Shriners Hospitals for Children

<http://www.shrinershospitalsforchildren.org/shc>

### Easterseals

<https://www.easterseals.com/>

### National Down Syndrome Society

<https://www.ndss.org/>

### The Compassionate Friends

<https://www.compassionatefriends.org/>

### Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov/>

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# Workbook

## NCLEX-STYLE REVIEW QUESTIONS

1. Preventing and treating infections during childbirth have reduced maternal and infant mortality rates. Of the following, which scientific advancement has done the *most* to improve neonatal mortality statistics?
  - a. Control of puerperal fever
  - b. Use of anesthesia during labor
  - c. Enforcement of strict rules in hospitals
  - d. Treatment advances for preterm infants
2. Which of the following are ethical dilemmas? (Select all that apply)
  - a. Using a surrogate for a pregnancy
  - b. Being part of a stepfamily
  - c. Research on umbilical cord blood
  - d. Treating a very premature infant
  - e. Testing for infections
3. The nurse collects data and begins to develop a trust relationship with the client in which component of the nursing process?
  - a. Assessment
  - b. Planning
  - c. Implementation
  - d. Evaluation
4. The nurse gives the client a bed bath and assists the client to eat his breakfast. This is which component of the nursing process?
  - a. Assessment
  - b. Planning
  - c. Implementation
  - d. Evaluation
5. In caring for clients, a healthcare team often uses critical pathways. Which of the following are reasons critical pathways are used? (Select all that apply.) The critical pathway:
  - a. decreases cost for the client and hospital.
  - b. helps establish a trusting relationship with clients.
  - c. is followed by all members of the health team.
  - d. provides organization for the care of the client.
  - e. includes all treatments and procedures.

## STUDY ACTIVITIES

1. Choose the three social issues you think have the highest impact on healthcare concerns of children. Thinking of these issues, complete the following table.

	How Does This Issue Affect Children's Healthcare?	What is the Nurse's Role in Dealing With This Issue?
Social issue:		
Social issue:		
Social issue:		

2. Go to <http://mchb.hrsa.gov/about/timeline/index.asp>
  - a. Identify three of the events you feel have made the greatest impact on maternal-child care.
  - b. Describe your rationale for choosing these events.
  - c. How do you think these events will affect you as a nurse?
3. Compare and contrast the care delivered to children in institutions in the 19th and early 20th centuries, the hospital care of infants and children in the period immediately after World War I, and the hospital care of infants and children today.

## CRITICAL THINKING: WHAT WOULD YOU DO?

1. A new mother tells you that her husband makes a few dollars an hour over the minimum wage, so her newborn is not eligible for Medicaid. She sighs and wonders aloud how she is going to pay the medical bills. What would you say to the new mother? Does she have any options? If so, what are they?
2. A staff member says to you, "Things were better the way we cared for infants in the old days." How would you respond?
3. While working, you overhear an older nurse complaining about family caregivers "being underfoot so much and interfering with client care." Describe how you would defend open visiting for family caregivers to this person.