

TUBERCULOSIS CASE MANAGEMENT FOR NURSES

OVERVIEW OF PUBLIC HEALTH AND PUBLIC HEALTH NURSING

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INTRODUCTION

The purpose of this module is to provide an overview of public health, focusing on:

- Key concepts of public health, such as the definition, objectives, and core functions
- A review of nursing knowledge that is critical to the understanding of public health practice such as the definition of nursing, the nursing process, and standards of practice
- A discussion of public health nursing, including a brief history of the specialty and
 - Its role in the management of tuberculosis (TB) cases and
 - Factors that differentiate public health nursing from other nursing specialties

The public health nursing section ends with a discussion of nursing within the framework of the *Core Functions of Public Health* and *Scope and Standards of Public Health Nursing*, as presented in the American Nurses Association (ANA) publication prepared by the Quad Council of Public Health Nursing Organizations.

LEARNING OBJECTIVES

After completion of this learning module, you will be able to:

- 1) Define the science of public health
- 2) Describe the core functions of public health
- 3) Explain how public health objectives are accomplished through core functions of public health
- 4) Explain how core functions of public health are manifest in tuberculosis control
- 5) Define professional nursing practice
- 6) Differentiate between internal and external standards for practice
- 7) Describe the key components of public health nursing practice
- 8) Describe the nursing process as it is used in public health nursing practice
- 9) List the standards for public health nursing practice

OVERVIEW OF PUBLIC HEALTH

According to the **World Health Organization (WHO)**, health is “a state of complete physical, mental, and social well-being and not merely the absence of disease (1958). This encompassing definition is implicit in the discipline of public health, which is the science and art of preventing disease, prolonging life, and promoting health. Looking at the definition from a holistic perspective, the Institute of Medicine defined public health as “what we, as a society do, collectively, to assure the conditions in which people can be healthy” (1988).

The mandate for public health activities comes from public health laws that consist of legislation, regulations, and court decisions enacted by federal, state, and local governments to protect the community's well being. Public health laws identify the policies and procedures that guide the process of preventing disease and protecting and promoting health. On the basis of public health laws, efforts to control TB have been undertaken. The practice of public health requires that the rights of individuals be balanced with the need to protect society.

The **objectives of public health** are to generate organized efforts that address the public's health, by applying scientific and technical knowledge to prevent disease and promote health (Institute of Medicine, 1988). Public health objectives may be accomplished by individuals or by public and private groups. However, government has a special role in public health, ensuring the placement of essential components to adequately address the objectives of public health. Public health activities may include sanitation, control of communicable infections, such as tuberculosis, and the education of populations on how to protect their health. Government achieves public health objectives through the implementation of the core functions of public health.

THE CORE FUNCTIONS OF PUBLIC HEALTH

The following are examples of how the core functions of public health are applied to tuberculosis.

Assessment refers to systematic data collection, monitoring and providing information on the health of a community. As it relates to TB control, data are collected regarding the number of TB cases in a community and analyzed to measure the success of efforts to treat and control the occurrence of new cases.

Policy development refers to the provision of leadership in the advancement of rules and regulations that support the health of populations and utilizes scientific knowledge in decision-making regarding policy. TB control policies are related to the identification and reporting of people who have TB infection and disease, their treatment, and follow-up.

Assurance refers to the role of public health in making sure that essential health services are available community-wide, including a competent healthcare workforce in both the public and private sectors. In the treatment of tuberculosis, assurance addresses the issue of availability of appropriate TB services provided by personnel who are knowledgeable about TB, as well as ensuring that private healthcare providers are informed about the proper management of TB.

SELECTED CONCEPTS IN NURSING PRACTICE

The 1996 revision of the ANA's Social Policy Statement suggests that **definitions of nursing** should "illustrate the consistent orientation of nurses to the provision of care that promotes well-being in the people served." In addition, the document acknowledges the influence that the science of caring has had on nurses' diagnoses and treatment of human responses to health and illness (ANA, 1996). Therefore, the Social Policy Statement states that definitions of nursing must acknowledge the four essential features of contemporary nursing practice that follow.

- Attention to the full range of human experiences and responses to health and illness without restriction to a problem-focused orientation
- Integration of objective data with knowledge gained from an understanding of the patient or group's subjective experience
- Application of scientific knowledge to the processes of diagnosis and treatment
- Provision of a caring relationship that facilitates health and healing (ANA, 1996)

The definition of nursing has evolved as the knowledge base and practice of the discipline has advanced. The ability of nursing to progress, as knowledge and human health experiences change, makes it a dynamic and multifaceted profession. In summary, nursing may be defined as a profession that addresses human responses to the full range of health experiences by:

- Integrating objective and subjective information about humans
- Applying scientific knowledge to diagnosis and treatment
- Developing a caring relationship that fosters health and healing

The nursing process is the problem-solving method used in nursing practice. Its holistic perspective serves as a tool for evaluating and improving care. In addition, it helps avoid duplications and omissions while contributing to comprehensive and consistent care.

Elements of the nursing process

- Assessment and diagnosis
- Planning
- Implementation
- Evaluation

Assessment is the systematic collection and analysis of data culminating in a nursing diagnosis. Assessment is the initial phase of the nursing process and is identified by the American Nurses Association as the first standard for professional nursing practice (1996). It is a continuous aspect of the nursing process and involves collaboration with patients, caregivers, and healthcare providers who contribute to the patients' care. After information about a patient's health situation is obtained, analyzed, and documented, the nurse makes a nursing diagnosis. The nursing diagnosis is a statement of clinical judgment that conveys the nursing assessment. It provides the basis for the selection of nursing strategies to achieve patient care outcomes for which the nurse is accountable.

During the diagnostic phase, data are analyzed and interpreted. Conclusions are drawn regarding patients' needs, problems, concerns, or human responses. Nursing diagnostic statements are identified and documented and provide direction for the remainder of the nursing process. They serve as the basis for planning, implementing, and evaluating care.

The most widely accepted structure for the nursing diagnostic statement is that advocated by the North Atlantic Nursing Diagnosis Association (NANDA). Regardless of the selected structure, the **diagnostic statement** should include the following components:

- Statement of human response
- Statement of nursing judgment
- Conclusion based on nursing assessment
- Reference to a health experience
- Two-part statement that includes etiology

The first part of the statement communicates the functional behaviors that can be improved through nursing actions. These behaviors may promote, protect, maintain, or restore health. Modifiers for the first part of the diagnostic statement may be “alteration in” or “potential alteration of”. The second part of the diagnostic statement identifies the causes or factors that nurse works to improve or influence. This part of the statement describes factors that contribute to the current healthcare situation. The following are examples of nursing diagnostic statements that may be typical of those used in nurse case management of TB:

- Potential alteration in health maintenance related to a multiple drug regimen
- Alteration in health maintenance related to non-adherence to the TB treatment regimen

The first example acknowledges that TB medications, if not carefully monitored, may have deleterious effects. The second nursing diagnosis identifies a change in a patient’s usual health pattern when the TB treatment regimen is not followed. Both diagnoses imply the nursing action to be taken, the desired patient behaviors, and the expected outcomes.

The **planning** component of the nursing process involves the establishment of intervention strategies. In the planning process, it is necessary that all interventions include:

- Stated outcomes (criteria for evaluation) with a time frame for achievement
- Indication of how achievement of the expected outcome will be measured

Steps in the planning phase include:

- Prioritizing the nursing diagnoses
- Identifying expected outcomes and discussing them with the patient when possible
- Writing the nursing orders, i.e., nursing behaviors that will help the patient achieve the identified outcomes
- Recording the diagnoses, nursing strategies, and expected outcomes in an organized nursing care plan

The third phase of the nursing process is **implementation**, the execution and completion of nursing strategies identified in the planning phase. Implementation requires communication of the plan to all participants involved in the patient's care, including the patient and family. The plan of care may be carried out by members of the health team, the patient, the patient's family, and/or other caregivers. During this phase, the nurse continues to assess the patient and record progress. Documentation verifies that the plan has been implemented and can be used to identify the standard of care and evaluate the plan's effectiveness.

Evaluation is the final, ongoing phase of the nursing process that documents both the patient responses and the extent to which the expected outcomes have been achieved. The nurse assesses the patient's progress using expected outcomes as criteria for evaluation. Corrective measures and revisions to the care plan are employed, if needed.

The importance of documentation at each stage of the nursing process has been discussed. From the initial assessment through the final evaluation, the nurse must record relevant observations and interactions. Not only does accurate and detailed documentation influence patient care, but it serves to legitimize the contributions made by nursing. Cohen & Cesta (2001) suggest the use of standardized nursing language and classification systems to describe the elements of nursing care. Examples are found in Table 1.

<u>CLASSIFICATION SYSTEM</u>	<u>ELEMENT OF NURSING PROCESS WHERE UTILIZED</u>
NANDA	Nursing diagnoses in all settings
NIC	Nursing interventions in all settings
NOC	Nursing outcomes in all settings
Omaha System	Diagnoses, interventions, outcomes in community setting

The sources for these classification systems can be found in the Bibliography at the end of this unit and used by individual practitioners to enhance patient care at all levels.

The use of standardized language in the nursing care plan will result in documentation that is more efficiently retrieved and more easily analyzed. In addition, other disciplines can use the same language to document their care, facilitating communication among professionals.

Regardless of the area of specialization, nurses are expected to demonstrate competence in their practice. Competency is the integration of knowledge, skills, attitudes and behaviors, and the delivery of care according to expectations or standards. Standards are authoritative statements intended to foster quality patient care and excellence in practice, and they provide the means for measuring the professional performance of nurses and the quality of care they provide. Standards, both internal and external, also define the legal and professional responsibilities of the nurse and serve as a measure of appropriate professional nursing practice.

Internal standards are criteria for practice that are established by or within an institution or agency, including:

- Policies and procedures
- Job descriptions
- Agency rules
- Nursing care plans

Nursing care plans are the most direct evidence of nursing judgment and serve as documentation of a nurse's knowledge of the standard of care for a given healthcare situation. If a nurse establishes a plan of care and then deviates from that plan, s/he may be deviating from a "reasonable" standard of care.

External standards are those set by an authority outside an institution or agency, including:

- Guidelines submitted by accrediting agencies
- Nursing theories
- Nursing authorities (e.g., American Nurses Association or nursing experts)

External standards always supersede internal standards. For example, if a job description required a nurse to work outside the legal scope of nursing practice, regulations identified in a state's Nurse Practice Act would take precedence over the job description. Knowledge of internal and external standards is a vital component of a nurse's professional competence.

The nursing profession distinguishes among standards of care, standards of professional performance, and standards of nursing practice.

- *Standards of care* are patient-centered and represent a competent level of care as demonstrated by the nursing process
- *Standards of professional performance* are provider-centered and represent a competent level of behavior in the professional role
- *Standards of nursing practice* are patient-centered and provider-centered and represent a level of care or performance that is common among professional nurses and may be used to judge the quality of nursing practice (Kelly & Joel, 1999; Quad Council of Public Health Nursing Organizations, 1999).

The professional standards for public health nursing practice can be found in Appendix 1.

PUBLIC HEALTH NURSING

Public health nursing in the United States evolved primarily from programs that were developed in Western Europe, particularly Great Britain. In the early 1860s, trained nursing school graduates were assigned as visiting nurses to provide care for the poor in their homes. They were called “District Nurses,” and although they provided nursing care for the sick poor, they did not provide direct care to persons with communicable diseases. To avoid disease transmission from one household to another, these nurses provided care indirectly by teaching family members how to perform tasks and providing the family with the necessary equipment (Kalisch & Kalisch, 1995).

Visiting nursing began in the United States in 1877 when the New York City Mission instituted what was called “district” or “block” nursing. The major focus was religious, although nurses also emphasized health care. Later, the Ethical Society took a more nonsectarian approach and visiting nurses taught cleanliness, proper feeding of infants and children, as well as aspects of preventive care.

In 1893, Lillian Wald and Mary Brewster, both trained nurses, established the Henry Street Settlement House in a tenement on the Lower East Side of New York City. There, they recruited other nurses and combined visiting and district nursing within the broader scope of what Lillian Wald called, “public health nursing” (Dieckmann, 2000).

The nurses at the Henry Street Settlement House provided care to many patients with TB. Through the 19th century, statistics showed tuberculosis to be the leading cause of death due to infectious diseases. City tenement dwellers, such as those living on Manhattan’s Lower East Side, were often too poor to be hospitalized. Wald and Brewster and their staff provided health services in the home to all in need, regardless of ability to pay or religious affiliation. They emphasized that fresh air, a healthy diet, and sanitary living conditions were keys to recovery from disease. Lillian Wald, as the first public health nurse, employed epidemiology and statistics to explain environmental and social causes of TB morbidity and mortality (Dieckmann, 2000).

From 1895-1899, patients with TB were cared for by visiting nurses, whose practice was considered general. In 1899, a physician at Johns Hopkins University founded the Laennec Society of Baltimore, to investigate the social conditions of people with TB. The society believed that the answers to treatment and containment of TB could be found in the home (Kalisch & Kalisch, 1995). In the first organized study of its kind, several common factors among people with TB were discovered: overcrowded living conditions, nonexistent ventilation, poor diet, and sharing of beds and utensils. In 1903, nurses were assigned to the full-time care of TB patients in their homes. Nurses located persons with TB, brought them to the dispensary and taught them the importance of fresh air, good food, and rest. The nurses not only reported substandard living conditions, but attempted to improve them with the help of relief agencies. They also provided bedside care to the sick and established precautionary measures to avoid infection of others. Nurses managed the complete care of patients with TB, including direct care, case finding, contact tracing, coordination of relief services, and patient and community education for prevention. Today, these nurses would be called “case managers” for patients with TB. Finally, in 1904, through contributions from Baltimore citizens, additional nurses were hired to work exclusively with TB cases under the supervision of the Visiting Nurse Association of Baltimore. The Visiting Nurse Association of Baltimore was the first in the United States to offer specialized nursing care for those infected with TB (Kalisch & Kalisch, 1995).

Williams (2000) defines current public health nursing practice as the synthesis of nursing theory and public health theory applied to promoting and preserving the health of populations. The focus of public health nursing practice is the community as a whole and the effect of the community's health status (resources) on the health of individuals, families, and groups. Care is provided within the context of preventing disease and disability and promoting and protecting the health of the community as a whole.

The practice is population focused and community oriented. The goal is prevention of disease and disability "through the creation of conditions in which people can be healthy" (Quad Council of Public Health Nursing Organizations, 1999). Public health nursing practice is a specialized field within the broad arena of community health nursing practice.

The public health nurse generalist holds a bachelor of science degree and applies basic concepts of public health and comprehensive healthcare planning in collaboration with communities. The nurse is knowledgeable about social, economic, ecologic, and political issues related to the needs of populations at risk. The public health nurse specialist has completed a masters or doctoral program and enhances services to populations through application of advanced knowledge in areas such as public health sciences, humanities, management theory, health policy, program planning and evaluation, and research (Williams, 2000). Both the generalist and specialist work at the aggregate level, incorporating concepts and theories from public health, social, behavioral, and nursing sciences.

The goal of the public health nurse is to combine public health core functions with nursing practice to achieve health goals for a population. On the next page are some examples of TB case management activities performed by the public health nurse within the framework of the core functions of public health.

APPLICATION OF CORE FUNCTIONS IN TB NURSING

Assessment

- Conduct community assessment to identify available resources
- Collect and interpret data on TB in the community
- Participate in TB case finding
- Monitor trends in TB
- Evaluate outcomes of direct patient care, educational programs, and research

Policy Development

- Recommend tuberculin skin test training for nurses in school or office settings
- Inform local government officials of need for support services
- Encourage community involvement in TB elimination

Assurance

- Develop standards for providing directly observed therapy (DOT) in schools
- Provide health promotion activities for families and individuals
- Provide physicians in the private sector with current TB treatment guidelines

The Association of State and Territorial Directors of Nursing (ASTDN) has developed a model of public health nursing practice that demonstrates the interaction. This model can be found in Appendix 2.

SUMMARY

This learning module presented key information related to public health, such as the definition of public health, its objectives, and the core functions of assessment, policy development and assurance. The selected topics in nursing practice reviewed in this module provide notable concepts from nursing, including the definition of nursing, the nursing process, and standards of practice. A greater comprehension of public health nursing established through its definition, a brief history of the inception of public health nursing, and its role in TB management serve to increase awareness of the role of the public health nurse. To further expand the topic, the Quad Council of Public Health Nursing Organization' tenets of Public Health Nursing, Standards of Public Health Nursing Practice, and Standards of Professional Performance can be found as Appendix 1, and the ASTDN model for public health nursing is presented in Appendix 2.

APPENDIX 1

The following standards were created by the Quad Council of Public Health Nursing Organizations as a means to prepare public health nurses for the coming changes in public health services.

The Quad Council of Public Health Nursing Organizations

- ANA Council for Community, Primary, and Long-Term Care Nursing Practice
- APHA Public Health Nursing Section
- Association of Community Health Nurse Educators
- Association of State and Territorial Directors of Nursing

In the publication, *Scope and Standards of Public Health Nursing*, the Quad Council indicates that future public health services “will be driven by local community needs, resources, and preferences of the people” (1999). The council suggests that all public health nurses will need “a broad range of population-focused skills to be strong public health team partners” (1999).

The following tables provide an overview of the *Scope and Standards of Public Health Nursing Practice* and categorize the information contained within the publication. It is recommended that all public health nurses read the complete document to gain a full understanding. *Scope and Standards of Public Health Nursing Practice* may be obtained from the American Nurses Association. The following information is reproduced with permission of the American Nurses Association.

The Quad Council emphasizes that adherence to the tenets of public health nursing with the overall goal of promoting and protecting population health is what distinguishes public health nursing from other nursing specialties. Although other nursing specialties may address some of these tenets, they do not incorporate all eight tenets into their practice. In addition, the council stresses that the focus of care, rather than the location of care, is what separates public health nurses from those in other nursing specialties.

SCOPE OF PUBLIC HEALTH NURSING PRACTICE

Tenets of Public Health Nursing

- Population-based assessment, policy development, and assurance processes are systematic and comprehensive
- All processes must include partnering with representatives of the people
- Primary prevention is given priority
- Intervention strategies are selected to create healthy environmental, social, and economic conditions in which people can thrive
- Public health nursing practice includes an obligation to actively reach out to all who might benefit from an intervention or service
- The dominant concern and obligation is for the greater good of all the people or the population
- Stewardship and allocation of available resources support the maximum population health benefit gain
- The health of the people is most effectively promoted and protected through collaboration with members of other professions and organizations

(Quad Council of Public Health Nursing Organizations, 1999).

STANDARDS OF CARE FOR PUBLIC HEALTH NURSING PRACTICE

Standard I. Assessment

The public health nurse assesses the health status of populations using data, community resources identification, input from the population, and professional judgment.

Standard II. Diagnosis

The public health nurse analyzes collected assessment data and partners with the people to attach meaning to those data and determine opportunities and needs.

Standard III. Outcomes Identification

The public health nurse participates with other community partners to identify expected outcomes in the populations and their health status.

Standard IV. Planning

The public health nurse promotes and supports the development of programs, policies, and services that provide interventions and improve the health status of populations.

Standard V. Assurance: Action Component of the Nursing Process for Public Health Nursing

The public health nurse assures access and availability of programs, policies, resources, and services to the population.

Standard VI. Evaluation

The public health nurse evaluates the health status of the population.

(Quad Council of Public Health Nursing Organizations, 1999).

STANDARDS OF PROFESSIONAL PERFORMANCE

Standard I. Quality of Care

The public health nurse systematically evaluates the availability, accessibility, acceptability, quality, and effectiveness of nursing practice for the population.

Standard II. Performance Appraisal

The public health nurse evaluates his or her nursing practice in relation to professional practice standards and relevant statutes and regulations.

Standard III. Education

The public health nurse acquires and maintains current knowledge and competency in public health nursing practice.

Standard IV. Collegiality

The public health nurse establishes collegial partnerships while interacting with healthcare practitioners and others, and contributes to the professional development of peers, colleagues, and others.

Standard V. Ethics

The public health nurse applies ethical standards in advocating for health and social policy and delivery of public health programs to promote and preserve the health of the population.

Standard VI. Collaboration

The public health nurse collaborates with the representatives of the population and other health and human service professionals and organizations in providing for and promoting the health of the population.

Standard VII. Research

The public health nurse uses research findings in practice.

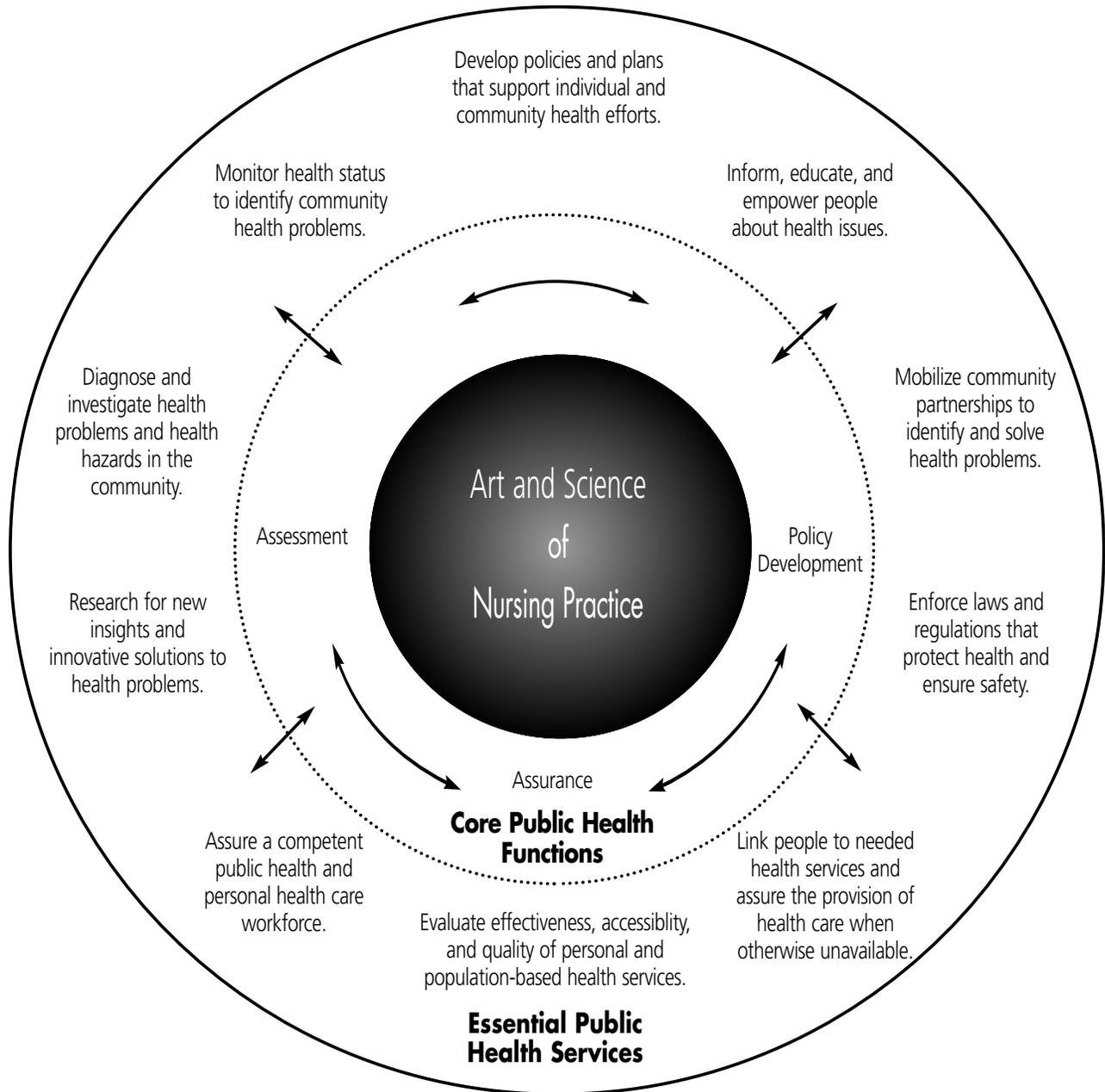
Standard VIII. Resource Utilization

The public health nurse considers safety, effectiveness, and cost in the planning and delivery of public health services when using available resources to ensure the maximum possible health benefit to the population.

(Quad Council of Public Health Nursing Organizations, 1999).

APPENDIX 2

ASTDN PUBLIC HEALTH NURSING PRACTICE MODEL



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REVIEW QUESTIONS

SECTION REVIEW-OVERVIEW OF PUBLIC HEALTH

- 1) Define public health.
- 2) What is the source of authority for public health practice?
- 3) What is the role of government in public health?

SECTION REVIEW-CORE FUNCTIONS OF PUBLIC HEALTH

- 1) List the core functions of public health.
- 2) Describe how public health objectives are accomplished through each core function of public health.

SECTION REVIEW-SELECTED CONCEPTS IN NURSING PRACTICE

- 1) List the parts of the nursing process.
- 2) Describe the assessment component of the nursing process.
- 3) What activities constitute the planning component of the nursing process?
- 4) What do outcome statements represent?
- 5) How are statements of expected outcomes used in the evaluation phase of the nursing process?
- 6) Describe the implementation phase of the nursing process?
- 7) Describe the evaluation phase of the nursing process.
- 8) Differentiate between standards of care and standards of professional performance.
- 9) Differentiate between internal and external standards and give two examples of each.

SECTION REVIEW - PUBLIC HEALTH NURSING

- 1) Define public health nursing.
- 2) What is the focus of practice for public health nurses?
- 3) What is the goal of public health nursing?
- 4) Differentiate between the public health nurse generalist and public health nurse specialist in terms of:
 - a. Educational preparation
 - b. Scope of practice

SECTION REVIEW-APPENDICES

- 1) List the eight tenets of public health nursing.
- 2) List the six standards of care for public health nurses.
- 3) List the eight standards of professional performance for public health nurses.
- 4) Describe how the ASTDN Model illustrates the interaction between public health nursing practice and the core functions of public health.

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