CHAPTER 2

IMPORTANT FACTORS INFLUENCING THE NURSE PRACTITIONER ROLE

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Legal Dimensions of the Role

LEGAL AUTHORITY FOR PRACTICE

State Nurse Practice Acts—Rules and Regulations

Authority for nurse practitioner (NP) practice is found in state legislative statutes and in rules and regulations. The Nurse Practice Act of every state customarily authorizes a board of nursing to establish statutory authority to define who may be called an NP (title protection), what they may do (scope of practice), restrictions on their practice, the requirements an NP must meet to be credentialed within the state as an NP (education, certification, etc.), and disciplinary grounds for infractions. See National Council of State Boards of Nursing's (NCSBN's) website (www. ncsbn .org) for a listing of state nursing board requirements. In many states, legislative acts may specifically require that an NP develop a collaborative practice agreement with a physician that defines general supervision and delegation of authority. Collaborative agreements describe what types of drugs, devices, or diagnostics might be ordered, and define limits related to NP practice.

Statutory law is implemented in regulatory language. The rules and regulations for each state may further define scope of practice, practice requirements, and/or restrictions.

In 1999, the National Council of State Boards of Nursing (NCSBN) began the implementation of an interstate compact for nursing practice to reduce state-to-state discrepancies in nursing requirements for practice. The Advanced Practice Registered Nurse (APRN) Compact addresses the need to promote consistent access to quality advanced practice nursing care within states and across state lines. The Uniform APRN Licensure/Authority to Practice Requirements, developed by NCSBN with APRN stakeholders in 2000, establishes the foundation for this APRN Compact. Like the existing Nurse Licensure Compact for recognition of registered nurse (RN) and licensed practical nurse (LPN) licenses, the APRN Compact gives states the mechanism for mutually recognizing APRN licenses/authority to practice. To be eligible for the APRN Compact, a state must either be a member of the current nurse licensure compact for RNs and LPNs or

choose to enter both compacts simultaneously. To see which states participate view the state compact map at www.ncsbn.org/public-files/NLC_Map.pdf.

NURSE PRACTITIONER PROFESSIONAL PRACTICE STANDARDS

Licensure

- Licensure is "[a] process by which an agency of government grants permission to individuals accountable for the practice of a profession to engage in the practice of that profession and prohibits all others from legally doing so" (Committee for the Study of Credentialing in Nursing, 1979; U.S. Department of Health, Education, and Welfare [DHEW], 1971).
- The purpose of licensure is to protect the public by ensuring a minimum level of professional competence. Licensure benefits both the public and the individual nurse because essential qualifications for nursing practice are identified; a determination is made as to whether an individual meets those qualifications; and an objective forum is provided for review of concerns regarding a nurse's practice when needed. Licensure benefits nurses because clear legal authorization for the scope of practice of the profession is established. Licensure also protects the use of titles. Only a licensed nurse is authorized to use certain titles (i.e., registered nurses [RNs], licensed practical/vocational nurses [LPN/VNs], advanced practice registered nurses [APRNs], etc.) or to represent themself as a licensed nurse (NCSBN, 2011).

Certification

- Certification is "[a] process by which a non-governmental agency or association certifies that an individual licensed to practice as a professional has met certain pre-determined standards specified by that profession for specialty practice" (DHEW, 1971).
- The purpose of certification is to assure the public that a person has mastery of a body of knowledge and has acquired the skills necessary to function in a particular specialty. Some certifications are required for entry into practice (e.g., for licensure within a state) and thus have a regulatory function; some certifications denote professional competence and recognize excellence.

Accreditation

- Accreditation is "[t]he process by which a voluntary, non-governmental agency or organization appraises and grants accreditation status to institutions and/or programs

or services [that] meet predetermined structure, process and outcome criteria" (DHEW, 1971). The purpose is to ensure that the organization has met specific standards.

Scope of Practice

- *Scope of practice* defines a specific legal scope determined by state statutes, boards of nursing, educational preparation, and common practice within a community.
  - For example, adult nurse practitioners (ANPs) are not legally authorized to care for children. The state might require an NP to have formal educational preparation in pediatrics. There is broad variation from state to state.
- General scope of practice is specified in many published professional documents (e.g., *Scope and Standards of Advanced Practice Registered Nursing*, ANA, 1996). Many organizations have completed role delineation studies that attempt to qualify the core behaviors that all advanced practice nurses (APNs) must possess, as well as the core knowledge and behaviors required of persons in a particular specialty.
  - For example, core knowledge for a pediatric nurse practitioner (PNP) is inherently different from that for a geriatric nurse practitioner (GNP). It is critical that these statements about specific scope and standards exist so that everyone—including nurses—will have access to materials to which they can refer when there are specific questions related to role. This is especially important when the traditional role of nurses is changing or "advancing" at an uneven rate through changes in state law.
  - Because the NP role has expanded into new practice settings, including hospice, acute care hospitals, and home care, it is important that core knowledge and state law protecting NPs in these practice settings also expand, providing the legal authorization and title protection necessary for these practice settings.
- Prescriptive authority is recognized as within the scope of practice for nurse practitioners in all 50 states, although there is major variability from state to state. This variability has created inherent difficulty in collecting data related to NP prescribing practices. The *Nurse Practitioner Journal* publishes a comprehensive update of legislative requirements and recent changes in its January issue each year. Data collected by Nurse Practitioner Alternatives, Inc., since 1996 has documented stability within prescribing patterns by NPs. Data from 2004 documents indicate that the majority of NPs possess their own Drug Enforcement Administration (DEA) numbers (72%), write between 6 and 25 prescriptions in an average clinical day (79%), recommend between 1 and 20 over-the-counter (OTC) preparations in an average clinical day (90%), and manage between 25% and 100% of their patient encounters independently (97%; Nurse Practitioner Alternatives, Inc., 2004).

Standards of Practice

- Standards of practice are authoritative statements by which the quality of practice, service, or education can be judged (e.g., *Scope of Practice for Nurse Practitioners*, American Association of Nurse Practitioners, 2019; *Code of Ethics for Nurses*, ANA, 2015).
- Professional standards focus on the minimum levels of acceptable performance as a way of providing consumers with a means of measuring the quality of care they receive. These standards may be written at the generic level to apply to all nurses (e.g., following standard precautions) as well as to define practice by each specialty.
- The presence of accepted standards of practice may be used to legally describe the standard of care that a provider must meet. These standards may be precise proto cols that must be followed or recommendations for more general guidelines.

The Future of Nurse Practitioner Education and Practice

- In 2020, the National Organization of Nurse Practitioner Faculties (NONPF) released the new and revised Post-baccalaureate Doctor of Nursing Practice (DNP) Program Curriculum and Competency Mapping Templates. As documented by the NONPF, the intent of these documents is to support NONPF's goal to transition all NP programs to the DNP by 2025. These documents can be viewed at https://www.nonpf.org/page/DNPResources?&hhsearchterms=%22practice+and+doctorate+and+entry+and+level+and+competencies%22
- In 2022, as part of a multi-organization collaboration, NONPF (www.nonpf.org), released the *Standards for Quality Nurse Practitioner Education (NTFS)*, 6th edition, A Report of the National Task Force on Quality Nurse Practitioner Education. This consensus-based document provides new standards and revised criteria that facilitate program development, quality, and continuous improvement through assessment, sustainability, and planning. This document can be viewed at https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/2022/ntfs_/ntfs_final.pdf

THE NP ROLE IN UNDERSTANDING AND ADVOCATING FOR PATIENT RIGHTS

Confidentiality

- The patient and family have a right to assume that information given to the health care team will not be disclosed; that is, their information will be kept confidential. This has several dimensions.

- *Verbal information*: Health care providers shall not discuss any information given to them during the health care encounter with anyone not directly involved in a patient's care without the patient's or family's permission (when the family has decision-making permission).
- *Written information*: Confidentiality of the health care encounter is protected under federal statute through the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The Administrative Simplification provisions of HIPAA require the U.S. Department of Health and Human Services to establish national standards for electronic health care transactions and national identifiers for providers, health plans, and employers. The provisions also address the security and privacy of health data. Information may be accessed at http://www.cms.gov/regulations-and-guidance/ hipaa-administrative-simplification/hipaageninfo/thehipaalawandrelated-information.html. The person's right to privacy is to be respected when requesting or responding to a request for a patient's medical record.
- The statute requires that the provider discuss confidentiality issues with patients (parents in the case of a minor), establish consent, and clarify any questions about disclosure of information.
- The provider is required to obtain a signed medical authorization and consent form to release medical records and information.
- Exceptions to guaranteed confidentiality occur when the need for information outweighs the principle of confidentiality. Examples include the following:
  - Release of records to insurance companies
  - Release of records to attorneys involved in litigation
  - Court orders, subpoenas, or summonses
  - Meeting state requirements for mandatory reporting of diseases or conditions
  - In cases of suspected or actual child abuse
  - If a person reveals an intent to harm someone

Informed Consent

- *Informed consent* is the right of all competent adults (age 18 or older) and emancipated minors (age 17 or younger who are married, a parent, or self-sufficiently living away from the family domicile) to accept or reject treatment by a health care provider. (Some states have laws concerning birth control or abortions that apply to patients younger than 18.)
- The clinician has the duty to explain relevant information to patients to assist them in making informed decisions. This information usually includes diagnosis, nature and purpose of proposed treatment or procedure, risks and benefits, prognosis, availability

of alternative methods of treatment and their risks and benefits, and all possibilities of serious harm.

- It must be documented in the medical records that this information has been provided.
- Informed consent does not absolve the NP of allegations of malpractice.

Care of Minors

- In most jurisdictions, persons under the age of 18 cannot receive health care services without permission of a competent parent or legal guardian.
- Exceptions to this rule may be made in some jurisdictions in the case of an emancipated minor, a pregnant minor, or in matters pertaining to sexually transmitted diseases and birth control.

Advance Directives

- When a patient is incapable of making decisions, the person's preferences may be expressed in a written living will or a health care durable power of attorney created when the patient was still competent. Such documents are called *advance directives*.
- *Living wills* are written documents prepared in advance in case of terminal illness or nonreversible loss of consciousness.
- Their provisions go into effect when:
  - The patient has become incompetent,
  - The patient is declared terminally ill, and
  - No further interventions will alter the patient's course to a reasonable degree of medical certainty.

Durable Power of Attorney for Health Care

- People can identify in writing an agent to act on their behalf, should they become mentally incapacitated. The decisions of the designated agent are:
  - Binding,
  - Not limited to the circumstances of terminal illness,
  - Flexible enough to carry out the patient's wishes throughout the course of an illness, and
  - Often accompanied by a durable power of attorney over financial issues.

Ethical Decision-making

- Moral concepts such as advocacy, accountability, loyalty, caring, compassion, and human dignity are the foundations of ethical behavior.
- The ethical behavior of nurses has been defined for professional nursing in an American Nurses Association policy statement (ANA, 2015).
- Ethical behavior incorporates respect for a person's autonomy. Ethical behavior means that a patient must be allowed to make decisions regarding their care to the full extent of their personal capacity to do so.
- Duty to help others (beneficence), avoidance of harmful behavior (nonmaleficence), and fairness are also foundational components of ethical behavior.

Quality Assurance

- *Quality assurance* (QA) is a system designed to evaluate and monitor the quality of patient care and facility management.
- Formal programs provide a framework for systematic, deliberate, and continuous evaluation and monitoring of individual clinical practice.
- Programs promote responsibility and accountability to deliver high-quality care, assist in the evaluation and improvement of the patient's care, and provide for an organized means of problem-solving.
- A good program identifies educational needs, improves the documentation of care, and reduces the clinician's overall exposure to liability.
- Programs identify components of structure, process, and outcomes of care. They also look at organizational effectiveness, efficiency, and client and provider interactions.
  - QA may be implemented through audits, utilization review, peer review, outcome studies, and measurements of patient satisfaction.

Quality & Safety Education for Nurses (QSEN)

- Quality & Safety Education for Nurses (QSEN) was funded by the Robert Wood Johnson Foundation to address the knowledge, skills, and attitudes necessary to ensure the quality and safety of the health care systems in the United States.
- The National Academy of Medicine (NAM), along with numerous professional organizations representing nursing, identified competencies to be used in the education, certification, and continuing education of advanced practice nurses.

- Areas identified that affect advanced practice include:
  - Patient-centered care focus,
  - Teamwork and collaboration,
  - Use of evidence-based practice,
  - Continuous quality improvement,
  - Safety to minimize harm to patients and providers, and
  - Use of informatics and technology.

NURSE PRACTITIONER LEGAL AND FINANCIAL ISSUES

Liability

- NPs should be aware of liability issues or exposure to legal risk, which include
  - Patients,
  - procedures, and
  - Quality of medical records.
- There are methods of risk reduction or management:
  - Activities or systems have been designed to recognize and intervene to reduce the risk of injury to patients and subsequent claims against health care providers.
  - Malpractice insurance does not protect clinicians from charges of practicing outside their legal scope of practice. All clinicians carry their own liability insurance coverage to ensure their own legal representation by an attorney to advocate for them.

Malpractice

- Malpractice involves negligent professional acts of persons engaged in professions requiring highly technical or professional skills.
- The plaintiff has the burden of proving the four elements of malpractice.
  - *Duty*: The clinician does not exercise reasonable care when undertaking and providing treatment to the patient when a patient–clinician relationship exists.
  - *Breach of duty*: The clinician violates the applicable standard of care in treating the patient's condition.
  - *Proximate cause*: There is a causal relationship between the breach in the standard of care and the patient's injuries.
  - *Damages*: There are permanent and substantial damages to the patient because of the malpractice.

- Types of malpractice insurance
  - *Claims-made policy*: Covers a claim only as long as both the incident and the claim take place while the policy is in force.
  - *Occurrence-based policy:* Covers any claim that results from an incident that occurs during the term of the policy, regardless of how long it takes before the claim is made.
  - *Tail coverage*: Additional or supplemental insurance that covers the provider for incidents that occurred during the term of a claims-made policy but are not brought forward until after the policy has expired.

National Practitioner Data Bank (NPDB)

- The Health Care Quality Improvement Act of 1986 established a databank to scrutinize members of the health care profession and list those practitioners who have had malpractice claims asserted against them.
- Currently few NPs are listed in the NPDB, but the number of NPs who have malpractice claims filed against them is increasing as the number of NPs in practice increases.

Reimbursement

- NPs are reimbursed for their services as primary care providers under Medicare, Medicaid, the yes Federal Employees Health Benefits Program, TRICARE (formerly known as CHAMPUS), veterans' and military programs, and federally funded school-based clinics.
- Medicare: People age 65 and over, some disabled people under the age of 65, and people with kidney disease treated with dialysis or transplant are eligible for Medicare.
  - Medicare A: Hospital insurance that requires no premium. Part A covers inpatient care, including hospitals, skilled nursing facilities (not custodial or long- term care), hospice, and eligible home health care services.
  - Medicare B: Outpatient insurance that requires a premium. Patients may decline coverage. Part B covers outpatient services, durable medical equipment, physical and occupational health services, home health care, and eligible preventive care services.
  - Medicare C: Combines Part A and Part B of Medicare.
  - Medicare D: Covers prescription drugs; usually requires a premium. The patient may decline coverage.
  - Medicare E: Offers incentive/reimbursement for providers participating in electronic prescribing.

- Incident to billing: Medicare regulation. Pays 100% of the physician charge to an NP who provides care to patients under specific guidelines (see the Centers for Medicare & Medicaid Services [CMS] website for full guidelines):
  - Services are furnished as an integral, although incidental, part of the physician's care.
  - Physicians must provide the initial service and regular subsequent visits.
  - A physician must be present in the office but not necessarily in the exam room.
  - Services are billed under the physician's provider number at 100% of the physician rate.
- Medicaid
  - Individual states administer and make the rules for Medicaid.
  - States must adhere to CMS rules and regulations when directing the Medicaid program.
  - By federal law, Medicaid will cover services of family and pediatric NPs.
  - If a state has applied to CMS for a Medicaid waiver, it is important that NPs are allowed to be primary care providers.
  - NPs must apply to state Medicaid for Medicaid provider numbers.
  - Full CMS guidelines are available at www.cms.gov
- Private insurance plans may elect to reimburse for NP services even if not mandated to do so by state law. In some states, however, the insurance code may be interpreted rigidly to exclude the reimbursement of NPs.
- Managed care organizations (MCOs) have frequently excluded NPs from being designated as primary care providers carrying their own caseloads. Thus, in many MCOs, the only option for NPs is to be salaried employees. As salaried employees, the NP contributions are often not visible and may be credited to their collaborating physician, giving them a "ghost" provider status. Without a legitimate method to document services provided and revenue generated, the NP can find that job security is often at risk. Many state NP organizations have recently focused legislative activity on enacting state laws allowing NPs to function as primary care providers in both health maintenance organizations (HMOs) and preferred provider organizations (PPOs). These efforts have led to opposition from state medical organizations.
  - There is considerable flux in state and national policy on what services and procedures NPs may bill for and whether they will be paid directly. Incorrect billing places health care providers at risk of fraud and abuse charges, regardless of whether they knowingly violate the law or are simply ignorant of the regulations.
  - NPs must be aware of specific regulations and policies for patient care services. Resources include CMS bulletins, among others (www.cms.hhs.gov/).

- ◊ Coding and billing practices are the responsibility of the NP provider, and knowledge of the regulations for payors is a requisite competency.
- ◊ Specific rules and regulations for Medicare and Medicaid can be found at www .cms.hhs.gov

Performance Assessment

- The NPDB and Health Integrity and Protection Data Bank (HIPDB) are maintained by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Practitioner Data Banks. Developed because of the Health Care Quality Improvement Act of 1986, the NPDB and HIPDB are flagging systems intended to facilitate a comprehensive review of the professional credentials of health care practitioners, with a goal of improving the quality of health care. The information contained in the NPDB includes a practitioner's licensure, professional society memberships, malpractice payment history, and record of clinical privileges. An NP may perform a self-query by visiting the site at www.npdb -hipdb.com/
- Other programs monitoring and comparing health quality include the Healthcare Effectiveness Data and Information Set (HEDIS), developed by the National Committee on Quality Assurance (NCQA). HEDIS is a set of standardized performance measures designed to ensure that purchasers and consumers have the information they need to reliably compare the performance of managed health care plans (www.ncqa. org).

Health Records

Electronic health record (EHR) systems readily allow access to medical records at a national level for more definitive monitoring of the effectiveness and outcomes of interventions. The data collected assists in determining the most effective clinical interventions and establishing effective guidelines for health care providers.

Centers for Medicare & Medicaid Services and Electronic Health Records

- CMS is promoting the use of EHRs to assist in attaining national health care accuracy and efficiency and better meet established goals.
- The term "meaningfully" is being used for the EHR to assess the efficiency of an electronic system. The 2009 American Recovery and Reinvestment Act delineates three essential components for meaningful use of EHRs for electronic prescribing, exchange of information, and measurement of clinical quality. In 2011, the first of the three stages

was implemented, with the final stage implemented in 2015. The program is voluntary and requires application according to established guidelines. Reimbursement for program participation is based on specific criteria, such as benchmarks for recording accurate vital signs, height, body mass index (BMI), immunizations, and other health care interventions.

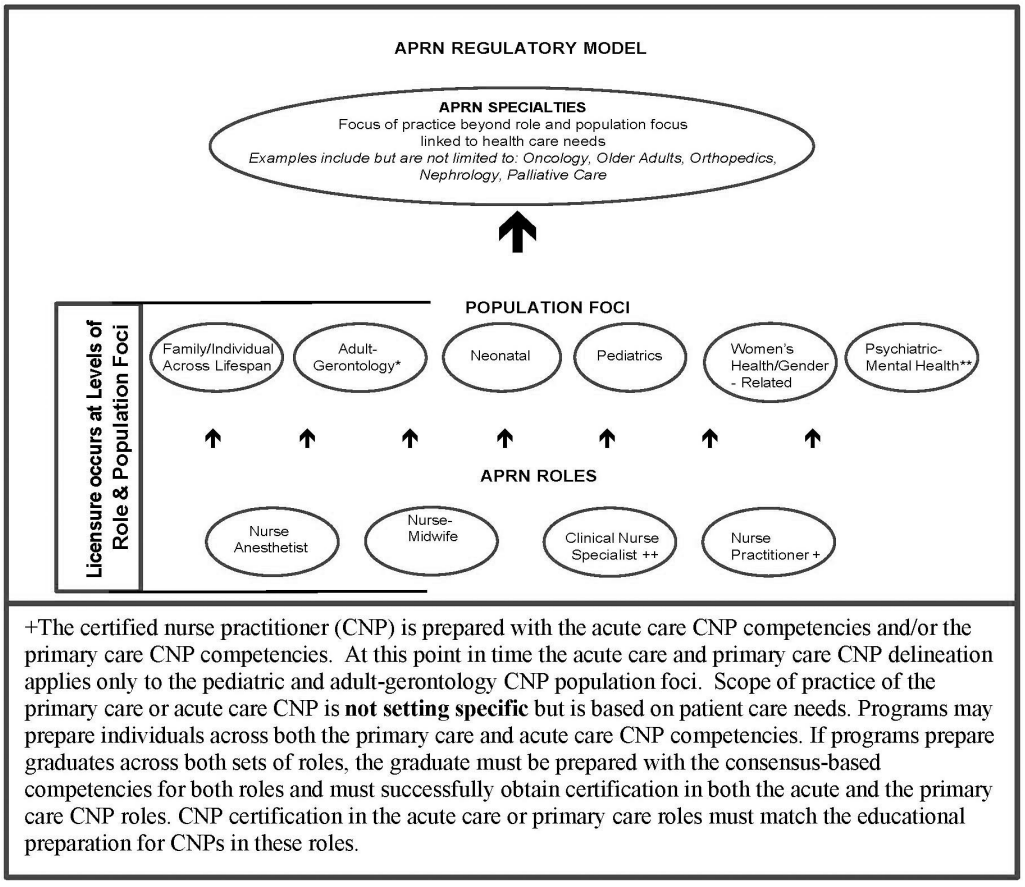
- Benefits for the patient include receiving reminders for appointments by email, accessing portions of the medical record to review lab work, and leaving messages for providers. Specifics may be found on the CMS website at https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms.
- E-scribe: Electronic submission of prescriptions is now common practice, and specific laws regarding e-scribing vary slightly from state to state. Refer to specific state laws for accurate rules regarding the use of e-scribing by means of certified EHR.

Current Trends and Topics in Nurse Practitioner Education and Practice

CONSENSUS MODEL FOR APRN REGULATION: LICENSURE, ACCREDITATION, CERTIFICATION, AND EDUCATION

- Consensus document from more than 40 nursing and advanced practice organizations and the NCSBN APRN Advisory Committee
- Published July 2008
- Provides a national baseline for APRN licensure, accreditation, certification, and education (LACE)
- Defines APRN practice, describes APRN regulatory model, identifies titles to be used, defines specialty, describes emergence of new roles and population foci, and presents strategies for implementation
- Key issues:
  - Goal is standardization of APRN education, licensure, and practice across all states and territories
  - Limits APRN title to four roles: nurse practitioner, nurse anesthetist, nurse midwife, and clinical nurse specialist
  - Identifies six population foci, with potential for more as practice changes
  - Provided for elimination of separate geriatric and adult NP role and certification; replaced with combined ANP-GNP role, education, and certification

FIGURE 2–1.
APRN REGULATORY MODEL



Reprinted from *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification, & Education* (p. 10), by the APRN Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee, 2008. Retrieved from https://www.ncsbn.org/ Consensus_ Model_for_APRN_Regulation_July_2008.pdf

DOCTOR OF NURSING PRACTICE (DNP)

- 2004: American Association of Colleges of Nursing (AACN) members approved DNP Position Statement and 2015 target implementation date.
- 2006: *The Essentials of Doctoral Education for Advanced Nursing Practice* was published.
- DNP is the degree associated with practice-focused doctoral nursing education.
- The goal is to prepare graduates for the highest level of nursing practice beyond the initial preparation in the discipline.

- It includes the four current APN roles: clinical nurse specialist, nurse anesthetist, nurse midwife, and nurse practitioner.
- The degree may be entry into practice or post-master's degree.
- It includes eight essentials of doctoral education for advanced nursing practice:
  - Scientific Underpinnings for Practice
  - Organizational and Systems Leadership for Quality Improvement and Systems Thinking
  - Clinical Scholarship and Analytical Methods for Evidence-Based Practice
  - Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care
  - Health Care Policy for Advocacy in Health Care
  - Inter-Professional Collaboration for Improving Patient and Population Health Outcomes
  - Clinical Prevention and Population Health for Improving the Nation's Health
  - Advanced Nursing Practice
- It is endorsed by APRN organizations but has no required entry-into-practice date established for NPs.

***NONPF committed to moving all entry-level nurse practitioner (NP) education to the DNP degree by 2025 (NONPF, 2018). NONPF developed new and revised the post-baccalaureate DNP Program curriculum and competency mapping templates (NONPF, 2020). More information can be found at the following link: https://www.nonpf.org/page/DNPResources

Practice Environment, Policy, and Advocacy

NAM'S FUTURE OF NURSING 2020–2030

At the request of the Robert Wood Johnson foundation and on behalf of the national academy of medicine, an ad hoc committee conducted a study to develop strategies that improve opportunities for nurses to leverage their expertise to advance health equity and optimize health outcomes for all people.

Future of nursing 2020–2030: charting a path to achieve health equity explores nursing's role in reducing health disparities, promoting equity, keeping costs at a minimum, utilizing technology, and maintaining patient- and family-focused care into 2030. Although the goal is to keep costs at bay, NPS must not do so at the expense of assisting patients to achieve optimal health outcomes. The goal of achieving health equity by eliminating health disparities requires that NPS prioritize the service aspect of health care. Using technology requires advocacy for equitable access to and assistance with literacy. Therefore, the np must promote and develop innovations

that support persons and families with ease of access, effective and efficient communication, and high-quality telehealth to monitor health conditions. The report also outlines the critical areas that the nursing professions must bolster to have an impact on the goals of decreasing disparities and advancing health equity. These areas include the nursing workforce, nursing leadership, nursing education, well-being, emergency preparedness and response, and nursing's responsibility regarding individual and structural determinants of health. Nurses work in a broad array of settings, which provide opportunities to improve health through multiple intervention strategies, including the following:

- Advocacy
- Securing resources and making appropriate referrals
- Patient, family, community, and population-focused education
- Team-based/integrative care models
- Active involvement in health policy
- Participation in patient-centered outcomes research

For more information on *the Future of Nursing 2020–2030: Charting a Path to Achieve Health Equity*, visit https://nam.edu/publications/the-future-of-nursing-2020-2030/

NONPF CALLS FOR GREATER RACIAL AND ETHNIC DIVERSITY IN NURSE PRACTITIONER EDUCATION (2018)

In alignment with the mission and vision of NONPF, the organization strives to champion a culture of diversity and inclusivity across all NP education programs and calls upon NP faculty to consider increases in racially and ethnically diverse patient populations, persistence of racial and ethnic disparities in health care delivery, and disparate representation of racially and ethnically diverse groups among NP faculty and within the professional workforce.

ANA POSITION STATEMENT

The Nurse's Role in Addressing Discrimination: Protecting and Promoting Inclusive Strategies in Practice Settings, Policy, and Advocacy states that the ANA seeks to eliminate all forms of discrimination, improving access to and attainment of quality health care, providing inclusive and impartial health care that is devoid of bias, and actively seeking and engaging in opportunities to eradicate disparities. The full ANA statement can be viewed at https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/Columns/ANA-Position-Statements/Nurses-Role-in-Addressing-Discrimination.html

AMERICAN ACADEMY OF NURSING (AAN) EQUITY, DIVERSITY, AND INCLUSIVITY STATEMENT

The Academy envisions "Healthy Lives for All People" and their mission is to "Improve health and achieve health equity by impacting policy through nursing leadership, innovation, and science." The Academy is committed to integrating its core values of equity, diversity, and inclusivity as the foundation for developing an anti-racist agenda and the ongoing goal of eliminating all forms of discrimination. "To the Academy, equity is assuring the right conditions for all people to thrive and achieve their full potential. The Academy defines diversity as affirming all the ways in which people differ. Inclusivity, as defined by the Academy, refers to the welcoming and active engagement of all voices within every aspect of the organization and with an intentional emphasis on acknowledging those who experience or have experienced marginalization or disenfranchisement." The full statement can be viewed at https://www.aannet.org/about/about-the-academy/edi

HEALTHY PEOPLE 2030

The *Healthy People 2030* mission is "Building a Healthier Future for All." The 10-year goals focus on improving health and well-being through data-driven objectives in three categories: (1) 10 core objectives, (2) developmental objectives, and (3) research objectives. The core objectives focus on evidence-based interventions to impact high-priority public health issues. The role of the NP in achieving the *Healthy People* goals is to apply the data to surveillance, implement strategic interventions, engage in research, and collaborate in the development of population- and issue-specific intervention strategies. The *Healthy People 2030* goals initiative and Social Determinants of Health (SDOH) can be viewed at **https://health.gov/healthypeople**

NOTABLE CONSIDERATIONS FOR ADVANCING HEALTH EQUITY

Acquisition and Application of Cultural Intelligence

Nurse practitioners across roles have the responsibility of caring for individuals and communities that represent a vast array cultural backgrounds and must be prepared to provide culturally responsible individual- and population-centric care to advance health equity and eliminate health disparities and health care disparities. Critical to achieving these goals, the *Healthy People 2030* goals, and the goals associated with the SDOH is the development of cultural intelligence (CQ). CQ is the skill and ability to function effectively in multicultural situations and environments. CQ can significantly improve cultural literacy and fluency, thereby eliminating barriers, such as personal and institutional biases, that impede the provision of culturally sensitive health care.

The NP has an integral role in promoting and advancing health equity through practice, policy, and advocacy for all people Diversity, equity, inclusion, anti-discrimination, and anti-racism are central to the elimination of health disparities and optimizing health outcomes for all people. There is consensus among professional nursing organizations that supports the responsibility of nurses at all levels of practice to function professionally in concert with the humanitarian ethos, which is predicated on providing care to all humans from the lens of impartiality. The humanitarian principles undergird the code of ethics for nurses, highlighting the values of compassion, service, sympathy, mercy, trust, and respect for human life and dignity.

Providing culturally responsible care requires that the NP be aware that clinical guidelines are meant to *guide* heath care practices and treatment plans, but that to achieve best practices, plans of care must be adapted to meet the individual needs of each person with whom they engage. The NP must engage in culturally responsible and inclusive care, regardless of personal preferences and biases. Consideration and integration of the cultural preferences and practices of each individual and community are crucial in holistically addressing heath care needs, thus creating opportunities to shift the determinants of health toward equitable health care and optimal health outcomes for all individuals and communities.

Bias

Bias is a preference for or aversion to someone that may advantage or disadvantage those at whom the bias is aimed. Bias is a personal, and oftentimes, unsubstantiated judgement, labeling, or stereotyping of someone or something. In health care, bias is a leading cause of health inequity and the subsequent health disparities and adverse health outcomes. Much of the literature addresses the impact of implicit bias on health inequities; however, both implicit and explicit bias may equally negatively impact morbidity and mortality among the most impacted populations. Bias often impacts patient–provider interactions, clinical decision-making, and ultimately, patient and population health. From a geopolitical perspective, bias also affects the distribution of resources, many of which affect the overall health and well-being of individuals on the receiving end of bias and discrimination. Nurse practitioners have the responsibility to be aware of their own personal biases and to recognize and stand against the biased-influenced decisions of others. All NPs must be willing to consistently participate in trainings that facilitate bias-reduction strategies to positively influence health outcomes for all human beings.

Health Disparities

It is important to note that there are two types of disparities that impact health outcomes: health care disparities and health disparities. Health care disparities are systems-based disparities that impact individuals and populations, and health disparities refer to the actual health of people. According to the U.S. Department of Health and Human Services Agency for Healthcare Research

and Quality, health care disparities refer to variances in the availability of and access to health care resources, including facilities and services. For more information, visit https://www.ahrq.gov/topics/disparities.html.

The Centers for Disease Control and Prevention (CDC) refers to health disparities as preventable variances in disease burden, injury, violence, and/or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. The CDC acknowledges that "health inequities are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources." Factors such as race/ethnicity, gender, sexual orientation, sex, ability, social and economic status, education level, and geographical location heavily influence health disparities and health care disparities. As determined by the NAM Future of Nursing 2020–2030 Report and the *Healthy People 2030* initiative, intentionally and adequately addressing the SDOH can improve health outcomes through targeted efforts to decrease and eliminate social, economic, and health care disparities. Nurse practitioners have the power and unique opportunities to influence change in these areas. More information can be accessed at https://www.cdc.gov/healthyyouth/disparities/index.htm

Health Literacy

The Health Resources and Services Administration (HRSA) defines health literacy as the ability of an individual to obtain, process, and understand basic health information necessary for making decisions about their health care. It is critical for the NP to know that low health literacy is most prevalent among specific populations, such as older adults, historically underrepresented populations, financially disadvantaged populations, and people from medically underserved populations. However, NPs must not generalize, stereotype, or make assumptions about all individuals or communities who fall within these groups. Cultural intelligence and individualized care must be applied to all people. It is the responsibility of the NP to interview and assess each person to determine individual needs and provide appropriate education. More information on health literacy can be found at https://www.hrsa.gov/about/organization/bureaus/ohe/health-literacy/index.html

Social Determinants of Health

The CDC defines SDOH as "factors that contribute to a person's current state of health." These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature. Holistic FNP practice incorporates all components into patient care (https://www.cdc.gov/social-determinants/index.htm).

Economic Stability

Goal: Help people earn steady incomes that allow them to meet their health needs.

One in 10 people in the United States live in poverty, making it difficult for many people to afford healthy foods, health care, and adequate housing. One of the foci of *Healthy People 2030* is to help people achieve economic stability. Steady employment decreases the likelihood of living in poverty and increases the likelihood of being healthy. Living with certain disabilities, injuries, and health conditions often limits employment opportunities. NPs play a pivotal role in identifying financial burdens, barriers to access to health care, and barriers to acquisition of health-promoting foods and other resources. It is also within the role of the NP to serve as a liaison and assist in building relationships with social service entities that provide people and communities with needed resources. Other ways that NPs can help to advance the Heathy People 2030 goals is to be aware of and promote existing employment programs, career counseling, and high-quality childcare opportunities, all of which can help more people with job attainment and job security. In addition, many NPs are active in policy engagement, which provides prime opportunities to impact the revision of and/or development of policies aimed at subsidies to help people buy healthy foods, obtain safe housing, increase access to affordable health care, and quality education. Each of these initiatives can reduce poverty and improve health and well-being. More information on the *Economic Stability SDOH* can be viewed at https://health.gov/healthypeople/objectives-and-data/browse-objectives/economic-stability

Education Access and Quality

Goal: Increase educational opportunities and help children and adolescents do well in school.

Higher educational levels increase the likelihood of people being healthier and life expectancy growth. *Healthy People 2030* focuses on ensuring high-quality educational opportunities for children and adolescents and on helping them perform well in school. Stress associated with living in poverty can adversely affect brain development in children and make it more difficult for them to perform well in school.

Of note for NPs is that children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination are more likely to struggle with certain academic subjects, especially math and reading. They are also less likely to graduate from high school or pursue college education. This directly affects their ability to obtain safe jobs with decent wages, and consequently contributes to the development of health problems such as heart disease, diabetes, and depression. In caring for children and adolescents, the NP should be vigilant in screening for and identifying indicators and risk factors related to low-quality education. Beyond identification, the NP serves as an advocate for families experiencing inadequate child and adolescent education and should engage in seeking ways to connect these families with appropriate resources. Interventions that aid children and adolescents with school performance and providing financial resources for college may have long-term health benefits. More information

can be found at https://health.gov/healthypeople/objectives-and-data/browse-objectives/education-access-and-quality

Health Care Access and Quality

Goal: Increase access to comprehensive, high-quality health care services.

Many people in the United States do not have health insurance, making it less likely to have a primary care provider, less likely to have consistent health care, and less likely to participate in wellness promotion, all of which adversely impact morbidity and mortality among these individuals. The overall health and well-being of individuals cannot improve without adequate health care, including access (i.e., locations, transportation, health insurance, timeliness, and adequate employment to cover co-pays and prescriptions) and high-quality health care services. The number of individuals who cannot get access to health care as needed and those who are unable to obtain prescription medications when needed has increased over the past several years and is continuing to worsen, according to the *Healthy People 2030* overview on the SDOH. NPs have a moral and professional responsibility to engage in policy and advocacy initiatives aimed at increasing access for affected individuals for significant change in the direction of comprehensive and high-quality health care to occur. Developing innovative interventions that facilitate increased access to health care is essential, and NPs can play a vital role in that. More information on health care access and quality can be found at https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality

Neighborhoods and Built Environments

Goal: Create neighborhoods and environments that promote health and safety.

The environment has a major influence on the health and well-being of people and communities. Air and water quality, physical safety (violent vs. non-violent; sidewalks and places to safely access physical activity), number of people interacting within a space (over- or under-populated). Historically underrepresented racial and ethnic minorities and financially disenfranchised people are more likely to live in high-risk places. These factors are key components of a holistic assessment and cannot be overlooked. It is within the purview of the NP to be an active participant in health promotion and safety. *Healthy People 2030* recognizes that improving neighborhoods and built environments can impact health and safety in all the places where people live and interact.

Nurse practitioners should engage in interventions and policy changes at every level of government to aid in health and safety risk reduction, health promotion, and improved quality of life and overall health outcomes. Additional information may be found at https://health.gov/healthypeople/objectives-and-data/browse-objectives/neighborhood-and-built-environment

Social and Community Context

Goal: Increase social and community support.

Opportunities for interpersonal interactions in a variety of places may significantly affect overall health and well-being. In alignment with the focus of *Healthy People 2030* on assisting people with social support needs, NPs should also identify and support this effort through advocacy and active engagement in interventions and innovations, and through interprofessional collaboration with other relevant health care advocates, including other professionals and organizations. More information can be accessed at https://health.gov/healthypeople/objectives-and-data/browse-objectives/social-and-community-context

RESEARCH

- Nurse Practitioners should understand research methods, advocate for ethical and culturally responsible research methods and practices and be able to translate research into practice.
- Research Ethics: The ANA and other organizations provide codes of ethics related to research activities.
- Quantitative vs. Qualitative Research
  - Quantitative research: Research that uses objective measurements to provide numerical and statistical information and data in the form of numbers, percentages, and ratios; may include interventions and treatments
  - Qualitative research: Investigation of a problem using inquiry methods and developing conclusions based on observations, quotes, and themes
- Translational Research
  - Understanding research methodology and bio-statistical data to evaluate, interpret, and implement research findings
  - Identification of evidence-based research and use of critical thinking to implement new research findings and ideas into practice
- FNPs must be prepared to be
  - Lifelong learners: identifying research problems, participating in research affects, and applying research findings
  - Scholars: Providing outcomes research data through various dissemination modes such as publications, speaking engagements, and professional presentations
- Assurance of Safe Practice
- A system to evaluate and monitor the quality of patients' care and facility management.

- Formal programs that provide a framework for continuous, consistent monitoring and evaluation:
  - Structure, process, and outcomes of care
  - Client interactions
  - Clinical competence
  - Performance assessment
- Knowledge of standards of care and clinical guidelines
- Minimizing clinical errors and complications by using risk-reducing tools such as smart phones and tablets, flow sheets, and electronic resources
- Promoting a safe work environment using principles of QSEN
- Evaluation of clinical outcomes using
  - Continuous Quality Improvement (CQI)
  - Peer review
  - Audit

DISASTER AND EMERGENCY CARE AND PLANNING

Attention is increasingly being paid to preparing RNs to assume emergency roles during a time of mass casualties from either natural disasters or terrorist attacks. The International Nursing Coalition for Mass Casualty Education was established to help nurses to identify the educational competencies for RNs responding to mass casualty incidents. The coalition aspires to improve the ability of all nurses to respond safely and effectively to mass casualty incidents through the identification of existing and emerging roles and responsibilities of nurses, ensuring robustness of education for mass casualty incidents, helping to understand response frameworks, and ensuring collaborative efforts. As outlined in the *NAM Future of Nursing 2020–2030 Report, nurses* are expected to be prepared to respond to emergencies. Information on the objectives and work that has been done toward a uniform curriculum in this area may be obtained at http://www.nursing.vanderbilt. edu/advantage/emergency.html In addition, the Emergency Nurses Association, with endorsement from NONPF, published specialty competencies for the NP who practices in emergency care (Emergency Nurses Association {ENA}, 2008). The 2021 updated competencies from the American Academy of Emergency Nurse Practitioners and the ENA can be found at https://www.ena.org/docs/default-source/education-document-library /enpcompetencies_final.pdf?sfvrsn=f75b4634_0 .

The Centers for Disease Control and Prevention also maintains emergency preparedness resources for health care providers. These can be found at http://emergency.cdc.gov/

COMPLEMENTARY AND INTEGRATIVE HEALTH

There is greater recognition of the use of complementary and integrative modalities. The National Center for Complementary and Integrative Health (NCCIH) is the federal government's lead agency for scientific research on complementary and integrative health (https://nccih.nih.gov). Delivery of holistic, patient-centered, and culturally intelligent care requires NPs to fully engage persons seeking wellness care and those who access care during times of illness in the development and management of treatment plans. The role of the NP in complementary and integrative health is to assess individual levels of health literacy and provide education accordingly. The focus of the plan of care should be on optimal health and well-being, as defined by each individual. Resources for health care providers can be found at https://www.nccih.nih.gov/health/providers.

Definitions (NCCIH)

- NCCIH uses the following terms:
  - "Complementary health approaches" is used when discussing practices and products of nonmainstream origin.
  - "Integrative health" is used when discussing practices that incorporate complementary approaches into mainstream health care.
  - If a practice is nonmainstream and used together with conventional medicine, it is referred to as "complementary."
  - If a practice is nonmainstream and used in place of conventional medicine, it is considered "alternative."

Demographics

- More than 30% of adults and 12% of children use complementary or alternative approaches to health care.
- Many drug–herb interactions have been identified.
- Sixty-eight percent of clinically significant drug–herb reactions are related to five herbs:
  - Kava
  - Garlic
  - Ginkgo biloba
  - St. John's wort
  - Valerian

- The prescription medications most frequently affected:
  - Warfarin
  - Sedative/hypnotics
  - Antidepressants
  - Insulin
  - Oral antidiabetic agents
  - Hepatotoxic medications
  - Oral contraceptives

Role of Nurse Practitioner

Nurse practitioners should be aware of current evidence and resources regarding Complementary and Alternative Medicine (CAM) interventions.

- Maintain objectivity and be supportive about patients' choice to use CAM.
- Proactively ask all patients about the use of and response to CAM:
  - Request that patients bring their supplements (bottles, tubes, containers, packaging, etc.) to visits.
  - Ask about alternative therapies.
  - Document all CAM information and referrals in patient's record.
  - Use caution with women of childbearing age—many herbals are category C.

TABLE 2–1. NCCIH TYPES OF COMPLEMENTARY HEALTH APPROACHES

APPROACH	EXAMPLES
Natural Products*	Vitamins and minerals, probiotics, herbs (also known as botanicals)
Mind and Body Practices	Acupuncture, relaxation techniques, guided imagery, tai chi, qigong, healing touch, hypnotherapy, movement therapies, yoga, chiropractic, meditation, massage therapy
Other Complementary Health Approaches	Homeopathy, traditional healers, Ayurvedic medicine, naturopathy, traditional Chinese medicine

*Herbal products, probiotics, and vitamins are not approved by the U.S. Food and Drug Administration (FDA) and are considered food supplements.

Source: National Center for Complementary and Integrative Health (NCCIH). Retrieved from https://nccih.nih.gov/health/integrative-health#term

TABLE 2–2.
SELECT DRUG–HERB INTERACTIONS

HERB	DRUG(S)	EFFECT
Garlic	Warfarin	Decreased blood concentrations
Ginkgo biloba	Anticoagulants, aspirin, NSAIDs	Increased risk of bleeding with warfarin
	Thiazide diuretic	Increased blood pressure
	Trazodone	Coma
	Anticonvulsants, TCAs	Decreased seizure threshold
Kava	Benzodiazepines	Additive CNS depression
	Levodopa	Increased "off" periods in patients with Parkinson's Disease
St. John's wort	Warfarin and related anticoagulants, cyclosporin, amitriptyline, digoxin	Decreased blood concentrations
	Piroxicam, tetracyclines	Increased phototoxicity
	Antidepressants, CNS stimulants	Additive effects
	Theophylline	Decreased xanthine levels
Valerian	CNS depressants	Additive CNS depression

Note. NSAIDs = nonsteroidal anti-inflammatory drugs; TCAs = tricyclic antidepressants; CNS = central nervous system.

TABLE 2–3.
COMMON TYPES OF COMPLEMENTARY HEALTH APPROACHES

TEN MOST COMMON COMPLEMENTARY HEALTH APPROACHES IN USE BY ADULTS IN THE UNITED STATES	
17.7%	Natural products
10.9%	Deep breathing
10.1%	Yoga, tai chi, or qi gong
8.4%	Chiropractic or osteopathic manipulation
8.0%	Meditation
6.9%	Massage
3.0%	Special diets
2.2%	Homeopathy
2.1%	Progressive relaxation
1.7%	Guided imagery

Source: *Trends in the use of complementary approaches among adults: United States, 2002–2012.* National health statistics report no. 79, by T. C. Clarke, L. I. Black, B. J. Stussman, P. M. Barnes, and R. L. Nahin, 2015, Hyattsville, MD: National Center for Health Statistics.

CARING FOR PEOPLE WITH DISABILITIES

Definitions

The Americans with Disabilities Act (ADA) is a civil rights law that was enacted in 1990. It prohibits discrimination against individuals with disabilities in all areas of public life, including employment, schools, transportation, and all public and private places that are open to the public. The law ensures that people with disabilities have equal and equitable rights and opportunities as compared to everyone else. The civil rights protections for individuals with disabilities are like those provided to individuals based on race, color, sex, national origin, age, and religion. It guarantees that individuals with disabilities have equal opportunities in public accommodations, employment, transportation, state and local government services, and telecommunications. A person with a disability has a physical or mental impairment that substantially limits one or more major life activities, *or* a record or history of such an impairment, *or* is regarded/perceived by others as having such an impairment. When used in reference to the ADA, the term "disability" is used in a legal rather than medical context. Nurse practitioners should be aware of this distinction. More information about the ADA may be obtained at: https://adata.org/learn-about-ada

- Characteristics of disabilities vary in severity:
  - Very mild (inconvenience)
  - Moderate (interfere with some activities)
  - Severe (need assistance for activities of daily living [ADL] and instrumental ADL)
  - Very severe (need technology for survival)
- Disabilities vary in type:
  - Physical
  - Sensory (vision and hearing)
  - Psychiatric or mental health
  - Cognitive or intellectual
  - Communication
- Disabilities vary in visibility:
  - Not at all visible to others
  - Visible to informed others
  - Visible to all
- Issues for providers
  - Access and care
    - People with disabilities encounter serious barriers to receiving quality health care, preventive care, screening, and reproductive care.

- People with disabilities have received lower quality of care, less aggressive treatment, and are offered few choices. Health care providers are often underprepared for addressing sexuality, pregnancy, childbearing, and common health problems in people with disabilities. This increases the risk for health inequities, health disparities, and sentinel events.

◊ Barriers to optimal care in people with disabilities include:

- Lack of awareness and knowledge about specific disabilities and of disability in general,
- Lack of CQ regarding interacting with and caring for people living with disabilities,
- Lack of accountability of health care providers for providing culturally responsible and inclusive care for all people,
- Lack of knowledge about the law or disregard for the legal mandates,
- An erroneous assumption is that people with disabilities are dependent on others and incapable of making their own decisions.

◊ Consequences of lack of substandard and non-inclusive care

- Negative encounters, often resulting in people with disabilities avoiding health care providers unless and until necessary
- Inadequate health care, including preventive screening
- Delay in treatment or lack of treatment
- Low level of participation in health-promotion activities
- Poor health status, isolation, and psychological issues

Preventing health disparities using an inclusive excellence approach

Inclusive excellence embodies the principles of cultural intelligence, the humanitarian ethos and principles, and ethical principles as defined in the ANA Code of Ethics for nurses. It embraces diversity, equity, equality, inclusion, belonging, and all the characteristics that make individuals and populations unique. The role of the NP is to adopt and employ supportive strategies that assist in the provision of care in ways that deter discriminatory practices and bias-influenced care, to increase opportunities to advance health equity, and improve population health. Some of those strategies include:

♦ Self-awareness, bias acknowledgement, and mitigation and/or de-activation of bias-influenced decisions

- Cultural intelligence application:
  - Discuss culture and cultural preferences with each patient.
  - Do not generalize, stereotype, or make assumptions about people from specific affinity groups, including race, gender identification, sex, nationality, ethnicity, disability, body composition, families, or communities.
- Adopt inclusive language:
  - Ask about pronouns and use appropriate pronouns.
  - Ask about gender identification.
- Approach the care of all persons as a partnership, not a dictatorship. People have the right to be active participants in and make the ultimate decisions regarding health care.
- Attend trainings and other educational opportunities related to caring for people from underrepresented, marginalized, and stigmatized populations.
- Provide appropriate and relevant accommodations for all persons who are consumers within the health care system.
- Practice the concept of "nothing about us without us" and the concept that no policy should be decided by a group or representative without participation of members of the affected group.

GENETICS AND GENOMICS

Overview

- Genetics and genomic science are redefining the understanding of the continuum of human health and illness. Recognition of genomics as a central science for health professional knowledge is essential.
- The human genome project was completed in April 2003.
- This science is number one on the list of the 10 most important medical advances in the first decade of the 21st century.
- Care for all people, across the life span, will increasingly require familiarity with genetic and genomic information related to
  - Prevention, screening, diagnostics, prognostics, selection of treatment, monitoring of treatment effectiveness, referral, and the International HapMap Project (haplotype map).
    - Genetic databank allows exploration of relationships between genetic differences and diseases
    - A global catalog of common human genetic variants

- Contains a description of each variant, identifies where it occurs in human DNA, and describes variation and distribution within and across populations
- Links genetic markers with human traits (e.g., celiac disease) and/or presence or absence of disease

Definition

- *Genetics:* The study of individual genes and their impact on relatively rare single gene disorders
- *Genomics*: The study of all the genes in the human genome together, including their interactions with one another, the environment, and the influence of psychosocial and cultural factors

Role of the FNP

- Understand the relationship of genetics and genomics to health, prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness
- Facilitate access to genetic specialists
- Develop a family history
  - Complete detailed family history, including genetic and environmental risk factors
  - Use these mnemonics to identify "red flag" issues:
    - SCREEN
      - Some concern
      - Reproduction
      - Early disease, death, or disability
      - Ethnicity
      - Nongenetic
    - Family GENES
      - Family: multiple affected siblings or persons in multiple generations
      - G: groups of congenital anomalies
      - E: extreme or exceptional presentation of common conditions
      - N: neurodevelopmental delay or degeneration
      - E: extreme or exceptional pathology
      - S: surprising laboratory values

- Pharmacogenomics
  - Drug metabolism is orchestrated by complex interactions among dozens of different genes.
  - There is the potential for safer drugs, more effective prescribing, more accurate dosing, targeted vaccines, and reduced cost (e.g., warfarin).
- Lifestyle
  - Lifestyle risk factors are known to affect overall health (sedentary lifestyle, obesity).
  - Biologic processes are complex and poorly understood.
  - Findings in telomere studies identify some impact of lifestyle on the life of the gene.
  - Further genetic research may identify susceptibility factors.
- Genetic counseling and screening
  - Multidisciplinary health care team provides counseling and screening
  - Considerations for genetic counseling and/or screening:
    - Those who have or are concerned that they might have an inherited disorder or birth defect
    - Women who are pregnant or planning to be at age 35 or older
    - Couples who already have a child with an inherited disorder, undiagnosed disease, or birth defect
    - Couples whose infants have a genetic disease diagnosed by routine newborn screening
    - Women who have had three or more miscarriages or babies who died in infancy
    - People concerned that their jobs, lifestyles, or medical histories may pose a risk to the outcome of pregnancy (common causes of concern include exposure to radiation, medications, illegal drugs, chemicals, or infections)
    - Couples who would like testing or more information about genetic conditions that occur frequently in their ethnic groups
    - Couples who are first cousins or other close blood relatives
    - Pregnant women whose ultrasound examinations or blood testing indicate that their pregnancies may be at increased risk for certain complications or birth defects
- Prenatal testing
  - Began in 1970s with alphafetoprotein testing
  - Quad screen with ultrasound can identify approximately 90% of trisomy 21 cases.
  - Markers help identify high-risk pregnancies such as preeclampsia, fetal growth restriction, fetal demise, and placental abnormalities

- Gene therapy
  - This is a technique for correcting defective genes responsible for disease development. All therapies require "carrier molecule" or vector to carry therapeutic gene to patient's target cells; the most common vector is a genetically adapted virus.
  - Several approaches:
    - Most common: normal gene inserted into a nonspecific location within the genome to replace a nonfunctional gene
    - Abnormal gene could be switched with normal gene through homologous recombination
    - Abnormal gene repaired through selective reverse mutation that returns a gene to its normal function
    - Gene regulation (the degree to which a gene is turned on or off) could be altered
  - The U.S. Food and Drug Administration (FDA) has not yet approved any human gene therapy product for sale; all are still experimental.
  - Ethical questions and opinions about gene therapy abound.
- NPs need to become increasingly familiar with pharmacogenomics and the most recent indications for medication prescribing.

END-OF-LIFE CARE

All patients are entitled to counsel regarding end-of-life care to ensure that patients have input and can involve their families with their care at the end of life. Advance care directives ensure that the patient's desires are known and followed when the patient is no longer able to communicate. Nurse practitioners play a unique role in this care delivery process in both inpatient and outpatient settings.

- Palliative care is comprehensive and coordinated, using all resources available within the community, with no exclusions regarding curative therapy.
- Hospice care is more focused on keeping patients comfortable at the end of life and generally does not include treatment intended to be curative.

Palliative care

- Comprehensive care for short- or long-term illnesses, including incurable conditions
- Multidisciplinary approach
- Includes pain and symptom management

- Addresses social, psychological, and spiritual needs as well as physical (including pain management)
  - Information available from the Hospice and Palliative Nurses Association (www .hpna.org/) and the Center to Advance Palliative Care (www. getpalliativecare.org)

Hospice care

- Available when all curative treatment options are exhausted or refused
- Multidisciplinary approach
- Focuses on pain control and comfort measures
- Stresses quality of life
- Provides family support
  - Exclusions regarding therapeutic interventions delineated before patient enters hospice care

DIRECT-TO-CONSUMER ADVERTISING

Patients frequently present to the office already having formed their diagnosis and requesting specific treatments. NPs must become knowledgeable about the newest products on the market and how they are marketed to consumers to appropriately counsel and treat patients. NPs critically read clinical studies and make evidence-based decisions about the appropriateness of medications and therapies based on individual patient presentation.

TELEHEALTH

With rapidly expanding technology, the use of telecommunications in health care delivery is ever- changing. Telehealth in part includes "use of information and technologies that are emerging, as well as the ability to move the caregiver and information to where the patient is rather than moving the patient to centralized places to deliver health services and information." (Huston, 2013)

Areas to be included in these advances:

- High-quality video conferencing between provider and patient
- Medical records
- Surgical robots
- Remote monitoring of implanted medical devices such as pacemakers, defibrillators, and some pain medication delivery systems

Since the release of the IOM report *To Err is Human: Building A Safer Health System* (1999), increased attention has been paid to changes all health care providers should make to reduce medical errors. In response, The Joint Commission (formerly known as JCAHO, or The Joint Commission on Accreditation of Healthcare Organizations, www.jointcommission.org/) has issued a list of abbreviations that should not be used in health care. In addition, the Institute for Safe Medication Practices has published a list of dangerous abbreviations related to medication use that it recommends should be explicitly prohibited (http://www.ismp.org/). The list of banned abbreviations includes many symbols traditionally used in patient charts and in written prescriptions.

THERAPEUTIC COMMUNICATION

Overview

- *Therapeutic communication* is a transaction between the sender and the receiver. Both parties participate simultaneously.
- In the transactional model, both participants perceive each other, listen to each other, and simultaneously engage in the process of creating meaning in a relationship, focusing on the patient's issues.
- Both patient and provider bring unintended bias to the exchange influencing the intended message and its interpretation.
- Interactions must be viewed in the context and intersectionality of identities of both the patient and the provider:
  - Values, attitudes, and beliefs
  - Gender
  - Age or developmental level
  - Cultural influences
  - Religious of spiritual affiliations
  - Social status
  - Economic/financial status
  - The environment
- Requirements for therapeutic relationships:
  - Authenticity
  - Rapport
  - Trust
  - Respect

- ◊ Honesty
- ◊ Empathy
- ◊ Consistency

- ♦ Therapeutic communication involves actively listening and observing, both verbal and nonverbal cues.
  - ◊ Nonverbal
    - Body language (i.e., body movement, eye contact, eye movements, posture)
    - Affect and demeanor
  - ◊ Verbal
    - Giving broad openings—offering general leads
    - Using silence—accepting
    - Giving recognition—restating
    - Reflecting—focusing
    - Exploring—seeking clarification and validation
- ♦ Nonverbal behaviors to promote active listening:
  - ◊ **S**—Sit squarely facing the patient
  - ◊ **O**—Observe an open posture
  - ◊ **L**—Lean forward, toward the patient
  - ◊ **E**—Establish eye contact
  - ◊ **R**—Relax

Therapeutic Boundaries

- ♦ Effective communication is a core skill in primary care.
  - ◊ The therapeutic relationship is a planned, goal-directed, and contractual relationship between the provider and the patient for the purpose of providing care to the patient to meet his or her physical, emotional, and spiritual health care needs.
  - ◊ Therapeutic relationships occur along a dynamic continuum.
  - ◊ The provider is accountable and takes responsibility for setting and maintaining the boundaries of a therapeutic relationship, regardless of the client's actions or requests.
  - ◊ Professional boundaries identify the parameters of the therapeutic relationship.
  - ◊ Establishing, maintaining, and communicating professional boundaries to the patient is imperative to the therapeutic relationship. Boundary crossing is a

conscious or unconscious decision by the provider that deviates from established ethical and professional boundaries, including these examples:

- Accepting gifts
- Self-disclosure by the provider
- Embarking on a social relationship with a patient
- Sexual misconduct
- Exploiting the therapeutic relationship for the emotional, financial, sexual, or personal advantage or benefit of the provider

Teaching Strategies/Group Dynamics/Literacy

Patient education is a matter of quality, safety, and is essential to successful clinical interventions. It should occur at each clinical visit. Busy clinical settings should not hinder patient education, as NPs are responsible and accountable for providing education as part of a holistic model of care. Literacy levels differ considerably within the clinical setting. The average literacy level for patients is estimated to be at the fifth grade, and inadequate functional health literacy may be as high as 80% in some clinical settings. Health care expenses escalate considerably in the lower-literacy populations. The NP must not allow literacy levels to induce bias and does not excuse the responsibility of providing adequate health education to all patients, regardless of literacy level.

- Teaching strategies include using written patient education materials in the preferred primary language, and multimedia approaches such as audio and video that are specific to the literacy level of the patient. Best practices require the NP to move beyond just giving the materials to the patient or care supporter, but to read through or discuss the materials to ensure understanding by offering a space for questions and explanations.
- Group dynamics may alter the efficacy of group teaching and require considerable time on the part of the clinician. This should not deter the NP from this responsibility.
- Improving patient education using multimedia computer programs and touch screens is rapidly becoming a more feasible option, followed by one-on-one interaction with the instructor and/or smaller group interaction. The role of the NP is to ensure that people who are provided these materials receive explicit instructions on use of the technology and the health care information provided in this format.

PROFESSIONAL ORGANIZATIONS

- Participation in professional organizations is critical in affecting advancement of the nursing and nurse practitioner profession. Through active participation in professional organizations, NPs have a voice in NP education, health policy, NP autonomy, including

independent practice, and governance. There is power in numbers, and all NPs should be involved and active in their professional organizations at the national, state, and local levels to broadly influence academia, health care systems, and clinical practice.

- State organizations work diligently to monitor and affect laws and regulations affecting NP practice and health policy. In addition, these associations provide peer-networking and continuing education opportunities. Many state NP organizations have local chapters.
- National organizations
  - American Association of Nurse Practitioners (AANP): the American Academy of Nurse Practitioners and the American College of Nurse Practitioners joined to create the largest full-service national professional membership organization for NPs of all specialties in 2013 (www.aanp.org). The mission of AANP is to lead NPs in transforming patient-centered health care with a vision of "providing high-quality health care for all by the patient's provider of choice" (AANP, 2013).
  - The National Organization of Nurse Practitioner Faculties (NONPF) is an organization of nurse practitioner educators who are instrumental in setting standards for nurse practitioner education. NONPF has developed core competencies describing the domains of practice with critical behaviors that should be exhibited by all entry-level NPs.

Theory and Principles of Family-Focused Care

The traditional family nurse practitioner (FNP) provides primary and secondary preventive care to persons across the life span living alone or in nuclear or extended family networks. Today's family consists of individuals who identify themselves as family members, not limited by walls, genetics, or legally defined relationships. Friedman (2002) defines family as "two or more persons who are joined together by bonds of sharing and emotional closeness and who identify themselves as being part of the family" (p. 9).

Family members may live together or within proximity in a common community and participate together in educational, social, and religious experiences. Families may form as an outgrowth of kinship bonds with others in the community or because of culturally specific extended family networks. Family forms are varied—the FNP will interact with many different family forms such as the gay and lesbian family, the single-parent family, the extended family, adoptive or stepparent families.

Family-focused care is the specialized role of the FNP, who acknowledge that the family process is an interaction among members that serves to promote mental and physical health, prevent disease, and restore health in times of illness. FNPs provide a comprehensive psychosocial approach to caring for people that fosters health-promoting lifestyles among family members. The FNP interacts across the interdependent roles of individual, family, and community to act as advocate, case manager, coordinator, counselor, and expert provider of care.

The FNP assesses family structure and dynamics to help people maximize their health, given the realities of their personal and family health histories, psychosocial histories, genetic makeups, cultural and religious values, traditions, and social and economic contexts. FNPs teach family members to recognize the influences of their family health patterns and risks, use family members as resources for knowledge and support during periods of health, maintain psychosocial ties with their family of origin, and assume functions that help optimize health in family members by using resources in the community.

The FNP role is interpreted as a unique NP role. It is not, as some would suggest, an adult NP plus pediatric NP plus geriatric NP role, but it requires mastery of a unique constellation of knowledge and tasks involving the care of an individual within a family context. The FNP is not expected to have the depth of knowledge of NPs practicing in the specialty areas but is expected to know something about many different diseases and processes affecting the person throughout the life span. As such, the FNP works closely with physician colleagues in the diagnosis and development of the initial treatment regimen and is prepared to refer to specialists.

FAMILY THEORY—ASSESSMENT AND INTERVENTION

In general, family theory serves as a basis for assessing and coming to understand the structure, development, and function of families through the process of family assessment. Authors such as Friedman (2002), Kaakinen et al. (2015), and Wright and Leahey (2012) have developed family assessment tools. Family theory is grounded in general systems theory, including structural functional theory, family systems theory (Bowen), family development theory (Duvall, 1977), child development theory (Erikson; 1959 Havighurst, 1952), and other social science theories, including communication, stress, and interactional theory.

THEORETICAL BASIS FOR FAMILY THEORY—GENERAL SYSTEMS THEORY

General systems theory provides a framework that explains the dynamic structure and function of the family within the context of a unified whole. The family performs activities reflected by the actions of interacting parts or subsystems. Any *system* is defined as "a bounded set of interrelated elements exhibiting coherent behavior as a trait" (Constantine, 1986, p. 67). Families are considered systems because they are made up of interrelated elements or objectives, exhibit coherent behaviors, have regular interactions, and are interdependent.

These are the major principles of systems theory adapted from Friedman (2002), Kaakinen et al. (2015), and Wright and Leahey (2012):

- Each system has its own characteristics, and the whole is greater than the sum of the parts, rather than just the sum of the characteristics of individual parts of a system.

- All parts of the system are dependent on one another, even though each part has its own role within the system.
- Families are organized in a way that enables the interdependence and interactivity of their members.
- Each family system has mechanisms for the exchange of information within the system and between the system and the broader environment.
- Boundaries that are open, closed, or operate at random exist within family systems.
- Family systems change over time as both individuals and the whole respond to change in the internal and external environments. With change, families become more complex, reflecting adaptation and differentiation of their members.
- Change occurs through feedback processes that allow for circular interaction within the family system, rather than a linear cause-and-effect pattern.
- A change affecting one part of a family manifests itself as change in the whole family system.
- Families strive for homeostasis or a predictable steady state that reflects a balance between change and stability.

The value of systems theory lies in understanding that families are composed of interacting parts in constant interaction with one another and the larger environment, and that change in one part of the family is reflected in change in the family. As families expand, grow, and experience stress and illness, their ability to be changed and yet maintain homeostasis reflects the health and coping strategies of the family to adapt. Families with poor coping strategies may resist change or be unable to restore homeostasis after change. Stress and illness may trigger dysfunctional coping patterns or disequilibrium. Families with closed boundaries may resist help from outside resources during periods of disequilibrium.

STRUCTURAL FUNCTIONAL THEORY

- Families are social systems that form interdependent and independent relationships referred to as *subsystems* both within and outside of the family. Structure describes relationships within families, such as the husband–wife subsystem, parent–child subsystem, sister–brother subsystem, and so on.
- Internal family subsystems function as a microcosm of society, reflecting the larger sphere of human needs. Rank order within families is a component of structure, such as the ordering of children by birth in the family or by age if they are adopted or stepchildren.

- Function includes the tasks that families carry out to provide members with safety, reproduction, education, parenting, sexual expression, economic security, transfer of cultural traditions and inheritance, social support, play, relaxation, and health promotion opportunities.
- Supra-systems form outside the family and reflect functional needs not met within the family. Relationships with teachers, schools, religious and civic organizations, the health care system, and friends are examples of supra-systems that meet needs not fulfilled by interactions within the family system. Multiple relationships are formed through supra-systems that reflect family values, beliefs, and emotional boundaries. By developing an ecomap, the FNP can visualize the relationships of family members with systems outside the family system (Wright & Leahey, 2012).
- These are the principles of structural functional theory adapted from Friedman (2002), Hanson et al. (2005), and Wright and Leahey (2012):
  - Families are social systems with instrumental and expressive functions that include activities of daily living, communication, social support, role acquisition, values, beliefs, problem-solving, and relationships.
  - In optimally functioning families, members take on predictable roles that meet the instrumental and expressive needs of their members.
  - Families are composed of small numbers with characteristics of small-group behavior.
  - Families are social systems that carry out functions necessary to meet the need for orderly transfer of wealth, procreation, and education of members of society.
  - People adopt norms, values, and cultural traditions that are learned as part of the process of family socialization.
  - Disease or ill health can interfere with the family's ability to carry out its internal functions and meet the responsibilities it has formed in relationships with systems outside the family. Families with multiple unmet needs may experience guilt, stress, dysfunction, and poor coping strategies during periods of stress and illness.

FAMILY DEVELOPMENTAL THEORY

- Developmental theory explains human growth and development according to theorists such as Erikson, Piaget, and Havighurst. Duvall (1977) and Duvall and Miller (1985) further applied the concept of development to the sociological study of family. The model outlines the eight consecutive stages in the family life cycle, offers a predictive overview of the activities that occur in families over time, and serves as a basis for anticipatory guidance when assessing and teaching families.

- According to Duvall (1977), families pass through eight chronological stages; as in child development theory, success in one task sets the stage for success in subsequent tasks. Failure in one task leads to frustration or delays in subsequent tasks or stages in the family life cycle. These stages are supported by Duvall's model and adapted from Friedman (2002):
  - Beginning family
  - Childbearing family (oldest child up to 30 months of age)
  - Family with preschool children (oldest child 2½ to 5 years of age)
  - Family with school-aged children (oldest child 6 to 12 years of age)
  - Family with adolescents (oldest child 13 to 20 years of age)
  - Launching center family (grown children leaving the home)
  - Family with middle-aged parents (empty nest, up to time of retirement)
  - Family with old age and retirement
- Underlying assumptions (adapted from Friedman, 2002; and Hanson et al., 2005)
  - Families change over time because of the influence of environmental conditions.
  - Developmental tasks are the aims, although they are not completed at one time and may overlap with other developmental tasks.
  - Families demonstrate different forms of membership across developmental stages that perform age-related functions.
  - Families bring with them an experience of their pasts as well as current circumstances.
  - Families share common developmental processes with other families.
  - Families express developmental milestones in a variety of ways.

COMMUNICATION THEORY

As described by Friedman (2002), Hanson et al. (2005), and Wright and Leahey (2012):

- Communication theory emphasizes the interaction of people that includes both verbal and nonverbal communication among members of a family.
- Communication functions include emotional support, shared information, and instruction.
- The content of messages is time-bound and must be appreciated within the context of the sender.

- Communication that lacks clarity may lead to family dysfunction or poor coping strategies.
- Communication conveys values and beliefs between members and the external environment.
- Communication with clarity and congruence promotes positive behavior within the family.