The DNP-Prepared Nurse Practitioner
Improving Patient Outcomes through
Executive Leadership and
Quality Improvement
in Federally Qualified Health Centers

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DISCLOSURES

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OBJECTIVES

By the end of this presentation, the participant will be able to:

• recognize the **eight essentials of doctoral nursing practice** as a foundation for success of the DNP prepared nurse practitioner working to improve healthcare outcomes.

• describe reasons why the Doctorate of Nursing Practice (DNP) prepared nurse practitioner is qualified to serve in **quality improvement and executive leadership roles**.

• list examples of how the DNP prepared nurse practitioner can **improve population health outcomes** through quality improvement and executive leadership roles.
DOCTORATE OF NURSING PRACTICE (DNP): HISTORY

1965: Dr. Loretta Ford and Dr. Henry Silver created the first training program for Nurse Practitioners at the University of Columbia.

1970's: Defining the role and results with increased availability.

1980's: Cost and the economic value.


2006: Support for DNP as entry to practice by 2025 and redesign of DNP Essentials to support IOM.
"Doctoral education in nursing is designed to prepare nurses for the highest level of leadership in practice and scientific inquiry" (AACN, 2006)2

DOCTORATE OF NURSING PRACTICE (DNP):
COURSE WORK

3-4 years of full-time study including summers
12 months minimum of full-time post-master's study
Minimum of 1,000 hours of practice hours
Final DNP Project
Core classes:
• Advanced Health/Physical Assessment
• Advanced Physiology/Pathophysiology
• Advanced Pharmacology
## EXAMPLE PLAN OF STUDY: DNP-FAMILY NURSE PRACTITIONER

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>Applied Epidemiology</td>
<td>Clinical Data Management and Evaluation</td>
<td>Mental Disorders in Advanced Practice</td>
<td>Primary Care: Infants, Children, and Adolescents I</td>
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<td>Evaluating Evidence for Practice</td>
<td>Population Health for Advanced Practice</td>
<td>Pathophysiology for Advanced Clinical Practice</td>
<td>Primary Care: Adult and Older Individuals I</td>
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<tr>
<td>Advanced Practice Role I: Introduction</td>
<td>Quality and Safety</td>
<td>Doctor of Nursing Practice Project I</td>
<td>Advanced Practice Clinical Practicum II</td>
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<td><strong>Spring</strong></td>
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<td>Advanced Physiology Online</td>
<td>Health Policy, Law, and Advocacy</td>
<td>Health Promotion and Assessment for Advanced Clinical Practice</td>
<td>Primary Care: Infants, Children, and Adolescents II</td>
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<td>Health Systems, Finance, and Economics</td>
<td>Genetics/Genomics for Advanced Nursing Practice</td>
<td>Pharmacotherapeutics for Advanced Practice Nursing</td>
<td>Primary Care: Adult and Older Individuals II</td>
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<td>Leadership and Management Essentials</td>
<td>Summer</td>
<td>Advanced Diagnostics and Therapeutic Procedures for Primary Care</td>
<td>Advanced Practice Clinical Practicum III</td>
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<td>Health Policy, Law, and Advocacy</td>
<td>Summer</td>
<td>Graduates Pharmacology Specialty</td>
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<td>Genetics/Genomics for Advanced Nursing Practice</td>
<td>Summer</td>
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DOCTORATE OF NURSING PRACTICE: PROGRAM TRENDS³
DOCTORATE OF NURSING PRACTICE: PROGRAM TRENDS

Growth in Doctoral Nursing Programs: 2006-2018

Number of PhD Programs | Number of DNP Programs

- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
INSTITUTE OF MEDICINE REPORT: THE FUTURE OF NURSING – LEADING CHANGE, ADVANCING HEALTH

TRANSFORMING PRACTICE

NURSES AND PRIMARY CARE
Nurses provide primary care services across the spectrum of health care settings. The range of possibilities for nurses providing primary care is significant, and their capacity for filling these roles is not always recognized.

- Numbers of nurse practitioners and physician assistants are steadily increasing.
- Numbers of medical students and residents entering primary care are decreasing.

Between 1995 and 2005, the number of nurse practitioners per primary care MD more than doubled, from 0.33 to 0.48. The number of physician assistants per primary care MD also increased.

It is possible to increase the supply of both NP and PA in a relatively short amount of time, helping to meet an increased demand for care, including caring for up to 30 million previously uninsured Americans.
INSTITUTE OF MEDICINE REPORT:
THE FUTURE OF NURSING – LEADING CHANGE, ADVANCING HEALTH
FEDERALLY QUALIFIED HEALTH CENTERS (FQHC) 6

Provide medical, behavioral health, & dental care in underserved areas

- Offers services regardless of ability to pay

Receive funds from Health Resources and Services Administration (HRSA)

- HRSA funds nearly 1,400 health centers operating approximately 12,000 service delivery sites.
- More than 27 million people rely on these clinics for care
FEDERALLY QUALIFIED HEALTH CENTERS:
ACUTE CARE COST SAVINGS IMPACT

Coordinated, comprehensive, community care
  • Patient centered medical home model
  • Underserved communities

Acute Care Cost Savings Impact:
  • FQHC patients had 24% lower spending across all settings
    o 33% lower spending on specialty care
    o 25% fewer inpatient admissions
    o 27% lower spending on inpatient care
FEDERALLY QUALIFIED HEALTH CENTERS: CHRONIC CONDITIONS IMPACT

Health center patient populations are more complex because they have higher rates of chronic conditions and social risk factors associated with poorer health outcomes.

Percent of U.S. population vs. health center patient population for selected demographics, 2017

- Hypertension Prevalence: 45% vs. 32%
- Diabetes Prevalence: 21% vs. 11%
- Income at or Below Federal Poverty Level: 69% vs. 13%
- Homeless: 5% vs. 0.2%

IOWA NURSING
FEDERALLY QUALIFIED HEALTH CENTERS: CHRONIC CONDITIONS IMPACT

The health center patient population has grown increasingly complex, with higher rates of chronic conditions than in previous years.

Percent growth in health center patients diagnosed with selected chronic conditions, 2013 – 2017

*COPD = chronic obstructive pulmonary disease
**Excludes tobacco and alcohol use disorders
FEDERALLY QUALIFIED HEALTH CENTERS: CHRONIC CONDITIONS IMPACT

The health center model achieves better outcomes for complex patients, even while serving patients with higher rates of chronic conditions and social risk factors.

Percent of population with hypertension and diabetes under control, 2017

<table>
<thead>
<tr>
<th>Condition</th>
<th>U.S. Population</th>
<th>Health Center Patient Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension Under Control</td>
<td>57%</td>
<td>63%</td>
</tr>
<tr>
<td>Diabetes Under Control</td>
<td>60%</td>
<td>67%</td>
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</table>
FEDERALLY QUALIFIED HEALTH CENTERS: FINANCIAL & QUALITY IMPACT

75,000 total lives affected in the Midwest by Proteus programs since 1979.

1,500 MIGRANT WORKERS were provided with professional MEDICAL CARE annually.

300 JOB TRAINING PROGRAMS EACH YEAR.

$5,000,000.00 ANNUAL ECONOMIC IMPACT OF PROTEUS PROGRAMS.

IOWA NURSING
QUADRUPLE AIM

The IHI Triple Aim

- Population Health
- Experience of Care
- Per Capita Cost

- Provide the Best Patient Experience
- Provide the Best Clinical Outcomes
- Provide the Most Cost Effective Care

IOWA NURSING
FEDERALLY QUALIFIED HEALTH CENTERS: EVOLVING LEADERSHIP NEEDS

finding a CMO who can drive value

Chief medical officers (CMOs) lead many initiatives that have a direct impact on the value proposition, such as those focused on improving quality and the patient experience, integrating with physicians, and designing and implementing electronic health records (EHRs).

“Now that medical care models have shifted from medical-based incidents to the concept of health, leadership models need to evolve to be more collaborative.”

Within the specific context of health care, collective leadership is necessary to ensure that continually improving, high quality and compassionate care is given to patients and other service users.

Collective leadership for cultures of high quality health care
FEDERALLY QUALIFIED HEALTH CENTERS:
LEADERSHIP NEEDS

CANDIDATE CHARACTERISTICS

- **MUST BE MISSION-DRIVEN:**
- **PATIENT-CENTERED and fiscally responsible:**
- A high level of comfort, interest and capability working in a community-based environment
- Able to sell and champion change.
- Delivers results in measurable, quantifiable fashion. Has a bias for action and strong execution skills.
- Understands clinical operations, health care finance, cost management and healthcare delivery across the continuum.
- Mob, people accountable, can make tough decisions and is able to handle difficult conversations.
- **Boots on the ground, visible leader** who is a strong communicator, a coach and a mentor.
- **Empowering, supportive and promotes a culture of “Joy in Service.”**

- 15 years’ experience in a management role
- Experience with an FQHC organization (preferred but not required)
- Knowledge of the legal and regulatory healthcare environment
- Experience with implementing and using EMR/EHR systems
- Knowledge and experience with licensing/accrediting agencies and managed care organizations
- Exceptional interpersonal skills
Doctoral-Prepared Nurse Practitioners are educated and qualified to meet the organizational leadership needs of FQHCs

- Understand clinical needs of patients and communities
- Understand system-based quality improvement to improve clinical outcomes for complex populations
- The Eight Essentials of Doctoral Education for Advance Nursing Practice further outline the readiness of the DNP in quality improvement & executive leadership roles
  - Impact population health outcomes
  - Impact future of our healthcare system
THE 8 ESSENTIALS OF DOCTORAL EDUCATION FOR ADVANCED NURSING PRACTICE

I. SCIENTIFIC UNDERPINNINGS
II. LEADERSHIP FOR QI
III. EVIDENCE-BASED PRACTICE
IV. INFORMATION SYSTEMS
V. HEALTH CARE POLICY
VI. INTERPROFESSIONAL COLLABORATION
VII. POPULATION HEALTH
VIII. ADVANCED NURSING PRACTICE
The DNP Program prepares the graduate to:

1. Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice.

2. Use science-based theories and concepts to:
   - Determine the nature & significance of health & health care delivery phenomena;
   - Describe the actions & advanced strategies to enhance, alleviate; and ameliorate health & health care delivery phenomena as appropriate;
   - Evaluate outcomes

3. Develop & evaluate new practice approaches
I. SCIENTIFIC UNDERPINNINGS FOR PRACTICE

DNP Coursework: pharmacology, pathophysiology, clinical practicum, quality and safety, population health
I. SCIENTIFIC UNDERPINNINGS FOR PRACTICE

TACTICS

- Include scientific theory in nursing leadership initiatives & discussions
- Use scientific theoretical-based approaches
- Build clinical research teams
II. ORGANIZATIONAL & SYSTEMS LEADERSHIP FOR QUALITY IMPROVEMENT & SYSTEMS THINKING

The DNP Program prepares the graduate to:

1. Develop & evaluate care delivery approaches that meet current & future needs of patient populations

2. Ensure accountability for quality of health care & patient safety
   a. Use advanced communication skills to lead QI and patient safety initiatives in health care systems
   b. Employ principles of business, finance, & health policy to develop and implement effective plans for practice-level and/or system-wide practice initiatives
   c. Develop and/or monitor budgets
   d. Analyze the cost-effectiveness of practice initiatives
   e. Demonstrate sensitivity to diverse organizational cultures & populations, including patients and providers

3. Develop and/or evaluate effective strategies for managing ethical dilemmas
II. ORGANIZATIONAL & SYSTEMS LEADERSHIP FOR QUALITY IMPROVEMENT & SYSTEMS THINKING

TACTICS
- Fill senior level quality teams with DNP
- Increase access to quality data
- Track DNP-led QI projects and outcomes
- Develop new nurse sensitive indicators

American Organization of Nurse Executives: Nurse Executive Competencies
III. CLINICAL SCHOLARSHIP & ANALYTICAL METHODS FOR EVIDENCE-BASED PRACTICE

The DNP Program prepares the graduate to:

1. Critically appraise existing literature to determine & implement EBP
2. Design & implement processes to evaluate outcomes
3. Design, direct, & evaluate QI methodologies
4. Develop practice guidelines to improve practice and environment
5. Use information technology & research methods to:
   • Collect data, design database, & analyze data
   • Design evidence-based interventions
   • Predict & analyze outcomes
   • Examine patterns of behavior & outcomes
   • Identify gaps in evidence for practice
6. Function as practice specialist
7. Disseminate findings from EBP and research to improve healthcare outcomes
III. CLINICAL SCHOLARSHIP & ANALYTICAL METHODS FOR EVIDENCE-BASED PRACTICE

TACTICS

- Include EBP emphasis within job description roles
- EBP mentors for new staff
- Formalize teaching roles with affiliated college of nursing.
- Time for scholarly activities including national presentations & publications showcasing the DNP role
- Track EBP activities with descriptions & outcomes
IV. INFORMATION SYSTEMS/TECHNOLOGY & PATIENT CARE TECHNOLOGY FOR THE IMPROVEMENT & TRANSFORMATION OF HEALTH CARE

The DNP Program prepares the graduate to:

1. Design, select, use & evaluate programs that evaluate & monitor outcomes
2. Analyze elements necessary to the selection, use and evaluation of health care information systems & patient care technology
3. Develop & execute data extraction from practice information systems and databases
4. Provide leadership in the evaluation/resolution of ethical and legal issues relating to use of information, IT, and patient care technology
5. Evaluate consumer health information sources
IV. INFORMATION SYSTEMS/TECHNOLOGY & PATIENT CARE TECHNOLOGY FOR THE IMPROVEMENT & TRANSFORMATION OF HEALTH CARE

**TACTICS**

- Appoint DNPs as active members of EHR teams
- Involvement in technology selection related to nursing and patient care
- Participate in EHR optimization practices

**HRSA Data**

- 99% of FQHCs have EHR
- Send prescriptions, safety checks, decision support, reminders
- Clinical information exchange – 80%
- Patient engagement – 90%
- Data collection – 99%
V. HEALTH CARE POLICY FOR ADVOCACY IN HEALTH CARE

The DNP Program prepares the graduate to:

1. Analyze health policies from various perspectives

2. Develop & implement institutional, local, state, federal, and/or international health policy

3. Influence policy makers through active participation on committees, boards, task forces

4. Educate others regarding nursing, health policy, & patient care outcomes

5. Advocate for the nursing profession within policy & healthcare communities

6. Develop, evaluate, & provide leadership for health care policy that shapes health care financing, regulation, and delivery

7. Advocate for social justice, equity, & ethical policies
V. HEALTH CARE POLICY FOR ADVOCACY IN HEALTH CARE

TACTICS

- Devote time to active leadership roles in nursing organizations
- Develop mentorship programs
- Nominate colleagues for local, state, & national opportunities
VI. INTERPROFESSIONAL COLLABORATION FOR IMPROVING PATIENT & POPULATION HEALTH OUTCOMES

The DNP Program prepares the graduate to:

1. Employ effective communication & collaborative skills in development & implementation of practice models, peer review, practice guidelines, health policy, standards of care, and/or other scholarly products

2. Lead interprofessional teams in the analysis of complex practice and organizational issues

3. Employ consultative & leadership skills with intraprofessional and interprofessional teams to create change in healthcare and complex healthcare delivery systems
VI. INTERPROFESSIONAL COLLABORATION FOR IMPROVING PATIENT & POPULATION HEALTH OUTCOMES

TACTICS

- Educate senior administration about DNP capacity
- Create DNP-led teams of interdisciplinary professionals to create & disseminate solutions
- Increase interdisciplinary collaborative efforts
The DNP Program prepares the graduate to:

1. Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standards of care, and/or other scholarly products

2. Lead interprofessional teams in the analysis of complex practice and organizational issues

3. Employ consultative and leadership skills with intraprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems
### VII. CLINICAL PREVENTION & POPULATION HEALTH FOR IMPROVING THE NATION’S HEALTH

**TACTICS$^{13}$**

- Organize and lead processes related to prevention
- Provide education to support staff working to improve health outcomes
- Design new & innovative care delivery models

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**UNIFORM DATA SYSTEM**

- Population Characteristics
- Chronic Conditions
- Preventive Services

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**Patient Incentives from Payers Encourage Preventive Care Visits**

Payers are turning to patient incentives in order to encourage beneficiaries to engage in preventive care visits that may keep them healthier for longer.
VIII. ADVANCED NURSING PRACTICE

The DNP Program prepares the graduate to:

1. Conduct comprehensive and systematic assessment of health and illness in complex situations, incorporating diverse & culturally sensitive approaches

2. Design, implement, & evaluate therapeutic interventions

3. Develop therapeutic partnerships with patients and other professionals to facilitate optimal care and patient outcomes

4. Demonstrate advanced levels of clinical judgement, systems thinking, & accountability in designing, delivering, and evaluated evidence-based care

5. Guide, mentor, and support other nurses

6. Educate and guide individuals and groups through complex health and situational transitions

7. Use conceptual and analytical skills in evaluating links among practice, organizational, population, fiscal, and policy issues
## VIII. ADVANCED NURSING PRACTICE

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<tr>
<th>Scientific Underpinnings</th>
<th>Leadership for QI</th>
<th>Evidence-Based Practice</th>
<th>Information Systems</th>
<th>Health Care Policy</th>
<th>Interprofessional Collaboration</th>
<th>Population Health</th>
<th>Advanced Nursing Practice</th>
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### The NP difference

Yet the long alliance between nurse practitioners and FQHCs is due to more than finances — and may benefit patients in unique ways, says Ali.

"Nurse practitioners gravitate toward healthcare for underserved populations because it’s part of their culture, their mindset," she says. "Nurses are the ones who do the hands-on, who educate, who come in after the provider is gone and say, ‘Did you understand everything? Do you need help? And so many FQHC patients need that level of care.’"

Many nurse practitioners grew up in the communities they serve, and so tend to have deep familiarity with the lives of their patients — what Troy Long, M.D., a population health specialist with Kaiser Permanente, calls “lived experience.” They share their patients’ culture and understand their challenges and strengths, he says.

And those qualities can help keep patients engaged in their care to improve outcomes.

Andrew Van Wiezen, M.D., an internist and medical director of Esperanza Health Centers, in FQHC in Chicago, agrees.

"Nurse practitioners do tend to be more empathetic and mission-oriented," he says. Van Wiezen also notes that, at his organization, nurse practitioners are often the most open to innovation.

"It’s our NPs who champion ACO participation and take the lead in participating in e-consults," he says.

### TACTICS

- Teach others about DNP academic preparation
- Role modeling and education to APNs without the DNP
- Create healthy nursing practice environments
- Showcase areas of DNP practice
- Precept students
CONCLUSIONS

• The **eight essentials of doctoral nursing practice** are a foundation for success of the DNP prepared nurse practitioner working to improve healthcare outcomes

• Doctorate of Nursing Practice (DNP) prepared nurse practitioners are qualified to serve in **quality improvement and executive leadership roles**

• DNP prepared nurse practitioners can **improve population health outcomes** through quality improvement and executive leadership roles
CONCLUSIONS

“We need to realize and to affirm anew that nursing is one of the most difficult of arts. Compassion may provide the motive, but knowledge is our only working power. Perhaps, too, we need to remember that growth in our work must be proceeded by ideas, and that any conditions which suppress thought must retard growth. Surely, we will not be satisfied in perpetuating methods and traditions. Surely, we shall wish to be more and more occupied with creating them” (Nutting, M.A, 1925) 22
REFERENCES

1. Rupe, K. (2019). A Comparison of the BSN as Entry Level to Practice for the Professional Nurse to the DNP as Entry Level to Practice for the Nurse Practitioner. (Pending publication)


