Collaboration Across Disciplines: A DNP Nurse Practitioner Led Interprofessional Practice

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Objectives

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

• Define strategies for establishing successful clinical academic-community partnerships.
• Describe methods to incorporate interprofessional education and clinical experiences into practice.
• Discuss strategies to sustain a successful DNP led interprofessional care team to improve patient outcomes.
Guiding Principles to Academic-Practice Partnerships

These guiding principles were developed by the AACN/AGONE Task Force on Academic-Practice Partnerships in January 2012.

The recent passage of the Affordable Care Act (ACA) has created the greatest change in the American healthcare system since 1965. The goal of the ACA is to improve the health of the population through expanded coverage, controlled healthcare costs and improved healthcare delivery systems. Donna Shalala, PhD, Chair of the RWJ/OM Future of Nursing Committee emphasized that “transforming the nursing profession is a crucial element to achieving the nation’s vision of an effective, affordable healthcare system that is accessible and responsive to all.”

Academic Practice Partnerships are an important mechanism to strengthen nursing practice and help nurses become well positioned to lead change and advance health. Through implementing such partnerships, both academic institutions and practice settings will formally address the recommendations of the Future of Nursing Committee. Effective partnerships will create systems for nurses to achieve educational and career advancement, prepare nurses of the future to practice and lead, provide mechanisms for lifelong learning, and provide a structure for nurse residency programs.
Academic-Practice Partnerships

- Advance nursing practice to improve health outcomes
- Nurses leading and preparing future nurse leaders
- Partnership between academic program and clinical/community setting
- Principles of partnership include:
  - Formal relationship
  - Shared vision
  - Mutual goals
  - Respect and transparency
MUSC CON Practice Partnership

- **Academic-practice partnership**
  - MUSC College of Nursing
  - East Cooper Community Outreach
- **MUSC College of Nursing**
  - Academic health science center
  - RN-BSN, ABSN, DNP, PhD programs
  - CON Office of Practice promotes the integration of practice, education and research
- **East Cooper Community Outreach (ECCO)**
  - Local non-profit organization
  - Serves over 4,500 very low income families each year
  - Focus on empowerment and personal health responsibilities
  - Financial assistance, job training, food bank, clothing bank
  - Wellness classes, dental care, prescription assistance
Organization Needs

ECCO
- Primary care services
- Timely patient care
- Continuity of care
- Clinic space
- Social worker

CON Office of Practice
- Faculty practice
- Student clinical rotations
- Faculty scholarship
- Nurse Practitioners

Partners in Healthcare
Partners in Healthcare - History

• **2013 - 2015**
  • Nurse Practitioner (NP) practice providing primary care services to uninsured clients
  • 1 NP, Social Worker
  • 4 hours a week
  • BSN and NP students

• **2016**
  • NP led interprofessional practice providing primary care and chronic disease management to uninsured patients
  • 2 NP, 1 Pharmacist, Social Worker
  • 8 hours a week
  • BSN, NP, PharmD students
Partners in Healthcare – Current Structure

• **2017-2018**
  - NP led model of integrated interprofessional practice and education
  - 3 NPs, Pharmacists, Physicians, Family Medicine Residents, Social Worker, Volunteers
  - 12 hours a week
  - BSN, NP, PA, Medical, PharmD students; dietetic interns; public health interns
  - Telehealth/Teleprecepting
  - Community outreach
  - DNP/quality improvement projects
  - TeamSTEPPS
Partners in Healthcare – Current Structure

- NP leads the IP team of practitioners and students
- Care provided via traditional on-site care and telehealth
- Patients are scheduled for an appointment by the social worker and volunteers
## Partners in Healthcare – Clinic Day

### Pre-Clinic Brief
- 30 minutes before the first patient appointment
- Led by NP
- All staff, providers, students
- Review all scheduled patients
- Discuss purpose/goals of visit
- Provider and student assignments

### Post-Clinic Debrief
- 10 minutes end of clinic day
- Led by NP
- All staff, providers, students
- What went well
- Areas of improvement
Partners in Healthcare – Clinic Day

Clinic

• Volunteer assists with patient check-in/out and clinic flow
• Students assigned to patients
• Provider oversees patient care
• Telehealth for consultation and direct patient care
• Teleprecepting of IP students
• Social worker for prescription assistance, referrals, and socioeconomic factors
Partners in Healthcare – Staff and Providers

Providers
- All MUSC Faculty
  - NP (DNP prepared)
  - PharmD
  - MD (collaborating physicians)
  - Family medicine residents (2nd or 3rd year)*

Staff
- ECCO staff and volunteers
  - Social worker
  - Administrative assistant
  - Office manager
  - Volunteers
    - Nurses
    - Front office
Partners in Healthcare – Students

Students

• MUSC Students
  • Various levels
  • NP (DNP), BSN, PA, MD, PharmD, Dietetic Intern, Public Health Intern*
  • Various rotations (4 weeks – multiple semesters)
  • Max student load per clinical day (1 NP and 1 PharmD) = 2 NP/PA/MD, 1 BSN, 1 PharmD

• Students are active participants in patient care and function within the scope of their professional role with provider supervision.
  • BSN student rooms the patient, obtain vitals and health history.
  • One NP/PA/MD student assigned to each patient to complete the history, physical, assessment and plan/education.
  • NP/PA/MD student present cases to the provider after completing the history and physical.
    • Preceptor and student work collaboratively to develop assessment/plan and complete the patient visit.
  • PharmD student completes a medication reconciliation and provides feedback on medications.
  • PharmD student may also provide medication education and smoking cessation to patients as needed.
  • Students complete all aspects of visit including patient charting with provider supervision.
  • Learning points are discussed among providers and students.
Partners in Healthcare – Patients

**Clinic visits/Encounters**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Patients</th>
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<tbody>
<tr>
<td>2015</td>
<td>250</td>
</tr>
<tr>
<td>2016</td>
<td>300</td>
</tr>
<tr>
<td>2017</td>
<td>400</td>
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</tbody>
</table>

**Unduplicated Patients Served**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Patients</th>
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<tbody>
<tr>
<td>2015</td>
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<tr>
<td>2016</td>
<td>90</td>
</tr>
<tr>
<td>2017</td>
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Partners in Healthcare – Patients

Demographics

- Average age = 50

- Gender
  - Female 63%
  - Male 37%

- Race
  - White 54%
  - Black 40%
Partners in Healthcare - Outcomes

**Blood Pressure**
- Mean SBP 129
- Mean DBP 80

**A1C**
- Average A1C 6.6%

**Emergency Department Utilization**
- 15.5% (uninsured national average 17-23%)

**Hospitalization**
- 3.7% (uninsured national average 4-7%)

**No Show Rate**
- 25%

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<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
<th>Average Cost</th>
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<tbody>
<tr>
<td>Primary Care Appointment</td>
<td>336</td>
<td>$175</td>
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<tr>
<td>Labs</td>
<td>174</td>
<td>$1,500</td>
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<tr>
<td>X-Ray</td>
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<td>$360</td>
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<tr>
<td>Ultrasound</td>
<td>7</td>
<td>$525</td>
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<tr>
<td>CT scan</td>
<td>3</td>
<td>$1,200</td>
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<tr>
<td>MRI</td>
<td>2</td>
<td>$2,611</td>
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<tr>
<td>Mammogram</td>
<td>23</td>
<td>$102</td>
</tr>
<tr>
<td>Specialty Appointment</td>
<td>88</td>
<td>$175</td>
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</table>

**Total Estimated Cost of Services**: $360,483
### Partners in Healthcare - Outcomes

#### 2017 Interprofessional Student Rotations

<table>
<thead>
<tr>
<th>Program</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>BSN</td>
<td>4</td>
</tr>
<tr>
<td>NP (DNP)</td>
<td>6</td>
</tr>
<tr>
<td>PA</td>
<td>7</td>
</tr>
<tr>
<td>PharmD</td>
<td>8</td>
</tr>
<tr>
<td>Family Medicine Resident</td>
<td>3</td>
</tr>
<tr>
<td>Dietetic Intern</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
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#### 2018 Interprofessional Student Rotations (Jan-July)

<table>
<thead>
<tr>
<th>Program</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSN</td>
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<td>NP (DNP)</td>
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<td>PharmD</td>
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</tr>
<tr>
<td>MD</td>
<td>3</td>
</tr>
<tr>
<td>Family Medicine Resident</td>
<td>6</td>
</tr>
<tr>
<td>Dietetic Intern</td>
<td>1</td>
</tr>
<tr>
<td>Public Health Intern</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
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Sustaining Partners in Healthcare

PIH is a successful DNP led clinic that utilizes an interprofessional and evidence-based model of care to improve health and integrates a successful collaboration between academics, community partners, and interprofessional faculty.

Areas of Success
• Collaborative relationship between CON and ECCO
• Communication and Transparency
• ECCO support of education and scholarship
• Model of integrated IP practice and education
Sustaining Academic-Practice Partnerships

Challenges
• Restricted APRN practice
• Coordinating faculty/student schedules with practice/community partner
• Tracking data and outcomes
• Funding

Lessons Learned
• Always keep the patient first
• Identified leader from all partners
• Strategies to optimize IP student learning
• Include patients, families and community partner in student education
• Joint grants/funding
References


