Advanced Practice in MS Care
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Session Faculty & Disclosures

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Disclosures: TEVA, EMD Serono, Novartis and Genzyme
(consultant, speaker).

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GW MFA - Neurology, Research Consultant
Disclosures:
Biogen Idec, shares held in past 12 months
At the completion of this session, the attendee will:

1. Describe the educational models of the PA & NP (Advanced Practice Provider – APP) and their advantage to a neurology practice.

2. Recognize the diverse practice settings and responsibilities of an APP.

3. Identify the roles and responsibilities of an APP in the private practice outpatient, academic medical center and research settings.
**WHAT IS A PA?**

**What is a PA?**
A physician assistant (PA) is nationally certified and state licensed to practice medicine as part of a physician-led team. PAs are educated at the graduate level and practice in nearly every medical specialty and setting.

**What do PAs do?**
- Obtain medical histories
- Conduct physical exams
- Diagnose and treat illnesses
- Order and interpret tests
- Counsel on preventive healthcare
- Assist in surgery
- Write prescriptions
- Make rounds in nursing homes and hospitals

* PAs’ responsibilities correspond to their supervising physicians’ practice.

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**HOW TO BECOME A PA**

- There are 187 accredited PA educational programs in the United States.
- Most PA programs award a master’s degree.
- PAs are required to complete:
  - More than 400 hours in basic sciences
  - 75 hours in pharmacology
  - 175 hours in behavioral sciences
  - Nearly 580 hours of clinical medicine
  - The average length of a PA program is 26 months long.
  - More than 2,000 hours of clinical rotations in multiple care settings and specialties.
HOW TO BECOME A PA

- PAs are required to pass a national certifying examination administered by the National Commission on Certification of Physician Assistants.
- PAs must earn and log 100 hours of continuing medical education every two years.
- PAs must take a recertification examination every ten years.
- To be able to practice, PAs must have a state license and work with a physician.
- The current six-year time period between recertification exams will be extended to 10 years to better reflect PA competence in practice.

VITAL STATISTICS

50
Number of states authorizing PA prescribing privileges

90,000
Number of certified PAs at the end of 2012, according to the National Commission on Certification of Physician Assistants

1967
Year the first three PAs graduated from Duke University

$90,873
Median annual income from primary employer for full-time clinically practicing PAs* in 2010.

Projected Growth of PAs in Clinical Practice

With a projected growth of 39 percent, the Bureau of Labor Statistics predicts physician assistants will be the second-fastest-growing health profession in the next decade (after home health aides).

83,600
Employment in 2010

108,300
Projected employment in 2020

*Excludes self-employed and part-time PAs

**PA PRACTICE SPECIALTIES**

**DISTRIBUTION OF CLINICALLY PRACTICING PAs BY PRIMARY SPECIALTY**

- GENERAL & SURGICAL SUBSPECIALTIES 26.0%
- FAMILY MEDICINE 23.2%
- OTHER 18.4%
- GENERAL & INTERNAL MEDICINE SUBSPECIALTIES 14.8%
- EMERGENCY MEDICINE 10.6%
- GENERAL PEDIATRIC & SUBSPECIALTIES 3.4%

Source: 2013 AAPA Annual Survey.

**PA WORK ENVIRONMENTS**

**DISTRIBUTION OF CLINICALLY PRACTICING PAs BY PRIMARY WORK SETTING**

- HOSPITAL 20.7%
- SINGLE-SPECIALTY PHYSICIAN GROUP 27.8%
- SOLO-PHYSICIAN PRACTICE 10.3%
- MULTISPECIALTY PHYSICIAN GROUP 9.5%
- FEDERALLY QUALIFIED & COMMUNITY HEALTH CENTER 5.1%
- CERTIFIED RURAL CLINIC FACILITY 3.3%

Source: 2013 AAPA Annual Survey.
• Exact number difficult to quantify
• In the 2013 AAPA Annual Survey 18,000 respondents
  87 self-identified as IM: Neurology
• Association of Neurology Physician Assistants
  Amy Dix, PA-C, MSCS  Kansas City MS Ctr
  Jenny Ravenscroft, PA-C, MSCS
  http://www.neurologypa.org/
  70 members per website contact list

PAs ARE SKILLED HEALTHCARE PROVIDERS AND A GROWING FORCE

Every year, a typical PA treats 3,500 patients.
➤ 80 percent provide acute care management.
➤ 52 percent perform minor surgical procedures.
➤ 64 percent provide chronic disease management.

The typical PA writes 2,600 to 5,200 prescriptions each year.

With a strong foundation in general medicine, PAs are able to adapt to changing healthcare needs. PAs usually change specialties two to three times during their careers.

Since 2006, the PA profession has grown 34 percent and is expected to continue growing.
**PAs DELIVER PATIENT-CENTERED CARE IN A TEAM ENVIRONMENT**

PAs deliver the full scope of patient care across all medical and surgical specialties. Every week, the typical PA:

- Treats 16 patients with coronary artery disease, 10 patients with COPD and 15 patients for pain management
- Manages patient care coordination and provides clinical preventive services

As a member of a healthcare team, PAs work with an average of four physicians, three other PAs and one NP.

Four out of five (86 percent) PAs report high job satisfaction compared with 39 percent of physicians.*


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**PAs INCREASE AMERICA’S ACCESS TO HEALTHCARE**

37 percent of PAs work in medically underserved counties in the U.S.*

PAs report that, on average, 23 percent of their patients are on Medicaid and 14 percent are dual eligible. Additionally, 16 percent of their patients are uninsured, compared with only 8 percent of patients seen by doctors.**

Nearly one-third (32 percent) of PAs practice in primary care, the largest segment of which is family medicine (23 percent of PAs overall).

A small but growing number of PAs are practicing in new models of care:

- 10 percent practice in patient-centered medical homes.
- 3 percent practice in retail or freestanding urgent care facilities.

*Including MSA, WBA and MWP designations
**Source: The Physicians Foundation, A Survey of America’s Physicians: Practice Patterns and Perspectives, Merritt Hawkins, 2012
What is a Nurse Practitioner?

• Nurse practitioner’s (NP’s) are clinicians that blend clinical expertise in diagnosing and treating health conditions with an added emphasis on disease prevention and health management.
• Autonomously and in collaboration with health care professionals and other individuals.
• Provide a full range of primary, acute and specialty health care services.


What is a Nurse Practitioner?

• Manage acute and chronic medical conditions through comprehensive history and physical exam, diagnostic tests and treatments.
• Offer a comprehensive perspective to health care and offer a unique emphasis on the health and well-being of the whole person.
• Focus on health promotion, disease prevention and health management, education and counseling.

What Is Our History?

- First NP program - 1965 University of Colorado
- Loretta Ford, RN and Henry Silver, MD collaborated for 1st NP training program
- Focus on health promotion, disease prevention, children and families
- 1967 Boston College Master’s program for NP’s
- Within 9 years, 65 programs in Pediatrics alone, others for women’s or family health.
- Over 1000 NP’s, midwives, nurse anesthetists.

Wilson, 1994

What Does an NP Do?

- NP’s provide a full range of primary, acute and specialty health care services, including:
- Ordering, performing and interpreting diagnostic tests such as lab work and x-rays.
- Diagnosing and treating acute and chronic conditions such as diabetes, high blood pressure, infections, and injuries.

What Does an NP Do?

- Prescribing medications and other treatments.
- Managing patients' overall care.
- Counseling.
- Educating patients on disease prevention and positive health and lifestyle choices.

How To Become An NP

- Complete a master's or doctoral degree program, and have advanced clinical training beyond their initial professional registered nurse preparation.
- All programs require a didactic component and clinical courses prepare nurses with specialized knowledge and clinical competency.
- New terminal degree for advanced practice nursing will change from the Master's to the Doctor of Nursing Practice (DNP) by the year 2015.
NP Qualifications

- NP's undergo rigorous national certification (ANCC or AANP).
- Recertification q 5 years.
- Periodic peer review, meet clinical outcome evaluations, and must adhere to a code for ethical practices.
- Self-directed with continued learning and professional development to maintaining clinical competency.
- NPs lead and participate in both professional and lay health care forums, conduct research and apply findings to clinical practice.


NP License/Practice Locations

- NPs are licensed in all states and the District of Columbia, and practice under the rules and regulations of the state in which they are licensed.
- Practice locations include: rural, urban and suburban communities, in many settings including clinics, hospitals, emergency rooms, urgent care sites, private physician or NP practices, nursing homes, schools, colleges, and public health departments.

Currently at least 6+ years of academic and clinical preparation.

Requirements for Practice:
- Bachelor’s Degree in Nursing
- Registered Nurse License
- Graduate Nursing Education (soon to require doctorate)
- National Board Certification
- State NP license/registration


Vital Statistics
- NP’s had over 900 million patient visits in 2012.
- 70% of NP’s see 3 or more patients/hour
- 74% accept Medicare 68% accept Medicaid 83% accept Private Insurance 71% accept Uninsured

### Practice Specialties

<table>
<thead>
<tr>
<th>Population</th>
<th>Percent of NPs</th>
<th>Years of Practice</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Care</td>
<td>7.5</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>Adult+</td>
<td>19.3</td>
<td>11</td>
<td>50</td>
</tr>
<tr>
<td>Family+</td>
<td>54.5</td>
<td>9</td>
<td>48</td>
</tr>
<tr>
<td>Gerontological+</td>
<td>2.5</td>
<td>13</td>
<td>53</td>
</tr>
<tr>
<td>Neonatal</td>
<td>1.1</td>
<td>16</td>
<td>52</td>
</tr>
<tr>
<td>Oncology</td>
<td>1.2</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>Pediatric+</td>
<td>5.3</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Psych/Mental Health</td>
<td>3.7</td>
<td>11</td>
<td>54</td>
</tr>
<tr>
<td>Women’s Health+</td>
<td>4.9</td>
<td>17</td>
<td>53</td>
</tr>
</tbody>
</table>

### Vital Statistics

- **Increasing in numbers:**
  - 1999 – 68,300
  - 2004 – 106,000
  - 2007 – 120,000
  - 2014 – 192,000
  - 2025 – projected 244,000

- **Prescribe medications in all 50 states and D.C.**

- **Experienced: Over 4 decades of improving patient access and quality of care**
Who is the MS NP

- Master's (or doctorate) prepared expert nurse who manages the complex medical problems and related issues faced by patients with MS and their families across the disease continuum.

- Promotes wellness, restoration of health, prevention of illness and management of disease

- Goal of instilling hope and empowering patients to participate in their own care.


Who Is the MS NP?

- We collaborate with our healthcare team to provide comprehensive care to patients with MS.

- Have several roles:
  - Administrator
  - Educator
  - Collaborator
  - Consultant
  - Researcher
  - Advocate

- Expert Clinician - In-depth understanding pathophysiology of MS, knowledge regarding appropriate interventions (DMT’s, symptom management) and diagnostic tests to provide patient care.

• Nurse Practitioners and Physician Assistants = Advanced Practice Providers (APP).
• We may come from different backgrounds.
• Our roles and responsibilities are similar.
• Provide patient centered care in a team environment.

Diverse Practice Settings

• Academic Centers

• Private Practice MS Centers
APPs in Outpatient Private Practice

- New Patient with Suspected MS
- New Patient with Known MS Diagnosis
- Follow-up MS Patient
- Referrals/Coordination of Care
- Behind the Scenes/Extras
New Patient Suspected MS

* 40 minute scheduled visit
* History
* Family History-MS, Autoimmune
* Exam
* Review Previous Records

New Patient Suspected MS

* Scenario A- More Information is Needed
  * -Discuss Differential Diagnosis
  * -Order Testing
  * -Offer Referral to Academic Center
  * -Symptom Management as needed
New Patient Suspected MS

- Scenario B- Meets Diagnostic Criteria for MS
- Discuss Diagnosis
- Disease Modifier- if needed 1-2 week f/u
- Symptom Management
- Answer Questions

New Patient Known MS

- 40 minute scheduled visit
- History
- Exam
- Review Previous Records
New Patient Known MS

- Plan
- Review Disease Modifier
- Symptom Management
- Patient Education/Questions
- Forms to Transfer Rx
- Labs/Imaging
- Refer as Needed
- Discuss study options if appropriate

Follow-up MS Patient

- 20-30 minute scheduled visit
- History
- Exam
- Test Result Review
- Review specific DMT's in detail-answer questions
- Again review study options if appropriate
- Hopefully begin DMT process or study process
Follow-up MS Patient

- Plan
- Disease Modifier
- Symptom Management
- Labs/Imaging
- Research Update
- Answer Questions
- Refer as Needed

Referral/Coordination of Care

- Collaborating/Supervising
  Physician
- Academic Center
- PT, OT, Speech Therapy
- Neuropsychology
- Counseling

- DME
- Urology
- Pain Management
- PCP
Behind the Scenes/Extras

* Authorizations
* -Medication
* -Tests
* Financial Assistance
* DMV forms
* Disability Forms/Letters

Behind the Scenes/Extras

* Patient Portal
* Phone Calls
* Medication Refills
* Review Test Results/Consult notes as Received
APPs in Academic Medical Centers
Practice Settings

* Mix of inpatient and outpatient
* Coordination of Care
* Research Unit or Clinic
* Behind the Scenes/Extras
In Practice

- Detailed History and Physical Exam on admission
- Ordering and interpreting tests
- Neuroimaging
- Labs
- CBC, LFTs, CMP
- NMO titer
- Antibody status
- Daily rounding
- Discharge planning

Coordination of Care

Collaborating/Supervising Physician
Consulting Services
  - Neuroradiology
  - Urology
  - PT, OT, Speech Therapy
  - Pain Management
  - Neuropsychology
  - Counseling
  - PCP and/or referring Neurologist follow up
With Caregivers
- Depending on the study and sponsor
- Study coordinator
- Sub-investigator
- PI

- Subject recruitment
- Outreach to referring providers
- IRB communication
- Initial submission
- Periodic review and updates
- Subject review
- Informed Consent
- H&P (including EDSS and other specific measures)
- Labs
- CRFs
Patient and Caregiver education
Education to other providers
Scholarship
Grant submission
Manuscript submission
Data analysis and interpretation

APP’s are medical professionals who are nationally certified and state-licensed to practice medicine as part of a health care team.

APP’s are educated at the masters level
Practice in nearly every medical specialty and setting to include Neurology.
Roles and skills are diverse to bring added value to high quality patient care.
Goal of the APP in MS is to maximize the care of the MS patient in an ever evolving health care environment utilizing a team approach.