Physician Assistants and Emergency Medicine

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Mean Patient Waiting Time at Emergency Department Visits: United States, 1997-2007

Data not collected in 2001-2002.

NOTE: All trends shown are significant (p < 0.05).

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Trends in the Number of Emergency Department Visits and Visit Rates: United States, 1992-2007

- Visit rates
- No. of visits

NOTE: All trends shown are significant ($p < 0.05$).

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Percent Distribution of Emergency Department Visits by Age: United States, 2007

- Under 15: 19.1%
- 15-24: 16.3%
- 25-44: 28.7%
- 45-64: 21.0%
- 65 and over: 15.0%

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Percent Distribution of Emergency Department Visits by Expected Source of Payment: United States, 2007

- Private insurance: 32.8%
- Medicaid: 25.1%
- Medicare: 14.3%
- No insurance: 15.4%
- Other/Unknown: 12.4%

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Percent distribution of emergency department visits by expected source of payment according to hospital admission status: 2007

**Admitted**
- 14.6 million visits
  - 25% Private insurance
  - 20% Medicaid
  - 16% Medicare
  - 8% No insurance
  - 10% Other or unknown

**Not admitted**
- 102.2 million visits
  - 34% Private insurance
  - 26% Medicaid
  - 16% Medicare
  - 13% No insurance
  - 11% Other or unknown

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Trends in Patient Contact by Type of EM Provider (log scale)

Hooker, Cipfer, Cawley. *Journal Interprofessional Care*, 2008; National Center for Health Statistics 2010
Mean Duration of Emergency Department Visits by Disposition: United States, 2007

- Admit to obs unit
- Admit to hospital
- Transfer to different hospital
- Admit to CCU
- Refer to social services
- All visits

NOTE: All means are significantly different from the mean for all visits ($p<0.05$)

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.
Metropolitan Status of EM Visits: 2007

METROPOLITAN, 79.46

NON-METROPOLITAN, 20.16
Distribution Physician Assistants: 2009

Estimated Number of Clinically Active PAs: 74,500

- Emergency Medicine: 23%
- General Internal Medicine: 7%
- Surgical Subspecialties: 11%
- IM Subspecialties: 23%
- Pediatric Subspecialities: 2%
- Occupational Medicine: 1%
- Other: 13%
- General Pediatrics: 2%
- Ob/Gyn: 2%
- General Surgery: 3%

AAPA: 2010
Physician Assistants per 100,000 Persons: 2009

American Academy of Physician Assistants 2010
## Roles of EM PAs

<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time (&gt;32 hours/week)</td>
<td>84%</td>
</tr>
<tr>
<td>Total (full-time) hours per week</td>
<td>41.6</td>
</tr>
<tr>
<td>Hours providing patient care</td>
<td>39.9</td>
</tr>
<tr>
<td>See some inpatients</td>
<td>48%</td>
</tr>
<tr>
<td>Nursing home patients</td>
<td>2.4%</td>
</tr>
<tr>
<td>Hospital privileges</td>
<td>97%</td>
</tr>
<tr>
<td>Take call</td>
<td>12%</td>
</tr>
</tbody>
</table>
Select Functions of EM PAs

- Manage In-Patients: 12%
- Supervise Other PAs: 15.8%
- Precept Other Students: 31.9%
- Precept PA Students: 48.8%
- Suture: 83.3%
Additional Compensation

- On-call
- Performance
- No additional pay
- Overtime

Percentage
Mean Number of Prescriptions Written Per EM Visit by Type of Provider

- **PA**: 1.61 prescriptions, 0.35 controlled substances
- **NP**: 1.56 prescriptions, 0.29 controlled substances
- **MD/DO**: 1.6 prescriptions, 0.34 controlled substances
Type of Base Pay EM PAs

- Hourly: 64.2%
- Salary: 33.1%
- Other: 2.7%
Correlation of PA Salary with Doctor:PA Ratios

MedPAC Report:
Working in Multidisciplinary Teams

• The Medicare Payment Advisory Commission's (MedPAC) June report includes recommendations on Graduate Medicare Education Financing: Focusing on Educational Priorities.

• The MedPAC report recommends that GME funding be shifted to support programs that emphasize team-based care, quality-based performance measures, and better coordinated care and treatment outside of hospitals.

• The Commission also recommended that independent research be conducted on the numbers and different types of health care professionals, including NPs and PAs, that are needed in a better organized and more efficient health care system. In describing the role of PAs and NPs, the report states that PAs and NPs "provide essential patient services and enhance the effectiveness and efficiency of physician time and expertise."

• MedPAC also wants more specifics on approaches that work best to bring health care professionals to medically underserved communities.
Summary

• The demand for emergency medical care is increasing in the US
• The number of providers is not keeping pace with the demand for providers
• PA/NPs as EM providers are growing more than physicians
• How the outcomes of care provided by PAs, NPs and doctors in EM remains to be compared.
Role of the Nurse Practitioner in Emergency Care

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Lippincott, Williams, and Wilkins
Nurse Practitioners

- Rank as one of the fastest growing healthcare professions

- 140,000 qualified to practice in the U.S.

- Up from 125,000 in 2008

(AANP, 2010)
Emergency Care

- 1 in 5 people visited the emergency department in 2007 (Centers for Disease Control and Prevention, 2010)

- Emergency care represents less than 3% of the nation's $2.1 trillion in health care expenditures caring for 120 million annually

- Emergency physicians expect ER visits to increase with health care reform, due to growing physician shortages (ACEP, 2010)
Nurse Practitioners in Emergency Care

- NPs in EDs for over 4 decades
  - Emergency Departments
  - Fast Tracks
  - Urgent Cares

- NPs/PAs cared for 13% of all ED patients

- New Models of Care
  - Rapid Triage
  - Rapid Exams
  - Rapid Disposition
ENA – NP DELPHI STUDY

- 2006 – Emergency Nurses Association embarked on Delphi Study (52 participants completed all three rounds)

- Competencies include knowledge, behaviors, and skills an entry-level NP should have in order to practice in emergency care.

- Competencies are intended to supplement the NONPF core competencies for all nurse practitioners as well as population-focused NP competencies

- NP practice may differ due to:
  - variations in state regulation
  - practice setting
  - employment arrangement
  - as a result of increases knowledge and/or experience
ENAO – NP DELPHI STUDY

2008 – Consensus Panel
- American Association of Colleges of Nursing (AACN)
- American Academy of Emergency Medicine (AAEM)
- American Academy of Nurse Practitioners (AANP)
- American College of Emergency Physicians (ACEP)
- American College of Nurse Practitioners (ACNP)
- American Nurses Association (ANA)
- American Nurses Credentialing Center (ANCC)
- Board of Certification for Emergency Nursing (BCEN)
- Commission on Collegiate Nursing Education (CCNE)
- Emergency Nurses Association (ENA)
- National Council of State Boards of Nursing (NCSBN)
- National Organization of Nurse Practitioner Faculties (NONPF)

I. Management of Patient Health/Illness Status

1. Triages patients’ health needs/problems.

2. Completes EMTALA–specified medical screening examination.

3. Responds to the rapidly changing physiological status of emergency care patients.

4. Uses current evidence–based knowledge and skills in emergency care for the assessment, treatment, and disposition of acute and chronically ill and injured patients.
I. Management of Patient Health/Illness Status (cont)

5. Specifically assesses and initiates appropriate interventions for violence, neglect, and abuse.

6. Specifically assesses and initiates appropriate interventions and disposition for suicide risk.

7. Assesses patient and family for levels of comfort and initiates appropriate interventions.

8. Recognizes, collects, and preserves evidence as indicated
I. Management of Patient Health/Illness Status (cont)

9. Orders and interprets diagnostic tests.

10. Orders pharmacologic and non-pharmacologic therapies.

11. Orders and interprets electrocardiograms.

12. Orders and interprets radiographs.


II. Professional Role

- 15. Functions as a direct provider of emergency care services.
- 16. Directs and clinically supervises the work of nurses and other health care providers.
- 17. Participates in internal and external emergencies, disasters, and pandemics.
- 19. Acts in accordance with legal and ethical professional responsibilities (e.g., patient management, documentation, advance directives).
20. Assesses and manages a patient in cardiopulmonary arrest.

21. Assesses and manages airway.

22. Assesses and obtains advanced circulatory access.

23. Assesses and manages patients with disability.

   ◦ (See ENA/ACEP joint position statement – www.ena/org)
IV. Skin and Wound Care Procedures

- 25. Performs ultraviolet examination of skin and secretions.
- 26. Treats skin lesions.
- 27. Injects local anesthetics.
- 29. Removes toe nail(s).
IV. Skin and Wound Care Procedures

30. Performs a nail bed closure.

31. Performs closures (e.g., single layer, multiple, staple, adhesive).

32. Revises a wound for closure.

33. Debrides minor burns (e.g., non-adhering blister).

34. Incises, drains, irrigates, and packs wounds.
V. Head, Eye, Ear, Nose, and Throat Procedures

- 35. Dilates eye(s).
- 36. Performs fluorescein staining.
- 37. Performs tonometry to assess intraocular pressure.
- 38. Performs Slit lamp examination.
- 40. Controls epistaxis.
VI. Chest and Abdomen

- 41. Performs a needle thoracostomy for life-threatening conditions in emergency situations (e.g., tension pneumothorax).

- 42. Replaces a gastrostomy tube.
VII. Neck, Back, and Spine Procedures

43. Clinically assesses and manages cervical spine.

44. Performs lumbar puncture.
8. Gynecologic, Genitourinary, and Rectal Procedures

- 45. Incises and drains a Bartholin’s cyst.
- 46. Assists with imminent childbirth and post-delivery maternal care.
- 47. Removes fecal impactions.
- 49. Performs sexual assault examination.
IX. Extremity Procedures

- 51. Reduces fractures of small bones.
- 52. Reduces fractures of large bones with vascular compromise.
- 53. Reduces dislocations of large and small bones.
IX. Extremity Procedures

- 54. Applies immobilization devices.
- 56. Performs arthrocentesis.
- 57. Measures compartment pressure.
58. Performs radio communication with prehospital units.

59. Interprets patient diagnostics as communicated by prehospital personnel.

60. Removes foreign bodies.
**BECOMING AN ENP?**

- **Graduate Programs (Masters, Post Masters, DNP)**

- **Programs with Emergency Concentration**
  - Uni of Southern Alabama – Mobile, AL
  - Emory – Atlanta, GA
  - Loyola – Chicago, IL
  - Uni of Florida – Jacksonville, FL
  - Uni of Texas, Houston, TX
  - Uni of Texas, Arlington, TX
  - Uni of Virginia – Charlottesville, VA
  - Vanderbilt – Nashville, TN
FNP & PA
Educational Similarities & Differences

FNP
- BSN clinical hours: 700
- BSN/RN experience (2,000 hr)
- Nursing theory
- NP clinical hours: 658

PA
- Physiology
- Pathophysiology
- Ethics
- Gen Med/acute and chronic disease
- Disease/infectious disease
- Pharmacology
- Physical assessment
- Professional issues: (health promotion, legislative issues, policy, role, research)
- OB/GYN
- Pediatrics
- Geriatrics
- Psych

Pre-PA school clinical hours: variable
- Anatomy
- Clinical procedures
- Surgery
- Emergency
- EKG interpretation
- X-ray interpretation
- Clinical hours: 2078

Bednar, Susan; Atwater, Alison; Keough, Vicki
EMERGENCY NURSE PRACTITIONER

GRADUATE PROGRAM
- FNP Program – Consensus Model Document 2008
  - EDs require “family across the life span”
  - ACNP Program—usually no pediatric component

CERTIFICATION
- FNP (e.g. ANCC, AANP)
  - AANP does not support the DNP equivalency exam – this is an academic degree not a “clinical” option
- Specialty Certification
  - BCEN Needs Assessment completed – to ENA BOD Summer 2010 for final recommendations (cert and/or portfolio)

PREVIOUS EXPERIENCE
- Staff nurse (with BLS, ACLS, TNCC, ENPC)
- Certified Emergency Nurse (CEN) certified
- On-the-job training (e.g., suturing, minor procedures)
- Relevant continuing education
HIRING AN ENP?

- Graduation from an accredited program
  - Emergency concentration preferred

- FNP Certification Exam
  - Specialty certification and/or portfolio option (TBA)
  - Competency skills checklist (graduate program)

- Application Process
  - Resume Submitted
    - RN License/NP License
    - Prescriptive Authority/DEA License

- Panel Interview – EDMDs/NPs/PAs and Staff

- Medical Staff Privileges – may take up to 6 mo
NURSE PRACTITIONER
PRESCRIPTIVE AUTHORITY

States That Prescribe Legend Drugs Only

States Recognized by DEA with Authority to Prescribe Controlled Substances
* Schedule II-V Only
** Schedule III-V Only
*** Schedule V Only
- Schedule II Limitations
+ Pending DEA Approval

Source: Drug Enforcement Administration, DEA 2010
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Last Updated 2/22/10
The American Academy of Nurse Practitioners is the largest, full-service Nurse Practitioner organization representing the 135,000 Nurse Practitioners in all Specialties.
COLLABORATION/SUPERVISORY LANGUAGE IN STATE PRACTICE ACTS & REGULATIONS FOR NURSE PRACTITIONERS

- Plenary Authority (No Physician Relationship Required)
- Collaboration with Physician
- General Supervision/Delegation by Physician
  - Collaboration or Supervision for Prescribing Only
  - Collaboration for Prescribing Schedule II Drugs Only
  - Other

Source: State Nurse State Practice Acts
And Administration Rules, 2009
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Update: 6/11/10
NP – avg. 9 yrs NP experience

Most Common Specialties
- FNP (54.5%)
- Adult (20.4%)

Practice
- Community practice < 25,000 (17%)
- Communities of > 250,000 (39%)

Settings
- Private physician practices (30.3%)
- Hospital–based outpatient clinics (11.6%)
- Hospital inpatient settings (9.8%)

2008 AANP National NP Compensation Survey

- **Visits per hour**
  - (12%) 5 or more/hr
  - (29%) 1–2 pt visits/hr
  - (58.8%) 3–4 pt visits/hr

- **Annual Salary/Income** (full-time NPs)
  - Emergency/Urgent Care \((n = 160)\)
  - Base Salary: $96,270
  - Total Income: $112,030

St. Mary’s Experience

- 415 bed Catholic Healthcare Hospital–since 1923
- Private/non-profit community hospital
- Level II Trauma Center
- Affiliated with the UCLA School of Medicine

FALL 2009

- Embarked on “rapid triage” pilot project ED
- 30 Bed ED
- 5 Fast Track Beds
- 1 NP/PA – 10am to 10 pm – Fast Track
- Triage RN

- Increased LWBS patients
- Decreased patient satisfaction
St. Mary’s Experience

- **SPRING 2010**
  - Redesigned triage form/waiting area
  - Triage in Fast Track
  - Tech/RN vital signs
  - 2 NPs/PAs – 10am – 10pm

- Patients per day (120–150; now as high as 180 pts/day)
- Volume up 8% – 12 patients per day
- Greater patient satisfaction (>91%)
- Excellent patient outcomes
- Provider satisfaction
RN/Tech (vital signs)
NP/PA medically screens patient and then determines level
(5-level triage)

A. Immediate life-saving intervention required
(apneic, pulseless, severe respiratory distress, $SPO_2<90$, acute mental status changes, or unresponsive)
ABCDs – TO ED

B. High risk situation is a patient you would put in your last open bed
Severe pain is determined by clinical observation and/or patient rating of greater than or equal to 7 on 0–1/distress is 0 pain scale
NP/PA ASSESSES, INITIATE ORDER SETS – TO FAST TRACK – THEN DISCHARGED

C. Resources: Count the number of different types of resources, not the individual tests or x-rays (examples: CBC, electrolytes and coags equals one resource; CBC plus chest x-ray equals two resources).
SOME PATIENTS WILL BE MEDICALLY SCREENED and SENT TO THE FAMILY WAITING ROOM – (e.g. UTI) THEN DISCHARGED
NPs at St. Mary Medical Center

- Are value added
- Serve ED patients with similar outcomes
- Expedite flow and throughput of ED patients
- Advance orders/order sets
Future Issues: NPs in EDs

- Hospital vs. physician group role utilization
- Scope of practice (support to the physician with higher acuity patients)
- Resourcing of the role (add personnel to fast track)
- Ensuring medical staff at large is supportive and understanding of the role and scope of NPs/PAs.
- Compliance with medical staff oversight including Performance Improvement (PI) and Peer Review (PR).
32 million newly insured Americans by 2014

Predicted 40,000 primary care physician shortfall by 2020

Not enough emergency medicine residency trained MDs  
(Academic Emergency Medicine, 2008)

Market forces virtually guarantee that more health providers will be using NPs and other "physician extenders"  
(Bauer, 2010)
The full integration of NPS... in many clinical areas will also enhance *access.*

Decades of experience with NPs and several studies indicate that *quality is not a problem with reforms that would allow NPs to provide more services.*

Patients like the care they receive from NPs at least as much as the care they receive from physicians. Consumers' overall appreciation of NPs is extremely *high.*

(Bauer, 2010; Edmunds, 2010; Office of Technology Assessment 1998; Safriet, 1992)
SUMMARY

- Peer-reviewed journal articles reinforce the Office of Technology Assessment's conclusions in 1981. NPs can be utilized in a significant portion of medical services ranging from 25% in some specialty areas to 90% in primary care with at least similar outcomes.

- Collaborative, team-based approaches to care including teams led by NPs should be actively promoted to reduce overall spending on healthcare.

- NPs can reduce costs without diminishing quality in the process.

  (Bauer, 2010; Edmunds, 2010; Office of Technology Assessment 1998; Safriet, 1992)