Advanced Practice Providers in Hospital Practice: Evidence and Best Practice

Prasad H Rao, MD, MRCP
Associate director of CDU, Hospital Medicine, Kennestone Regional Medical Center, Wellstar Health System

Valery Akopov, MD, SFHM
VP and Chief of Hospital Medicine, Palliative Care and Hospice, Wellstar Health System

History

Advanced Practice Nursing
- 1940 – Nurse anesthetists, Nurse midwives
- 1954 – Psychiatric nursing

Physician Assistants
- 1965 – First class of PA students were assembled from US Navy Corpsmen by Dr. Eugene Stead of Duke University. Curriculum based on fast tracking medical doctors in WWII
- Late 1960s – Washington and Philadelphia
- Early 1970s – Texas

Current Statistics


<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Total</th>
<th>Outlook 2012-2022</th>
<th>Employment change 2012-2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Practitioners</td>
<td>131,400</td>
<td>31%</td>
<td>43,000</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>86,700</td>
<td>38%</td>
<td>33,000</td>
</tr>
</tbody>
</table>

Physician Survey in GA – July 2014

Nurse.com

Survey of 1,520 physicians by Jackson Healthcare, Alpharetta, GA
- 79% Physicians reported increased productivity to medical practice
- 64% of respondents reported a positive trend of increasing responsibilities of APPs
- 42% Physicians did not use APPs
- 30% used NPs
- 30% used PAs
- 10% used certified registered nurse anesthetists
- 30% saw an increase in use of APPs in the last year
The effect of a multidisciplinary hospitalist/physician and advanced practice nurse collaboration on hospital costs.


• Comparative, 2-group, quasiexperimental design was used; 1,207 general medicine patients (n=581 in the experimental group and n=626 in the control group) were enrolled.

• The control unit provided usual care.

• The care management in the experimental unit had 3 different components: an advanced practice nurse who followed the patients during hospitalization and 30 days after discharge, a hospitalist medical director and another hospitalist, and daily multidisciplinary rounds. LOS, hospital costs, mortality, and readmission 4 months after discharge were measured.

• Average LOS was significantly lower for patients in the experimental group than the control group (5 vs. 6 days, P<.0001).

• The “backfill profit” to the hospital was US$1591 per patient in the experimental group (SE, US$659).

• There were no significant group differences in mortality or readmissions.

Utilization and expansion of APPs

Need based

• To fill gaps in providers
• Method in Hospital Medicine

Intentional

• Structured
• Method in Sub Specialties

Clinical Models

Wellstar Health System
Wellstar Health System
- Kennestone Regional Medical Center
- Cobb Hospital
- Pauley Hospital
- Douglas Hospital
- Windy Hill Specialty Hospital

APP distribution
- Focused Deployment
  - CDU
  - Consult Service
  - Admission
  - PATT Clinic
  - Night Cross Cover and Admissions
- General
- Med-Surg Unit

Focused
- Positives
  - Quicker Onboarding
  - More structured
  - High Efficiency
- Negatives
  - Less Variety of patients

General
- Positives
  - More variety of patients
  - Helps physicians on all floors
- Negatives
  - Longer onboarding
  - Need more experienced APPs
**Advanced Practice Providers in Hospital Based Practice:**

Best Evidence and best Practice.

Yvonne Brown DNP, MSN, FNP-C,

Lead Advanced Practice Provider,

Nurse Practitioner

Emory Healthcare

Division of Hospital Medicine

Emory University Hospital at Midtown

yvonne.brown@emoryhealthcare.org

---

**Increasing patient census…..**

- Aging population
- Unstable economy
- Shifting healthcare paradigm

---

**Physician shortages……..**

- Stalled recruitment efforts
- Medical house staff work hour restrictions
- Geography

---

**Changing reimbursements……..**

- Patient Protection and Affordable Care Act
- Pay for performance
- Treatment guideline adherence
- Quality demonstration
- Re-admissions

---


---

10/6/2014
Burn out…….. 

Alternative staffing model….. 

MD/DO 

PA 

NP 

Emory Division of Hospital Medicine 

Advance Practice Provider Roles 

Nocturnist 

- Cross cover HKS patients
- Nurse calls
- Manage patients actively changing clinically
- Rapid response
- Assist code team with cardiopulmonary arrest
- Family updates
- Document as needed
- Assist with admissions
- Nocturnist MD is always in house doing admissions and is clinical back
- Autonomy
- Bill for critical care and admissions
Advance Practice Provider Roles

**Observation**
- Clinical Decision Unit (CDU)
- Rapid disposition low acuity patients
- APP responsible for flow of the unit
- Protocol driven unit
- Assigned physician rounds daily and is clinical back-up
- Autonomy
- Bill for admissions, follow-ups and discharges

**Admissions**
- Assist admitting physician
- Admitting physicians receive sign-out from ED, clinics, transfer service, private office...etc., assigns admission to admitting APP who does full assessment and H&P. Physician will also see and assess patient, review and/or amend APP plan of care.
- Bill for admissions.
- Less autonomous

**Consultations**
- Collaboration with medical consults MD
- Designated medical consultation APP at the Orthopedic and Spine hospital
- Initial consultation
- Daily rounds
- Assist with medical management
- Bill for initial consultations and follow-ups

**Primary care of hospitalized patients**
- Specialty service
- High census general medical service
- Step-down unit
- LTAC
- Higher acuity patients
- Less autonomy
- Closer physician supervision
- APP will manage a percentage of the physician's caseload with updates throughout the day
- Daily round, follow-ups, discharges, initiate specialty consultation
- Bill for follow-ups, discharges and critical care
Onboarding

“If you think you are going to be successful running your business in the next 10 years the way you did in the last 10 years, you’re out of your mind”

Roberto Goizueta

Onboarding, The Importance

• **First Impression**
  - Clarify role, dispel confusion
  - Timeline expectation to autonomous practice

• **Ease transition into new role**
  - Novice APP
  - APP changing role


Onboarding, The Importance

• **Supported clinical immersion**
  - Preceptor or mentor
  - Focused clinical education
  - Evaluation of performance
  - Remediation of needed

• **Integrates provider onto team**
  - Official staff introductions
  - Welcome letter
  - Circulate new hire CV

• **Limits attrition**
  - Improved retention in a supportive environment

Onboarding, The literature

The University of Maryland Medical Center

- Urban academic medical center
- 100 + APPs in hospital based practice
- 2005-conducted exit interviews of APPs voluntarily terminating their affiliation and their respective collaborating physician


APPs reported
- Inadequate clinical orientation causing lack of confidence
- Lack of support to assume responsibilities in high acuity area
- Role clarity
- Unrealistic expectation of collaborating physician
- Collaboration physicians reported
- Frustration with the timeline from new hire to autonomy

Process improvement project to develop comprehensive onboarding process
- 12 weeks
- Streamlined process for start-up administrative activities
- Assignment of a mentor and/or preceptor
- Clinical immersion
- Opportunities for socialization with APP peers
- Identification of system resources
- Development of standardized role descriptions
- Development of an orientation packet


Onboarding, Sample

Emory Division of Hospital Medicine

- Sample of comprehensive onboarding process
- Streamlining of administrative activities
- Assignment of mentors and/or preceptors
- Clinical immersion
- Opportunities for socialization with APP peers
- Identification of system resources
- Development of standardized role descriptions
- Development of an orientation packet

Faculty Development

Centralized Leadership Model
- Continued successful integration
- Advocacy
- Centralized planning
- Coordination

The APP Leader

Advanced Practice Providers in Hospital Practice: Evidence and Best Practice

Prasad H Rao, MD, MRCP
Associate director of CDU, Hospital Medicine, Kennestone Regional Medical Center, Wellstar Health System

Valery Akopov, MD, SFHM
VP and Chief of Hospital Medicine, Palliative Care and Hospice, Wellstar Health System

References


Faculty Development

Structured
- Annual/Quarterly education sessions
- Committee participation
- Annual career development meetings

Continuous
- Regular meeting times
- Communication of time sensitive patient issues - availability
- Periodic meetings of the group
- Sharing experience
Advanced Practice Fellowship in Hospital Medicine

Phase 1: Boot Camp (2 weeks)
- Computer training
- Billing training
- History and physical and the approach to common clinical conditions

Phase 2: Professional Development (6 weeks)
- >3 patient load and FU

Phase 3: Clinical Development (8 weeks)
- Clinical competence and efficiency, 4-6 patients

Phase 4: Skills Refinement (24 weeks)
- Evenings, nights and Subspecialties

Phase 5: Capstone (8 weeks)
- Real world exposure 7-10 patients

Components of evaluation
- Scientific Foundation Competencies
- Leadership Competencies
- Quality Competencies
- Practice Inquiry Competencies
- Technology and Information Literacy Competencies
- Policy Competencies
- Ethics Competencies
- Independent Practice Competencies

Core Competencies
- Patient Care
- Medical Knowledge
- Practice Based Learning and Improvement
- Systems Based Practice
- Professionalism
- Interpersonal Skills and Communication

Evaluation

Structured
- Self Evaluation
- 360 degree evaluation
- Timely feedback