Physician Assistant Education and Practice

Sue M. Nyberg, MHS, PA-C
Chair and Associate Professor
Wichita State University Department of Physician Assistant
Physician Assistant Overview of Profession

- First PA students enrolled at Duke University in 1967
- Response to shortage and uneven distribution of primary care physicians
- Curriculum is based on medical school model
- One national board certification exam for graduates of all programs in US
  - 100 hours continuing medical education every 2 years
  - All PAs required to pass primary care board recertification exam every 6 years
Physician Assistant Overview of Profession

- U.S. Bureau of Labor Statistics
  - Increase in PA positions by 39% (2008 – 2018)
- 75,000 PAs in clinical practice
- 12,000 students currently in clinical programs
  - 154 accredited programs
  - PA program applications nearly doubled in past 4 yrs
Physician Assistant
Overview of Profession

- Recognized in all 50 states
- Licensed to practice medicine with physician supervision
  - diagnose and treat illnesses
  - order and interpret diagnostic tests
  - assist in surgery
  - write prescriptions
  - counsel and educate patients
- approx. 75 – 80% of care provided by primary care physician
- Scope of practice dependent on supervising physician
- Practicing in all medical specialties
Physician Assistants in Kansas

- National certification exam
- Licensed by Kansas State Board of Healing Arts (KSBHA)
- Broad definition of supervision
  - Written protocol filed with KSBHA – outlines scope of practice (including prescriptions)
  - Physical presence of supervising physician not required
    - Supervising physician available for communication by phone within 30 minutes
  - *Review of patient medical records within 14 days* (change in process)
Physician Assistants in Kansas

KANSAS – Licensed PAs

Source: KAPA, KSBHA
PA Practice in Kansas

- Est. **Patient Visits** (2008) – 2,842,630
- Est. **Prescriptions Written** (2008) – 3,695,419

Source: AAPA Census, 2008
WSU Physician Assistant Program Overview

- Only PA training program in Kansas
- Over 1200 graduates
- Certificate program – first class in 1972
- Bachelor degree – first class in 1990
- Master degree – first class 2004
  - Master of Physician Assistant
- Located on main WSU campus
  - College of Health Professions
- Accreditation through 2018

www.chp.wichita.edu/pa
WSU Physician Assistant Program Overview

- **Full-time, lock step program**

- **26 months in length**

- **Students admitted once per year (June)**
  - Class size – 48 students (increased 14% in 2010)
  - Currently enrolled – 90 students

- **Program Tuition**
  - $22,000 - WSU
  - $31,000 – nationwide (avg. in-state for public university)

Source: Physician Assistant Education Association, 2010
WSU Physician Assistant Program Overview

- **Primary care emphasis**
  - patient education, preventive care, prenatal to geriatrics

- **Competency based**
  - Academic warning system
    - Formal remediation plans
    - 4 warnings = dismissal
  - Summative evaluation prior to graduation
    - Meet all PA professional competencies
Admission Requirements

- Bachelor degree
  - majority of applicants have science degrees
  - minimum GPA – 3.0

- Prerequisite courses
  - chemistry, biology, microbiology, anatomy, physiology, pathophysiology, statistics, etc.
  - Minimum GPA – 3.0

- Previous healthcare experience
  - strongly recommended (85% of accepted applicants)

- Interview
Mission

- The mission of the Department of Physician Assistant is to be a learning community dedicated to developing generalist health care professionals by:
  - Valuing students
  - Integrating teaching, scholarship, practice, and service
  - Partnering with the community

Educational Philosophy

- The educational philosophy of the Program centers on the premise that the education and training received will prepare and encourage students to provide primary care in areas where the need is greatest. Service and clinical education in underserved and rural areas and with minority populations is emphasized.
Mission and Philosophy

WSU PA Practice in Primary Care (%)

- WSU Grads
- National Average

1975-2003: 51.2, 39.7, 45.3, 36, 44.2, 47.9, 47
2004: 50.3, 38.3, 34
2005: 44.2
2006: 33.3
2007: 33.4
2008: 33.4
Faculty

- Sue Nyberg, MHS, PA-C
  - Program Director
- LaDonna Hale, PharmD
  - Assistant Program Director
- Pat Bunton, MS, PA-C
  - Academic Coordinator
- Marlyse Anderson, MPA, PA-C
  - Dir. of Clinical Education
- Gina Brown, MPAS, PA-C
- Kayla Keuter, MPH, PA-C
- Darron Smith, PhD, PA-C
- Lucas Williams, MPA, PA-C

Medical Director

- Garold Minns, MD
  - Associate Dean for Academic Affairs and Professor – KU School of Medicine
Applicants – Class of 2013

- Total applications – 453
- Qualified Applicants - 306
  - 49 US states and Canada
  - 38% Kansas residents
- Applicants Interviewed - 142
  - 22 US states and Canada
  - 64% Kansas residents
- Applicants Accepted – 48
  - 63% Kansas residents
Students

- 48 students per class
  - Class size increased from 28 in 1993 after KHF grant (1.6 million)
  - Class size increased from 42 in 2010

- Average age – 26

- Average incoming GPA – 3.6

- Prior health care experience – average 14 months

- 3:1 female:male

- Attrition - approx. 1 student per class
1st year – 14 months

- Average 30 – 35 hrs/week in classroom
- Anatomy – 5 credit hours
- Pharmacology – 6 credit hours
- Clinical medicine – 20 credit hours
- Physical diagnosis/assessment – 6 credit hours
- Research – 9 credit hours
Curriculum – Clinical Rotations

- **2nd year – 12 months**
  - 4 – 6 weeks in length
    - Primary care, ER, surgery, women’s health, etc.
  - Average 40 – 45 hrs/week (full-time)
  - Approx. 100 **volunteer** preceptors (physicians, PAs) across Kansas
  - Room and board provided by most preceptors in rural areas
  - Emphasis on primary care
  - Required 12 weeks in rural setting
Student Co-Authored Research since 2006

- 17 peer-reviewed journal articles
- 6 book chapters
- 33 scientific posters presented nationally
- 6 national research awards
- 11 university research awards
1. Physicians and PAs working together in a medical home is a proven model for delivering high quality, cost-effective care.
   a. Recognize that PAs function as primary care providers in a medical home when supervised by a physician

2. Encourage training programs to promote and support opportunities for internists to precept PA students

3. Encourage interdisciplinary education of medical and PA students

Source: American College of Physicians, “Internists and Physician Assistants: Team Based Primary Care”, 2010
**Recruitment/Retention**

- Nationwide, counties without PAs are more likely to be rural\(^1\)
- Factors affecting likelihood of students choosing primary care, rural and underserved careers
  - Physicians\(^2\)
    - rural birth, interest in serving underserved or minorities, rural or inner-city training experience
    - women less likely to choose rural practice
    - men less likely to choose primary care
  - PAs
    - minority PAs, married and older, household income < $50K at time of high school graduation\(^3\), rural or inner-city training experience

PA Supply and State Law

- 6 key elements of effective and efficient physician-PA teams (AAPA)
  1. State Licensure
  2. Scope of practice determined at the practice level
  3. Adaptable requirements for physician supervision
  4. Full prescriptive authority, including controlled meds
  5. Chart co-signature requirements determined at the practice level
  6. Number of PAs a physician may supervise determined at the practice level
### States Ranked by PAs per 10,000 population

<table>
<thead>
<tr>
<th>Ranking</th>
<th>State</th>
<th># of PAs/10,000 pop.</th>
<th># of key elements in place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alaska</td>
<td>5.6</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Nebraska</td>
<td>4.0</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Colorado</td>
<td>3.7</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>KANSAS</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>26</td>
<td>Oklahoma</td>
<td>2.6</td>
<td>1</td>
</tr>
<tr>
<td>49</td>
<td>Missouri</td>
<td>1.2</td>
<td>1</td>
</tr>
<tr>
<td>50</td>
<td>Mississippi</td>
<td>0.6</td>
<td>2</td>
</tr>
</tbody>
</table>

Recruitment/Retention

**FIGURE 3.** US counties with and without PAs, by urbanicity

Opportunities

Established program at WSU
- Strong applicant interest
- Excellent program reputation
- Continuously accredited
- Strong research record
- Interprofessional education in WSU College of Health Professions

Excellent support by medical community
- Classroom lectures
- Clinical rotation sites across Kansas – urban and rural communities
- 4 year medical school in Wichita
  - opportunities for collaboration
Future Growth

- **Barrier - Faculty shortage**
  - Exists nationwide
  - Most faculty come from clinical practice
    - Faculty development takes time, resources
  - Average clinical salary growth 2001 – 2005
    - PAs – 15%
    - NP – 13.2%
    - FP physician – 9.6%
  - Average WSU faculty salary
    - approx. $10,000 - $15,000 less than faculty salaries (nationwide mean)
    - approx. $15,000 - $17,000 less than clinical salary (nationwide mean)
  - If faculty salary growth is not parallel to clinical salaries quality of graduates may be affected

1. Pedersen D. The productivity of PAs, APRNs, and physicians in Utah. JAAPA. Jan 2008;21(1);42-47.
Future Growth

- **Additional Barriers**
  - **Availability of clinical sites**
    - shortage of clinical sites in many specialties, particularly rural family practice
    - clinical preceptors volunteer time and resources, “burn out” is common
    - Very limited resources for recruitment/development
  - **Increasing admin requirements from clinical sites**
  - **Lack of coordination among training programs**
  - **Limited physical room for expansion**
  - **Graduate job market**
    - need physicians willing to hire/supervise
Summary

- PAs accepted as quality, cost-effective providers of primary care
- WSU PA Program is an established, stable program with high graduation rates
- Strong applicant interest
- Shortage of faculty and clinical training sites
- Expansion of PA graduates linked to physician willingness to hire/utilize PAs
Questions?