



Characteristics of Primary Care Office Visits to Physician Assistants, Nurse Practitioners, and Physicians in the VA , 2005-2010



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BACKGROUND

The U.S. Department of Veterans Affairs has been a frontrunner in utilization of physician assistants (PAs) and nurse practitioners (NPs). Evaluation of the roles and impact of PAs and NPs in the VA is critical to ensuring optimal care for American veterans and may inform best practices for use of PAs and NPs in other settings.

We examine whether primary care provider types are occupying patient care niches within the VA. We also examine the assumption that PAs and NPs see patients who are less medically complex than those seen by physicians.

METHODS

This project uses national data from the Veterans Administration to compare characteristics of primary care patients and patient encounters attended by PAs, NPs or physicians .

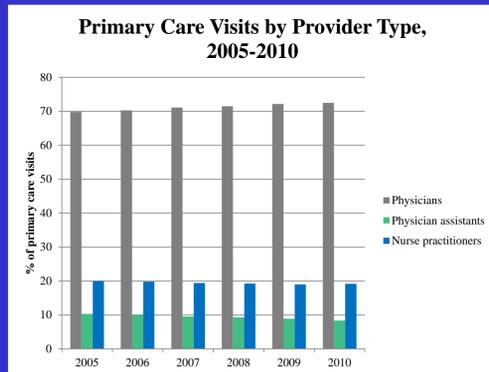
DATA SOURCE

- Veterans Administration electronic medical record data from 2005-2010
- 11 million primary care encounters in 2010
 - Physicians: 7,700,000
 - NPs: 2,000,000
 - PAs: 890,000

RESEARCH QUESTIONS

1. What are the trends in use of PAs and NPs in VA primary care between 2005 and 2010?
2. How do patient and patient encounter characteristics vary among provider types?

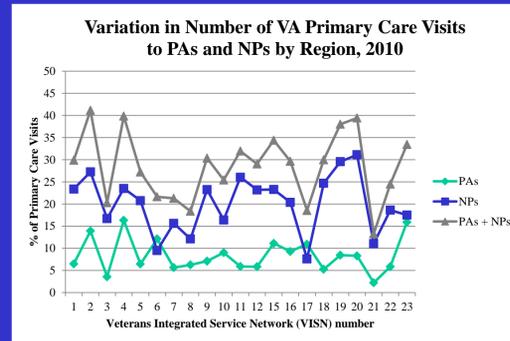
RESULTS



PAs and NPs attend 28-30% of VA primary care visits, with NPs attending twice as many visits as PAs.

Provider type	% of visits with physician listed as a second provider
Physician assistant	0.75
Nurse practitioner	0.52

Very few (<1%) visits to NPs and PAs list a physician as a second provider. It is possible that physicians were involved in some of these visits, but not coded as providers.

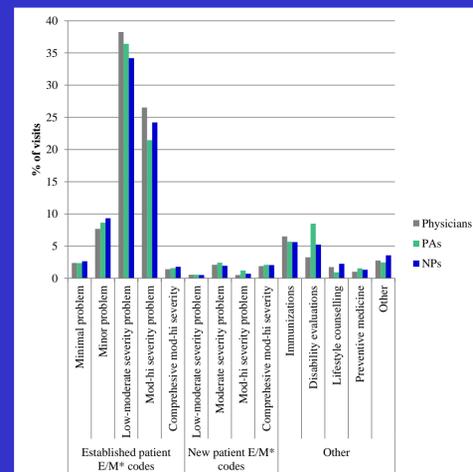


Use of PAs and NPs in varies widely by region. Inter-facility variation may also be large.

Comparison of VA primary care encounter characteristics, 2010

Variable	Physician	PA	NP
Mean age (years)	62.8	61.1	61.7
Male (%)	93.4	93.3	90.0
Race/ethnicity (%)			
White	21.0	20.9	20.4
African American	5.8	5.0	6.0
Hispanic	2/7	1.1	1.8
Other	0.3	0.2	0.3
Missing	70.1	72.8	71.7
Purpose of visit (%)			
Scheduled clinic visit	92.4	85.7	90.3
Unscheduled visit	4.2	5.3	4.5
Physical exam to determine compensation and pension eligibility	3.4	9.0	5.2

Comparison of primary visit procedure codes, 2010



Categories were created from encounter CPT codes. *E/M= Evaluation and management.

IMPLICATIONS

1. VA data is a promising source for research on care by PAs and NPs.
2. Other sources show recent growth in VA employment of PAs and NPs. Since we did not find an increase in numbers of primary care PA and NP visits, these new employees may be working in specialty care.
3. PAs , NPs, and physicians seem to fill similar roles in VA primary care clinics. Additional research is needed to examine whether this is the most effective and efficient division of labor.

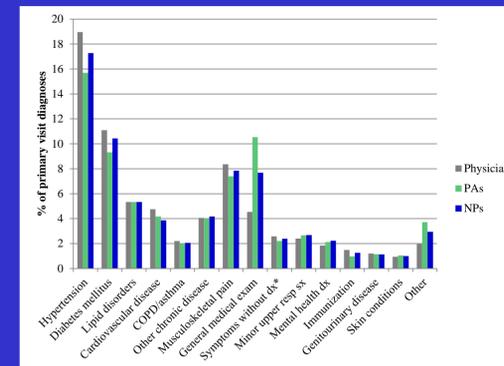
FUTURE WORK

- Person-level analysis comparing patient characteristics by assigned primary care provider type.
- Analysis of primary care team composition and division of labor.
- Comparison of patient-level continuity of care, resource use, and health outcomes by assigned primary care provider type.

FINDINGS

1. A substantial proportion (28-30%) of VA primary care encounters are attended by PAs and NPs. This proportion was stable from 2005-2010.
2. Nurse practitioners attend approximately twice as many VA primary care encounters as PAs.
3. Most VA primary care encounters record only one provider type.
4. Use of PAs and NPs in VA primary care varies widely by region.
5. Characteristics of patients and encounters are similar for physicians, PAs, and NPs in VA primary care clinics.
6. PAs perform more general medical exams for purposes of determining disability than do physicians or NPs.

Comparison of primary encounter diagnoses, 2010



Diagnosis categories were created from the encounter primary diagnosis ICD-9 codes. Diagnoses present in >.02% of visits are categorized above. Nearly 30% of visits have ICD-9 diagnoses present in <.02% of visits. These will be categorized in future work, and could change to proportions above slightly. *Symptoms without diagnoses include headache, dizziness, chest pain, edema, abdominal pain, convulsions, and shortness of breath.