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**Title: Does participation of PAs in patient care increase office visit utilization?**

**Abstract:**

**Introduction:**

Physician assistants (PAs) are providing a growing portion of medical care in the US [1], and some analysts suggest that PAs may buffer predicted physician shortages [2]. Some research suggests that, rather than relieving physician workload, use of nurse practitioners may lead to overall increased use of health services [3]. This research is subject to criticism and has not been replicated for PAs.

If PAs provide primarily supplemental, as opposed to standard-of-care services, then patients who see PAs might require more office visits per year than those who see physicians only, leading to increased health care utilization. This project addresses the following research question:

**After accounting for case-mix differences, is *substantive* PA involvement in patient care associated with increased office visit utilization?**

**Methods:** This retrospective cohort study uses 1996-2004 office-based visit data from the national Medical Expenditure Panel Survey [4] to compare number of office visits per year between between adults for whom PAs provided  $\geq 30\%$  of visits and adults cared for

by physicians only. Negative binomial regression was used to compare number of visits per year between persons with and without PA care, adjusted for demographic, geographic and socioeconomic factors, insurance status, health status, and medical conditions

### **Results:**

After case-mix adjustment, adults for whom PAs provided a substantive portion of care used about 16% fewer office-based visits per year than patients cared for by physicians only ( $p < .05$ ). This difference in use of office-based visits was not offset by increased utilization in other settings.

### **Discussion:**

These findings indicate that inclusion of PAs should not be expected to increase office visit use and suggest that increased numbers of PAs may help to offset predicted physician shortages.

### References:

1. Cooper, R.A., *Health care workforce for the twenty-first century: the impact of nonphysician clinicians*. Annual Review of Medicine, 2001. **52**: p. 51-61.
2. Green, L.A., et al., *The Physician Workforce of the United States: a Family Medicine Perspective*. 2004, Robert Graham Center: Policy Studies in family Medicine and Primary Care, American Academy of Family Physicians: Washington, DC.
3. Laurant, M.G., et al., *Impact of nurse practitioners on workload of general practitioners: randomised controlled trial*. BMJ, 2004. **328**(7445): p. 17.
4. Agency for Healthcare Research and Quality. *Medical expenditure Panel Survey (MEPS), What is MEPS?* 2004 April 15, 2004 [cited 2005 June 6]; Available from: <http://www.meps.ahrq.gov/whatis.htm>.

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1. Cooper, R.A., *Health care workforce for the twenty-first century: the impact of nonphysician clinicians*. Annual Review of Medicine, 2001. **52**: p. 51-61.
2. Green, L.A., et al., *The Physician Workforce of the United States: a Family Medicine Perspective*. 2004, Robert Graham Center: Policy Studies in family Medicine and Primary Care, American Academy of Family Physicians: Washington, DC.
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4. Agency for Healthcare Research and Quality. *Medical expenditure Panel Survey (MEPS), What is MEPS?* 2004 April 15, 2004 [cited 2005 June 6]; Available from: <http://www.meps.ahrq.gov/whatis.htm>.