



# CENTER FOR HEALTH POLICY AT INDIANA UNIVERSITY

RESEARCH BRIEF

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## DOES QUALITY CARE WORSEN WHEN PHYSICIANS HAVE HIGHER PATIENT VOLUMES?

Physician productivity and quality of care are two healthcare issues that will remain of importance for years to come. Growing healthcare needs and costs could pose a taxing responsibility on the nation's already understaffed primary care infrastructure. As the age of the population increases, so will demands on the healthcare system.

### HOW CAN PHYSICIANS HANDLE A GROWING NUMBER OF PATIENTS WHILE STILL PROVIDING QUALITY CARE?

Indiana University Center for Health Policy researchers, Drs. Nir Menachemi and Valerie Yeager, previously worked with leaders at the Jefferson County Department of Health in Alabama to evaluate the relationship between physician productivity and quality of care in a safety-net population.

The researchers convened a panel of physician leaders and quality experts to identify variables that measure physician adherence to commonly accepted medical guidelines. The guidelines chosen did not include those provided automatically by an electronic health records (EHR) system that prompt physicians to behave in certain ways. The team landed on four dependent variables to represent the appropriateness of care provided, which consisted of two variables pertaining to antibiotic use and two pertaining to asthma care.

The two focus areas examined for quality of care were:

**Antibiotic use** – how often a doctor prescribed/provided an antibiotic for a viral condition, as this form of treatment is considered a misuse or overuse of antibiotics. Inappropriate antibiotic use is linked to the emergence and spread of antibiotic resistant bacteria, a major health threat in the US; and because children are often prescribed antibiotics for acute respiratory infections that do not require such treatment.

**Asthma care** – the number of asthma patients that had their asthma severity classified and number of patients prescribed an inhaled corticosteroid that were classified. Proper classification schemes and evaluations help identify asthma patients with a more severe form of asthma who require a tailored asthma action plan and an inhaled corticosteroid.

*Electronic health records allow physicians to see more patients and work to improve healthcare quality, especially in safety-net clinical settings.*

The overall assessment of the two focus areas suggests that in a primary care setting, increased physician productivity marginally impacts quality of care.

### FINDINGS SUGGEST:

- 1. Increased productivity will have a relatively small impact on the quality of care offered by pediatricians and family doctors in a safety-net clinical setting.** There was no association between physician productivity and three of the process measures of quality, and only a moderate, negative relationship between physician productivity and the percent of patients on an inhaled corticosteroid that were classified.
- 2. When physicians provide quality care in one realm, they are likely to do so in other realms.** In other words, quality performance is not random. The study found that high performance in terms of classifying asthma patients is associated with high performance for otitis media care. Additionally, providing appropriate care for otitis media was associated with providing less antibiotics overall.

**To read the full study, visit [go.iu.edu/1PHb](http://go.iu.edu/1PHb).**

Menachemi N, Yeager VA, Welty E, and Manzella B.

"Are physician productivity and quality of care related?" *Journal for Healthcare Quality*, vol. 37, no. 2, 2015, pp. 93-101.

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