Global measures that are commonly used to gauge physician efficiency as part of pay-for-performance programs may actually hinder efforts to reduce the overuse of services, finds a Commonwealth Fund-supported study in *Health Affairs*.

In “Beyond the Efficiency Index: Finding a Better Way to Reduce Overuse and Increase Efficiency in Physician Care,” (Health Affairs Web Exclusive, May 20, 2008), leaders of the 3,400-physician Rochester Individual Practice Association (RIPA) found that use of global measures of physician cost efficiency, such as the efficiency index, “tends to interfere with quality improvement.” RIPA leaders have sought instead to decrease overuse by identifying variations in the key drivers of cost.

After seven years spent conducting individual practitioner pay-for-performance evaluations, lead author Robert A. Greene, M.D., and colleagues found that they could “focus on reducing unnecessary variation and eliminating overuse, placing cost reduction in the larger context of quality improvement.” The team applied the alternative approach to hypertension treatment and to reducing the overuse of fiberoptic laryngoscopy by otorhinolaryngologists (ORLs) in the treatment of conditions like tonsillitis and adenoiditis.

**Looking for Alternatives**

Pay-for-performance—or the use of financial incentives to encourage improvements in quality and efficiency—is an increasingly prevalent approach to cost containment in health care. One common measure of physician performance is the efficiency index, or EI, which is used to determine the ratio of actual costs to expected costs, adjusted to patient case mix and severity. From 1999 to 2006, RIPA used such an index as part of its individual physician pay-for-performance program. But in recent years, RIPA developed an alternative approach that identifies specific medical services that are key drivers of cost variation for a given condition across an entire specialty.

“We found it difficult to conduct quality improvement projects based on EIs because they did not identify action items for the measured physicians,” the authors say. Instead, the team asked the question: “What are lower-cost and higher-cost physicians doing differently from each other?”

**Aligning Care and Efficiency**

The researchers separated RIPA internists into five groups, from lowest cost (quintile 1) to highest cost (quintile 5), and focused on the principal cost drivers (e.g., lab tests, office visits, and pharmacy) in treating hypertension. Doing this allowed the team to rule out individually expensive, but uncommon, services. For example, under the EI system, an emergency room visit could mark an individual internist as inefficient, even though the visit is not a dominant cost driver nor necessarily under the control of the assigned practitioner. The approach also allowed RIPA leaders to engage high-cost physicians by showing them the ways their colleagues are improving care while containing costs.

Pharmacy costs varied more than five times as much as lab test or office visit costs, signaling that medication choice was the major driver of cost variation. The use of
brand-name angiotensin-converting enzyme (ACE) inhibitors was a main culprit; only 5 to 10 percent of patients tolerate these drugs better than a generic substitution. “In an era of rising costs, we propose that using equivalent but more costly treatments is inappropriate,” the authors note. What’s more, research has shown that medication cost is a large factor in patient compliance.

As part of its ORL project, the team found that fiberoptic laryngoscopy was a prime cost driver, and that its use did not lead to savings in other areas. Because there are no specific national guidelines available in this area, the researchers asked ORL practitioners to identify their reasons for using the high-cost intervention. The review led to a discussion and literature review showing that repeat exams were not necessary.

The researchers conclude that “much variation in clinical practice is attributable to physician preference, habit, and training, rather than patient preference, severity, or outcomes” and that, in many cases, fiberoptic laryngoscopy represented overuse.

**Conclusions**

“Given inevitable limits of time and energy, it is important to focus quality improvement efforts on the true drivers of unnecessary cost and variations and to generate preferred practice patterns for entire specialties rather than individual physicians,” conclude the authors, who suggest their approach better identifies wasteful practices and works to engage physicians to change behaviors, rather than alienating them.

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**Practice Pattern Analysis of Uncomplicated Hypertension Treated by Rochester Individual Practice Association (RIPA) Internists, 2003–2004**

![Bar chart showing percent of costs for lab and tests, office visits, and pharmacy by quintile.](Image)

Note: Costs per episode as a percentage of average total episode cost in quintile 5.