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# Validating the Link Between Good Physician Process of Care and Better Health-Related Quality of Life for Patients

Efforts to improve the quality of medical care in the United States include improving the *process of care*: how well and how appropriately physicians and other health care professionals care for patients, from taking medical histories to ordering laboratory tests. Better process should lead to better health-related quality-of-life outcomes, but because of analytical challenges, that link had never been clearly established until now.

A team led by RAND researcher Katherine Kahn has finally confirmed the link between better physician care process and better health-related quality-of-life outcomes for patients with chronic diseases. Validating process-of-care measures has important implications for clinicians, patients, and all involved with health care delivery. To overcome the previous analytical challenges, the researchers examined their data with a statistical approach that is often used by econometricians but rarely used in health services or health policy work.

The team examined the ambulatory care provided to 963 managed care patients with at least one chronic illness (ischemic heart disease, asthma and/or emphysema, or diabetes). The researchers measured the patients' self-reported health-related quality of life from two patient surveys conducted 30 months apart. During that time, the patients' medical records—representing more than 5,000 patient-physician interactions—were also analyzed. The researchers measured provider adherence to 120 process-of-care criteria in six areas of clinical care: collection of the patient's history, physical examination, laboratory tests, diagnostic procedures, medications, and counseling.

After comparing the process-of-care scores with the patient-outcome scores over the study period, the team found the following:

- A statistically significant link exists between better physician process of care and better health-related quality-of-life outcomes for patients.
- Improving the process of care for patients from a moderate level (50th percentile) to the next-best level (75th percentile) improves patient physical health roughly equivalent to erasing the effects on health-related quality-of-life scores associated with 2.5 years of aging.
- By accounting for patient burden of illness, the better process–better outcome link holds even for seriously ill patients. (Previous studies for this group had turned up a paradox—that for severely ill people, better process of care was associated with worse outcomes.)

These findings should reassure patients, providers, and those involved with health care delivery that the net result of better process is realized by patients in terms that matter to them; the team adds that “providers can use this analysis as both a motivation and a challenge to provide better process.”

The team's paper received the 2008 Eisenberg Award from Health Services Research. The award recognizes major achievements in improving patient safety and quality.

This fact sheet is based on: Kahn KL, Tisnado DM, Adams JL, Liu H, Chen WP, Hu FA, Mangione CM, Hays RD, and Damberg CL, “Does Ambulatory Process of Care Predict Health-Related Quality of Life Outcomes for Patients with Chronic Disease?” *Health Services Research*, Vol. 42, No. 1, February 2007, pp. 63–83.

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