



Background

A landmark Foundation-initiated study by the RAND Corporation found that Americans receive only half of recommended medical care.¹ This study added to the mounting evidence of quality deficiencies in the U.S. health care system, which was brought to the forefront in a 2001 Institute of Medicine report documenting the chasm between the care Americans have now and the care Americans should have.² A new study from this RAND research project asks the next logical question: How are patient characteristics such as age, gender, race/ethnicity and income associated with the quality of health care received? This question has been widely studied, but largely as it relates to whether an encounter with a provider occurs. Whether necessary preventive measures, treatments or procedures are provided at similar rates to individuals with different social and demographic characteristics is less understood.

A research team led by Steven Asch, M.D., M.P.H., analyzed data from a large, random sample of patients who made at least one visit to a health care provider in the previous two years.³ Using over 400 indicators of quality care, they found that differences by patient characteristics in the quality of medical care received were small—even when statistically significant—compared to the larger gap between the care that all Americans receive and the care they should receive. Shortfalls in quality of care are a systemic problem. These are important considerations when thinking about health care quality improvement programs—to focus on any one subgroup or one type of service is to undervalue the complex relationship between quality and the many patient characteristics that affect it.

Percentage of Recommended Care Received, According to Characteristic

Characteristics	Percentage	
Sex	Female	56.6
	Male	52.3
Race	White	54.1
	Black	57.6
	Hispanic	57.5
	Other	55.4
Health Insurance	Uninsured	53.7
	Medicaid	54.9
	Medicare	56.9
	Managed Care	55.2
	Private non-managed care	53.6
Income	< \$15K	53.1
	\$15K–\$50K	54.7
	> \$50K	56.6

The Findings

- **Adults received only about half of the recommended care.** Participants received 54.9 percent of the recommended care.
- **Small variations in quality exist among patient characteristics.** Females received higher quality care than males (56.6 versus 52.3 percent; $p < 0.001$). Blacks and Hispanics received slightly higher quality care than whites (57.6 and 57.5 percent versus 54.1 percent; $p < 0.001$). Medicare beneficiaries received higher quality care (3.2 percentage points higher) than those without health insurance ($p = 0.03$). Individuals who reported incomes above \$50,000 had quality scores 3.5 percentage points higher than those who earned under \$15,000 ($p < 0.001$).
- **Quality-of-care scores vary based on type (acute, chronic or preventive) and function of care (screening, diagnosis, treatment or follow-up).** For example, women had higher scores than men for chronic and preventive care (57.9 versus 54.5 percent and 57.8 versus 50.1 percent) but lower scores for acute care (51.9 versus 58.4 percent). Women also had lower scores for treatment (56.0 versus 59.3 percent). These results are consistent with the disparities literature on men and women.⁴
- **Having health insurance was not enough to ensure quality care.** Quality scores among people with Medicaid, managed care and private non-managed care were largely not statistically different compared to not having insurance. Although the difference in the receipt of recommended care between Medicare beneficiaries and the uninsured was significant (56.9 percent versus 53.7 percent; $p = 0.03$), it was not large.

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Supplementary Information

Quality indicators used in article can be found at:

http://www.rand.org/health/feature/2006/060315_asch.html.

Resources

Asch SA, Kerr EA, Kessey J, Adams J, et al. “Who Is at Greatest Risk of Receiving Poor-Quality Health Care?” *New England Journal of Medicine*. 354(11): 1147–1156.

Kohn LT, Corrigan JM, Donaldson MS (eds), Committee on Quality of Health in America. *To err is human: Building a safer health system*. Institute of Medicine Report. Washington, DC: National Academy Press, 2000.

McGlynn EA, Asch SM, Adams J, et al. “The Quality of Health Care Delivered to Adults in the United States.” *New England Journal of Medicine*. 348(26): 2635–2645, 2003.

Richardson WC, Berwick DM, Bisgard JC, et al. (eds), Committee on Quality of Health in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press, 2001.

1 McGlynn EA, Asch SM, Adams J, et al. “The Quality of Health Care Delivered to Adults in the United States.” *New England Journal of Medicine*. 348(26): 2635–2645, 2003.

2 Richardson WC, Berwick DM, Bisgard JC, et al. (eds), Committee on Quality of Health in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press, 2001.

3 Asch SA, Kerr EA, Kessey J, et al. “Who Is at Greatest Risk of Receiving Poor-Quality Health Care?” *New England Journal of Medicine*. 354(11): 1147–1156.

4 Vaccarino V, Rathore SS, Wenger NK, et al. “Sex and Racial Differences in the Management of Acute Myocardial Infarction, 1994 through 2002.” *New England Journal of Medicine*, 353(7): 671–682, 2005.