Frequently Asked Questions

Disparities in Health and Health Care among Medicare Beneficiaries: A Brief Report of the Dartmouth Atlas Project Conducted for the Robert Wood Johnson Foundation's Aligning Forces for Quality Program

QUESTIONS ABOUT THE CURRENT REPORT:

Q: Why did the Dartmouth Atlas Project (DAP) choose the measures of care that are highlighted in this report?

A: The selected measures highlight several important issues related to the quality of health care and disparities in health and health care delivery. These are also measures that can be reliably analyzed using Medicare claims data. The measures underscore three opportunities for reform:

Delivering effective care: A key element of high-quality ambulatory care is the capacity of the local delivery system to provide services of proven benefit. The AQA (*www.aqaalliance.org/performancewg.htm*) and the National Committee for Quality Assurance (*www.ncqa.org*) have endorsed a set of these ambulatory care measures, only a few of which can be reliably ascertained from claims data. DAP included two of those measures in this report—mammography for women age 65-69 and hemoglobin A1c (blood sugar) testing for diabetics—and will release additional measures on our web site: eye exams and testing for blood lipids (cholesterol) in diabetics. The web site is *http://www.dartmouthatlas.org/af4q.shtm*.

Improving care coordination: Primary care physicians play a key role in providing and coordinating high-quality health care. Adequate access to primary care can improve care coordination and reduce the frequency of avoidable hospitalizations. DAP included one measure of primary care orientation in this report, the percentage of Medicare beneficiaries whose predominant (most frequently seen) provider is a primary care physician. An additional measure, the percentage of patients who have a primary care physician, is available on our web site.

Avoiding adverse events: Many hospital admissions are for medical conditions that can be treated in either inpatient or outpatient settings. Examples include poorly controlled diabetes or worsening heart failure. In such cases, better outpatient management can often prevent hospitalization. Discretionary stays in the hospital pose risks to patients and substantial costs to society.

The report also presents data on the rate of major leg amputations -- a devastating complication of diabetes and peripheral vascular disease. Amputation rates are four times greater in blacks than in whites and differ by a factor of three among U.S. states and regions. Because poverty is an important risk, addressing these remarkable disparities in health outcomes will require attention to the full spectrum of health determinants, ranging from

limited health literacy, lack of transportation and inadequate housing on the one hand to inadequate access to high quality, well-coordinated primary and specialty care on the other. The dramatic differences across and within regions highlight the opportunities for communities to come together to address the important determinants of health.

Q: What is known about the causes of variation in medical care?

A: Although some of the variations across regions are due to differences in the underlying health of populations, much of the variation in both utilization and outcomes is due to differences in the local delivery system itself. Important local determinants include the regional supply of health care resources (such as the per capita supply of hospital beds and clinicians) and the professional theories or practice styles of physicians. Differences in the organization of care also appear to be important – care in some areas of the country is delivered by tightly integrated delivery systems that afford the opportunity for explicit planning of capacity and care models. In many other regions, care is less well organized and integrated. Accountability for quality and outcomes can be vague and the infrastructure for care improvement less well defined. In addition to these general explanations, each region and provider has its own unique history and characteristics that are important to understand towards the goal of improving care.

Q: How are the Aligning Forces regions in the report defined?

A: Some of the regions are metropolitan areas; others are counties or states. For the Dartmouth measures, when regions are not entire states, we defined the populations based on the closest overlap between ZIP codes and the selected region. A list of the ZIP codes for each AF4Q region, and maps showing the overlap between regions and the ZIP codes, will be available June 5 at *http://http://www.dartmouthatlas.org/af4q.shtm*.

Q: Where do the data used in the report come from?

A: The data are drawn from the enrollment and claims records of the Medicare program, Part A (inpatient claims) and Part B (claims filed by physicians, community health centers and rural health clinics). The Centers for Medicare and Medicaid Services (CMS), the federal agency that collects data for every person and provider using Medicare health insurance, provides the data to the Dartmouth Atlas for research and reporting.

Q: Which populations are included in the data?

A: The data—and therefore Dartmouth Atlas analyses—are restricted to the fee-for-service Medicare population age 65 and older. The discharge rates for ambulatory care-sensitive conditions and leg amputation are based on 100% of Medicare beneficiaries. The rest of the rates are based on a 20% random sample of beneficiaries. For some measures, care is measured for subsets of Medicare populations, such as women age 65-69 for mammograms and patients with diabetes aged 65-74 for the diabetes care measures. HMO patients are not included in our analysis; since HMOs receive a fixed annual amount per enrollee, in exchange for which they must provide all required services, HMOs do not submit individual claims to Medicare.

Q: Why does DAP focus on Medicare data? Are there similar variations in the under-65 population?

A: CMS makes available a uniform national claims database for research purposes. There is no counterpart to this database for the commercially insured population. However, studies that the DAP and others have done using other data sources (such as private insurer data and state all-payer data) have shown similar variations among the under-65 population.

Q: Why does DAP only have data for blacks and whites? What about Hispanics, Asians, American Indians and others?

A: DAP focuses on the comparison of blacks to non-blacks for several practical reasons. Separate analyses of the Hispanic population are challenging because fewer than half of self-designated Hispanics are coded as such in the Medicare data; Hispanics constitute less than 6 percent of the elderly population; and they are highly clustered in a few communities. Racial designations for Asians and American Indians are more accurate, but their small numbers (they represent less than 3 percent of the U.S. population) limit the precision of race-specific analyses. At the same time, excluding any of these populations from the regional comparisons in this report was judged to be undesirable. DAP therefore restricted the analyses in the current report to blacks and non-blacks, and, for ease of exposition, the authors refer to the non-black population as white.

Q: Why don't you have race-specific data for every region?

A: In many regions, there are too few black Medicare beneficiaries to reliably measure medical care by race. To ensure that the measures are reasonably precise, DAP restricted the reporting of measures to those where there were at least 200 people in the relevant population. For example, to report the percentage of black diabetics receiving hemoglobin A1c testing, there had to be at least 200 black patients with diabetes in the state or region in question during the study period. If DAP researchers were unable to report black rates, they did not report white rates. The overall Medicare rates are still reported.

Q: Is care for blacks uniformly worse than care for whites?

A: No. In some states and regions, blacks received equal or better care than whites. For most measures, disparities across states and regions were substantially greater than the differences by race. In other words, where overall quality rates were high, rates for both blacks and whites tended to be high, even if there were differences between blacks and whites within the region. However, leg amputation rates were higher among blacks nearly everywhere; only one region had a rate for blacks that was lower than the rate for whites in *any* region.

Q: If blacks are more likely than whites to have a primary care physician as their predominant provider, why do they still experience disparities in medical quality and health outcomes?

A: While adequate access to primary care and improved care coordination are thought to be important components of high-quality care, they are not sufficient to overcome all socioeconomic barriers. The striking disparity, for example, between blacks and whites in their rates of leg amputation points out the need to focus attention on the full spectrum of health determinants. A number of factors are correlated with poor health, including poverty,

lower levels of schooling, limited health literacy, inadequate housing, lack of transportation and inadequate access to high-quality, well-coordinated primary and specialty care.

Most importantly, the absence of a simple relationship between relatively higher use of primary care physicians and outcomes reveals the importance of health care systems that are well integrated across all physician specialties – primary care, subspecialty care – and all sites of care. Primary care is an essential element of high quality care but not sufficient by itself.

Q: What are ambulatory care-sensitive conditions? Why are these important?

A: Many hospital admissions are for medical conditions – such as poorly controlled diabetes or worsening heart failure – which can be treated in either the inpatient or the outpatient setting, and for which hospitalization can often be prevented by better outpatient management. While it may feel safer and easier for the physician, or be the only option for a patient with inadequate home or community-based support, discretionary stays in the hospital pose a risk to patients and a substantial cost to society. Hospitalization rates for these – and for most medical conditions – are also strongly influenced by the local supply of hospital beds per capita. Higher bed supply is permissive of health care practices that are associated with higher medical admission rates.

Q: How do the measures in this report compare to other quality data available for my region?

A: Most quality data—including the measures of effective care in this report—reflect technical quality. That is, whether things that ought to have been done were actually done. The effective-care measures in this report are similar to HEDIS or CMS Hospital Compare measures, except that, unlike quality data that measure the performance of specific hospitals or health systems, the measures in this report are population-based and reflect the experience of all non-HMO Medicare beneficiaries age 65 and older living in a region or state. In addition, this report extends quality measures to domains such as primary care orientation and occurrence of avoidable hospitalizations.

Q: Why did DAP choose the years 2003 though 2005 for the study measures?

A: These are the most recent data available from CMS. As new data are released, updated measures will be provided.

Q: Why are some measures for multiple years and others not?

A: DAP combined years for two reasons. First, the relevant time period for the medical care being studied was more than 12 months. (Mammography, for example, is recommended at least every other year for women ages 65 to 69.) Second, when events were of lower frequency, DAP combined years to present stable rates.

Q: Where can I find additional information about these measures?

A: The full methods are available at *http://www.dartmouthatlas.org/af4q.shtm*.

QUESTIONS ABOUT THE DARTMOUTH ATLAS PROJECT:

Q: What is the Dartmouth Atlas Project?

A: For more than 15 years, DAP has documented variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide comprehensive information and analysis about national, regional and local markets, as well as individual hospitals and their affiliated physicians. The Atlas reports are used by health care providers, policymakers, the media and health care analysts. More information about the Atlas and Atlas data can be found at *www.dartmouthatlas.org*.

Q: What is the Atlas's affiliation with the Robert Wood Johnson Foundation?

A: The Robert Wood Johnson Foundation is the largest and most important supporter of the Dartmouth Atlas Project, having provided core funding since the project's inception. The Atlas team has worked closely with RWJF and the Aligning Forces for Quality (AF4Q) project in developing the quality measures.