

REPORT 2 OF THE COUNCIL ON MEDICAL SERVICE (I-09)
Geographic Variation in Health Care Cost and Utilization
(Reference Committee J)

EXECUTIVE SUMMARY

The phenomenon of “geographic variation” has been attracting increasing attention among analysts and policymakers struggling to address rising health care costs, and for some has become a rallying cry for the need to decrease waste and increase efficiency in the health care system. This report provides an overview of research into geographic variation; describes the work of the Dartmouth Atlas Project; and discusses the limitations of the Dartmouth Atlas Project’s research to date on explaining geographic variation. The report concludes with a discussion of the importance of pursuing additional research into the causes of geographic variation, and recent efforts by the American Medical Association (AMA) to address efficiency concerns.

While it is widely acknowledged that health care spending patterns vary across the country, the causes and implications of these variations are less clear. A compelling public policy question is whether health care costs in the United States could be reduced by identifying efficiencies in low-spending areas that could be replicated in higher-spending areas, without jeopardizing health care quality and patient access. The answer to this question depends in large part on the ability of researchers to effectively study and document variables that affect health care utilization and cost, and the extent to which these variables can be influenced or manipulated by public policy.

According to a 2008 Congressional Budget Office report, recent research on causes of geographic variation suggests that less than half of the amount of variation is attributable to factors that have already been measured related to local health care prices, health status, and cultural and demographic factors. With as much as half of geographic variation remaining “unexplained” after controlling for basic variables related to prices, health status and demographics, there is a need for further study to effectively identify and describe the remaining causes of health care spending variation.

Work by the Dartmouth Atlas Project provides valuable descriptive information about health care spending and utilization patterns across the United States. However, data are insufficient at this point to make reliable assumptions about why these variations exist, and what policies should be applied to improve health care delivery overall. Although variation research has controlled for many factors, it does a disservice to health system reform efforts to conclude that all remaining variation is unjustified, and that health care delivery patterns in low-spending areas are preferable to delivery patterns in high-spending areas.

Additional research is necessary to determine what other factors affect local health care delivery, and whether these factors lead to desirable variations. From a policy perspective, identifying these factors can help determine if and where there may be opportunities to reduce variation and increase efficiencies throughout the health care system. The Council cautions that policies based on narrowly defined research or simplified data analysis could jeopardize efforts to bend the cost curve and improve patient care. The AMA must continue to emphasize the importance of gathering and disseminating evidence-based clinical information that can be used by physicians to provide the right care at the right time.

REPORT OF THE COUNCIL ON MEDICAL SERVICE

CMS Report 2-I-09

Subject: Geographic Variation in Health Care Cost and Utilization

Presented by: Barbara L. McAneny, MD, Chair

Referred to: Reference Committee J
(William J. Holt, MD, Chair)

1 The phenomenon of “geographic variation” has been attracting increasing attention among
2 analysts and policymakers struggling to address rising health care costs, and for some has become a
3 rallying cry for the need to decrease waste and increase efficiency in the health care system. The
4 June 1, 2009 issue of the *New Yorker* included an article by surgeon Atul Gawande, MD, that
5 examined health care costs in McAllen, Texas, a small border town with – by some measures – the
6 highest health care costs in the nation. The article, which attracted the attention of the
7 Administration, Congress, and the press, describes Dr. Gawande’s attempts to uncover the reasons
8 for McAllen’s high costs, and his discomfort upon “diagnosing” that “the primary cause of
9 McAllen’s extreme costs was, very simply, the across-the-board overuse of medicine.”

10
11 The Council on Medical Service is aware that nothing about health care costs or utilization can be
12 explained “very simply.” This report provides an overview of research into geographic variation;
13 describes the work of the Dartmouth Atlas Project, which has emerged as a leading resource in
14 geographic variation studies; and discusses the limitations of the Dartmouth Atlas Project’s
15 research to date on explaining geographic variation. The report concludes with a discussion of the
16 importance of pursuing additional research into the causes of geographic variation, and recent
17 efforts by the American Medical Association (AMA) to address efficiency concerns.

18 19 RESEARCH ON GEOGRAPHIC VARIATION

20
21 Variations in health care spending across the United States are well documented. The most recent
22 National Health Expenditure data show unadjusted per capita health care spending ranging from
23 \$4,000 in Utah to \$6,700 in Massachusetts (Centers for Medicare and Medicaid Services, 2007).
24 Prior years’ data show similar spending variations across states. Variations have also been
25 documented among smaller geographic units. Using Medicare data, researchers with the
26 Dartmouth Atlas Project have studied variations across hospital referral regions (HRRs), which are
27 defined based on referral patterns to hospitals that provide major cardiovascular surgical
28 procedures and neurosurgery. Dartmouth data show that among 306 HRRs, Medicare spending per
29 patient ranges from nearly \$14,500 in some areas, to as little as \$5,200 in others (Dartmouth,
30 2008). Similarly, county by county analyses by the National Center for Policy Analysis show
31 Medicare per capita spending varies from just over \$5,000 in Nobles County, Minnesota, to \$8,500
32 in Rice County, Kansas (NCPA, July 2008).

33
34 While it is widely acknowledged that health care spending patterns vary across the country, the
35 causes and implications of these variations are less clear. A compelling public policy question is
36 whether health care costs in the United States could be reduced by identifying efficiencies in low-
37 spending areas that could be replicated in higher-spending areas, without jeopardizing health care

1 quality and patient access. The answer to this question depends in large part on the ability of
2 researchers to effectively study and document variables that affect health care utilization and cost,
3 and the extent to which these variables can be influenced or manipulated by public policy.
4

5 Research shows that some health care cost variation is the result of unique local characteristics.
6 For example, prices paid for medical services are influenced by local prices associated with
7 providing medical care, such as office rent, professional liability insurance rates, and local salaries
8 for health professionals (Congressional Budget Office [CBO], 2008). Research also suggests that
9 professional liability costs have some effect on the practice of medicine, leading to variations in
10 practice patterns consistent with varying professional liability climates. One study of the
11 relationship between liability costs and Medicare expenditures suggested that states in the top
12 quartile of professional liability costs could be expected to spend 4% more on total Medicare
13 spending than states in the bottom quartile of liability expenditures (Baicker et al., 2007). The
14 strongest relationship was demonstrated between liability costs and increased spending on imaging
15 services, while a weaker increase in services such as physician visits and diagnostic tests was also
16 present.
17

18 Health status of the local population also explains a portion of variation in health care use. Areas
19 with relatively high concentrations of sicker patients generally have higher per capita health care
20 costs than those with healthier populations. It is difficult to accurately assess, however, the extent
21 to which health status affects health care cost because of the difficulty in selecting or obtaining
22 relevant health status data (CBO, 2008). For example, risk adjustment measures used to control for
23 health status may be unreliable (e.g., data is self-reported by patients), or incomplete (e.g., co-
24 morbidities might not be adequately reflected).
25

26 Cultural and demographic factors such as race, income, and educational attainment have also been
27 the subject of research studies of per capita health care costs. To date, several studies focusing on
28 the Medicare population have suggested a limited effect of demographics on spending variation
29 (CBO, 2008). Yet many researchers feel that the importance of demographic variables has been
30 greatly underestimated, and that further research is necessary to assess the magnitude of the
31 relationship between socioeconomic factors and spending patterns. Specifically, some researchers
32 suggest that factors such as income and insurance have a significant effect on spending patterns of
33 the non-Medicare population (e.g., Cooper, 2008). Similarly, researchers at the Urban Institute,
34 including Jack Hadley, PhD, and Robert Berenson, MD, have found that demographic factors,
35 along with health status, are critical variables that affect health care utilization at the individual
36 level, and caution that their significance is masked in population-based analyses of health care
37 spending.
38

39 According to the 2008 CBO report, recent research on causes of geographic variation suggests that
40 less than half of the amount of variation is attributable to factors that have already been measured
41 related to local health care prices, health status, and cultural and demographic factors. A 2003
42 study by the Medicare Payment Advisory Commission (MedPAC) estimates that variation in prices
43 and practice costs accounts for about 29% of total variation in Medicare spending at the state level,
44 and health status accounts for approximately 16% of Medicare spending by state (CBO, 2008).
45 With as much as half of geographic variation remaining “unexplained” after controlling for basic
46 variables related to prices, health status and demographics, there is a need for further study to
47 effectively identify and describe the remaining causes of health care spending variation.

1 DARTMOUTH ATLAS PROJECT

2
 3 The Dartmouth Atlas Project has emerged as a leading source of information regarding geographic
 4 variation in health care. Begun in the early 1990s by John E. Wennberg, MD, MPH, the
 5 Dartmouth Atlas Project was developed to provide information to help structure the health care
 6 reforms proposed by the Clinton Administration. Dartmouth received funding from the Robert
 7 Wood Johnson Foundation to conduct an extensive analysis of health care spending and resource
 8 use across the United States. Dartmouth researchers proceeded with their analysis, while the
 9 Clinton health care reform efforts proved unsuccessful. Realizing they had “data without a
 10 customer,” Wennberg and his colleagues committed to producing the Dartmouth Atlas of Health as
 11 a publicly available, comprehensive resource for policymakers, analysts and others interested in
 12 understanding of the efficiency and effectiveness of the United States health care system.

13
 14 In 2003, Wennberg and Dartmouth Atlas co-founder Elliott S. Fisher, MD, MPH published two
 15 key studies in the *Annals of Internal Medicine* that examined whether regions with higher levels of
 16 Medicare spending experienced better outcomes (defined by mortality rates and improvements in
 17 functional status) or increased patient satisfaction than lower-spending regions. The studies found
 18 that patients in higher spending regions received more care (primarily inpatient and specialty care),
 19 but did not experience better outcomes or increased satisfaction. These studies became the
 20 foundation of Dartmouth’s subsequent work and serve as the basis for the Dartmouth Atlas
 21 Project’s overarching premise that it is possible to address health care spending growth by
 22 examining inefficiencies in the health care delivery system.

23
 24 Following is a summary of some of Dartmouth’s key conclusions regarding geographic variation in
 25 health care utilization. Dartmouth has characterized the majority of geographic variation as
 26 “unwarranted [because] it cannot be adequately explained on the basis of differences among
 27 regions in illness rates, patient preferences or the dictates of evidence-based medicine.” Based on
 28 its research, the Dartmouth Atlas Project has concluded that “much of the variation relates to
 29 provider quality defects,” and that otherwise unexplained differences in utilization are due to an
 30 underuse of effective care, misuse of preference-sensitive care, and overuse of supply-sensitive
 31 care. Dartmouth researchers have suggested that by addressing these three areas, “the nation could
 32 reduce health care spending by as much as 30 percent” without compromising the quality of care.

33
 34 It should be noted that Dartmouth’s conclusions about the role of “provider quality defects” in
 35 geographic variation are not based on documented causal relationships between physician behavior
 36 and utilization patterns. Rather, they are based on the lack of evidence about additional variables
 37 that also affect health care utilization, or that may affect both physician supply and utilization.
 38 This lack of evidence does not necessarily mean that other variables do not exist. Dartmouth’s
 39 research has focused primarily on health care delivery and payment systems, but further research
 40 into other variables (e.g., environmental, socioeconomic, or cultural) could lead to further
 41 reductions in the amount of unexplained variation.

42
 43 *Effective Care*

44
 45 “Effective care” refers to services or treatments that are widely accepted as offering value to
 46 patients without significant tradeoffs, often in the context of treating chronic conditions. These
 47 services are often defined in practice guidelines, with sound clinical evidence supporting their use.
 48 Examples include scheduling regular eye exams and blood screening tests for diabetic patients, or
 49 using beta-blockers for heart attack patients. Because clinical evidence supports the use of these
 50 services as effective ways of reducing morbidity and mortality, it is reasonable to expect that

1 virtually all patients would receive the services when clinically appropriate, and that their use rates
2 would be relatively stable across regions.

3
4 Research by Dartmouth and others shows that patients do not always receive treatments
5 recommended by practice guidelines. A Dartmouth study of diabetic Medicare patients showed
6 that, depending on hospital referral region, the percentage of patients receiving annual blood
7 screening ranged from 10 to 70 percent of patients. Dartmouth research further suggests no
8 correlation between spending levels in a region and the incidence of effective care. Paradoxically,
9 some Dartmouth studies have shown an inverse relationship between health care spending and the
10 likelihood that patients will receive recommended care. Researchers speculate that patients in
11 higher spending regions may have more physicians involved in their care, which increases the need
12 for effective care coordination efforts. In the absence of other explanatory evidence, Dartmouth
13 researchers conclude that the inverse relationship between health care spending and effective care
14 delivery can be partially explained by a lack of effective care coordination systems, resulting in
15 gaps in patient care (Fisher, February 27, 2009).

16 17 *Preference-Sensitive Care*

18
19 Unlike effective care, which is supported by clinical evidence as being the best course of action for
20 a particular illness or condition, “preference-sensitive care” generally refers to situations in which
21 there may be more than one accepted treatment option, and where there are “significant tradeoffs
22 among the available options.” Treatment options may represent varying degrees of intervention
23 (e.g., lumpectomy vs. mastectomy for early stage breast cancer), or choosing between medical and
24 surgical options (e.g., watchful waiting with routine testing for an enlarged prostate vs.
25 prostatectomy).

26
27 The appropriateness of preference-sensitive care should be based on the weight ascribed by the
28 patient to the costs and benefits of one procedure relative to another. Dartmouth’s studies of
29 preference sensitive care show large variations in preference-sensitive procedures across regions,
30 but relative uniformity within a given region. According to Dartmouth researchers, the consistency
31 with which a certain procedure is performed in a single region “suggest[s] that local medical
32 opinion has a strong influence on the choice of treatment.” Dartmouth researchers conclude that, in
33 the case of preference-sensitive care, physician practice style appears to play a much larger role in
34 utilization and costs levels than either patient preference or clinical appropriateness (Dartmouth
35 Topic Brief, 2007).

36 37 *Supply-Sensitive Care*

38
39 Although questions have been raised recently about the relative significance of physician supply to
40 health care utilization, Dartmouth’s conclusions about “supply-sensitive” care have attracted the
41 attention of a wide range of policymakers and analysts. Dartmouth defines supply-sensitive care as
42 “care whose frequency of use is not determined by well-articulated medical theory, much less by
43 scientific evidence. Supply sensitive services include physician visits, diagnostic tests,
44 hospitalizations and admissions to intensive care among patients with chronic diseases...Where
45 there is greater capacity, more care is delivered – whether or not it is warranted.”

46
47 In the 2003 *Annals* articles, the Dartmouth researchers examined the costs and outcomes associated
48 with end-of-life care with the objective of determining if regions with higher Medicare spending
49 delivered better care. The authors determined that patients in higher spending regions received
50 60% more care than patients in the lowest-spending regions, in the form of increased use of
51 evaluation and management services and testing, imaging and minor procedures, and use of a

1 hospital as the site of care. Patients in higher spending areas were also likely to see more
2 specialists (including general internists) and to be treated by greater numbers of physicians than
3 those in lower-spending areas. Despite the increased intensity of utilization, the study found that
4 higher spending regions did not demonstrate higher quality of care on measures such as appropriate
5 follow-up care or preventive care (Fisher, 2003, Part 1). The study also determined that higher
6 levels of spending on end-of-life care did not lead to lower mortality rates, better functional status,
7 or higher patient satisfaction (Fisher, 2003, Part 2). Subsequent research by Dartmouth researchers
8 suggests that patients in higher spending areas might receive lower quality care, possibly due to the
9 increased risks associated with receiving care in a hospital setting (e.g., infection or medical
10 errors), and the lack of care coordination that can be associated with treatment by multiple
11 physicians (Fisher, February 27, 2009).

12 13 LIMITATIONS OF DARTMOUTH ATLAS OF HEALTH CARE DATA

14
15 Due to its strong reputation and comprehensive collection of data and analyses, the Dartmouth
16 Atlas of Health Care has emerged as a respected and influential voice in the health system reform
17 dialogue. Dartmouth research reveals aspects of health care delivery that could benefit from closer
18 examination and more deliberate attention in order to achieve maximum efficiencies for patients
19 and the health care system as a whole. Unfortunately, the Dartmouth research is frequently used to
20 attack physicians, alleging provision of unnecessary and costly care, and often provides the basis
21 for sensational and flawed theories about the drivers of health care costs and practice differences
22 across the country.

23 24 *Individual vs. Aggregate Data*

25
26 As noted, Dartmouth's research, while extensive, is not exhaustive, and some analysts have
27 expressed caution about conclusions drawn from Dartmouth's findings. Robert Brook with the
28 RAND foundation generally praises the work of the Dartmouth Atlas Project, but is concerned that
29 the conclusions to reduce supply and services in high-spending areas is overshadowing the need to
30 evaluate clinical appropriateness in the context of level of service use (Newberg, 2006). Similarly,
31 Jack Hadley of the Urban Institute warns that levels of individual variation could be "distorting"
32 cost averages, meaning that within a given region individual high-spenders and low-spenders could
33 already be receiving appropriate levels of care, even if the "average" regional spending appears
34 high (Newberg, 2006).

35
36 A recent critique of the 2008 edition of the *Dartmouth Atlas* notes that Dartmouth methodology for
37 studying the relationship between utilization and outcomes for end-of-life care underestimates
38 potential treatment benefits by failing to account for variations in the severity and treatability of
39 illnesses in individual patients "at the time of patient evaluation." Dartmouth researchers
40 attempted to control for disease severity by retrospectively studying groups of people at fixed
41 intervals prior to death. According to the Dartmouth literature, the focus on patients who died
42 allowed the researchers to "be sure that patients were similarly ill," because the prognosis for all
43 the patients was death (Dartmouth Hospital-Specific Data FAQ). Gerald Neuberg, MD, of the
44 Columbia University College of Physicians and Surgeons, notes that retrospectively looking at
45 treatments patients received prior to death obscures important information about what benefits the
46 patients might have gained from the treatments in terms of quality of life in the final weeks.
47 According to Neuberg, "from the look-back perspective, care is viewed not as a means to improve
48 health, but as an accumulation of expenses that failed to prevent an inevitable death" (Neuberg,
49 2009).

1 *Unexplainable is Not Necessarily Unwarranted*

2
 3 In March 2009, the Council met with Richard Cooper, MD, and Christopher Hogan, PhD, to
 4 discuss their work to expand the available evidence on geographic variation. Dr. Cooper, of the
 5 University of Pennsylvania, has been an outspoken critic of Dartmouth’s research, particularly of
 6 the conclusion that unexplained variation is synonymous with unwarranted variation. Cooper is
 7 particularly interested in the “web of economic, demographic, and health spending patterns [that]
 8 independently and collectively unite quality, health care spending, and social structure” (Cooper,
 9 2008). Specifically, Cooper has emphasized the relationship between health care utilization and
 10 poverty, which itself correlates with a wide range of variables such as education levels, community
 11 resources, and employment status. According to Cooper, areas with a “higher social burden”
 12 experience more doctor visits, more hospital admissions and readmissions, and longer hospital
 13 stays in part because patients do not have access to the vast array of services and supports that help
 14 individuals achieve and maintain optimal health.

15
 16 There seems to be support among those in the research community that more studies should be
 17 undertaken to assess the impact of demographic and socioeconomic factors on health care spending
 18 and utilization. This is an area that is being targeted by policymakers interested in identifying
 19 explanations for some of the as yet “unexplained” variation in health care costs and utilization.
 20 The Council notes that smaller case studies of geographic variation uncover additional variables
 21 that are unlikely to be controlled in larger studies, but prove to have a significant explanatory effect
 22 on service use. For example, Hogan examined the six-to-one variation in Medicare oxygen
 23 spending per capita among the 10 states with the highest and lowest spending rates. He identified
 24 only a weak correlation ($R=0.16$) between state prevalence of chronic obstructive pulmonary
 25 disease (COPD), but a large correlation between a state’s altitude and oxygen use ($R=0.89$). States
 26 with the highest levels of oxygen spending were those with high mean elevation above sea level
 27 (specifically, Nevada, New Mexico, Utah, Colorado and Wyoming), while those with low oxygen
 28 spending were closer to sea level (Hawaii, Washington, DC, Minnesota, Rhode Island and North
 29 Dakota). Based on Hogan’s case study, the variation in state-level Medicare oxygen spending per
 30 capita can be almost entirely explained by health status (i.e., COPD prevalence) and elevation
 31 above sea level. If Hogan’s analysis had been based on a more limited set of variables, some may
 32 have concluded that the variation in oxygen usage was “unwarranted,” because an explanatory
 33 variable was not identified.

34
 35 *Medicare is Not Entirely Representative of Total Health Care Spending*

36
 37 Medicare is often used as a proxy for information about broader health care spending patterns,
 38 because data from the Medicare fee-for-service program provides detailed information about
 39 beneficiaries and the use and cost of services covered by Medicare. Comparable information is
 40 difficult to obtain for individuals with private insurance coverage. Yet, Medicare spending data is
 41 not necessarily representative of total health care spending. A paper by Andrew Rettenmaier and
 42 Thomas Saving explores the “multi-dimensional” nature of geographic variation, and demonstrates
 43 that the use of Medicare spending data as a proxy for health care utilization overall leads to an
 44 incomplete analysis of regional spending variations (Rettenmaier and Saving, 2009). Rettenmaier
 45 and Saving compare state-level rankings of health care spending using multiple metrics, and find
 46 the relative ranking of high- and low-spending states changes based on the metric used. For
 47 example, 2004 data show Louisiana and Maryland ranking highest in Medicare per enrollee
 48 spending, but 36th and 17th in overall per capita health care spending. They document similar
 49 “resorting” of state rankings when examining elements of Medicaid spending, and spending by the
 50 non-Medicare/Medicaid population.

1 Rettenmaier and Saving’s analysis of Medicaid spending vs. percentage of Medicaid enrollees
 2 sheds light on broader policy decisions that may affect health care spending. As shown in Figure 1,
 3 Alaska and New Jersey rank highest for Medicaid per enrollee spending, but 30th and 48th in the
 4 percent of the population enrolled in Medicaid. Conversely, California ranks last in Medicaid
 5 spending per enrollee, but 3rd in percent of population enrolled in its Medicaid program.

Figure 1 Medicaid Rankings

State	Rank of Medicaid spending per enrollee, capita spending	Rank of percent of population enrolled in Medicaid
Alaska	1	30
New Jersey	2	48
California	50	3

Source: Rettenmaier and Saving, 2009

6 The extreme variation in these rankings “indicates the interplay and tradeoffs states make in
 7 determining eligibility criteria and Medicaid benefit generosity.” It should be noted that
 8 Rettenmaier and Saving identify a positive relationship between the number of uninsured in a state
 9 and the level of Medicare spending, indicating that “Medicare cross-subsidizes the uninsured
 10 population.”

11
 12 Rettenmaier and Saving’s observations do not necessarily contradict the findings of Dartmouth
 13 researchers, but shed light on the complexity of geographic variation analysis, and point to the
 14 importance of using data beyond the Medicare program to help enhance knowledge and inform
 15 policy development. Although Dartmouth researchers have suggested that health care spending
 16 could be reduced by as much as 30 percent if utilization in high spending areas of the country
 17 mirrored utilization in lower spending areas, Rettenmaier and Saving suggest that adjusted
 18 potential savings across all populations is only about 5%. This lower estimate, compared with
 19 Dartmouth’s 30% estimate, incorporates spending patterns by non-Medicare populations, which are
 20 generally excluded from the Dartmouth analyses.

21
 22 *The Interplay of Supply and Demand*

23
 24 Finally, Dartmouth’s conclusions about the relationship between capacity and utilization (i.e., the
 25 overuse of supply-sensitive care) may be premature, and the research is insufficient to establish a
 26 causal relationship between levels of capacity and levels of utilization. Further study is needed
 27 about whether the supply of medical resources might itself be influenced by the demand for health
 28 care. For example, physicians might be drawn to areas with higher levels of illness, income, or
 29 preferences for treatments. When supply is affected in this manner, it is empirically difficult to
 30 determine whether utilization is higher because of supply or demand factors. Although the
 31 Dartmouth project controls for many demand factors, some may remain unmeasured, and the
 32 estimates of the extent to which capacity explains variation in use may be somewhat overstated.
 33 Dartmouth’s focus on supply factors diminishes the importance of potentially meaningful variables
 34 that may warrant further study.

1 DISCUSSION

2
3 The Dartmouth Atlas Project characterizes high-spending regions as producing “excess levels of
4 intervention,” and its literature claims that up to 30% of spending on health care is wasted. The
5 Council believes that these conclusions significantly overstate a legitimate concern that the health
6 care delivery system is not maximizing its opportunities for efficiency. Research into geographic
7 variation is a valuable tool to help physicians, policymakers, politicians, and other key stakeholders
8 improve their understanding of issues related to health care cost and quality in the United States,
9 and to identify appropriately targeted policy solutions that will help enhance health care delivery.

10
11 The Dartmouth Atlas and other research into geographic variation provide valuable descriptive
12 information about health care spending and utilization patterns across the United States. However,
13 data are insufficient to make reliable assumptions about why these variations exist, and what
14 policies should be applied to improve health care delivery overall. Although variation research has
15 controlled for many factors, it does a disservice to health system reform efforts to conclude that all
16 remaining variation is unjustified, and to assume that health care delivery patterns in low-spending
17 areas are preferable to delivery patterns in high-spending areas.

18
19 Additional research is necessary to determine what other factors affect local health care delivery,
20 and whether these factors lead to desirable variations. From a policy perspective, identifying these
21 factors can help determine if and where there may be opportunities to reduce variation and increase
22 efficiencies throughout the health care system. The reliance on Medicare data also limits the
23 generalizability of many conclusions based on current geographic variation research. The Council
24 believes that the creation of a national claims database that would include data from all public and
25 private health insurers could facilitate more comprehensive research into health care utilization
26 patterns across all segments of the population.

27
28 The preponderance of the evidence that variation is much less evident for “universally accepted”
29 treatment options suggests an opportunity to improve medicine’s knowledge about best practices
30 with regard to treatments and health care processes. The AMA continues to play a leadership role
31 in developing quality measures through the Physician Consortium for Performance Improvement,
32 and has strong policy supporting well designed clinical comparative effectiveness research efforts
33 (Policy H-460.909, AMA Policy Database), and enhancing efforts to generate and disseminate
34 information about comparative practice patterns among physicians (Policy D-390.961). As part of
35 its commitment to controlling health care costs and advancing health system reform efforts, the
36 AMA joined six other health care organizations in May 2009, in committing to help the
37 Administration reach its goal of reducing the annual health care spending growth rate. In June
38 2009, the AMA agreed to specifically focus on care utilization by leading efforts to improve care
39 transitions to avoid hospital readmissions and reduce unnecessary utilization of certain services or
40 procedures that showed high variation and high cost.

41
42 The AMA is committed to action to help achieve greater value from our nation’s health care
43 spending, and the Council recognizes that work by the Dartmouth Atlas Project and others studying
44 geographic variation has the potential to help bend the spending curve and inform important policy
45 decisions to advance health system reform efforts. However, the Council cautions that policies
46 based on narrowly defined research or simplified data analysis could jeopardize these same efforts.
47 The AMA must continue to emphasize the importance of gathering and disseminating evidence-
48 based clinical information that can be used by physicians to provide the right care at the right time.

1 RECOMMENDATIONS

2

3 The Council on Medical Service recommends that the following be adopted and that the remainder
4 of the report be filed:

5

- 6 1. That our American Medical Association encourage further study into the possible causes of
7 geographic variation in health care delivery and spending, with particular attention to risk
8 adjustment methodologies and the effects of demographic factors, differences in access to
9 care, medical liability concerns, and insurance coverage options on demand for and
10 delivery of health care services. (New HOD Policy)
- 11
- 12 2. That our AMA encourage the development of interoperable national claims databases in
13 order to facilitate research into health care utilization patterns across all segments of the
14 health care delivery system. (New HOD Policy)
- 15
- 16 3. That our AMA support efforts to reduce variation in health care utilization that are based
17 on ensuring appropriate levels of care are provided within the context of specific clinical
18 parameters, rather than solely on aggregated benchmarks. (New HOD Policy)

Fiscal Note: Staff cost estimated to be less than \$500 to implement.

References available from the AMA Division of Socioeconomic Policy Development.