



American Hospital
Association

REPORT OF THE TASK FORCE ON VARIATION IN HEALTH CARE SPENDING

December 2, 2010

EXECUTIVE SUMMARY

Variation in spending per Medicare beneficiary has long been documented. Researchers at Dartmouth have gone as far as to assert that their work on variation suggests that nearly 30 percent of health care spending could be unnecessary or wasteful. Not surprisingly, in the search to find ways to bend the cost curve, the Obama administration and Congress have seized on reducing variation as a key target. In the fall of 2009, the AHA Board of Trustees convened the Task Force on Variation in Health Care Spending to examine this issue.

The task force spent significant time educating itself on the current research and the many perspectives on the issue. It found that variation goes beyond just measures of spending and arises from many interrelated factors, some within and some beyond the control of the health care system. Not all variation is undesirable or inappropriate. Variation can be appropriate when it is due to the characteristics of the population served (*e.g.*, age or gender) or the varying circumstances of providers (*e.g.*, special missions, costs of doing business, rural/urban location). Other variation is inappropriate, such as when providers fail to adhere to established medical practice resulting in the over, under, or misuse of services. Variation also can be due to broader social issues, such as when a population has poor health status due to poverty or adverse living conditions. Distinguishing among the types of variation is critical to arriving at a reasonable set of recommendations for action and a fair set of policies for holding providers and other stakeholders accountable for their results.

Despite this complexity, the task force concluded that a significant portion of variation is under the control or influence of hospitals and other providers, and that the time for action is now. Many aspects of health care reform are pushing the field to address variation, and pressures will accelerate as the drive to bend the cost curve intensifies. Addressing variation is a key imperative to success in the current environment and not addressing it is a huge vulnerability for the future.

The task force urged the AHA to issue a bold call to action on the piece of variation that legitimately belongs to hospital organizations, while recognizing that other stakeholders must do the same. Hospitals, in conjunction with physicians, other clinicians, and other care partners, must be aggressive and start to reduce the variation that is within their control; collaborate with other parts of the health care system, insurers, and employers to address inappropriate variation across the care continuum; and provide leadership in bringing together other stakeholders to deal with broader societal issues that affect health behavior and health status. The role of the AHA is to work to ensure that hospitals have the appropriate data, tools, and information to be successful in these efforts; to advocate for well-structured policies to ensure accountability and reward success; and to continue to advocate for the removal of the existing barriers to clinical integration.

The overarching recommendations of the task force are as follows:

- Recommendation 1: Hospitals together with physician partners, with leadership and support from the AHA, must take aggressive action to reduce inappropriate variation within their own organizations and collaborate with physicians and other clinicians, other providers, insurers, and employers to address inappropriate variation across the care continuum.
- Recommendation 2: The AHA must work to ensure hospitals have access to the data, tools, and strategies they need to be successful in reducing inappropriate variation within their own organizations and in conjunction with care partners.
- Recommendation 3: The AHA and hospitals must advocate for policies that recognize and enable appropriate variation while fairly holding health care organizations and others accountable for reducing inappropriate variation that is within their control and adjusting for those factors that are not.
- Recommendation 4: The AHA and the hospital field must take a leadership role in efforts to more fully engage patients and the population at large in their health and health care.
- Recommendation 5: The AHA Board of Trustees must revisit the issue of Medicare geographic payment adjustments, an issue beyond the scope of this task force, particularly in light of the Institute of Medicine (IOM) study, “Geographic Adjustment Factors in Medicare Payment.”

The task force also endorses the AHA’s current advocacy efforts to remove the legal and regulatory barriers to clinical integration and reform the medical liability system.

INTRODUCTION

Variation in spending per Medicare beneficiary is long documented. It occurs across geographic areas, within geographic areas, and even within provider organizations. Much of our understanding of variation has come from the Dartmouth Atlas, which has found dramatic differences in spending and utilization across geographic areas and, more recently, across individual providers. Dartmouth researchers have gone as far as to assert that their work on variation suggests that nearly 30 percent of health care spending could be unnecessary or wasteful.¹ Not surprisingly, in the search to find ways to bend the cost curve, the administration and Congress have seized on reducing variation as a key target.

Despite 25 years of documentation that variation exists, solutions have been elusive. In fact, there is no broad agreement on the causes of variation, with researchers hotly debating which portion is attributable to broader social problems such as poverty and health behavior versus the portion for which the health care system can legitimately be held accountable. One of the key problems is the difficulty in identifying and quantifying the impact of the many complex and interrelated factors at play. Also, variation in Medicare spending is just one of many aspects of variation related to health and health care, with variation occurring across all payers and across many other dimensions of performance including quality, access, utilization and health behavior. Researchers and providers lack the comprehensive data necessary to understand the underlying issues at the level required to support action.

While progress has been made in quantifying the effect of factors such as Medicare payment policy, demographics, and health status, the most current research suggests that half or more of variation cannot be explained by measurable factors. How much of this is justified by unmeasured factors versus what represents unnecessary or wasteful care is unknown. Clearly, some variation is expected (*e.g.*, medical science is continually evolving) and some variation is appropriate (*e.g.*, one would expect higher spending levels if the area has an older population). At the same time, nearly any health care professional looking across the providers in their own organization would say that there are differences in practice patterns that cannot be justified by differences in patient needs and, therefore, represent inappropriate variation.

But even as this debate rages in research journals and major newspapers, Congress and the administration are moving rapidly to identify policy options to reduce variation. Some members of Congress have advocated rewarding hospitals and physicians in low-spending areas. Health care reform included a directive to add efficiency measures to the value-based purchasing system for hospitals and a temporary payment to reward hospitals in low-spending counties. As promised at the time of passage of the bill, Health and Human Services (HHS) Secretary Kathleen Sebelius also has held a variation summit, as well as commissioned two Institute of Medicine (IOM) studies to examine this issue and make recommendations.

¹ Fisher ES, (October 23, 2003). Medical Care—Is More Always Better? *New England Journal of Medicine*, Vol. 349, No. 17.

Even within the hospital field there is controversy about how to measure variation, how much of it is within the control of which stakeholder, and what should be done to address it. But one area of strong agreement is that variation represents a huge vulnerability that the hospital field must tackle now before others tackle it for us. Variation is a symptom of inconsistent care practices that put quality outcomes at risk. Additionally, the pressure to lower the deficit as currently projected is enormous, as is the desire to achieve the coverage expansions promised by health care reform without adding to the deficit.

At the same time, many aspects of health reform already are pushing the field to address variation. These include changes to payments that get at variation in process and outcomes (value-based purchasing, as well as penalties for readmissions and health care-acquired infections), cuts to payment that assume higher levels of productivity, and delivery system reforms such as bundling and accountable care organizations that will put hospitals more at risk for care provided across the continuum. The private sector is undertaking similar initiatives – in some cases moving more rapidly. These efforts are moving providers away from the current payment mechanisms that reward volume to those that reward the efficient, effective delivery of care. Hospitals that are not engaged already in significant efforts related to quality, efficiency and clinical integration will not be well-positioned as the reforms included in the *Patient Protection and Affordable Care Act* (ACA) begin to take effect and demands from private payers increase. Pressures are likely to accelerate as the drive to bend the cost curve intensifies.

The AHA Board of Trustees appointed the Task Force on Variation in Health Care Spending (see Appendix A for membership) in November 2009 to examine the issue and provide guidance from the membership. Under the leadership of its chair, Scott Malaney, president and CEO of Blanchard Valley Health Care System in Findlay, OH, the task force studied the research, talked to many experts, sought input from the Regional Policy Boards (RPB) and Governing Councils, and formulated this report and recommendations.

KEY LEARNINGS FROM THE EXPERTS

Early on, the task force identified as key goals educating itself and the field to provide a foundation for efforts to reduce variation. To accomplish this, the task force devoted significant portions of two meetings to presentations from a number of experts on variation, including government officials, academic researchers, practicing physician-researchers addressing variation in their own organizations, and a private payer (see Appendix B for the list of speakers).² The task force reviewed the work done as part of the hospital field's *Health for Life* initiative, including the Task Force on Payment Reform and the Task Force on Care Coordination. It also reviewed the principles developed by the Work Group on the Medicare Wage Index.

Efforts to more broadly educate the field included a session on variation in health care spending at the 2010 AHA Annual Membership Meeting that featured three of the speakers who earlier presented to the task force. Task force Chair Scott Malaney presented the work of the task force in

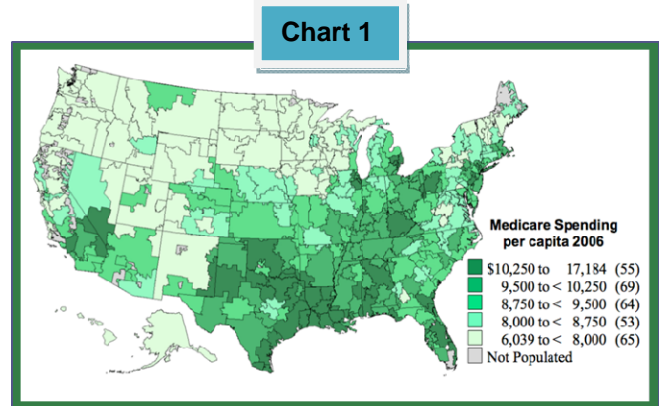
² The speaker presentations from the Educational Sessions on Variation in Health Care Spending can be found at www.aha.org/spendingvariation.

a *Town Hall Interactive* webcast held on October 19, 2010.³ The AHA also published a *TrendWatch* summarizing the research to date on variation in health care spending and commissioned two original research studies to assess the factors influencing variation.⁴ A listing of other research and materials reviewed by the task force can be found in Appendix C.

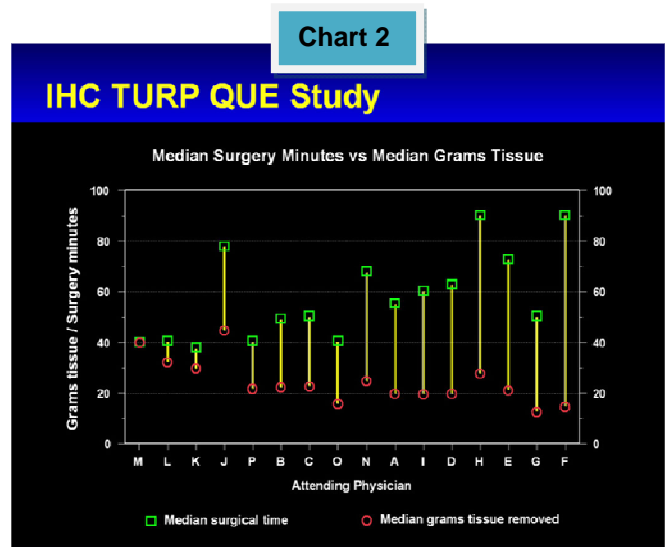
A number of central themes emerged from the educational phase of the task force’s work and provide an important foundation for its recommendations.

Variation exists at all levels of the health care system. Elliott Fisher, M.D., MPH and other researchers at the Dartmouth Institute have uncovered variation in Medicare spending per capita across and within states, as illustrated in Chart 1. Their work also has shown significant variation within communities and across similar organizations such as academic medical centers. Brent James, M.D., from Utah’s Intermountain Healthcare has been examining and working to reduce the variation among practitioners within his own organization. Chart 2 illustrates the variation in surgical technique among surgeons practicing in his system for transurethral resection of the prostate (TURP).

Variation exists across multiple performance dimensions. Spending is just one of the many dimensions of health system performance that varies. Stuart Guterman of The Commonwealth Fund presented its state report card, which documents the high level of variation in access, use of prevention and treatment, cost, equity and health behavior. Rear Admiral Penelope Slade-Sawyer from the Department of Health and Human Services shared data showing striking regional differences in health status and spending on public health that may impact care needs.



Variation occurs in both private-pay and Medicare populations. Allan Korn, M.D., of the Blue Cross/Blue Shield Association presented an analysis of a new national database of utilization that has found similar levels of variation in the private-pay population. At this point, more study is required to assess whether the patterns of variation are different.



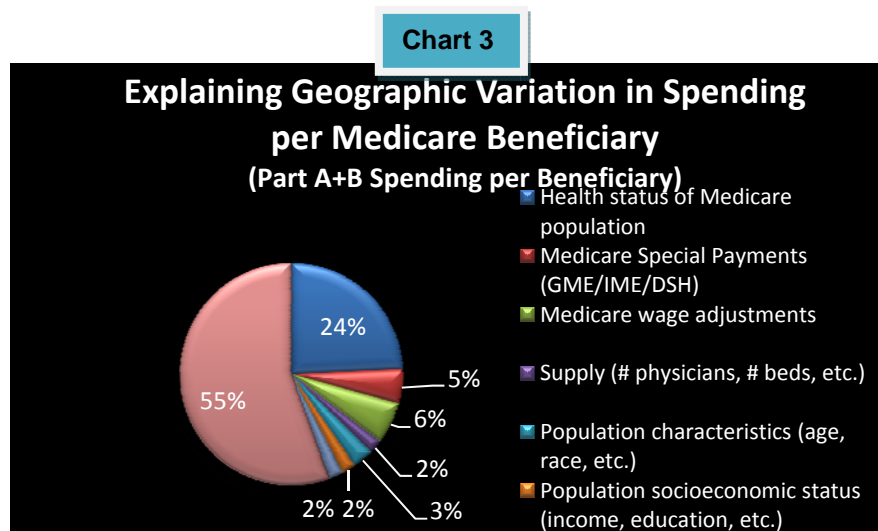
Hospitals are not the only source of variation in spending. The AHA commissioned a study to

³ Please go to www.aha.org/townhall to replay this webcast.

⁴ The *TrendWatch* can be found at <http://www.aha.org/aha/trendwatch/2009/twnov09geovariation.pdf>. *TrendWatch*, a series produced by the American Hospital Association, highlights important trends and policy issues in the hospital and health care field. Avalere Health supplies research and analytic support.

look at variation across service types and care settings. High spending in an area did not always mean high spending on hospital care. Often, levels of variation were higher in other settings or services such as home health, ambulatory surgery centers (ASC) or durable medical equipment (DME). However, because care provided in hospitals accounts for two-thirds of all Medicare Part A and Part B spending, variation in hospital care will be critical to reducing variation overall. But this can only be achieved in collaboration with physicians who direct much of the care provided in hospitals.

Many factors influence health care spending, some of which are beyond a provider’s control, while others are not. A regression analysis of Medicare spending per beneficiary commissioned by the AHA found that the largest contributor to variation in spending is health status, but other factors are significant as well. The picture is further complicated by interactions among the factors. For example, health behaviors and socioeconomic factors were found to be associated with health status. Once quantifiable factors are accounted for, about 55 percent of the variation remains unexplained. This portion of variation is likely due to differences in practice patterns, patient preferences, and other local factors. However, data to measure these differences are incomplete and imperfect. Sorting out the factors within and beyond a provider’s control in order to make appropriate risk adjustments makes the development of performance measures based on spending levels challenging. Chart 3 displays the results of the regression analysis.



Some degree of variation in medical practice will, and should, exist. Protocols don’t exist for every diagnosis. Patients tend to have multiple diagnoses that require tailoring those protocols that do exist. Innovation in care depends on testing new ways of caring for patients. As policies to reduce variation are implemented, outcomes must be tracked carefully to guard against unintended consequences.

Regional variation in service use is not the same as regional variation in spending. Mark Miller, Ph.D., from the Medicare Payment Advisory Commission (MedPAC) shared analysis of how the factors Medicare uses to adjust payment to account for wage differences and other special

circumstances contribute to variation in Medicare spending.⁵ MedPAC adjusted spending data for these factors to arrive at a measure that reflects service use. While this adjustment reduces the level of variation, significant variation remains, as shown in Chart 4.

Regions that have high levels of spending are not always the regions with high spending growth. Both Fisher and Miller cautioned that areas in the bottom quartile for spending can be in the top quartile for spending growth. Both are important to consider in addressing spending for the long term, especially in efforts to bend the cost curve.

Variation exists regardless of payment incentives, organizational structure, and other factors. Don Moran of the Moran Company discussed the importance of history and culture in influencing the current structure of each local health care system and observed, "...if you have seen one market, you have seen one market..." For example, Kaiser-Permanente has a unique history and culture that influences the Northern California health care delivery system.

Financial incentives matter. The work of Jean Mitchell, Ph.D., at Georgetown University highlights how changing financial incentives can influence provider behavior. For example, physicians order more services when they have an ownership interest in an entity that is going to provide those services. She cited a recent study that found a 15-fold increase in the rate of spinal fusion following the opening of physician-owned orthopedic hospitals. She also discussed some effects of capitated payment, which can result in the withholding of care, and salary models in which maintaining levels of productivity has been challenging for some.

Providers respond to data even without the use of financial incentives. John Birkmeyer, M.D., from the University of Michigan Health System presented information on a successful collaborative effort in Michigan to examine data on practice patterns and outcomes to determine and adopt best practices. Chart 5 shows how just sharing data with physicians had an immediate impact on practice patterns.

Dr. James from Intermountain Health Care in Utah also shared information on successful efforts to use data to understand variation and change behavior within his system.

Chart 4

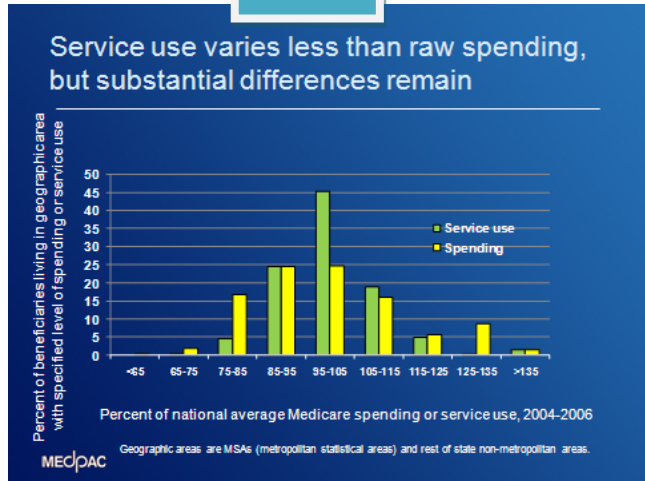
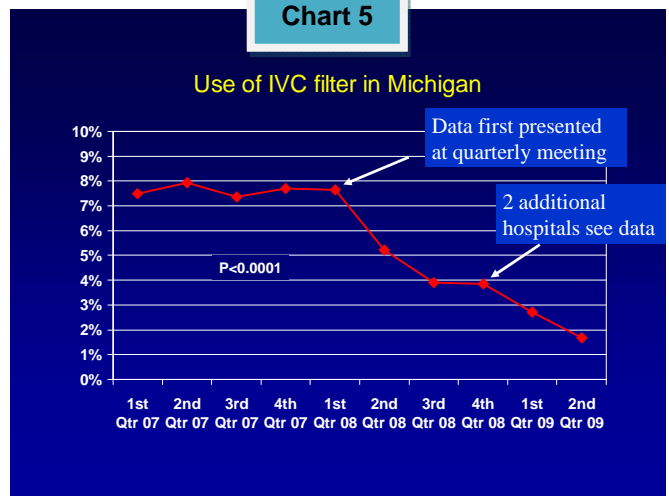


Chart 5



⁵ The Medicare Payment Advisory Commission (MedPAC) is an independent Congressional agency established by the Balanced Budget Act of 1997 (P.L. 105-33) to advise the U.S. Congress on issues affecting the Medicare program.

The link between quality and spending is disputed. One area of continued controversy is the link between quality of care and spending. Carolyn Clancy, M.D., from the Agency for Healthcare Research and Quality (AHRQ) showed how state spending levels and performance on AHRQ quality measures appear to have no relationship. On the other hand, J. Thomas Rosenthal, M.D., from the University of California at Los Angeles Medical Center presented the results of a study delving more deeply into the Dartmouth end-of-life research that found that, when patients with similar characteristics were followed forward, the organization with the highest level of spending had the lowest level of mortality. According to Dr. Rosenthal, Dartmouth end-of-life studies focused only on patients who died and, therefore, did not pick up these differences.

FINDINGS

Factors Influencing Variation

Using the learnings from the experts as a point of departure, the task force began to identify and examine the many interrelated factors that influence health care utilization and spending. With input from the AHA's Regional Policy Boards and Governing Councils, it identified nearly 30 factors that it believes have a significant impact on variation in spending (Table 1).

Factors split into those that represent broader societal factors and those that relate to the health care system. Social factors that contribute to variation include demographic characteristics such as a different age breakdown, racial make-up, or income profile. These characteristics interact and affect an individual's health behavior, health status, and care-seeking behaviors.

Other variation relates directly to the health care system—either to the structure and characteristics of the local health care market or the policy environment in which it operates. These factors all interact to affect provider behavior contributing to differences in quality, efficiency, access, and practice patterns.

These discussions led task force members to conclude that variation arises from many interrelating factors, some within and some beyond the control of the health care system. Not all variation is undesirable or inappropriate and distinguishing among the types of variation is critical to arriving at a reasonable set of recommendations for field action and a fair set of policies for holding providers and other stakeholders accountable for their results.

**Table 1:
Factors Influencing Variation**

Broader Societal Factors	Related to the Health Care System	
	Market/Provider Factors	Regulatory Environment
<ul style="list-style-type: none"> • Health status/disease prevalence • Health behavior • Income/poverty • Level of uninsurance • Urban/rural location • Unemployment • Age/sex • Race/ethnicity/linguistic diversity • Local culture/care seeking behaviors • Environmental factors (housing conditions, air quality, etc.) 	<ul style="list-style-type: none"> • Quality of care • Efficiency per unit of service • Practice patterns/propensity to treat • Access to care • Training of clinicians • Costs of doing business (cost of living, prevailing wage rates) • Penetration of health information technology • Prevalence of physician ownership of hospitals, ASCs, etc. • Mix of physicians (primary care vs. specialty) • Supply (physicians, beds, technology, etc.) • Age of plant • Predominant physician payment mechanism (salary vs. FFS) • Level of health system integration • Insurance market structure (degree of competition or consolidation) • Payer mix • Managed care penetration • Level of unionization 	<ul style="list-style-type: none"> • Medicare payment policies (wage index, IME, DSH, CAH program, etc.)⁶ • Medical liability environment • Scope of practice regulations • Other state and federal regulations • CON regulations • Medicaid/CHIP policies (payment rates, eligibility, etc.) • Insurance regulatory environment

Framework for Classifying Types of Variation

Chart 6 presents a framework for thinking about the types of variation, beginning with whether the variation is due to actions of the health care system or broader societal issues, whether or not it is appropriate, whether or not science suggests a best approach, and then whether it is in the control of hospitals or other parts of the care continuum. Different paths through this hierarchy suggest different approaches for action.

⁶ Indirect Medical Education (IME) is an adjustment made to Medicare payments under the inpatient prospective payment system (IPPS) to help offset the additional Medicare patient care costs that teaching hospitals incur. Disproportionate share (DSH) is an adjustment to Medicare IPPS payments for the added costs of serving low income populations. A Critical Access Hospital (CAH) is a hospital that is certified to receive cost-based reimbursement from Medicare based on meeting certain size and location criteria.

Societal factors beyond the direct control of the health care system are important drivers of variation. Studies have shown a strong link between poor health status and poverty, health behavior and environmental factors, such as the availability of healthy school lunches or sidewalks. Broader social issues that lead to variation are illustrated in a recent study that found that patients who were uninsured prior to entering the Medicare program have higher initial costs than those who had private insurance. **The task force found that this category highlights the important role that other stakeholder groups such as policymakers, schools, and employers must play in addressing variation and the need to make adjustments for the socioeconomic determinants of health (e.g., poverty).**

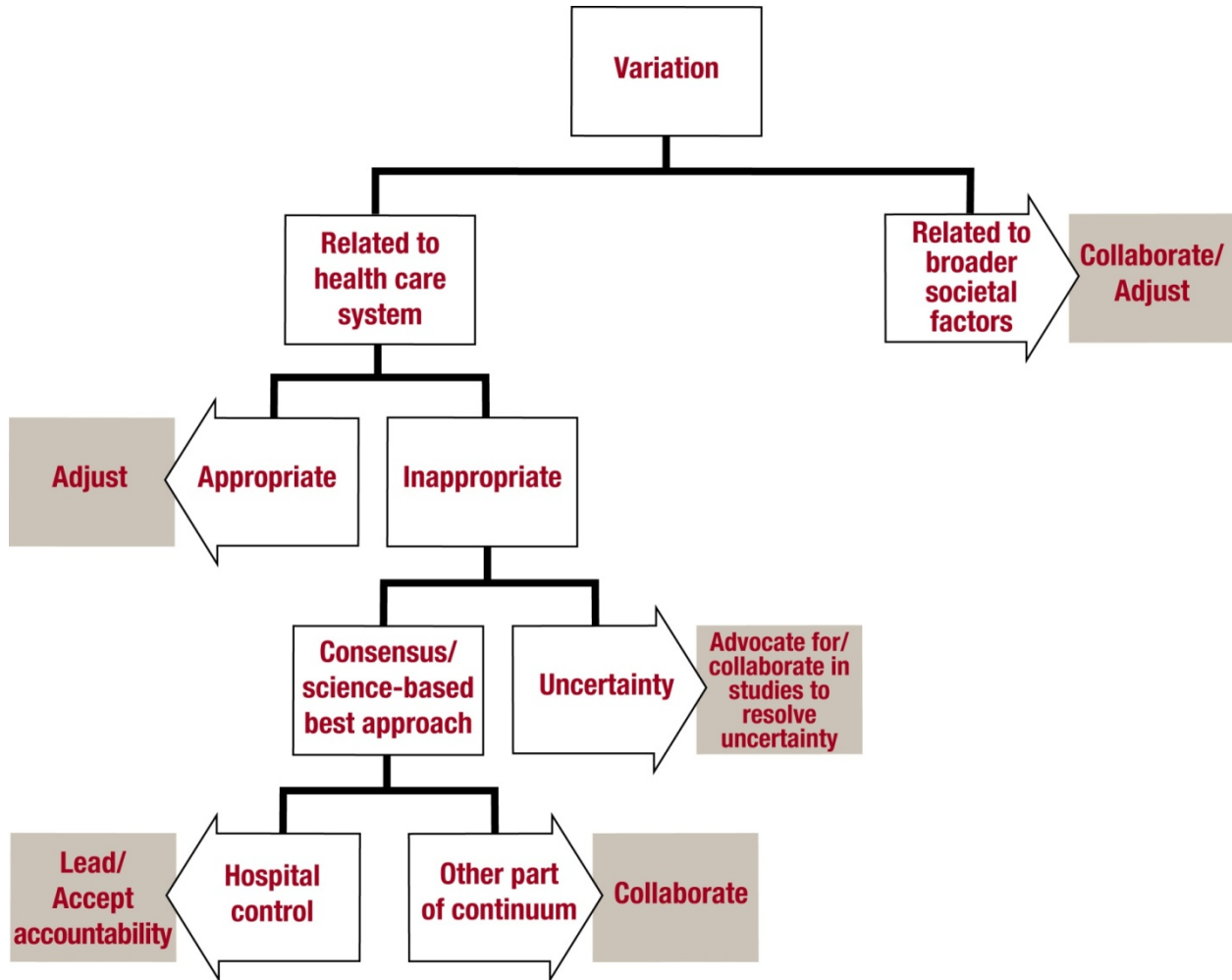
Variation can be appropriate and expected when it is due to the varying circumstances of providers or the different needs and characteristics of patient populations. For example, some organizations have teaching or research missions that result in higher costs, while small, rural hospitals may have added costs due to low volumes or the need to provide outreach to patients in remote areas. Other organizations serve patient populations with different demographic profiles. For example, one task force member described the added costs of needing to be able to provide translation services for 93 different languages because of the high level of ethnic diversity of the patient population served by his organization. Another talked about how sun-belt states attract retirees. In these states, a portion of the difference in use rates may be due to the higher average age of the population because people use more health care resources as they age. **The task force concluded that some (but not all) appropriate variation can be quantified statistically and must be adjusted for when setting performance expectations.**

Unexplained variation does not equate to *inappropriate* variation. Unexplained variation is the portion that cannot be *statistically* explained using quantifiable factors. What portion of unexplained variation is appropriate or inappropriate is unknown.

While the task force clearly recognized the need to adjust for providers' differing circumstances (costs of doing business, teaching and research mission, etc.), it spent a great deal of time discussing whether current Medicare payment policy achieves this goal and how payment policies play into spending variation. **Many members of the task force expressed strong concerns about the accuracy and fairness of the wage index in particular.** MedPAC and other research shows that the wage index – as well as those payments that recognize other special circumstances or roles such as indirect medical education (IME), disproportionate share hospital (DSH), and various special programs for rural hospitals—influence regional Medicare spending levels. MedPAC suggested that, in looking at spending, care must be taken to disaggregate service use from payment. The task force agreed with this assessment and acknowledged that each is a large and complex task. **While these Medicare payment adjustments deserve consideration in their own right, the task force focused its efforts, as directed, on the broader issue of service use. However, task force members felt strongly that the AHA Board of Trustees needs to revisit the issue of geographic payment adjustments, particularly in light of the Institute of Medicine study, “Geographic Adjustment Factors in Medicare Payment.”**

Within the health care system, inappropriate variation occurs both when organizations or individual practitioners fail to apply the medical science that exists or when neither science nor expert opinion

Chart 6: Types of Variation



has led to agreement on the most appropriate approach to care. Despite extraordinary advances in medicine, so much remains unknown and, thus, it is unrealistic to expect zero variation in health care. **Variation is expected and necessary when there is experimentation, hopefully leading to future consensus and then standardization. Hospitals and other health care providers must support this process.**

But even when science suggests a best approach, task force members wrestled with the degree of ownership hospitals should accept for inappropriate variation driven by other parts of the delivery system. They noted that what happens in the patient’s home before he or she seeks treatment and what happens in physicians’ offices before a patient interacts with the hospital are key determinants of variation in hospital costs and outcomes. For example, differences among physicians and other clinicians in caring for diabetics can result in some patients arriving at the hospital to undergo a surgical procedure with their blood glucose level in control, while others do not. The patients with out-of-control blood glucose are likely to experience longer lengths of stay, more complications, and less desirable outcomes. What happens after hospitalization in physician offices, post-acute

care, and other settings is equally important because poor care transitions or inadequate follow-up can result in emergency department visits, readmissions, and other adverse outcomes. Availability of post-acute care resources in a community can be an issue in assuring the most effective follow-up care is provided. **The hospital's ability to influence the behavior of physicians and other clinicians, particularly outside the hospital inpatient or outpatient setting, is a significant concern. Despite differences in the degree to which task force members thought hospitals should be held *accountable* for the behavior of patients, physicians, other clinicians, and other providers, they strongly agreed that *engagement* with these groups would be critical to ensuring care processes conform to evidence-based practice.**

The task force members acknowledged that significant variation exists that is squarely in the control of hospitals. This includes variation in care practices within hospital settings or other care sites in hospital systems that leads to variation in quality and efficiency. **Task force members felt strongly that hospitals must be held accountable for eliminating variation within their control when medical science suggests a best approach. Even when medical science is lacking, hospitals should work with clinicians to develop a data-based consensus approach to care within their organizations.**

The task force members recognized that hospitals and hospital systems are at different points along the evolutionary path towards greater integration across the care continuum. The extent to which the “hospital” can manage variation across the continuum will vary depending on the structure of the specific organization and will change over time. Hospital organizations that have stronger ownership, contractual or other collaborative relationships with physicians, post-acute care, and other providers may be able to accept more accountability at the outset than those that do not. **The task force members concluded that policies must accommodate these differences, while at the same time providing all organizations with the means and the incentives to move forward.**

One challenge in holding providers or other stakeholders accountable for variation is the current inability to fully quantify the effects of the various factors. Current research can account for just under half of the *geographic* variation in Medicare spending per beneficiary using quantifiable factors such as differences in health status, race/ethnicity, demographic factors (age/sex/income), urban versus rural location, and differences in Medicare payment rates. Many factors that are thought to influence spending variation at the *geographic* level have yet to be quantified, such as practice patterns, the structure of the market and local health care systems, and state regulatory factors. However, factors that cannot be quantified at a *geographic* level may be able to be measured at the *provider* level. For example, adherence to a specific protocol to prevent central line-associated bloodstream infections has been shown to reduce costs at the provider level, but measuring the effect of this practice pattern at the geographic level is difficult because of the many confounding factors that influence overall spending. The task force recognized that the lens through which one examines variation has significant implications for how one measures and addresses it. **Task force members concluded that, while the large amount of “unquantifiable” variation at the geographic level presents a strong argument for extreme caution in developing geographic measures of spending, it is not an excuse for inaction at the provider level. Furthermore, the task force indicated that the field should support research to continue to shrink that portion of variation that is unexplained.**

Challenges in Addressing Variation

The task force members noted a number of barriers to addressing variation both within their organizations and across the continuum, including:

- Data on what happens in physician offices and other care settings often are not readily available to hospitals, making it nearly impossible to identify and address variation across the continuum.
- Many gray areas of medicine still exist, and funding has been insufficient to conduct wide-scale comparative effectiveness research.
- Dissemination of best practices lags behind their development. The hospital field needs to improve its ability to replicate success.
- Widespread adoption of electronic health records and decision-support tools is lacking.
- Legal and regulatory barriers exist to clinical integration. These are more fully described in a recent *TrendWatch*, “Clinical Integration—The Key to Real Reform.”⁷
- Clinical training programs introduce variation by training clinicians to treat the same conditions in different ways.
- The medical liability environment continues to encourage defensive medicine. A recent survey published in the June 28, 2010 *Archives of Internal Medicine* found that 91 percent of physicians believe they order more tests and procedures than needed to protect themselves from lawsuits.

Focus and Approach

The task force reached out to the AHA’s Regional Policy Boards and Governing Councils to help focus its efforts on those factors that were thought to be the most important drivers of variation and to get input on the best approach for moving forward. The task force conducted an exercise where Regional Policy Board and Governing Council participants were asked to rate each factor by its importance and the degree to which hospitals should be held accountable for the resulting variation and then to provide input on the approach to addressing it. These discussions helped the task force refine the framework, prioritize the factors, and inform the development of recommendations. Table 2 shows a prioritization of factors by recommended approach.

⁷ See: <http://www.aha.org/aha/trendwatch/2010/10feb-clinicinteg.pdf>.

**Table 2:
Priority Factors by Approach**

Accept Accountability	Advocate/Collaborate	Adjust
<ul style="list-style-type: none"> • Quality of care • Efficiency per unit of service • Practice patterns/propensity to treat (within the hospital setting) • Penetration of health information technology 	<ul style="list-style-type: none"> • Practice patterns/propensity to treat (broader care continuum) • Health behavior • Health status/disease prevalence • Training of clinicians • Prevalence of physician ownership of hospitals, ASCs, etc. • Medical liability environment • Other state and federal regulations 	<ul style="list-style-type: none"> • Race/ethnicity/age/sex • Income/poverty • Urban/rural location • Unemployment • Health status/disease prevalence • Cost of doing business • Medicare payment policies (wage index, IIME, DSH, CAH program, etc.)

RECOMMENDATIONS

The task force urged the AHA to issue a bold call to action on the piece of variation that legitimately belongs to hospital organizations, while recognizing that other stakeholders must do the same. Hospitals must be aggressive and start to reduce the variation that is within their control; collaborate with other parts of the health care system, insurers, and employers to address inappropriate variation across the care continuum; and provide leadership in bringing together other stakeholders to deal with broader societal issues that affect health behavior and health status. The AHA’s role is to work to ensure that hospitals have the appropriate data, tools, and information to be successful in these efforts; to advocate for well-structured policies that ensure accountability and reward success; and to continue to advocate for the removal of the existing barriers to clinical integration.

The recommendations of the task force fell into five broad areas:

Recommendation 1: Hospitals together with physician partners, with leadership and support from the AHA, must take aggressive action to reduce inappropriate variation within their own organizations and collaborate with physicians and other clinicians,⁸ other providers, insurers, and employers to address inappropriate variation across the care continuum.

Recommendation 2: The AHA must work to ensure hospitals have access to the data, tools and strategies they need to be successful in reducing inappropriate variation within their own organizations and in conjunction with care partners.

Recommendation 3: The AHA and hospitals must advocate for policies that recognize and enable appropriate variation while fairly holding health care organizations and

⁸ Includes physician assistants and advanced practice nurses.

others accountable for reducing inappropriate variation that is within their control and adjusting for those factors that are not.

Recommendation 4: The AHA and the hospital field must take a leadership role in efforts to more fully engage patients and the population at large in their health and health care.

Recommendation 5: The AHA Board of Trustees must revisit the issue of Medicare geographic payment adjustments, an issue beyond the scope of this task force, particularly in light of the Institute of Medicine study, “Geographic Adjustment Factors in Medicare Payment.”

The task force acknowledged health information technology (HIT) as a critical enabler to move the field towards more consistent care practices, greater efficiency, and improved quality. The task force applauded Congress and the administration for allocating stimulus funds to support HIT investment and supported AHA’s ongoing advocacy efforts to ensure that the meaningful use and certification standards are within reach for the majority of hospitals and physicians.⁹

The task force also endorses the AHA’s current advocacy efforts to remove the legal and regulatory barriers to clinical integration and reform the medical liability system. The AHA positions on these issues can be found in Appendices D and E respectively.

Below we discuss each recommendation in detail.

Recommendation 1: Hospitals together with physician partners, with leadership and support from the AHA, must take aggressive action to reduce inappropriate variation within their own organizations and collaborate with physicians and other clinicians, other providers, insurers and employers to address inappropriate variation across the care continuum. The task force was adamant in its conclusion that the time for action is now. Many aspects of health care reform are pushing the field to address variation and pressures are only likely to accelerate as the drive to “bend the cost curve” intensifies. Addressing variation is a key imperative to be successful in the current environment; not addressing it is a huge vulnerability for the future.

1A The AHA and the hospital field as a whole must issue a call to action for hospitals to take a leadership role in addressing variation. As part of the effort to gain field-wide support for action, the AHA must continue efforts to educate the field and other stakeholders on the sources of variation, the strong case for immediate action to address it, and successful strategies for reducing inappropriate variation as they emerge. The AHA should widely disseminate this report to the field, as well as the research that informed the report.

The AHA also must communicate the lessons and recommendations from the work of the task force to policymakers, national physician organizations, and other groups working to understand the issue, such as the Institute of Medicine. The AHA must ensure that the efforts

⁹ More details on AHA’s advocacy efforts related to HIT can be found at: http://www.aha.org/aha_app/issues/HIT/index.jsp

of the field in taking on this issue—including the many initiatives that already are underway in hospital organizations across the country—are made more widely known to demonstrate field action to others and to encourage field-wide replication of successful efforts.

- 1B Hospitals together with physician partners must work to reduce inappropriate variation within their own organizations.** When there is clear evidence of the appropriate clinical path, hospitals must work to ensure care delivery meets this standard. When there is less evidence or the evidence is equivocal, the organization should collaborate with physicians, post-acute care providers, and others to agree on a local standard of practice. Where medical science is emerging, hospitals should strive to ensure their organizations and care partners keep abreast of new developments and where possible contribute data to help to resolve uncertainties. Addressing variation in utilization and outcomes should assume an elevated role on the agendas of the board, senior leadership, and physician peer review committees of health care organizations.

However, hospitals recognize they cannot make these changes on their own. Physicians, other clinicians and other care partners have an essential role.

- 1C Hospitals together with physician partners must partner with other clinicians, other providers, and payers to jointly reduce variation in medical practice both within and outside the hospital setting.** Reducing variation will involve ensuring that care within each setting meets appropriate clinical standards, as well as addressing care transitions from primary and specialty care to inpatient and outpatient hospital care to post-acute care. Payers can provide data to allow a better understanding of care processes for defined populations across the continuum of care. These partnerships will lead to a better ability to examine variation from a systems perspective and more standardization of practice across the care continuum. Examples of these types of initiatives are part of recommendation 2A.

Recommendation 2: The AHA must work to ensure hospitals have access to the data, tools, and strategies they need to be successful in reducing inappropriate variation within their own organizations and in conjunction with care partners. Information on model efforts to address variation; including best-practice tools, techniques, guidelines, and protocols; must be widely disseminated; data that allow providers to better understand their own and their care partners' performance must be available; and research must be funded to close the many gaps in medical science that contribute to variation in practice.

- 2A Expand the AHA's *Hospitals in Pursuit of Excellence* (HPOE) effort to include identifying and facilitating the replication of model initiatives to identify and reduce inappropriate variation across the care continuum.** The hospital field is engaged in many initiatives that improve quality and efficiency, but limited progress has been achieved in replicating successes nationwide. HPOE is working to broadly disseminate best practices and support organizations in learning from others, but efforts must be expanded.

Systems engineering processes that have become common within hospital settings, such as LEAN and Six Sigma, can be applied more broadly across the care continuum to identify and reduce inappropriate variation. HPOE should continue to build upon the examples that have

emerged as part of hospitals' efforts to reduce readmissions.¹⁰ The Joint Commission Center for Transforming Healthcare also offers a number of examples of using a systematic approach to analyze specific breakdowns in care, discover their underlying causes, and develop targeted solutions that can be replicated across organizations nationwide.¹¹ Many state hospital associations are engaged in efforts to support performance improvement that could be more broadly replicated. An example of this type of initiative is the Comprehensive Unit-based Safety Program (CUSP), which is addressing health care-acquired infections by using standardized practices and tools, providing a template for changing culture at the unit level, and employing robust measures to track performance.¹² This effort started as a project of the Michigan Hospital Association's Keystone Center for Patient Safety and Quality and, in partnership with AHA's Health Research & Educational Trust and with grant funding from AHRQ, has now expanded to more than 30 states.

HPOE also should expand its work to identify and disseminate best practices through collaborative activities involving providers, employers, insurers and/or other stakeholders. A model for this type of initiative is the collaborative quality initiative sponsored by Blue Cross Blue Shield of Michigan. This program involves consortia of providers using comparative performance reports to identify processes of care that are associated with optimal outcomes and using this information to guide system improvements. Individual provider organizations also offer excellent models for identifying and addressing areas of clinical variation including Kaiser Permanente, Geisinger Health System, and Intermountain Healthcare.

2B The AHA and hospitals must advocate for the development of datasets that allow providers to understand the full picture of care delivery. Data will be essential in illuminating the nature, reasons for, and extent of variation and in tracking what types of interventions are effective in achieving predictable, superior results. Unfortunately, most providers only have a window into their part of the patient's episode of care. This lack of data on care processes across the care continuum is a significant and ongoing barrier to addressing variation.

The *Patient Protection and Affordable Care Act* (ACA) directs the Secretary of Health and Human Services to make Medicare claims data available by January 1, 2012. The AHA must advocate that these data be made available in as close to real time as possible. Data must be made available across multiple years and allow various groupings (by patient, by episode, by provider) so that organizations can identify and address variations in care practices within their own organizations, assess the performance of their care partners across the continuum, and compare their performance to other organizations. Tools need to be developed to help providers access and utilize these data.

The AHA must advocate for AHRQ to expand the Health Care Cost and Utilization Project (HCUP) to collect comparable claims data from all types of payers on services provided across

¹⁰ See <http://www.hret.org/care/projects/guide-to-reduce-readmissions.shtml> for specific examples.

¹¹ See <http://www.centerfortransforminghealthcare.org/about/about.aspx> for additional information.

the care continuum in all states. The lack of data for providers to examine the care delivered to their patients across the continuum is one of the most significant barriers to addressing variation. Claims data should be combined with other data on the characteristics and health status of populations and made directly accessible to providers and researchers. The AHA should advocate for continued funding for AHRQ data initiatives through the appropriations process and provide other support to these efforts as a member of the HCUP partnership.

The Office of the National Coordinator for Health Information Technology (ONC) must be directed to assist providers in implementing health information exchange such that they have access to care data for their patients across the continuum. ONC should disseminate best practices for information exchange among coalitions of insurers, providers, state health agencies, or others who might provide timely and important information. To facilitate this process, the AHA should continue to advocate that HHS move forward with a unique patient identifier with appropriate incentives for patients to “opt in” to its use.

2C The AHA must advocate for a concerted national effort to develop and disseminate best practices to help hospitals, physicians and other clinicians, and other providers effectively and efficiently identify and address sources of inappropriate variation.

Additional federal dollars should be invested in developing and disseminating practice standards, guidelines, and comparative effectiveness research (including cost) to help providers identify and eliminate overuse and underuse. While variation in practice patterns has long been documented, limited information has been available to help providers determine the right course of care for a given patient. Without this information, incentives that potentially encourage less care could have unintended consequences.

The AHA must advocate for money to be allocated to support National Institutes of Health and professional society work in this area and to AHRQ to disseminate best practice approaches to reducing variation.

The AHA must advocate for a significant national investment in developing methods to quickly and effectively translate standards and guidelines and changes as they emerge into the decision support tools embedded in the electronic health record (EHR). This effort should be a public/private collaborative involving the National Institutes of Health, AHRQ, and the provider community, with input from HIT vendors. The goal is to create standards and tools to enable nationally produced research on evidence-based practice to be quickly, easily, and cheaply accessed by providers and incorporated into the decision support modules of the various EHRs they use, regardless of vendor.

Clinical training programs are known to be a source of variation in practice patterns. Not only should there be increased standardization across training programs based on the current evidence, but, since medical practice is continually evolving, clinical training programs must incorporate robust process improvement techniques to give providers the tools they need to address the issue of variation in clinical practice as their careers progress. Providers must be trained to understand the factors driving variation and how to identify its sources, and they must be equipped with the tools to achieve better, more predictable results. Continuing education will be an important component of this effort.

Recommendation 3: The AHA and hospitals must advocate for policies that recognize and enable appropriate variation while fairly holding health care organizations and others accountable for reducing inappropriate variation that is within their control and adjusting for those factors that are not. Elements of effective policies include performance measures to assess whether providers are adhering to the best medical science available and incentives to reward high and/or improved performance.

3A The AHA must continue to work with other stakeholder groups (e.g., the National Quality Forum) to develop a single national set of performance, including efficiency, measures that fairly distinguish between appropriate and inappropriate variation in practice. Measures should be able to differentiate across providers or provider systems and zero in on the underlying sources of variation in terms of service and provider types. Measures should be refined enough to ensure good performers in high-spending areas are not penalized and that poor performers in low-spending areas are not rewarded. The data used to build this national measure set should be standardized, and publicly available, and methodologies should be transparent and replicable.

Measures used to assess performance should be adjusted for demographic factors (race/ethnicity, income, employment status, age, and sex); health status; costs of doing business; special missions such as care for indigent populations, teaching or research; and location (rural/urban status). Research on the socioeconomic determinants of health must be more fully developed to ensure adjustments adequately account for these factors.

3B The AHA must advocate for appropriate and aligned incentives within new payment methodologies that reward efficient and effective care. Several provisions in the ACA have the potential to create a payment environment that rewards providers for delivering efficient and effective patient care. These include: accountable care organizations (ACOs) with shared savings or partial capitation, bundling, value-based purchasing, and medical homes. Private payers and providers across the country also are developing various new payment models. These models should be tested to determine if their promise for improving quality and reducing cost and variation can be realized. The Center for Medicare and Medicaid Innovation also provides opportunities for experimentation.

The AHA must evaluate and influence the structure of these efforts to ensure they are flexible enough to encourage innovation and allow multiple types and sizes of providers to participate. Policies should provide a transition period to avoid sudden changes in payment that could destabilize individual providers or systems. Initial savings should be reinvested in infrastructure or capacity to change how care is delivered. For example, savings could be applied to necessary enhancements to information systems or preventive or other services for which compensation is not currently received (e.g., physician e-mail consults, nurse home visits to support patient recovery from hospitalization). As time goes on, a larger portion should go to reducing overall health care spending.

Payment approaches must establish accountabilities for all providers—physicians and other clinicians, hospitals, post-acute care providers, and others—for the quality and outcomes of the

care provided, the coordination of care across different settings, and the efficiency with which that care is delivered.

Policies should recognize and reward high-performing providers. Many hospitals have made efforts to reduce variation. Performance benchmarks should be set to differentiate those hospitals that already have achieved significant reductions in variation from those that are just beginning the process.

The variation task force also reviewed the work of the Task Force on Payment Reform and expressed broad support for its findings. Additional criteria for evaluating payment reform efforts from its recommendations also endorsed by the variation task force include ensuring that payment approaches:

- are scalable and can be applied to different types of institutions, markets, and patient populations;
- are transparent;
- create a sustainable model for efficient providers including support of special missions and community benefit;
- allow different pathways for organizations that are on different points of the evolutionary path toward clinical integration; and
- recognize the significant costs of creating and maintaining the infrastructure required to support clinical integration.

Recommendation 4: The AHA and the hospital field must take a leadership role in efforts to more fully engage patients and the population at large in their health and health care.

Encouraging individuals to exercise personal responsibility in how they care for themselves and how they utilize services is an important part of improving health status and ensuring the most efficient use of resources. Multi-stakeholder involvement will be critical to achieving progress in this area.

4A Hospitals should promote the use of tools such as shared decision-making models and advance directives to help patients make informed choices about the course of care.

Variation in the use of medical resources often can be linked to services where multiple valid alternative treatment protocols are available. These decisions often are made by medical professionals without the patient's awareness that options exist. This is particularly true for end-of-life care, where, if the patient's wishes were known in advance, much of the spending for care inconsistent with patient wishes could be avoided.

4B The AHA and hospital members should take a leadership role in promoting national and local initiatives to encourage healthy behaviors. Health status and health behaviors are major drivers of variation in health care spending with rates of obesity, diabetes, heart disease, and other chronic illnesses differing dramatically by region. Hospitals as employers should implement work place wellness programs and use these programs as models to encourage other employers to follow suit. Hospitals also should engage with local officials, the public

health community, schools, and other employers to promote joint efforts to improve the health of their communities. The AHA should support these efforts by identifying and disseminating model workplace and community wellness initiatives.

4C The AHA should advocate for benefit designs that support early prevention and wellness.

The ACA requires that group health plans and private health insurers offering group health plans or individual health insurance cover certain preventive services with no copay or deductible. Medicare already has moved in this direction. Other benefit designs would provide enrollees/beneficiaries with positive incentives to participate in wellness activities and receive appropriate preventive care or charge premium differentials to enrollees who practice poor health behaviors.

Recommendation 5: The AHA Board of Trustees must revisit the issue of Medicare geographic payment adjustments, an issue beyond the scope of this task force, particularly in light of the Institute of Medicine study, “Geographic Adjustment Factors in Medicare Payment.” Variation in health and health care goes well beyond the issue of Medicare spending per beneficiary with variation occurring across all payers and across many performance dimensions including quality, access, utilization, and health behavior, among others. While differences in the factors that Medicare uses to adjust payment (*e.g.*, the wage index, IME, DSH, and special programs for rural hospitals) contribute to spending variation—in some localities more than others—this issue represents a specific slice of a much broader issue. Although many members of the task force expressed strong concerns about the accuracy and fairness of the wage index in particular, this task force focused its efforts, as directed, on broader issues. However, the task force recommends that the board revisit Medicare geographic payment adjustments as the IOM begins its work.

CONCLUSION

After many years of research and debate, now is the time to take action to reduce variation. The task force recognizes that this will not be easy, but it needs to be done. Bending the health care cost curve is seen by many as an imperative to control the deficit. At the same time, many aspects of the health reform law hold the promise of providing the incentives, data, and tools needed to support providers in efforts to reduce variation. In fact, hospitals that are not already engaged in significant efforts related to quality, efficiency, and clinical integration will not be well-positioned for success in the emerging environment. Taking leadership to reduce variation is to the benefit of not only providers but also payers and patients as we move toward a health care system that provides health care coverage for all.



Appendix A

AHA Task Force on Variation in Health Care Spending

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Appendix C

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