EXECUTIVE SUMMARY

Despite a recent slowdown in growth, US health care spending continues to rise faster than the overall economy, wages, and inflation. In 2005, National Health Expenditures (NHE) reached almost $2 trillion, representing $6,697 per person or 16% of gross domestic product. As rising health care costs drive up health insurance premiums and the number of the uninsured, there has been mounting public pressure for action to contain health care costs. In this report, the Council on Medical Service identifies strategies to contain health care costs and achieve greater value for health spending, paying particular attention to the role that physicians play in addressing health care costs.

It is critical to recognize that the ultimate public policy goal is not cost-reduction *per se*, but achieving better value for health care spending. Value can be thought of as the best balance between benefits and costs, and better value as improved clinical outcomes, quality, and/or patient satisfaction per dollar spent. The goal is not necessarily to reduce utilization but to “rightsize” use of services in accordance with their relative costs and benefits. The likely, but not guaranteed, net result would be lower per capita spending, with slower (or negative) cost growth over time. Accordingly, policymakers should not be deterred from simultaneously addressing the issues of rising costs, quality improvement, the uninsured, and health disparities, particularly given that solving these problems often go hand-in-hand.

Physicians play a central role in efforts to contain costs and improve value, both because of the impact of their behavior on costs and outcomes, and because their involvement is essential to the development of successful initiatives. While physicians play a central role, confronting endemic problems like obesity, tobacco use, and violence will require coalitions of stakeholders from within and outside the health care system, as well as major societal change.

Together, the body of clinical and cost evidence on the US health care system points to significant opportunities to reduce health care spending and improve value. Rising health care costs have been fueled by increased prevalence of preventable chronic disease, clinical risk factors, and unhealthy behaviors. There are also major inefficiencies in health care system, including overuse and underuse of services, and excessive non-clinical costs.

Based on analysis of this body of evidence, the Council proposes the following four broad strategies to manage costs and improve value:

- Reduce the burden of preventable disease;
- Make health care delivery more efficient;
- Reduce non-clinical health system costs that do not contribute to patient care; and
- Promote “value-based decision-making” at all levels.

From these broad strategies follow a number of specific, cross-cutting, synergistic policy interventions. The most promising interventions identified by the Council include promotion of patient lifestyle counseling, comparative cost-effectiveness research, continued development of health information technology, use of clinical performance measures that promote efficient use of services, targeted insurance benefit design, and investigation of opportunities to reduce non-clinical activities that do not add value to patient care.
Despite a recent slowdown in growth, US health care spending continues to rise faster than the overall economy, wages, and inflation. In 2005, National Health Expenditures (NHE) reached almost $2 trillion, representing $6,697 per person or 16% of gross domestic product (Catlin et al., *Health Affairs*, January 2007). As rising health care costs drive up health insurance premiums and the number of uninsured, there has been mounting public pressure for action to contain health care costs. A variety of evidence documents avoidable or inefficient health care spending, including: a rise in chronic medical conditions associated with modifiable risk factors; international comparisons of spending and epidemiological outcomes; geographic variations in treatment patterns; fragmentation of care; and widespread use of unwarranted or redundant services.

In this report, the Council on Medical Service identifies strategies to contain health care costs and achieve greater value for health spending. This report pays particular attention to the role that physicians play in addressing health care costs, and focuses on strategies to: (a) reduce the burden of preventable disease; (b) improve the efficiency of health care delivery; (c) reduce non-clinical health system costs that do not contribute value to patient care; and (d) improve health-related decision-making processes.

**INCREASED VALUE FOR HEALTH CARE SPENDING**

Although much of this report concentrates on strategies to reduce health care costs, it is critical to recognize that the ultimate public policy goal is not cost-reduction *per se*, but achieving better value for health care spending. Value can be thought of as the best balance between benefits and costs (i.e., efficiency, in economic terms), and better value as improved clinical outcomes, quality, and/or patient satisfaction per dollar spent. Opportunities exist to improve outcomes and quality while also reducing costs and, clearly, such opportunities should be pursued aggressively. However, strategies involving cost-quality tradeoffs are warranted when the value of improved outcomes outweighs the additional cost, or substantial savings accrue without significant compromise in quality. Thus, the goal is not necessarily to reduce utilization but to “rightsize” use of services in accordance with their relative costs and benefits. The likely, but not guaranteed, net result of “rightsizing” use of services would be lower per capita spending, with slower (or even negative) cost growth over time.

**THE CENTRAL ROLE OF PHYSICIANS**

Physicians play a central role in efforts to contain costs and improve value, both because of the impact of their behavior on costs and outcomes, and because their involvement is essential to the development of successful initiatives. Although physician services are only a fifth of NHE
spending, physicians impact spending on other services, for example, by ordering lab tests, 
prescribing medications, and admitting patients to the hospital. A portion of these services 
represent defensive medicine, provided in response to the threat of professional medical liability 
rather than on the basis of clinical necessity. Physicians also come into contact with most members 
of the public each year, putting them in a unique position to reduce and prevent risk factors for 
disease and injury. In public opinion polls, many people cite their physician as the person with the 
greatest influence in supporting behavioral changes such as smoking cessation, improved diet or 
increased physical activity. Smoking cessation counseling by physicians has been identified as one 
of the most cost-effective ways to prevent disease. In addition, the design and implementation of 
clinically sound, feasible strategies to address health care costs depends on the clinical expertise, 
intimate knowledge of the health care system, and buy-in of physicians. Members of the growing 
cadre of physicians assuming management positions in hospitals, integrated delivery systems, and 
insurance companies are uniquely positioned to institute policies and procedures that address costs 
and improve value. Finally, while physicians play a central role, confronting endemic problems 
like obesity, tobacco use, and violence will require coalitions of stakeholders from within and 
outside the health care system, as well as major societal change.

AMA POLICY AND ANALYSES

Previous AMA analyses of health care spending, cost-containment initiatives, and modifiable risk 
factors linked to the rise in costly chronic illness are included in the following reports:

- Joint report by the Council on Medical Service and the Council on Science and Public Health, 
  “Reward-Based Incentive Programs for Healthy Lifestyles” (A-06)
  Insurance Premiums.”

In summary, these analyses concluded that: (a) a multi-pronged approach to cost-containment is 
needed, involving greater reliance on private markets as well as government action; (b) because 
increased use of third-party payment has been a major historic driver of cost growth, successful 
cost-containment efforts must engage patients as allies in managing costs; and (c) it is critical to 
continue the development of specific cost-containment and quality initiatives, such as evidence-
based medicine, clinical treatment guidelines, disease management, and reduction of modifiable 
risk factors for chronic disease.

Long-standing policy calls for the AMA to study projections of future health care costs and assist 
society in prioritizing services (Policies H-155.979, D-155.996, H-155.963, H-155.978, and H-
155.980, AMA Policy Database). Cost-containment strategies are supported so long as they do not 
jeopardize patient health, quality of care or the patient-physician relationship; are evidence-based 
and developed with physician involvement; recognize cost containment as a legitimate but 
secondary objective to improving patient outcomes; and make patient participation voluntary 
155.985). AMA policy recognizes the central role that physicians play in cost-containment efforts, 
including development and implementation of initiatives such as disease management and clinical 
AMA has adopted extensive policy regarding clinical practice guidelines and quality measures,

Several policies advocate federal support for activities to improve the efficiency of health care delivery. Policies H-335.964 and H-285.926 support the activities of the Agency for Healthcare Research and Quality (AHRQ) and research on the clinical impacts of cost containment efforts. Numerous policies support development of health information technology, including Policies H-405.982, H-478.995, H-478.994, and H-480.971. Policy H-155.994 encourages physicians and hospitals to share information in order to avoid the need for duplicative diagnostic tests, and Policy H-185.996 promotes utilization of care in the most appropriate settings.


Hundreds of AMA policies address specific public health issues such as obesity, substance abuse, accidents, and violence. These can be found in the following sections of the AMA Policy Database: H-10.000 Accident Prevention/Unintentional Injuries, H-15.000 Accident Prevention: Motor Vehicles, H-30.000 Alcohol and Alcoholism, H-80.000 Crime, H-95.000 Drug Abuse, H-145.000 Firearms: Safety and Regulation, H-150.000 Foods and Nutrition, H-345.000 Mental Health, H-440.000 Public Health, H-470.000 Sports and Physician Fitness, H-490.000 Tobacco Use, Prevention and Cessation, H-495.000 Tobacco Products, and H-515.000 Violence and Abuse.

**CLINICAL FACTORS DRIVING HEALTH CARE COSTS**

Increased prevalence of chronic disease, clinical risk factors, and unhealthy behaviors have fueled rising health care costs. For example, the prevalence of obesity and diabetes has doubled over the last 25 years, and more than a quarter of health care spending growth in recent years is attributable to the rise in obesity and obesity-related growth of diabetes, high cholesterol, and heart disease (Thorpe et al., *Health Affairs*, October 2004). Today, a small number of disease categories and related lifestyle behaviors account for a majority of morbidity and mortality, much of it premature or avoidable. Four conditions and four unhealthy behaviors account for roughly $800 billion in
annual combined medical spending and lost productivity. The four disease categories are:

- cardiovascular disease, primarily heart disease and stroke;
- cancer;
- chronic obstructive pulmonary disease (COPD);
- and diabetes. The four modifiable behaviors are: unhealthy nutrition, physical inactivity, smoking, and excessive alcohol consumption.

Treated prevalence of disease – defined as underlying disease prevalence combined with changing clinical thresholds for diagnosis and treatment, and technological innovations that allow treatment to reach more patients – accounts for an estimated two-thirds of cost growth over the past five years. By comparison, only one-third of the cost growth during this period is due to rising treatment costs per case (Thorpe, *Health Affairs*, November/December 2005). Similarly, treated prevalence of disease, not treatment costs per case, drive Medicare cost growth, with virtually all spending growth attributable to patients with multiple comorbidities (Thorpe and Howard, *Health Affairs*, August 2006). Although a portion of the rise in treated prevalence represents earlier detection and more aggressive treatment of disease, much is due to an unwelcome rise in disease. This finding suggests that cost-containment efforts should focus on reducing the need for medical services (quantity), rather than prices. It also suggests that effective cost-containment efforts will require better management of chronic illness, and investments in prevention and public health.

Violence and accidents represent another major source of avoidable mortality, morbidity, and cost. Motor vehicle collisions are by far the leading cause of death among children, followed by homicide and suicide for those aged 15-19 (Centers for Disease Control and Prevention (CDC), June 2006). Rates of firearm-related deaths and other lethal violence are especially high for minority males, and are believed to be markedly higher in the US than other industrialized nations. Women are at higher risk of domestic violence and sexual assault. Alcohol and illegal drugs contribute to the prevalence and severity of all forms of violence and accidents, including motor crashes, assault, suicide, drowning, and fire. Most of the health care costs of violence, accidents, and other trauma arise from treating patients who sustain non-fatal injuries. A single event can result in multiple injuries and disability, including brain damage, which may require ongoing care and expense. Trauma-related injury consistently ranks as one of the three most costly disease categories, accounting for between 5 and 10 percent of aggregate health care expenditures (Machlin and Adams, MEPS/AHRQ, 2003 and Thorpe et al., *Health Affairs*, October 2004). Key opportunities for prevention include counseling patients on seat belt use and gun safety, and screening for depression and substance abuse.

The fact that minorities experience markedly worse health, and higher rates of chronic illness and injury has several additional policy implications. During the past century, mortality rates have declined steadily, but those of blacks have persistently been 30% higher than those of whites (Woolf, *JAMA*, February 7, 2007). This suggests that medical care and public health initiatives could have a greater impact on health and outcomes if they were targeted toward minorities and other underserved populations. However, the ability of the health care system, in isolation, to improve health in underserved populations is limited by the fact that the social factors underlying health disparities lie largely outside the health care system. Such factors include fewer educational opportunities, worse living conditions, and greater exposure to violence. Studies suggest that investments in education, for example, could do as much or more to reduce health disparities than investments in health care and public health (Woolf, *JAMA*, February 7, 2007 and Kindig, *JAMA*, December 6, 2006).
INEFFICIENCIES IN HEALTH CARE DELIVERY

In addition to reducing the need for medical attention, improving the efficiency with which services are provided can also lower health care costs and improve value.

Definition of Efficiency

Broadly defined, efficiency is the optimal balance between benefits and costs, involving both the production process and what is produced – minimizing resource use for given output (or maximizing output with given resources) and producing the most valued mix of outputs. Thus, health care efficiency can be improved by providing the same level (amount and quality) of care at lower cost, providing more care at the same cost, reducing overuse of services, and increasing underused services. “Efficiency” should not be equated with “cost reduction.” Cutting back on the number of organ transplants or shortening patient primary care visits might reduce costs, but would also diminish efficiency insofar as the value of care sacrificed exceeds the savings. Similarly, improving “productivity” need not increase value (i.e., be efficient), if it simply increases output of services that confer little benefit or even cause harm (e.g., ineffective treatments, treatment of trivial conditions, over treatment). These examples highlight the importance of considering costs to the entire health care system or society, not just particular stakeholders. Denial of certain benefits could yield immediate savings to insurers but increase future costs elsewhere in the system. To the extent that more efficient provision of care extends longevity, there could be an increase in individual lifetime costs and/or aggregate costs in future periods. Finally, the question of who receives services must be considered. The likely immediate effect of extending health insurance coverage to the uninsured and eliminating disparities in medical care based on race and ethnicity would be to increase aggregate US health care spending, but such increased spending would not be classified as inefficient. Thus, policymakers should not be deterred from simultaneously addressing the issues of rising costs, quality improvement, the uninsured, and health disparities, particularly given that solutions to these problems often go hand-in-hand.

Overuse of Services

Research suggests that unnecessary health care services account for a substantial share of health care spending. One study found that non-evidence-based diagnostic tests were ordered frequently during routine preventive health exams, with the estimated annual costs of unwarranted use of just three low-cost tests alone – urinalysis, electrocardiograms, and x-rays – in the range of $50 to $200 million (Merenstein et al., American Journal of Preventive Medicine, June 2006). The Medicare program recently established coverage of a “Welcome to Medicare” visit for new Medicare beneficiaries, which must include numerous, costly tests and procedures not supported by evidence-based guidelines. Fragmentation of care also contributes to overuse and overspending, including inefficiencies related to site of service such as emergency department visits that could have been provided at lower cost in a physician’s office. Current payment systems reinforce fragmentation by providing little or no reimbursement for coordination activities, and by reimbursing on the basis of individual services, tests, and procedures, rather than for meeting a patient’s overall health care needs. Lack of availability of patient records also results in excessive cost, for example, for repetitive medical histories and duplicative diagnostic tests.

Wide geographic variations in clinical treatment practices are also cited as evidence of inefficient overuse of care. A pair of studies examining regional variations in Medicare spending not due to differences in illness conclude that patients in higher-spending regions receive more services but no
better quality, access, health outcomes or patient satisfaction (Fisher et al., *Annals of Internal Medicine*, February 2003). Related research finds striking variations across academic medical centers in end-of-life care for chronically ill Medicare patients, with large differences in the likelihood of being admitted to an intensive care unit (ICU) (Wennberg, et al., *Health Affairs*, October 2004). Some studies suggest that high-cost, high-intensity practice patterns can be associated with worse quality and outcomes, perhaps because more “handoffs” among specialists make information sharing and coordination of care more difficult (MedPAC Report to Congress, June 2003). While there is general agreement that regional variations reflect inefficient overuse of care, there is dispute over the extent to which this is true and, especially, over the underlying causes and implications of overuse. Some studies imply that in areas where the supply of physicians and hospitals is high relative to demand for care, providers induce patients to utilize more care, and that strong financial incentives are needed to hold providers more directly accountable for providing efficient care. Other analyses show that physicians are highly responsive to outcomes evidence, adapting practice patterns to improve patient care, suggesting a need for wider dissemination of usable information on outcomes, costs, and best practices. Additional research is needed to determine the extent to which regional variations in clinical practice patterns reflect inefficiency, and the best ways to reduce inefficient variation.

End-of-life care is often cited as a specific source of overuse. A quarter of the cost of Medicare services is for patients in the last year of life, but reducing these costs presents several challenges (Hogan et al., MedPAC Report 00-1, May 2000). One difficulty with shifting patients to lower-cost settings is predicting who can be saved by treatment. A study of ICU patients showed that among the most expensive 10%, two-thirds survived (Welton, *American Journal of Critical Care*, 2002). Even when meaningful odds of benefit have diminished, cultural expectations often make patients, family members, and medical professionals reluctant to discontinue lifesaving treatment. Another difficulty is that the evidence on cost savings from shifting terminal patients to lower-cost settings such as hospice has generally been disappointing or inconclusive, with the notable exception of hospice care for cancer patients (Chernew et al., *Health Affairs*, 2004; Luce and Rubenfeld, *American Journal of Respiratory and Critical Care Medicine*, 2002; Buntin and Huskamp, *Gerontologist*, 2002; and Emanuel et al., *Archives of Internal Medicine*, 2002). Hospice care, advance directives, and related measures have been found to enhance palliative care, provide better coordination of care, reduce the likelihood of dying in the hospital, and increase patient autonomy (Luce and Rubenfeld, *AJRCCM*, 2002 and Emanuel, *JAMA*, June 26, 1996). Thus, despite a lack of demonstrated cost-savings, better management of end-of-life care would improve quality, yielding greater value.


**Underuse of Services**

Other research suggests inefficient underutilization of services that are known to yield savings. One study found that patients receive only 55% of services recommended by clinical guidelines, including preventive services and care for common chronic conditions such as hypertension, high cholesterol, and diabetes (McGlynn et al., *New England Journal of Medicine*, June 26, 2003).
Patient non-compliance with recommended treatment regimes, particularly chronic care medication, also contributes to underutilization and avoidable illness and cost. A systematic ranking of the cost-effectiveness of clinical preventive services shows substantial clinical and financial benefit from increasing services such as aspirin prophylaxis in high-risk adults and childhood immunizations (Maciosek et al., *American Journal of Preventive Medicine*, July 2006). Missed opportunities to counsel patients on lifestyle behaviors, exacerbated by fragmented health care delivery, represents a common example of inefficient under-use of services.

**Excessive Non-Clinical Spending**

Inefficient health system spending includes non-clinical spending that does not add value to patient care, such as excessive costs associated with administration, insurer profits, executive compensation, direct-to-consumer advertising by the pharmaceutical industry, and other marketing. Excessive insurer profits can arise from factors such as lack of market competition among a small number of carriers and excessive government payments health plans enrolling Medicare and Medicaid patients. Recently, a host of new “cottage industries” has cropped up around the insurance industry. These vendors provide third-party payers with services such as claims processing, billing, “repricing” of payments to providers, determination of medical necessity, regulatory compliance, and physician profiling. Non-clinical activities should be subject to cost-effectiveness analysis to determine whether they ultimately add value to patient care.

**BROAD STRATEGIES**

Together, the body of clinical and cost evidence on the US health care system points to significant opportunities to reduce health care spending and improve value. In simple mathematical terms, spending can be brought down by reducing the price of health care services, the quantity of services provided, or both. The preceding analysis suggests that meaningful reductions in health care spending will ultimately be accomplished by reducing growth in the overall quantity of services used. At the same time, improving the value of health care spending will also entail increased use of certain services. Accordingly, rising health care costs should be addressed through the following four broad strategies:

- **Reduce the burden of preventable disease.** This includes reducing risk factors for disease and preventing the onset of chronic illness; improving patient compliance with medications and preventive service recommendations; encouraging improved nutrition and physical activity; preventing injury due to accidents and violence; and conducting public health campaigns.

- **Make health care delivery more efficient.** This includes the use of cost-effective sites of service; better coordination of care; reducing unnecessary services; increasing use of services with positive return on investment in terms of reducing future disease and cost burden; greater availability of cost-effectiveness information; improving management of chronic conditions; and reduction of medical errors.

- **Reduce non-clinical health system costs that do not contribute to patient care.** This involves reducing non-clinical activities that do not meet the cost-effectiveness criteria of adding value to patient care, such as excessive spending on administration, profits, and marketing.
• Promote “value-based decision-making” at all levels. This involves improving the processes by which decisions are made, so that they take into consideration both cost and benefit – particularly clinical outcomes. Value-based decision-making can be thought of as an extension of evidence-based medicine, in which a host of private and public decisions are improved through greater availability of information and through incentives. Examples include physicians and patients choosing among drug therapies, insurers designing health plan cost-sharing features, legislators determining public health budgets, and legislators considering mandated insurance coverage of particular benefits. Bridging the disconnect between costs and benefits is an overarching theme in numerous recent commentaries on the US health care system (Porter and Teisberg, JAMA, March 14, 2007; Woolf, JAMA, February 7, 2007; Chernew et al., Health Affairs, January 2007; and Kindig, JAMA, December 6, 2006). In some way, each of these analyses seeks to improve health outcomes relative to spending by improving the basis on which decisions are made and resources allocated.

Each of these strategies will require changes in both patient and physician behavior, as well as targeted increases in medical and non-medical spending. The first strategy focuses on reducing overall demand for health care services, whereas the others focus on reducing the provision of low-value or harmful services, as well as increasing provision of high-value services. In practice, the strategies overlap. For example, more efficient management of chronic illness may reduce future disease burden by averting acute episodes of illness.

SPECIFIC INTERVENTIONS

The following specific interventions cut across the four broad strategies to manage costs and improve value. Again, there is overlap and synergy among the specific measures. For example, health information technology can be used to integrate the findings of cost-effectiveness research into clinical practice.

Investments in Public Health and Prevention

Preventing and halting the progression of disease, particularly stemming the rise in obesity, has the potential to dramatically reduce health care spending and improve health outcomes. Anti-smoking campaigns have succeeded in reducing the rate of smoking in the US since the 1960s, providing lessons for obesity control and other public health efforts. Key elements of effective tobacco control include clinical intervention, education, legislative regulation, tax and other financial incentives, and combining all elements into a comprehensive program (Mercer et al., American Journal of Clinical Nutrition, 2003). Research demonstrates the synergistic impact of influencing behavior through multiple channels and reaching people in a variety of settings, with medical care playing an important but limited role. Accordingly, the CDC has identified the following strategies to reduce obesity in children: increased physical activity, increased breastfeeding, reduced television viewing, reduced intake of sugar-sweetened beverages, and increased consumption of fruits and vegetables (Dietz et al., Health Affairs, March/April 2007). Achieving public health goals will require coordinated efforts involving schools, parents, legislators, employers, physicians, and insurers. For example, a growing number of employers offer employee wellness programs with services such as personal health assessments, on-site medical screenings, lifestyle counseling, exercise and nutrition classes, smoking cessation programs, aggressive monitoring of chronic conditions, and financial incentives for healthy behaviors. The federal government plays an ongoing role in tobacco control, providing data surveillance, evidence-based funding guidelines and best practice recommendations for states, program evaluation, legislative analyses, and
dissemination of clinical practice information (CDC State Tobacco Activities Tracking and Evaluation System; and CDC Office of Smoking and Health, August 1999). Public health advocates also point to the role of government regulation, for example, citing the fact that standardized nutrition labeling was brought about through legislation rather than voluntary action by the food industry.

Cost-Effectiveness Research and Information Dissemination

Policymakers show growing interest in evaluating and comparing the cost-effectiveness of new and existing pharmaceuticals and medical technologies (Davis et al., Commonwealth Fund, January 2007; Wilensky; Buto and Juhn; Clancy; and Rowe et al., *Health Affairs*, November 2006; and Thorpe, *Health Affairs*, November/December 2005). A more narrowly focused “Wellness Trust” to prioritize disease prevention has also been proposed (Lambrew, Brookings Institution, April 2007). Appeals for increased federal support of cost-effectiveness research have been fueled by growth in preventable illness, health care costs, pressure for price and quality transparency, scientific advances, and awareness that well-established clinical findings are not always applied in practice. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) directed the Agency for Healthcare Research and Quality (AHRQ) to conduct comparative outcomes – but not cost – research on interventions, including prescription drugs, for ten priority conditions in the Medicare population (Neumann et al., *NEJM*, October 6, 2005).

Comparative cost-effectiveness information would enable physicians and patients to make more informed health care decisions, for example, substituting name brand drugs with less expensive generic equivalents. Such information could also be used by insurers, employers, government entities, educators, and others seeking to prioritize which diseases to target, recognize overuse and underuse of specific services, and identify preventive services and treatments demonstrated to yield positive “return on investment.” Comparative cost-effectiveness information also can be used to design incentives for value-based decision-making by patients and physicians, for example, through health plan benefits, disease management programs, and pay-for-performance initiatives. Over time, comparative information could slow spending growth by discouraging the innovation and adoption of high-cost, low-benefit technologies. In order for cost-effectiveness research to impact clinical practice and outcomes, sufficient resources must be devoted to translating and disseminating findings in usable form.

Health Information Technology

Health information technology and cost-effectiveness research have the potential to synergistically improve the value of health care spending, with information systems facilitating the dissemination and application of research findings, while also allowing routine data collection to advance cost-effectiveness research and quality transparency. Evidence from other industrialized nations suggests that development and adoption of more advanced health information technology in the US would lower spending and improve clinical outcomes (Anderson et al., *Health Affairs*, May/June 2006). Further development of health information technology could improve physician decision-making and coordination of care in a number of ways. For example, online access to updated evidence-based clinical treatment guidelines could avert use of ineffective or non-recommended services. Making comparative prescription drug information available, perhaps automatically during electronic prescribing, would promote substitution toward lower-cost, clinically comparable alternatives. Electronic prescribing also could avert some costs associated with dispensing errors and dangerous drug interactions. Use of networked, interoperable electronic medical records could
reduce the need for duplicative diagnostic tests, lower transcription costs, curb time wasted
searching for information, provide lifesaving information in emergencies, and possibly even reduce
the costs of defensive medicine and professional liability premiums. Information technology might
also foster greater collaboration among providers in devising ways to lower costs and improve

An obstacle to adoption of health information technology is the fact that physicians may incur high
investment costs without recouping the savings permitted by new information systems. For
example, savings from reducing duplication of lab tests generally accrue to insurers. Thus, in order
for potential cost-savings and returns on investment in health information technology to be
realized, incentives must encourage appropriate adoption and use by various stakeholders.

**Clinical Performance Measurement**

The AMA-convened Physician Consortium for Performance Improvement® (Consortium)
coordinates the development of evidence-based clinical performance measures. Although the
clinical quality measures do not explicitly incorporate cost data or considerations, some recently
developed measures implicitly do so by targeting overuse of clinically unwarranted services. In
addition, a newly formed workgroup of the Consortium is addressing the issue of whether and how
measures might combine clinical and cost information, and the Consortium issued its *Position
Statement on the Linkage of Quality of Care Assessment to Cost of Care Assessment* in March
2007. The position paper and additional information about performance measurement are available
measurements are used to: provide confidential feedback to physicians or physician groups about
performance, sometimes relative to peers or benchmarks; report quality information to the public;
and provide financial incentives for quality improvements.

To impact clinical practice, performance measures should be embedded into the physician office
workflow, for example, through information and prompts within information technology systems.
To date, clinical performance measures have focused on processes (e.g., ordering of recommended
tests) rather than health outcomes (e.g., blood glucose or lipid levels), and some observers believe
that it would be more effective to base performance measurement and reimbursement on outcomes
(Porter and Teisberg, *JAMA*, March 14, 2007). Physicians and others are concerned that
performance measurement could inadvertently divert resources away from the types of care for
which performance is not measured (Casalino et al., *Health Affairs*, March/April 2007). Another
concern is that payers may selectively choose and apply performance measures simply to reduce
insurance claims costs, rather than to improve patient care and health outcomes. Finally, it is
important that clinical protocols and performance measures not be regarded as substitutes for
professional judgment, and physicians are able to adapt treatment based on the specific needs of the
patient.

**Payment Reform**

Private insurers, Medicare, and large multi-specialty integrated delivery systems have
experimented with payment systems designed to contain costs and/or improve clinical quality.
Physician financial incentives include per-patient capitated payments to physicians or group
practices, risk-sharing arrangements between physicians and third-party payers, economic
profiling, tiered physician networks, and physician pay-for-performance (PFP) programs. PFP
programs generally involve capitated case rates, global fees, and evidence-based guidelines.
Physician resistance to initial PFP efforts stemmed largely from the fact that individual physicians faced penalties for factors beyond their control, including actions of other providers, patient compliance with recommended treatment, patient case-mix, and faulty risk-adjustment. Some payment methodologies have increased the challenge of clinical integration of care among multiple clinicians treating the same patient, or imposed rigid treatment algorithms that do not accommodate justified deviations based on factors such as professional judgment or patient comorbidities. PFP programs have also been criticized for rewarding only a few high performers, rather than rewarding all high-quality care (Rosenthal and Dudley, *JAMA*, February 21, 2007). The AMA Private Sector Advocacy Web site provides additional information on physician payment methodologies ([http://www.ama-assn.org/ama/pub/category/14416.html](http://www.ama-assn.org/ama/pub/category/14416.html)), including economic profiling, tiered physician networks, and specific pay-for-performance programs.

There is general agreement that physician payment reform should give priority to reducing excessive hospital costs, preventing disease, and reducing health disparities. Current payment systems do not reward physicians for providing more cost-effective care to hospital patients. Significant legal barriers limit the ability of hospitals to share cost-savings with independent physicians, in part so that hospitals do not pressure physicians to limit care inappropriately. In addition, it is often difficult to attribute savings to specific parties. Recent payment reform discussions have examined ways to overcome these challenges, align incentives of hospitals and physicians, and better integrate delivery of care. A Medicare demonstration project is underway in which hospitals are permitted to pay physicians a portion of documented cost savings generated by quality improvements. As noted in Council on Medical Service Report 10, “Strategies to Strengthen the Medicare Program,” also before the House at this meeting, the Medicare payment system’s Sustainable Growth Rate (SGR) formula penalizes physicians for preventing hospitalizations by providing outpatient care.

Physicians generally do not receive sufficient resources, support, or reimbursement for lifestyle counseling or management of care for patients with chronic illness. The choice of performance measures and incentives in PFP programs should reward physicians for supporting patient behavioral changes such as smoking cessation, improved diet or increased physical activity, and for management of chronic illness such as diabetes and hypertension. To maximize effectiveness, insurers should cover nutrition counseling, prescription drugs to aid smoking cessation, and other complementary services. Physician PFP programs and patient wellness programs could be integrated so that patients are offered parallel incentives and assistance such as cash awards or gifts for healthy behavior, nurse helplines, and education programs (Rosenthal and Dudley, *JAMA*, February 21, 2007). Finally, PFP can be used in the effort to eliminate health disparities based on race and ethnicity, for example, by offering larger incremental payments for providing high-quality care to populations that are disadvantaged or more costly to treat effectively (Rosenthal and Dudley, *JAMA*, February 21, 2007 and Casalino and Elster, *Health Affairs*, April 2007).

**Better Coordination of Care**

A number of “patient-centric” models have been proposed to fundamentally restructure health care delivery and reimbursement in order to reduce fragmentation, improve outcomes, and reduce health disparities. Following the development of the Chronic Care Model in the 1990s, efforts to improve coordination of care have broadened to encompass preventive, chronic, and acute care (Wagner, *Effective Clinical Practice*, August/September 1998). Four national medical societies recently issued the Joint Principles of Patient-Centered Medical Home (American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, and American
The medical home approach is based on each patient having an ongoing relationship with a personal physician trained to provide first contact and ensure continuous, comprehensive care for all stages of life and across the entire health care system. Other elements include patient and family involvement in decision-making, health information technology, evidence-based medicine, clinical decision-support tools, and ongoing quality improvement efforts. Payment reflects the added value of activities that fall outside of face-to-face patient visits, including coordination among providers and secure e-mail and telephone consultation. Medicare and Medicaid demonstration programs are testing the medical home approach for patients with multiple chronic conditions. Other new models propose reorganizing delivery and reimbursement around episodes or “cycles” of care, rather than discrete services (Davis, *NEJM*, March 15, 2007 and Porter and Teisberg, *JAMA*, March 14, 2007), and providing more effective, personalized prevention and treatment by leveraging advances in genetic medicine (Snyderman, *Journal of Clinical Investigation*, October 2004). Such new models would reward greater collaboration among physicians, hospitals, and other stakeholders for innovating cost-effective approaches to care that meet the patient’s overall health care needs, be they preventive care, acute treatment, chronic disease management, behavioral change, education, or wellness promotion.

Targeted Benefit Design

There is growing interest among health policy researchers and insurers in manipulating out-of-pocket cost-sharing in order to reward compliance by patients with chronic conditions, thereby averting costly adverse outcomes (Chernew et al., *Health Affairs*, January 2007; Chouhdry et al., *Health Affairs*, January/February 2007; Demchak, State Coverage Initiatives issue brief, November 2006; and Furman, Brookings Institution, April 2007). Several large self-insured employers have started experimenting with lowering copayments for drugs identified as “clinically valuable” (e.g., beta-blockers and ACE inhibitors). Initial experience suggests that such targeted benefit design can improve clinical outcomes and reduce costs.

DISCUSSION

Although additional health care spending has yielded substantial clinical, economic, and quality of life benefits—for example, helping to reduce death rates for cardiovascular disease since the 1960s (Cutler and Meara, NBER Working Paper, October 2001), health care cost growth has outpaced general inflation, driven up health insurance premiums, and contributed to the number of the uninsured. Previous AMA analyses have focused on improving overall function of markets for health insurance and medical services; and on appropriate development of explicit cost-containment measures such as disease and case management, pay-for-performance, and end-of-life care improvements. In addition, the AMA has extensive policy on preventive medicine and public health, much of which was adopted without an explicit cost-containment goal, but which would reduce overall, long-term health care costs, improve health outcomes, and increase the value of US health care spending. The Council on Medical Service reiterates the importance of general market incentives for health care cost-containment, appropriate cost-containment measures, preventive medicine, and public health.

In this report, the Council asserts that the ultimate public policy goal is not cost reduction *per se*, but achieving better value for health care spending. Physicians play a central role in improving the management of health care spending, quality, and health outcomes. Nonetheless, confronting endemic problems that create needless health care costs, like obesity, tobacco use, and violence
will require coalitions of stakeholders from within and outside the health care system, as well as
major societal change.

The Council proposes the following four broad strategies to manage costs and improve value:

- Reduce the burden of preventable disease;
- Make health care delivery more efficient;
- Reduce non-clinical health system costs that do not contribute to patient care; and
- Promote “value-based decision-making” at all levels.

From these broad strategies follow a number of specific, cross-cutting policy interventions to
improve the cost-effectiveness of the US health care system. Together, specific interventions
would shift resources toward preventive services and public health interventions, increase the
availability of both clinical and cost information needed to make cost-effective decisions, and
employ incentives for patients, physicians, and others to make value-based decisions. The
proposed interventions emphasize the central role that physicians play in addressing rising costs
and improving value for health care spending. Important linkages and synergies exist among the
proposed interventions. For example, useful cost-effectiveness information disseminated through
health information technology could support physicians in providing personalized lifestyle
counseling to patients, particularly if payment reform, performance measurement, and
complementary patient support also promote lifestyle counseling. The most promising
interventions identified by the Council include promotion of patient lifestyle counseling,
comparative cost-effectiveness research, continued development of health information technology,
use of clinical performance measures that promote efficient use of services, targeted insurance
benefit design, and investigation of opportunities to reduce non-clinical activities that do not add
value to patient care.

RECOMMENDATIONS

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

1. That our American Medical Association (AMA) recognize that successful cost-
   containment and quality-improvement initiatives must involve physician leadership, as
   well as collaboration among physicians, patients, insurers, employers, unions, and
government. (New HOD Policy)

2. That our AMA support the following broad strategies for addressing rising health care
costs:

   (a) Reduce the burden of preventable disease;

   (b) Make health care delivery more efficient;

   (c) Reduce non-clinical health system costs that do not contribute value to patient care;
       and

   (d) Promote “value-based decision-making” at all levels. (New HOD Policy)
3. That our AMA continue to advocate that physicians be supported in routinely providing lifestyle counseling to patients through: adequate third-party reimbursement; inclusion of lifestyle counseling in quality measurement and pay-for-performance incentives; and medical education and training. (Directive to Take Action)

4. That our AMA continue to advocate that sources of medical research funding give priority to studies that collect both clinical and cost data; use evaluation criteria that take into account cost impacts as well as clinical outcomes; translate research findings into useable information on the relative cost-effectiveness of alternative diagnostic services and treatments; and widely disseminate cost-effectiveness information to physicians and other health care decision-makers. (Directive to Take Action)

5. That our AMA continue to advocate that health information systems be designed to provide physicians and other health care decision-makers with relevant, timely, actionable information, automatically at the point of care and without imposing undue administrative burden, including: clinical guidelines and protocols; relative cost-effectiveness of alternative diagnostic services and treatments; quality measurement and pay-for-performance criteria; patient-specific clinical and insurance information; prompts and other functionality to support lifestyle counseling, disease management, and case management; and alerts to flag and avert potential medical errors. (Directive to Take Action)

6. That our AMA encourage the development and adoption of clinical performance and quality measures aimed at reducing overuse of clinically unwarranted services and increasing the use of recommended services known to yield cost savings. (New HOD Policy)

7. That our AMA encourage third-party payers to use targeted benefit design, whereby patient cost-sharing requirements are reduced for maintenance medications used to treat chronic medical conditions, particularly when non-compliance poses a high risk of adverse clinical outcome and/or high medical costs. Consideration should be given to tailoring cost-sharing requirements to patient income and other factors known to impact compliance. (New HOD Policy)

8. That our AMA support ongoing investigation and cost-effectiveness analysis of non-clinical health system spending, to reduce costs that do not add value to patient care. (New HOD Policy)

References for this report are available from the AMA Division of Socioeconomic Policy Development.

Fiscal Note: Advocacy of specific measures to address rising health care costs at an estimated total cost of $4,890.