The U.S. health care system has some of the best to offer. U.S. spending per person on health care surpasses every other industrialized country, and highly trained clinicians supply care in state-of-the-art facilities equipped with the latest in medical technology. Yet, when compared to other industrialized countries such as Australia, Canada and the United Kingdom, the U.S. has among the highest medical error rates, most inefficient coordination of care and the highest out-of-pocket costs for care, which impede patient access.

Addressing these issues to create a system that provides the highest quality care will require concerted action from all stakeholders. Areas that must be addressed include: ensuring medical practice is consistent with the most current research, coordinating care across settings and over time, and measuring and rewarding excellent performance.

Making Strides and Aiming Higher

The Institute of Medicine defines health care quality as “the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.” In short: patients get exactly the care that they need, when they need it, without undergoing unnecessary or inappropriate treatments.

In contrast, poor quality relates to underuse – patients do not get the care they should; overdose – patients get care they don’t need; or misuse – patients experience preventable complications of care. Recent attention to the gaps in quality, and opportunities to improve it, has led to a surge of activity among providers, insurers, employers and others with documented gains. But more work remains.

Adults today on average receive only about half of recommended care. Recommended care may include screenings or preventive care for those at risk for developing disease, care to manage a specific chronic disease like asthma or diabetes, or the optimal course of treatment for an acute condition like a stroke or heart attack.
Disparities in care due to race, ethnicity, income and other factors also affect the likelihood of individuals receiving the care they need. For example, each year, diabetics should receive three preventive services: an eye exam, a foot exam and hemoglobin A1c testing. However, Hispanic adults with diabetes are much less likely than their non-Hispanic white counterparts to receive all three services. Similarly, high-income adults are more likely than low-income adults to get this care. Differences in disease outcomes – for instance, African-American women are more likely to die from breast cancer once the disease is detected than are white women – also suggest disparities that must be addressed.

But more care is not always better care. There is great variation across the country in the amount of care delivered for comparable conditions. For example, a senior citizen living in Kentucky is nearly twice as likely to have heart bypass surgery than one living in Colorado. However, more care does not necessarily lead to better health outcomes.

While hospitals, doctors, nurses and other care givers aim to provide quality care every day, the safety of our current health care system can be improved. For example, medication errors, one of the most common types of medical errors, harm at least 1.5 million people every year. And a recent study found that more than one in six hospitalized patients experienced medical errors that prolonged their hospital stay. Errors can result in a tragic loss of life. And the societal costs of medical errors range from $17 to $29 billion annually due to the additional costs of care to address the error, plus costs attributable to lost income, reduced productivity at home and work, and disability.

A number of factors impede the ability of our health care system to provide the best care possible. In some cases, we lack information about what the most appropriate care actually is. In other cases, we have the information, but have...
difficulty getting it into the hands of clinicians. The U.S. has invested heavily in medical research, and advances in medicine abound. Yet it still takes 15-20 years for research findings and new treatments to be fully incorporated into clinical practice.\textsuperscript{14}

The structure of the health care system – how care is organized and paid for – also can be a barrier to effective care delivery. About half of physicians deliver services in solo or small group practices, with limited or no access to patients’ full medical histories, including care provided in other settings and medications or therapies prescribed.\textsuperscript{15} Lack of coordination across providers can lead to duplicative, or even harmful care, and wasted resources. A recent study found that 22 percent of patients have received duplicative tests ordered by different doctors.\textsuperscript{16} Current payment systems reward providers for the number of services provided whether those services are needed or not and performed well or poorly. Additionally, some high-value services, like care coordination, are not paid for at all.

Hospitals, doctors, nurses and others are more focused today on quality improvement. They have instituted patient safety initiatives to decrease the frequency of medical errors and to improve quality of care. The National Healthcare Quality Report has found steady improvement across a variety of measures across multiple dimensions of quality and different provider types.\textsuperscript{17} Accelerating the pace of improvement, however, will require broader change at the system level to improve our knowledge of what is the best quality care; to measure whether doctors, hospitals and others are applying this knowledge in practice; and to reward excellent performance.

### Medical errors and unnecessary treatment occur.

Chart 4: Percent of Adults Reporting a Time They Experienced Errors or Duplicative Care in the Past Two Years

<table>
<thead>
<tr>
<th>Error Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider Ordered a Test that had Already Been Done</td>
<td>17%</td>
</tr>
<tr>
<td>Medical, Surgical, Medication, or Lab Test Error</td>
<td>17%</td>
</tr>
<tr>
<td>Provider Failed to Share Important Medical History or Test Results with Other Doctors or Nurses</td>
<td>19%</td>
</tr>
<tr>
<td>Provider Recommended Unnecessary Care or Treatment</td>
<td>25%</td>
</tr>
<tr>
<td>Any of the Above</td>
<td>42%</td>
</tr>
</tbody>
</table>


### Health Care System Changes to Consider

**Using Research to Guide Treatment Decisions**

Proven treatments are often referred to as evidence-based care. Recognizing the need for better information on evidence-based care, many health care leaders have called for a national investment in research comparing the benefits and risks – and sometimes costs – of the multiple health care options that exist for given conditions.\textsuperscript{18} Such research could elevate quality of care by helping both clinicians and patients make better-informed treatment decisions.\textsuperscript{19} Where scientific knowledge about the best treatments does exist, providers need ready access to it. Tools that make it easier for clinicians to incorporate new research findings

“*Our challenge is not to continue debating the existence of disparities; the evidence is overwhelming. Our challenge now is to develop and implement strategies to reduce and eliminate those disparities.*”

– John C. Nelson, MD, MPH, AMA Immediate Past President, and Randall W. Maxey, MD, PhD, NMA Past President
into their care delivery can help improve quality of patient care. For instance, clinical guidelines – specific recommendations on the appropriate course of care for patients with a given condition – help providers deliver effective and efficient care. Patients and their families also benefit from publicly available, easy-to-access, trustworthy information, that compares treatment options. For example, access to the results of a recent study comparing older, generic blood pressure drugs and the newer, more expensive ones can help patients make an informed medication choice.

Encouraging Improvement Through Measurement

Measuring and reporting quality indicators is one strategy to narrow the gap between the care that is recommended and that which is delivered. Making physicians aware of their performance can help them detect opportunities for improvement and encourage change for the better. For example, after the state of New York began collecting and reporting information about the quality of heart bypass surgery, the death rate from the procedure declined. The Hospital Quality Alliance, along with the Medicare program, has successfully begun to collect quality data from hospitals and clinicians. Public reporting of quality information also can help patients and their families “shop” for their care and discuss concerns about quality of care with their physicians. Increasingly, public agencies and independent organizations are publishing quality information about hospitals, physicians and health plans for consumers. For example, mortality rates for patients with heart failure and heart attack at more than 4,500 hospitals across the country are available on the Hospital Compare Web site.

Evidence-based care can improve patient outcomes.

Chart 5: Mortality Rates Following Hospital Admission for Heart Attack

Providers that implement evidence-based interventions deliver higher quality care.

Chart 6: Performance of Hospitals Participating in Premier Hospital Quality Incentive Demonstration (HQID) on Composite of 18 Measures


Changing Financial Incentives

Rewarding doctors, hospitals and others who deliver high-quality care can encourage accountability for patient care, offer incentives for clinicians to work together to coordinate care delivery and, most importantly, lead to better care processes. Since 2003, the number of programs that reward providers for high-quality care has more than tripled. Programs are diverse: they are both publicly and privately run and offer varying incentives including financial rewards or penalties, increased patient referrals, or public recognition of providers’ performance. One of the most common types of quality improvement programs – referred to as pay-for-performance programs – links payment to specific steps taken or results achieved in care. According to a survey of health care purchasers, government agencies and health plans, at least half of evaluated pay-for-performance programs have significantly improved clinical performance.

Redesigning Care Delivery

As the number of Americans with chronic conditions such as diabetes and heart disease climbs, more individuals will have complex health care needs, requiring care from multiple providers. Coordinating that care can strengthen the continuity of patients’ care across these multiple providers and assist patients in better managing their diseases. A primary care physician or other professional might serve as the quarterback responsible for coordinating the many aspects of a patient’s health care. Patients participating in

“The Premier hospital alliance is showing that even limited additional payments, focused on supporting evidence-based quality measures, can drive across-the-board improvements in quality, fewer complications and reduced costs.”

– Former CMS Acting Administrator Leslie V. Norwalk, January 26, 2007
care coordination programs can see their health improve, and they have fewer hospitalizations and emergency department visits.\textsuperscript{32} But, providers typically are not paid for taking steps to coordinate care.\textsuperscript{33} Payment systems can be revised to encourage clinicians to focus on all of a patient’s health care needs rather than only a slice of the required care.

Focusing on Mental Health Care
Co-occurring mental and physical illnesses are common: up to 75 percent of people with schizophrenia suffer from serious physical illnesses such as diabetes or high blood pressure.\textsuperscript{34} Yet the care systems for these conditions are typically separate. Coordinating mental and physical health care is sometimes difficult within the current health system, but doing so is in patients’ best interest. For example, patients who participated in psychotherapeutic interventions saw their average length of hospital stay fall by 78 percent, hospitalization frequency decrease by two-thirds and emergency department visits decline by almost half.\textsuperscript{35} Coverage and payment policies greatly complicate getting treatment. Redesigning them to ensure that mental and physical conditions are covered equally can lead to improvement in outcomes.

...but the payment system currently offers little reward.

Chart 9: Extent to Which Physicians Believe Factors Affect their Compensation

<table>
<thead>
<tr>
<th>Factor</th>
<th>Major Factor</th>
<th>Minor Factor</th>
<th>Not a Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity/Billing</td>
<td>58%</td>
<td>14%</td>
<td>27%</td>
</tr>
<tr>
<td>Board Re-certification Status</td>
<td>11%</td>
<td>28%</td>
<td>60%</td>
</tr>
<tr>
<td>Measures of Clinical Care</td>
<td>8%</td>
<td>19%</td>
<td>72%</td>
</tr>
<tr>
<td>Patient Surveys/Experience</td>
<td>8%</td>
<td>19%</td>
<td>72%</td>
</tr>
<tr>
<td>Quality Bonus/Incentive Payment from Insurance Plans</td>
<td>4%</td>
<td>15%</td>
<td>80%</td>
</tr>
</tbody>
</table>


People with chronic conditions see many physicians...

Chart 10: Percent of Medicare Enrollees with Claims Billed by Number of Physicians, 2003

<table>
<thead>
<tr>
<th>Number of Physicians</th>
<th>10+ Physicians</th>
<th>6-9 Physicians</th>
<th>2-5 Physicians</th>
<th>1 Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollees with CAD, CHF or Diabetes</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
<td>20%</td>
</tr>
<tr>
<td>Enrollees with CAD, CHF or Diabetes</td>
<td>80%</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Enrollees with All Three Conditions</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: CAD=coronary artery disease; CHF=congestive heart failure.
Putting the best evidence into practice, coordinating care and rewarding excellent performance can improve the quality of our nation’s health care.

- Patients could receive more timely, safe and effective health care;
- Disparities in the provision of care could be reduced;
- Health professionals could have tools to improve the quality of care that they deliver, and would be reimbursed for providing the best possible care; and
- Employers could benefit from a more stable workforce, as care coordination not only improves clinical outcomes, but also can increase job retention and productivity.39

...but coordinated care can improve patient outcomes.

Chart 11: Level of Assistance Needed with Daily Activities1, Patients Receiving Coordinated Care2 versus Patients Receiving Traditional Home and Community-based Services, by Follow-up Year

1 A higher score indicates greater need.
2 Program for All-Inclusive Care for the Elderly (PACE) provides integrated acute medical care and long-term care services to frail seniors.


Delivering Care Consistent with Patient Wishes

As patients deal with a serious illness such as cancer or approach the end of life, we can better align treatment with personal preferences. Allowing patients to direct their own care makes them feel more in control and more satisfied with the care they receive.36 Care that treats and prevents the side effects of serious and complex illness – referred to as palliative care – can improve the quality of care delivered at all phases of life. Palliative care includes pain management, symptom management and emotional and spiritual support for patients and their families.37 Recently, some states have started programs to help patients at the end of life remain at home longer. California offers one such program that includes home visits by nurses. Approximately 89 percent of patients (or families) believe this program has improved quality of life.38