

CROSSING THE QUALITY CHASM IN HEALTH REFORM

HEARING OF THE COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS UNITED STATES SENATE ONE HUNDRED ELEVENTH CONGRESS FIRST SESSION ON EXAMINING QUALITY IN HEALTH REFORM

JANUARY 29, 2009

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CROSSING THE QUALITY CHASM IN HEALTH REFORM

THURSDAY, JANUARY 29, 2009

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 2:00 p.m. in Room SD-430, Dirksen Senate Office Building, Hon. Barbara A. Mikulski presiding.

Present: Senators Mikulski, Dodd, Casey, Hagan, and Merkley.

OPENING STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Good afternoon, everyone. The U.S. Senate Committee on Health, Education, Labor, and Pensions will come to order. The Working Group on Quality is meeting this afternoon, and the focus of this particular hearing is called "Crossing the Quality Chasm in Healthcare Reform."

This is the second of a series of hearings we will be having to ensure that when we do our healthcare reform, we do not only reform insurance finance, but that we also reform how we are also going to be providing healthcare.

It is the view of the working group that by focusing on quality we will not only improve outcomes for patients, but we will improve the outcome in the bottom line of delivering healthcare itself. We need to say good-bye to silo thinking in which quality is over here, cost is there, and so on.

Even though our working groups are divided into three categories—coverage, chaired by Senator Bingaman; prevention, chaired by Senator Harkin; and quality, chaired by myself—we see it as all the same story.

Today, we are going to hear from a distinguished group of experts who will be testifying on that particular topic. I thank the witnesses for their flexibility. We had originally scheduled this hearing for 10 a.m., but President Obama decided to sign the Lily Ledbetter Fair Pay Act this morning, so we were there.

When we set this panel, we didn't realize we were going to have an all-women's panel, a chair. It is not like we get 1 day, and this is it.

[Laughter.]

But we welcome you.

I am going to dispense with my opening statement, but know that we believe that the work we are doing is going to focus on an evidence-based approach to reforming healthcare. Just in the same

way we ask our clinicians to be thinking that way, we feel that our committee should do the same. One of the most evidence-based ways of looking at that, of course, is an esteemed institution in our society, the Institute of Medicine.

In their ground-breaking report, "Crossing the Quality Chasm: A New Health System for the 21st Century," the IOM outlined a variety of goals that would make our healthcare system safe, effective, patient centered, timely, efficient, and equitable. We will be embracing those principles as we move ahead on the reform.

We have invited members of the original IOM quality committee—Dr. Cassel, president of the American Board of Internal Medicine; Dr. Rhonda Robinson-Beale, the chief medical officer of OptumHealth.

We have also invited respective policy thinkers that are well known in the community of healthcare innovation. Dr. Karen Davis, president of the Commonwealth Fund, which has issued a variety of reports that this committee has reviewed and embraced in principle. And Professor Elizabeth Teisberg, the professor of UVA's Darden Business School, will provide another perspective on how we will be able to think of strategies to improve health quality.

And finally, from the patient perspective—because we want to have patient-centered healthcare at the end of the day—Dr. Nancy Davenport-Ennis of the National Patient Advocate Foundation.

I am going to ask unanimous consent that my full statement go into the record.

[The prepared statement of Senator Mikulski follows:]

PREPARED STATEMENT OF SENATOR MIKULSKI

In 2001, the Institute of Medicine (IOM) published a groundbreaking report, "Crossing the Quality Chasm: A new Health System for 21st Century". IOM's vision defined six goals to improve health care:

- Safe—Avoiding medical errors.
- Effective—Providing evidence based services with over-utilization.
- Patient-Centered—Providing care that is responsive to patient's needs.
- Timely—Reducing harmful delays.
- Efficient—Avoiding waste of time, energy, and resources.
- Equitable—Quality not vary due to income, age, race, gender, or geography.

These goals remain essential to improving the quality of our Nation's health system. Goals should be part of any reform proposal that moves through Congress.

The purpose of today's hearing is to identify quality initiatives that should be considered as part of health reform.

We have invited back members of the original IOM Quality Committee, Dr. Christine Cassel, President of the American Board of Internal Medicine and Dr. Rhonda Richardson Beale, Chief Medical Officer of OptumHealth.

We've also invited two respected policy thinkers, Karen Davis, President of the Commonwealth Fund and Elizabeth Teisberg, Pro-

fessor at UVA's Darden Business School who will help update our thinking on strategies to improve health quality.

Finally, from the patient perspective, we have Nancy Davenport-Ennis of the National Patient Advocate Foundation.

My hope is that we can learn from these witnesses how theory has been put into practice, about promising quality initiatives that have moved from bench to bedside, and discuss what quality initiatives should be a part of reform.

There's no question it is time for Congress to act on comprehensive health quality initiatives. While IOM's report shaped the thinking and actions of health policy gurus, providers, and patients, the Federal Government has been slow to act.

The United States leads the world in health spending but lags behind when it comes to quality. It's time taxpayers and patients got better value for their health dollar by improving, not limiting, health care.

U.S. life expectancy is the same as countries that spend far less per capita. Billions of dollars are wasted each year through medical overuse, underuse, misuse, and inefficiencies.

Annual human cost is 98,000 deaths and 1 million injured from medical errors.

Despite the work of the IOM and today's panel members the United States still does a poor job of applying evidence to health delivery. There is no effective policy to research and disseminate best practices. The United States still does a poor job of using Health Information Technology and lack nationwide infrastructure to collect and share information.

The United States still does a poor job of care coordination and has not yet appropriately aligned payment policies with quality. The United States still has not prepared a sufficient healthcare workforce capable of caring for large numbers of retiring baby boomers.

By failing to adopt quality initiatives, it's obvious why we lag behind the industrialized world.

We can do better and it is my goal to make sure we do better.

I look forward to today's discussion and the development of consensus around key recommendations.

Senator MIKULSKI. Also, I will ask unanimous consent that any of our colleagues who have statements they would like to put in the record on this hearing that they be so included, and any questions that they might have that they also be submitted.

I know, speaking for Senator Enzi, we are really busy today with SCHIP on the floor and so on. Know that he has been an active participant at all of our many discussions and know that he wanted very much to be here.

His staff is here, and I am going to say that in the Q and A, if you all have questions in particular that you and Senator Enzi would like to ask me verbally, I would be happy to ask them on his behalf. I will also ensure that any of the members of the other party who have questions to submit to the witnesses can do so.

Having said that, why don't we start with you, Dr. Cassel? And then just move down the line and let us hear what insights you have to share with the committee.

**STATEMENT OF CHRISTINE K. CASSEL, M.D., PRESIDENT,
AMERICAN BOARD OF INTERNAL MEDICINE, PHILADELPHIA,
PA**

Dr. CASSEL. Thank you, Madam Chair, for the invitation to testify today about improving healthcare quality.

My name is Christine Cassel. I am a board-certified internist and geriatrician and the president of the American Board of Internal Medicine.

ABIM is an independent nonprofit organization that is of the profession and for the public. We assure, by board certification, that physicians in internal medicine and 17 different subspecialties have the knowledge and skills to practice within their specialty.

We certify about a third of the Nation's practicing physicians, and we are the largest of the 24 boards that constitute the American Board of Medical Specialties. Our standards shape medical training and physician practices throughout the country in many varied settings.

As you mentioned, I had the privilege of serving on the Institute of Medicine committee that produced the quality chasm report, and I believe we can point to many accomplishments since it was published in 2001.

The development and reporting of performance measures is a particularly visible achievement, but all of these measures are not really coordinated or linked enough with clinical practice to really have the big impact that they ought to have on quality and affordability. The National Quality Forum is trying to fix this, bringing leaders of a broad range of groups to set priorities for improvement and to facilitate consensus on performance measures.

As we now invest in health information technology to make all this data available, there is still another critical ingredient that is missing. We need to ensure that the clinicians who are using it have the skills needed to use this data effectively and to modernize their care around the patient's needs.

My training in geriatric medicine gives me insight into what is needed to take good care of patients who have complex and multiple chronic conditions, something we are going to have more and more of as the baby boomers age.

Doctors need to have the knowledge and judgment to make the right diagnosis and to manage complex care, and they also need skills less commonly taught, like working in clinical teams, care coordination, integration with other specialists, and linking community and clinical services.

My patients didn't just have one condition. They had five or six and were often taking 10 to 15 medications a day. They came to the doctor not with the diagnosis on their forehead, but feeling weak or dizzy or mentally confused.

These symptoms could result from anything—cancer to Alzheimer's disease. Or it might be caused by all these medications having side effects, or even over-the-counter remedies. There might be a pneumonia brewing, or it could be the loss of a spouse or another close caregiver.

The physician alone can't sort all this out and address all these different issues. If there isn't a team to help, the patient could have

many unnecessary tests, end up in the hospital, or, worse, fall and break a hip.

A case in point is the understandable excitement now about the patient-centered medical home. Most of the discussion is focused on practice infrastructure to facilitate integrated and coordinated care—electronic records, etc.—but without considering the doctor and the team.

If the doctor doesn't have the extensive knowledge and management skills, the promise of the medical home won't be fulfilled. You can't just order a medical home kit from a catalog and expect to produce results without also major changes in how we practice.

The profession has ways to help with this challenge. At ABIM, we provide Internet-based tools that are available to almost 200,000 physicians around the country that can help them to assess their practice strengths and weaknesses and offer links to tools and strategies for improvement.

Using physicians' intrinsic motivation to help their patients, the certifying boards have demonstrated that with trusted and actionable data, doctors actually do engage in improving quality of care. These very same data can be used if they want for reporting to health plans, NCQA, hospitals, or Medicare. This alignment reduces the burden of redundant data collection and the hassle for a busy office practice.

We evaluate physician performance and practice using NQF-endorsed measure sets as well as the doctor's knowledge, diagnostic ability, and medical judgment. In our survey, 73 percent of physicians changed their practice as a result of going through board certification.

The HELP Committee has already taken important steps in the stimulus bill—and you are to be thanked for that—by supporting both HIT and comparative effectiveness. These important investments will not reach their full potential unless physicians and other clinicians actually use the information they provide to inform their treatment decisions or to change their practice patterns.

Thank you for the opportunity to reflect on the progress made and the challenges that remain. We welcome the chance to partner with you as you consider the reforms ahead.

Thank you.

Senator MIKULSKI. Thank you, Dr. Cassel.

You know, your entire statement is very content rich. So we are going to have that in the record, too.

[The prepared statement of Dr. Cassel follows:]

PREPARED STATEMENT OF CHRISTINE K. CASSEL, M.D.

SUMMARY

ABIM is an independent, non-profit organization that assures via board certification that physicians have the knowledge, skills and attitudes to practice in a given specialty. ABIM certifies about one-third of the Nation's practicing physicians in varied settings and practice sizes. Since the 2001 publication of the Institute of Medicine's *Quality Chasm* report, many strides have been made to improve quality of care, with the development and reporting of performance measures as a particularly visible accomplishment. Yet, we have a long road ahead of us because individual performance measures will never be able to reflect, the complexity of medical practice. As we build a more scientifically robust performance measurement and reporting system with appropriate, valid measures linked to payment, we need to si-

multaneously focus on assessing and enhancing the skills and competencies that clinicians need to practice in a 21st century system.

The patient-centered medical home is a case in point. Discussions about this model have largely focused on practice infrastructure, select clinical measures and related payment mechanisms, with the goal of facilitating integrated and coordinated care. However, these discussions fail to recognize the importance of the competencies that physicians and other clinicians need to effectively practice in this redesigned system. These competencies must be at the core of primary care residencies and physicians in practice need support to work effectively in teams, engage patients in managing chronic conditions and effectively coordinate and manage the care of patients with multiple conditions, among other skills. ABIM's certification process helps drive the attainment of such knowledge and skills in training and practice.

ABIM's assessment "tool box" includes internet-based modules, which are available to over 200,000 physicians, that use National Quality Forum (NQF) measures to assess clinical care, a Consumer Assessment of Health Providers and Systems (CAHPS) patient experience survey and a mini version of the National Committee for Quality Assurance's (NCQA) Physician Practice Connections module. ABIM's tools also assess a physician's clinical knowledge base, diagnostic ability and medical judgment in a given medical specialty.

ABIM has aligned its certification program with the quality efforts of numerous organizations. In fact, at the request of a physician, ABIM will transfer certification results and data to NCQA, health plans, hospitals or Medicare with the goal of reducing redundant data requests and accelerating improvement.

ABIM stands ready to work with members of the HELP Committee as you embark on reforming the healthcare system and ask that you strongly consider the crucial role of clinician competencies in the reform landscape.

Chairman Kennedy, Senator Enzi and members of the Health, Education, Labor and Pensions Committee, thank you for the invitation to testify about improving health care quality. My name is Christine Cassel, and I am a board certified internist and geriatrician, and the President/CEO of the American Board of Internal Medicine (ABIM).

ABIM is an independent, non-profit organization that is "of the profession but for the public." We assure via board certification that physicians who practice internal medicine and 17 different subspecialties have the knowledge, skills and attitudes to practice within their specialty. ABIM certifies about a third of the Nation's practicing physicians and is the largest of the 24 boards that constitute the American Board of Medical Specialties (ABMS). The standards that we set shape both medical residency training programs and physician practices of all sizes in many varied settings.

Since the publication of the Institute of Medicine (IOM) *Quality Chasm* report in 2001, many strides have been made to improve the quality of care, with the development and reporting of performance measures as a particularly visible accomplishment. Having had the privilege of serving on the committee that produced the IOM report, I derive satisfaction from those gains while acknowledging that we have a long way to go. Specific, select accomplishments over the last 8 years include:

- The healthcare community, under the auspices of the National Quality Forum's (NQF) National Priorities Partners, has set national priorities for improvement—including patient and family engagement, reducing overuse of inappropriate services, and enhancing end of life and palliative care, which are key areas to focus on from my vantage point;
- The medical community is developing and implementing a broader array of evidence-based clinical guidelines, which translate research into practice recommendations, and they are beginning to enhance them with the integration of appropriateness criteria. These guidelines are then translated into performance measures;
- There is growing agreement about using standardized performance measures—focused on both clinical conditions and on patient experience—and the role that the NQF plays in facilitating consensus in this arena;
- There is some evidence that reporting of performance measures is driving improvement at hospitals and health plans, although that is less clear at the individual clinician level. For example, the Healthcare Effectiveness Data and Information Set (HEDIS) data, used at the health plan level, has shown improvements across multiple dimensions over the 9 years that the National Committee for Quality Assurance (NCQA) has been publicly reporting results.

As we build a more scientifically robust performance measurement and reporting system with appropriate, valid measures linked to payment, we must simultaneously focus on assessing and enhancing the skills and competencies that clinicians need to practice in an increasingly complex 21st century healthcare system.

My training in geriatric medicine emphasized a set of competencies that are necessary for the provision of high quality care. These competencies focused on the importance of making the right diagnosis (particularly with patients that have multiple, complex problems), working in clinical teams, care coordination, integration with other specialists, management of multiple chronic conditions and linking community and clinical services. But these skills are not utilized by many clinicians for a number of reasons: our training and education systems do not adequately focus on such competencies; such knowledge and skills are not supported by the systems in which clinicians work; and perhaps because these more complex areas do not easily lend themselves to performance measurement.

A case in point are the policy discussions about the patient-centered medical home, which are largely focused on practice infrastructure and related payment models that can facilitate integrated and coordinated care, but fail to emphasize the competencies that physicians and other clinicians need to effectively meet the promise of the medical home concept. These competencies must be a part of primary care residencies and physicians in practice need support to work effectively in teams and engage patients in managing their chronic conditions, among other skills that the vision of the patient-centered medical home model requires.

At ABIM, we provide internet-based tools that are available to close to 200,000 physicians that can help them assess their practice strengths and weaknesses and offer links that guide them towards improvement. By tapping into most physicians' intrinsic motivation to do well by their patients, the certifying boards have demonstrated that with trusted and actionable data, physicians engage in improving the quality of care. These very same data can then be used—if the physician so chooses—for reporting to health plans, NCQA, hospitals and to the Centers for Medicare & Medicaid Services. This alignment reduces redundant data collection, lessening the administrative burden on physicians (particularly in smaller practices), and can help in accelerating improvement.

ABIM's tools assess physician's performance in practice—using standardized NQF clinical measures, Consumer Assessment of Health Providers and Systems (CAHPS) patient experience surveys and a condensed version of NCQA's Physician Practice Connections (PPC)—as well as his or her knowledge base, diagnostic ability and medical judgment in a given medical specialty.

In a survey of over 5,000 physicians who have used ABIM's performance assessment tools, 70 percent of respondents reported that they found these tools valuable in identifying strengths and weaknesses in the care they provide. More importantly, 73 percent of respondents changed their practice as a result of completing one of ABIM's performance assessment modules.

Yet, there are aspects of practice that do not easily lend themselves to being assessed via performance measures. Therefore, other types of assessment tools are needed. Key examples include:

- Our current performance measurement system assumes that a correct diagnosis has been made and may even result in performance payments that stem from faulty diagnoses. This is not an outlier problem. The literature suggests that diagnostic errors account for 5–15 percent of medical errors, depending upon the specialty, and they are not declining over time. Certifying board examinations include clinical scenarios that test diagnostic acumen.
- Further, making the correct diagnosis and recommending an appropriate treatment plan requires up-to-date knowledge of new therapies, an ever-evolving understanding of the strengths and weaknesses of existing therapies and, often, the skill to know how to manage and integrate multiple therapies. Certifying board examinations test medical knowledge and provide scenarios to assess clinical judgment and management.
- Finally, it is less likely that performance measurement bundles will be developed for less common illnesses, such as thyroid disease, viral meningitis or rheumatoid arthritis. Yet patients will, and should, expect that physicians can diagnose and treat such conditions. Instead, clinical scenarios involving rare conditions lend themselves to board examinations and online point of care tools.

As members of the HELP Committee contemplate shaping a reformed health care system, you have already taken important steps in the stimulus bill by articulating the importance of both health information technology (HIT) and comparative effectiveness research. These investments can help deliver to physicians and other clinicians important data and information that they need to understand “how they are

doing” to help in facilitating care coordination and integration; aid in reducing wasteful, redundant testing; and provide a resource that objectively compares treatment options. But these important investments in a 21st century healthcare system will not reach their full potential unless physicians and other clinicians actually use the information they provide to inform their treatment decisions or to change their practice patterns. ABIM—and very likely other certifying boards—would be happy to work with the HELP Committee to facilitate physician engagement related to both HIT and comparative effectiveness.

Going forward, the HELP Committee might also want to consider how community health centers (CHCs) define their services, making sure that the definition allows for the effective delivery of and payment for comprehensive care to patients with complex and multiple conditions—the kind of care that geriatricians are trained to provide and that many patients beyond the elderly need. CHCs will also serve as patient-centered medical home sites, and will be most effective if the definition of provided services is expansive and staff is supported in learning new competencies to effectively practice in a redesigned model.

Finally, there are two other important, and related, areas of intersection: revitalizing primary care and providing better care for underserved populations. In both arenas, ABIM Board-level committees have been working to define, implement, test and evaluate new tools to assess related competencies. We would welcome the opportunity to share our learnings with you and others as you consider how to advance primary care and to close disparities gaps as part of a reformed healthcare system. For example, in the underserved area physicians using our tools in large and small practices will eventually be able to compare the quality of care they deliver across various sub-populations.

Thank you for the opportunity to reflect on what the quality community has and has not yet accomplished over the 8 years since the *Quality Chasm* report was published. We would welcome the chance to partner with you as you consider how to shape the reforms that lie ahead. In the process, we ask that you consider the skills and competencies of the Nation’s clinicians as essential to achieving the vision of a dramatically reformed system as laid out in that landmark report.

Senator MIKULSKI. Dr. Teisberg.

STATEMENT OF ELIZABETH TEISBERG, Ph.D., ASSOCIATE PROFESSOR, UNIVERSITY OF VIRGINIA’S DARDEN SCHOOL OF BUSINESS, CHARLOTTESVILLE, VA

Dr. TEISBERG. Chairwoman Mikulski, thank you for inviting me to talk about quality improvement and healthcare value for every American.

My name is Elizabeth Teisberg. I am a professor at the University of Virginia and coauthor of “Redefining Healthcare.” I am also the mother of a child who was painfully chronically ill for 6 years before his full recovery.

As a professional and as a mother, I have questioned the conventional wisdom that causes leaders to cling to a system that everyone agrees could be significantly improved. We can and should drive dramatic and ongoing improvement in value for patients, achieving far better outcomes much more efficiently.

Lack of attention to quality in healthcare drives costs up. While the cost of employee health benefits command headlines, U.S. employers spend three times that much on the costs of poor health. We can’t afford to ignore quality. We can and must use attention to quality to drive costs down and to improve value.

Quality in healthcare is measured by health outcomes achieved. The 139 heart transplant centers in the U.S. report results—for example, the percentage of patients who live for a year following a heart transplant. These are complex patients. For some centers, the percentage of patients that survive the first year is well over 90 percent.

What about the centers that report the lowest results? Eighty percent? Fifty percent? It is zero. To be fair, that center had performed only six transplants, but who should be the seventh? Because there is significant variance in outcomes, reporting is essential.

Process measures, also described as consensus measures, have been well developed in the past decade and are widely used. In Minnesota, effort to improve chronic care for patients with diabetes began with measures of process. Very rapidly, 90 percent of clinics became top rated for their processes, and someone asked, "Are the patients better off? Are the outcomes better?"

So outcome measures were developed, and in the first 2 years of public reporting, the percentage of patients that succeeded on all the measures of outcomes more than doubled from just over 4 percent to just under 9 percent. Great improvement, but a long way to go in spite of excellent process performance.

Reporting on the use of good process is not enough. Reporting outcomes drives improvement in health results. What is measured will improve. Outcome measurement accelerates learning by clinical teams, which, in turn, drives better results for patients and higher healthcare value.

The point is not consumer shopping. When New York State began publishing mortality rates for heart surgery by different providers, studies clearly showed that consumers did not use the data. Yet mortality dropped 41 percent in the first 4 years. Physician teams did use the data, and the dramatic decline in mortality surely benefited patients.

Reporting can and will start with imperfect measures. Congress need not specify the measures, just the requirement for teams to report outcomes.

HHS can have a not-for-profit organization oversee the registries, as they do for transplants, or HHS can ask the existing expert medical boards. Leaders from those boards tell me that they have clinically meaningful outcome measures, and they can require reporting for the renewal of credentials. This could happen quickly. This could start now.

Want to improve results and lower costs of chronic disease? Measure results. Want to drive down disparities in healthcare? Measure teams' results for every patient. Want to speed adoption of best practices? Measure results so clinical teams can compare and improve.

The fastest and most effective way to improve health outcomes for Americans, as well as to improve the measures themselves, is to start measuring and reporting outcomes. The time is now.

Thank you.

[The prepared statement of Dr. Teisberg follows:]

PREPARED STATEMENT OF ELIZABETH OLMSTED TEISBERG, PH.D.

SUMMARY

Access to health care for all Americans is essential to both equity and economic efficiency. Dramatic improvement in value (health outcomes per dollar spent) is necessary to provide quality care for all Americans.

The purpose of health care is health. Successful health care reform efforts must do more than cut costs. The real goal of health care reform is, and must be, to drive dramatic and ongoing improvements in the value of health care. This means improv-

ing quality—health and health care outcomes—relative to the cost of achieving these outcomes.

The tremendous opportunity in health care is using improvements in quality of outcomes to drive costs down. To see this, one must only recognize that the goal is more health, not more treatment. Often, improved quality means more effective treatment, better health, and *lower* costs. The essential insight is this: Living in good health is inherently less expensive than living in poor health. In this era of chronic disease, costs *rise* when quality is low. With improvement in value—the health outcomes per dollar spent—more people can receive better care.

The single most important step that Congress can take to enable improvement in health care value for Americans is to commit to measuring results. The adage applies: what is measured will improve. The time to begin is now.

The Senate does not need to specify the exact measures to be used. From a national policy perspective, the task is to require outcome measurement. The Department of Health and Human Services can give the task of developing measures for given medical circumstances to not-for-profit organizations, or to the existing medical boards that have deep credibility and expertise.

The point of measurement is not shopping or report cards. The purpose is to enable clinical teams to accelerate learning about what improves health outcomes and what improves the efficiency of effective care. A decade of process measurement has not yielded these desperately needed improvements. Measuring results is essential. Health outcomes are what drive value. At the same time, outcome measures are critical to ending the unacceptable disparities in American health care.

Starting soon matters. Past experience with outcome reporting in this country and in others clearly shows that the fastest way to improve both results and the measures themselves is to begin collecting the measurements.

Outcome measurement will spur improvements in health and health care value for all Americans. For patients and for health care professionals, measuring results will refocus the system on its intended purposes of *health* and *care*.

Chairman Kennedy, Chairwoman Mikulski, Ranking Member Enzi and members of this committee, thank you for inviting me here today to talk about health care quality and improving health care value for every American.

My name is Elizabeth Teisberg. I am a tenured professor at the University of Virginia and co-author of *Redefining Health Care*.¹

ACCESS, MEASUREMENT AND PAYMENT: KEY DIMENSIONS OF HEALTH CARE REFORM

Improving our Nation's health care is an urgent priority, made more critical by the current economic crisis.

- Health is essential to productivity—if health is undermined because of tough economic times, the Nation becomes less productive, less competitive, and less able.

- The health sector is a large and vibrant part of our economy and the economic recovery will be stronger and faster with an effective and efficient health sector. There is no greater short- or long-term economic stimulus than attending to the health of Americans. We must keep and expand meaningful jobs that create value by enabling health.

- The crisis in health care that preceded this economic downturn remains and won't disappear simply because of a recession. The problems are well known: costs are spiraling upward while quality in care and outcomes suffers from wide variance; good practice is undermined by inconsistencies in care, disjointed coordination and poor communication hinder care and hamper health outcomes; alarming numbers of deaths and serious injuries result from preventable medical errors, and over 40 million Americans lack the health insurance that would provide appropriate access to preventive and early stage care.

Action on health care reform is a critical priority for the Nation. For over a decade, repeated efforts to contain health care costs have met with, at best, limited success. To change that result, to create a world-leading health care system, the Nation needs clear, new goals, new policies that are rapidly implemented and a government structure that prompts, supports and rewards ongoing and dramatic improvement. My recommendations address **access**, **measurement** and **payment**—issues essential for quality and for success. But first, consider the goal of genuine health care reform.

¹M.E. Porter and E.O. Teisberg, 2006, *Redefining Health Care*, Harvard Business School Press, Boston, MA.

THE GOAL OF IMPROVING HEALTH FOR AMERICA

The Goal of Health Care is Health, so the Goal of Health Care Reform Must Be To Improve the Value of Health Care

I am neither a physician nor a Washington health policy insider. My expertise in this field comes as a scholar and professor of Innovation and Strategy, as a Ph.D. in engineering economic systems analysis, and as the mother of a child who was chronically ill and in pain for most of a decade before his full and complete recovery. As a professional, and as a mother, I have questioned the conventional wisdom that has blocked change and retained a system that everyone agrees could be significantly improved.

The real goal of health care is health. Yet, policy discussions are often framed as if the goal of health care delivery were cost reduction. If the goal of health care was simply cost reduction, the solution would be to offer pain killers and compassion. Clearly, that is not the solution for health care in our Nation. Successful health care reform efforts must do more than cut costs. **The real goal of health care reform is, and must be, to drive dramatic and ongoing improvements in the value of health care.** This means improving health care outcomes relative to the cost of achieving these outcomes.

Improving value in health care means improving health care outcomes for the money spent. This is a critical idea and an intuitive one. In most choices, people seek value—not the lowest cost regardless of poor quality, and not the highest quality without regard for cost. The tremendous opportunity in health care is how powerfully improvements in quality actually drive costs down. To see this, one must simply recognize that **Americans desire more health, not more treatment.** Improvement in health care need *not* mean more treatment and more cost. Often, improved quality means more effective treatment, better health, and *lower* costs. The essential insight is this: **Living in good health is inherently less expensive than living in poor health.** Improving health, improving the quality and the value of health care will save money, not cost money.

In this era of chronic disease, there is clear evidence that costs can be lowered through quality.

- Stroke is the leading cause of long term disability. Preventing a stroke or fully recovering from a stroke are—in every circumstance—less expensive than long term disability.

- Diabetes has become a pandemic, and people with diabetes have four times the health care costs of people without diabetes. Preventing disease progression and enabling people to live in ongoing health is far less expensive than paying for the compounding problems of amputations, heart disease and blindness. Healthy Americans work, provide for themselves and their families and pay taxes. Those afflicted with diabetes, and without access to effective care, can do less of those things.

- For breast cancer, early treatment enables better results at lower costs. A woman with stage one cancer may be cured. A woman whose disease has reached stage 2B will face more invasive, more expensive care with less promising results.

- For any disease, quality of diagnosis is critical: a wrong diagnosis leads to care that costs time, wastes money, and adds risk and discomfort.

In example after example, **improving health outcomes reduces costs.** Some of the savings result from reduction of waste and errors in the current fragmented organizational structures. Even more significant gains come from restructuring care into teams, coordinated over the full cycle of the patient care. Innovation in the structures of care delivery can yield better prevention and improved solutions for patients and families. In spite of the conventional wisdom, we *can* afford to improve quality. **Improving quality will drive dramatic improvement in value.**

Health policy reform can and should use improvement in health outcomes to drive down costs, rather than bowing to cost pressure and pushing down quality of health care or undertaking more efforts (and more administrative expenses) to limit access to care.

WHY RESULTS-DRIVEN COMPETITION?

Results-Driven Health Care Will Improve Value More Than Government-Driven or Consumer-Driven Approaches

In most sectors of the economy, the dynamic of competition drives improved value. In a functioning market, both quality and efficiency increase over time. But health care has been different. Quality has suffered while costs have increased. Waste is rampant. Why?

The problem in health care isn't too much competition or too little. The problem in health care is the wrong kind of competition. Health care lacks

positive sum competition to improve value in health care. Instead, health care is replete with examples of zero sum competition that shift costs through the exercise of bargaining power. Today's competition occurs among systems of providers and health plans over capturing contracts and resources, shifting costs to each other, to employers, to the government and to consumers. This zero sum competition destroys value, rather than creating value for patients. Health policy reform needs to disable the gains from zero sum competition. A key implication of this insight is that universal access is essential to effective, value-creating competition in health care.

The right competition is competition to increase value—to improve health care results. In positive sum competition, the patient wins with better health outcomes, the clinical team succeeds professionally, and the employer, government and health plans gain through more efficient care and increased productivity. **Policy needs to support positive sum competition.** This means that policy needs to require measurement of health care outcomes. Value is created in improving the health and health care outcomes of people.

Productive competition is one of the most powerful forces for change, for economic stimulus and for improvement. As President Obama stated in his inaugural address: *the question before us [is not] whether the market is a force for good or ill.* The market is a powerful force for change, and the right kinds of policy can set a dynamic of positive competition and increasing health care value for all Americans.

UNIVERSAL ACCESS

Access For All Americans is Essential not Only for Equity, but for Economic Efficiency

The dysfunctional competition in American health care is endlessly fueled by opportunities for one party to shift costs to another, to win by forcing another party to lose, rather than to win by creating value, by improving health and health care outcomes. To stop the cost shifting games, everyone must be brought into the system. As long as parties gain by avoiding serving the uninsured, the tremendous energies to win at cost shifting will continue. **Shifting costs does not create health care value.**

Lack of access reduces efficiency, shifts costs and, overall, raises costs of U.S. health care.

- Those without access to early stage and preventive care tend to seek care only after problems have advanced. **Treatment for later stage disease is both more expensive and less effective.** This is part of the reason why every country with some form of universal coverage has lower per capita health care expenditures than does the United States. It is simultaneously more effective and less expensive to treat early stage disease and prevent disease progression.

- In this country, **everyone may go to the emergency room, but thousands lack access to care in less expensive, more effective settings.** Those who argue that U.S. emergency rooms offer access for all must recognize that this is the highest cost way to provide access. Emergency rooms are not the venue for treating chronic disease or delivering preventive care. Emergency room physicians and nurses cannot create coordinated care for people who lack access to care in other settings. The efficiency gains from better coordinated care are unattainable with today's limited access.

- An enormous amount of effort goes into shifting and recovering the expenses of uncompensated care. These efforts create no value. Instead, they reduce value by **increasing administrative costs.** Costs of uncompensated care end up raising the charges to employers, the government and other patients, adding to the upward cost spiral.

There will be transitional costs in giving everyone access to more appropriate health care settings and at earlier points. Over time, however, it will be more efficient and more effective for all to have access to care and to dispense with the cost shifting efforts that consume vast amounts of resources without creating value for patients.

Achieving Universal Access Through Mandatory Coverage

Mandatory health plan coverage is the surest way to achieve universal access. This will require vouchers or subsidies, in appropriate amounts, for those who need them. The obvious objective is universal coverage, not simply expanded access with the known holes and obvious incentives to continue cost shifting. Gains from reducing administrative costs will be largely sacrificed by expanded coverage that is not truly universal.

Universal coverage (with measured results) will enable quality gains. With a health plan, every person becomes a paying customer. That creates incentives to provide quality care for all.

Universal coverage will also need rules that require all payers to cover their fair share of the most expensive patients. Financial risk pooling can address this, so that payers who cover more of the highest risk members receive an allotment that is collected from those who cover the lower risk members. This reduces the incentives for cherry picking only healthy customers. It is worth noting that the often-touted Swiss system has used a risk pooling mechanism for decades. The alternative of high risk health plans that are insurance of last resort for the sickest people leave in place the incentive for insurers to dis-enroll or discourage potentially expensive people.

The other essential enabler of universal access is a list of what insurance must cover. Clarity that reduces arguments about coverage creates enormous administrative savings. Of course, health plans could cover more than the minimum, but the minimum must be specified to make coverage meaningful. A logical starting point is to use the requirements for the Federal Employee Health Benefits. Simultaneously with starting mandatory coverage, a panel of experts could be convened to make recommendations about adjustments to the required coverage.

But universal access alone will not fix the system or contain rising health care costs. In the current structure, quality care for all will be difficult to achieve or afford—perhaps impossible. Neither incremental change nor waste reduction within the current structure will yield enough improvement. The Nation needs significant innovation and improvement in health care delivery to achieve a dramatic increase in value for patients. **With improvement in value—the health outcomes per dollar spent—better care will be available to more people.**

Universal access must be accompanied by measures that refocus health care on improving value for patients (and people who need not become patients). ***The single most important step that Congress can take to improve health care value for Americans is to commit to measuring results. The adage applies: what is measured improves.***

RESULTS MEASUREMENT

Measuring Results Will Unleash Significant Improvement in Value

Measuring results—health outcomes and costs—is critical to enable and drive improvements in value. **Achieving universal access will be far less expensive in a results-driven system where positive sum competition improves value.** Without improvements in the value of health care, the Nation will face increasing health care rationing of some form, whether it is explicit rationing of services, waiting lines or degradation of quality. But none of that is necessary or inevitable.

The most critical policy step for enabling improvement in value is to begin results measurement. Through meaningful outcomes measurement, clinical teams are able to accelerate learning about what truly improves health outcomes and what improves the efficiency of effective care. A decade of process measurement has not yielded these desperately needed improvements. Results—the improvement in a patient's health—must also be measured. The health outcomes of care are what matter to patients and families, to the professional success of clinicians, and to the productivity of the American workforce. Health outcomes drive value.

The Senate cannot, should not and does not need to specify the exact measures to be used. However, **the Congress must require outcome measurement.** The Department of Health and Human Services can give the task of developing measures for given medical circumstances (e.g. strokes, diabetes and its co-morbidities, asthma, heart disease, etc.) to not-for-profit organizations, or to established medical boards. The Society of Thoracic Surgeons has been measuring health outcomes for a decade and its efforts have resulted in dramatic improvements in health quality and value. Leaders of four medical boards have approached me with the statements that they already know clinically meaningful measures that could and should be collected. Because medical boards renew accreditation for physicians, the boards are in an able position to require reporting. They can begin simply by requiring reporting and tying board licensure to whether or not reporting was completed, not to the relative performance of the reported outcomes. As the measurements are checked and refined, the system will evolve. The board leaders with whom I've spoken can start quickly and have deep expertise and credibility.

Starting soon matters. Past experience with outcome reporting in this country and in others clearly shows that **the fastest way to improve both results and the measures themselves is to begin collecting the measurements.** Perfect measures and perfect risk adjustment are not required. When government efforts

launch outcome reporting, the clinicians most affected are spurred to improve the measures and to create new, more accurate and clinically relevant ones. The state-of-the-art outcome measurement by the Society of Thoracic Surgeons began as a defensive response to government (HCFA) reporting of mortality rates for cardiac surgery (based on administrative data). The universally collected and publicly reported outcome measures for transplants resulted from an Act of Congress establishing an organ sharing network and registry. Clearly, Congress can jump start results measurement that improves health care outcomes. Congressional expertise in the measures is not necessary. **Congress simply needs to require registries of outcome measurements and allow appropriate experts to specify the measures.**

The point of measurement is not to enable consumer shopping. Report cards are not the goal and assertions that consumers do not use outcomes measures is simply a distraction. **The objective of requiring measurement is to improve health care results by accelerating learning and improvement.** When the State of New York began public reporting rudimentary mortality outcomes, mortality from CABG surgery fell 41 percent in the first 4 years. The evidence was clear that patients did not use the data to shop. **Physicians used the data to improve.** The drop in mortality vividly indicates that patients benefited.

Measuring results will help clinical teams develop the needed insight to improve the structures and processes through which care is delivered. Clinical teams need to know what they do well. They need to know when they are improving and where they need further work. They need to know when they are achieving superb results so they can share their approaches with others. Indeed, the history of these efforts shows that when the teams with excellent results teach others, results improve overall and, importantly, the team doing the teaching improves even faster.

The Nation's health depends on this. **Don't accept delay, and don't settle for only process measures.**

- There have been significant and laudable efforts over the past decade to develop measures of accepted practice. These are important to understand and to share. But the promised progression to outcome measurement still lies ahead. **Congress needs to require outcome measurement to begin by a specified date.**

- **The measures must go beyond process compliance.** Measuring processes and measuring health outcomes are different. Indeed, many studies confirm that teams complying with the same process specifications get different health outcomes for their patients. Measuring only process compliance diverts health care down the road of administratively managed care and ever-increasing bureaucracy. It is easier to achieve consensus on process metrics because inputs are more readily controlled than the output of health results. But the past decade of process measurement has not yielded the needed improvements. **It is time to require measurement of outcomes.**

Outcome measures are also critical to ending the unacceptable disparities in American health care. Mandatory results measurement will mean that substandard care for any group, including minorities or people with low incomes, will be unmasked. Once unmasked, disparities are unacceptable and most are wholly unintended. At the same time, poor results for any patient will lower a team's outcome measures. On every dimension, results measures, more than any other policy, will accelerate elimination of substandard care for any group.

Outcome measurement will spur improvements in health and health care value for all Americans. Attention to health care outcomes also offers the potential to align interests across the health sector. Knowledge of what a clinical team is doing well and how it is improving restores pride and professionalism for physicians and nurses who are so often today beaten down by reimbursement hassles and bureaucracy that overshadow their heartfelt desire to care for patients. For patient and for health care professionals, results measures will refocus the system on its intended purposes of *health* and *care*.

PAYMENT

In the current system, financial success and medical success are not aligned. There is much discussion of the fact that some of the most effective work that physicians do is uncompensated. But the even bigger problems is that many of the structural improvements needed to allow greater leaps in health care value will not be supported by current reimbursement systems. Our piecemeal system of payment by procedure, by visit, by intervention and by hospital stay encourages poor coordination, redundant processes and lack of attention to the patient's full cycle of care. In addition, prices for a particular service vary widely by payer, which shifts costs and increases complexity, but creates no value.

Instead, **payment systems can support value-enhancing innovations in health care organizations by offering reimbursement for the full cycle of care needed by a patient.** Rather than numerous prices and bills, comprehensive reimbursement would essentially pay the clinical team as a whole, rather than create negotiated prices for all of the components of care. Prices for episodes, service bundles and ultimately full cycles of care will require teams to apportion payment, as occurs in other services in our economy. While that might sound a bit daunting to some teams today, the process of considering the full suite of services needed to restore the patient's health will lead to improved communication and improved awareness of the patient's full experience. Some hospitals and clinics, usually with salaried medical staff, have already begun paying teams in this way.

Today's pricing depends as much or more on who is paying than on the services being delivered. Reduced administrative costs, improved transparency and incentives to improve efficiency would result from requiring prices to depend only on medical circumstances and services and be the same for all payers. Large payer organizations find threatening the idea of reducing their bargaining power, but their negotiated discounts backfire by increasing the list prices and the costs of uncompensated care. Over time, cost shifting only fuels the spiral of increasing costs. **Aligning payment with the patient's care will refocus competition on improving health care value and bringing down price increases over time.**

Dramatic improvement in value will result from restructuring care in ways that are genuinely patient-centric. Today's physician-focused organizational structures deliver visits, interventions and procedures. **A patient-focused organizational structure delivers coordinated solutions for improving health results.** Teams could accelerate improvements in value by addressing clusters of medical circumstances that patients commonly face—what Prof. Michael E. Porter and I called “medical conditions” in *Redefining Health Care*. There is ample evidence that coordinated teams delivering care for patients with shared medical circumstances improve health outcomes and efficiency faster. They would be best supported by a system that includes all Americans with universal coverage for preventive, early and essential care, that has measured outcomes to enable learning and improvement, and that pays for the bundle of services needed to provide patient solutions.

CONCLUSION

Access to health care for all Americans is essential to both equity and efficiency. Dramatic improvement in value (health outcomes per dollar spent) is necessary to provide quality care for all Americans. Health outcomes will improve faster and more dramatically if they are widely measured. Coordination of care that improves both outcomes and efficiency will progress more readily if payment becomes team-based for cycles of care. Congress can make huge strides by requiring mandatory health plan coverage and setting outcome measurement in motion. The time to begin is now.

My thanks to the members of the committee and to its diligent and knowledgeable staff for the opportunity to share my thoughts with you.

Senator MIKULSKI. Thank you very much, Dr. Teisberg.

Dr. Robinson-Beale, before we go on, I want to acknowledge that Senator Dodd has come. He is next in line behind Senator Kennedy on the committee. Also our newest member, Senator Kay Hagan of North Carolina. We have got you way down there.

We have Senator Dodd and Senator Hagan. Senator Hagan, we don't know how many people are coming. Senator Dodd, do I have unanimous consent that we have her jump the seniority system for today?

Senator DODD. Well, let us discuss it for an hour or so.

[Laughter.]

Come on up here, Kay.

I have got a very bad voice, and I apologize. I have got a cold. I have got a 3-year-old and a 7-year-old. I don't have to say anything more probably. I am living in a petri dish, and so I apologize.

Let me thank Senator Mikulski for the tremendous work she is doing in this area. In fact, I just got off the phone with Senator Kennedy and Mrs. Kennedy, and he is doing well. He is sorry he

is not here today to participate in this, but deeply grateful for the work that Senator Mikulski is doing, along with our other colleagues, Senator Bingaman, I know as well, and Tom Harkin, in looking at various issues here as we get ready for what we hope is going to be a major effort on health reform.

We are grateful as well to Mike Enzi and other members of the committee who care about these issues as well. So we thank you very much, Senator, for what you are doing.

Senator MIKULSKI. Dr. Robinson-Beale. Please.

STATEMENT OF RHONDA ROBINSON-BEALE, M.D., CHIEF MEDICAL OFFICER, OPTUMHEALTH BEHAVIORAL SOLUTIONS, GOLDEN VALLEY, MN

Dr. ROBINSON-BEALE. Thank you, Madam Chairman. Thank you for inviting me to speak with you today about behavioral healthcare today in the context of the IOM reports "Crossing the Quality Chasm" and "Improving the Quality of Healthcare for Mental and Substance Use Conditions," the subsequent report that was put out after "Crossing the Quality Chasm."

I am honored to have the opportunity to communicate with you the heightened relevance of the recommendations from these reports, given the tremendous change in our economic environment we are now in, and we are challenged with facing a new construct of healthcare reform.

I hope to give you something to consider, some things that will be doable next steps to significantly move the status of behavioral health alone as a significant factor in healthcare reform.

I speak to you as a committee member of the "Chasm" report, as well as a sponsor of the "Improving the Quality of Healthcare for Mental Health and Substance Use Conditions." I am also the chief medical officer of the largest behavioral health organization in the country. We currently insure over 42 million people.

I am also the past chairman of the board of directors for the Association of Health and Wellness, the trade organization for managed behavioral health organizations, which does insure over 147 million people across the country.

The IOM "Chasm" and "Improving the Quality" reports clearly define the problems in both healthcare delivery systems, medical and behavioral, and offer a set of solutions for change. Despite the many issues and the solutions that were similar between the two systems, behavioral health reformation still lags behind its medical counterpart in the implementation of those recommendations.

Clear examples are this. The National Quality Forum, which has been designated as one of the entities that will drive consensus on performance measures, at this point has approved around 17 measures out of the plethora of measures that they have approved that are specific to behavioral health.

Fifteen of those are directed toward primary care management of behavioral health, which is leaving outside of that scope the measures of care for those individuals who have chronic mental illness.

Since 2006, at the time of the report "Improving the Quality of Healthcare," our country's landscape has changed dramatically. And in light of healthcare reform, there are new questions that need to be asked.

The questions now are how and what are the necessary changes in the behavioral health delivery system that we will need to make in order to be affordable, so that we can accommodate the larger number of individuals who will be able to seek care in an already overburdened and short-staffed delivery system and still provide quality of care?

Where the recommendations from the IOM "Chasm" report and "Improving the Quality" reports are still relevant and important, it is difficult to know which recommendations to initiate and which ones are essential to be implemented at this time. It is clear that a well-constructed strategy, concise execution, and having the buy-in and the inclusion of major stakeholders is needed to address this daunting task.

These are the recommendations. No. 1, it is important to adopt the culture that behavioral health is essential to health. It is key to effective medical care and greatly influences overall cost of medical care.

We know from looking at our stats and our data that behavioral health has a tremendous impact on medical cost. For example, we know that 39 percent to 40 percent of those who have chronic medical illnesses also have a behavioral co-morbidity.

We also know that or at least most people believe that behavioral health has a 3 percent to 5 percent impact on the medical dollar. When you begin to look at the impact of behavioral co-morbidities, that number rises to as high as 36 percent of the medical dollar.

When we look at the prevalence and the incidence of behavioral health across the board and we look at one indicator, and that one indicator would be the prescription rate for antidepressant medications, we see in our population anywhere from 9 percent to 17 percent of the medical population is on an antidepressant.

That is larger than any other chronic medical illness. It is larger than diabetes. It is larger than asthma, and it is larger than the incidence of cardiac disease.

With that being said, keep in mind that behavioral health still lags behind medical health in terms of having the infrastructure and the inclusion in many of the recommendations that have been put forth and actualized by the "Chasm" report.

Behavioral health is smaller. It is more organized—it is not as organized, but it is smaller so it is more doable. With that being in mind, it is necessary to create an organized approach to be concise.

I am suggesting that we would be able to put together a collaborative that would be accountable for convening the major stakeholders, prioritizing initiatives, monitoring those initiatives, and facilitating goals. By doing that, we can concisely and quickly begin to bring behavioral health up to play.

It is also important that there is governmental recognition. Just as parity has brought forth behavioral health to the forefront, governmental recognition and financial backing of initiatives is crucial to keep behavioral health in the forefront in importance in the healthcare reform.

Thank you.

[The prepared statement of Dr. Robinson-Beale follows:]

PREPARED STATEMENT OF RHONDA ROBINSON-BEALE, M.D.

SUMMARY

The IOM reports, *"Crossing the Quality Chasm"* (2001) and *"Improving the Quality of Mental and Substance-Use Conditions"* (2006) addressed the same fundamental question of what needs to occur to transform our current fragmented and unsafe health system to one that meets the needs of health consumers and our communities and assures quality of care. Quality is defined in these reports as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." In a health care system this links to the concept of reducing variation and increasing the delivery of effective care on a patient, provider and system level. In the IOM *Improving the Quality* report, recommendations, based on the *Chasm* 6 aims and 10 rules, were constructed with the goal of addressing the core quality elements needed to increase the likelihood of successful reformation of the behavioral health organization.

Since the start of this series of reports on behavioral health reform, some forward movement in the behavioral health agenda has occurred toward implementing recommendations. While these accomplishments are important, it is a common opinion among stakeholders in behavioral health, that there is more advancement needed in fulfilling recommendations in order to make significant progress and to move behavioral health closer to a quality model.

Since 2006, the date of the last behavioral health policy report, our country's landscape has drastically changed with economic devastation beyond any one's prediction. With the rising number of unemployed and the financial burdens citizens are experiencing, there is more urgency than ever to address our health care crisis. In today's environment, there are larger than ever numbers of individuals who are uninsured. Federal, States and employers are in extreme budget crisis and available funding for change is limited due to important competing interest. The question now is "how" and "what" are the necessary changes in the behavioral health care delivery system that will also be affordable, can accommodate larger numbers of individuals seeking services in an already overburdened system with limiting workforce and still provide quality. Where the recommendations from the IOM *Chasm* and *Improving the Quality* reports are still relevant and important, it is difficult to know which recommendations or initiatives are the key essential ones to be implemented. It is clear that a well constructed strategy, concise execution and having the buy-in and inclusion of the major stakeholders is needed to address this daunting task and to do so expeditiously.

RECOMMENDATIONS

- Adopt the culture that "behavioral health is essential to health," key to effective medical care and greatly influences overall cost of medical care.
- Make any behavioral health project funding contingent on clear demonstration of private-public involvement.
- Create and fund a behavioral health "czar" an entity, person, existing agency (ies) or a collaborative that can assume the role of creating a behavioral health reform agenda.
- The role of the behavioral health "czar" is accountable for convening stakeholders, prioritization, monitoring and facilitating goals.

The IOM *Chasm* and *"Improving the Quality"* reports clearly define the problems in both health care delivery systems and offer a set of solutions for change. Despite the fact many of the issues and the solutions are similar between the two systems, behavioral health reformation still lags behind its counterpart in the implementation of recommendations. Just as parity was enacted as a legislative act, governmental guidance and financial backing is crucial to continue to keep behavioral health in the fore front of importance in the health care reform.

INTRODUCTION

Mr. Chairman, members of the committee, thank you for inviting me to speak with you today about behavioral health care today in the context of the IOM reports *Crossing the Quality Chasm* (2001)¹ and *Improving the Quality of Health Care for Mental and Substance—Use Conditions* (2006).² I am honored to have this opportunity to communicate with you the heightened relevance of the recommendations from these reports, given the tremendously changed economic environment we are in now and the challenges we are facing within the construct of health care reform.

I hope to give you for your consideration doable next steps to significantly move the status of behavioral health along as a significant factor in health care reform. I speak to you as a committee member of the *Chasm* report, and IOM Health Services Board member, as a Chief Medical Officer for the largest behavioral health organization in the country that currently insures over 42 million people and as the past chairman of the board of directors for the Association for Health and Wellness (ABHW), the trade organization for managed behavioral health organization for which its members cover over 147 million people. My statements are my own drawn from my experience in all these venues and not as an official position statement from any organization with whom I have affiliation. As a point of reference I will use the term “behavioral health” as a comprehensive term representing both mental illness and substance-use conditions.

BACKGROUND

Significant reports that have influenced and reflected the need for change in the delivery of behavioral health historically has included:

- *Mental Health: A Report of the Surgeon General*³—established the basic understanding that behavioral health was important and that treatment works.
- 2001 *IOM Crossing the Quality Chasm*¹—architectural map to fundamental change in the general health care system to drive quality in care.
- 2003—*Achieving the Promise: Transforming Mental Health Care in America*⁴—laid out the values of patient-centered and consumer-driven systems of care.
- 2006—*IOM Improving Quality of Health Care for Mental and Substance-Use Conditions*²—built on the chassis of the *Chasm* report, it specifically lays out the architecture specific to behavioral health for transforming to a quality-driven system.

All these reports addressed the same fundamental question of what needs to occur to transform our current fragmented and unsafe behavioral health system to one that meets the needs of behavioral health consumers and our communities and assures quality of care.

DEFINITION OF QUALITY

Quality is defined by the IOM as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁵ In a health care system this links to the concept of reducing variation and increasing the delivery of effective care on a patient, provider and system level. In the *IOM Improving the Quality* report, recommendations, based on the *Chasm* 6 aims and 10 rules, were constructed with the goal of addressing the core quality elements needed to increase the likelihood of successful reformation of the behavioral health organization. Some of those core elements were:

- Applying the infrastructure changes outlined in the *Chasm* report to behavioral health (IOM rec 2). This recommendation specifically addresses the application of the general *Chasm* aims, rules and strategies to a behavioral health agenda.
- Designate an entity to collect and make ready for wider distribution of best practices. (IOM rec 4-1—4-2)
- Funding of “NQF”-like functions to establishing national behavioral health consensus measures and priorities (IOM rec 4-3), facilitating quality improvement practices. (IOM rec 4-4) and reporting of measures (IOM rec 5-4)
- Expect the integrating medical and behavioral health care into primary care initiatives and models. (IOM rec 5-2)
- Information technology systems needs to address behavioral health data needs as fully as general health. (IOM rec 6-1)
- Link funding mechanisms across many venues to measures of quality. (IOM rec 8-4)
- Collaborative innovative research strategies to address priority areas. (IOM rec 9-2)

PROGRESS IN REFORMING THE BEHAVIORAL HEALTH CARE SYSTEM

Since the start of this series of reports on behavioral health reform, some forward movement in the behavioral health agenda has occurred toward implementing recommendations. To highlight a few:

- NQF adopted 15 behavioral health measures as a part of the Ambulatory Care Standards⁶ which is focused on behavioral health commonly found in primary care setting. Most behavioral health measures are applicable to primary care management of behavioral health conditions and not specific to the scope of measurement

needs for chronically mentally ill populations managed by behavioral health clinicians. (IOM rec 4–3)

- Substance Abuse and Mental Health Services Administration (SAMHSA) organized the Federal Executive Steering Committee,⁷ an unprecedented collaborative effort among more than 20 Federal agencies and offices, to develop a specific agenda for driving a quality-based care system for the public sector. (New Freedom Commission report recommendation).

- Federal parity was passed Oct. 3 2008. (IOM rec 8–1)

While these accomplishments are important, it is a common opinion among stakeholders in behavioral health, that there is more advancement needed in fulfilling recommendations in order to make significant progress and to move behavioral health closer to a quality model. Many reasons have been cited for the lack of progress that is distinctive to behavioral health.² They consist of having more diverse stakeholder groups (consumers, different provider disciplines, Federal, State, employer purchasers) split between public and private systems, unclear locus of accountability on a provider, organizational and systems level and limited funding. The lag behind is telling in the limited number of pilots and size of programs implementing pay-for-performance initiatives in behavioral health. A recent study examining behavioral health pay-for-performance found that there were only 24 behavioral health pay-for-performance programs operating and among them was a clear need for a strong quality infrastructure for behavioral health in order to implement well.⁸ This is concerning since one of the major initiatives posed to be a part of health care reform is provider profiling and pay-for-performance reward programs.

BEHAVIORAL HEALTH CARE REFORM IN TODAY'S ENVIRONMENT

Since 2006, the date of the last behavioral health policy report, our country's landscape has drastically changed with economic devastation beyond any one's prediction. With the rising number of unemployed and the financial burdens citizens are experiencing, there is more urgency than ever to address our health care crisis. The questions posed to organizations like the IOM and others thought leader organization around the identification of the necessary changes needed to improve behavioral health care are still relevant and important. Now, however, there are additional serious issues that must be taken into account in constructing health care reform. In today's environment, there are larger than ever numbers of individuals who are uninsured, Federal, States and employers are in extreme budget crisis and available funding for change is limited due to important competing interest. The question now is "how" and "what" are the necessary changes in the behavioral health care delivery system that will also be affordable, can accommodate larger numbers of individuals seeking services in an already overburdened system with limiting workforce and still provide quality.

Where the recommendations from the IOM *Chasm* and *Improving the Quality* reports are still relevant and important, it is difficult to know which recommendations or initiatives are the key essential threads to pull on to be successful and not cause a catastrophic unraveling of the existing behavioral health structure. In this environment, there is an increased need now to be mindfully cautious and cost conscience to avoid wasteful spending on initiatives that is well-intended but executed poorly. There is an increased need to be precise in the construction of the behavioral health reform plan going forward. It is clear that a well-constructed strategy, concise execution and having the buy-in and inclusion of the major stakeholders is needed to address this daunting task and to do so expeditiously. Lawrence Bossidy in "*Execution: The Discipline of Getting Things Done*" identifies a construct for the effective execution of a plan:⁹

1. Create the framework for change;
2. Know the people, capacities and industry;
3. Set clear goals and priorities;
4. Follow through and perform on-going monitoring; and
5. Reward doing and results.

With this as an outline, these are some recommendations that appear to be fundamental to an efficient execution of a behavioral health reformation in this era of economic crisis.

1. Execution: Set a Framework For Cultural Change

1. As a part of cultural change there are basic values that guide the nexus of change. For behavioral health reformation they are:

- Facilitate the expectation that behavioral health initiatives should be planned along side of and/or integrated within medical demonstration pilots with distinct articulated behavioral health goals, performance measures and funding. Not providing

for major inclusion of behavioral health in health reform is counter productive. Here are some reasons why:

- a. Incidence of behavioral health co-morbidities among patients with chronic medical illness varies from 39 percent–44 percent.¹⁰
- b. The existence of behavioral co-morbidities raises the cost of medical care by 50–150 percent.¹¹
- c. Effective care does reduce medical cost and early identification and intervention can improve workplace productivity.¹²
- d. Commonly 9 percent to 17 percent of medical patients are on an antidepressant and only around 27 percent receive evidence-based care.¹³
- e. Despite the common belief that behavioral health cost consumes 3–5 percent of the medical dollar, with the prevalence of co-morbidities, behavioral health spend is close to 36 percent of the medical dollar.¹⁴

Recommendation: Adopt the culture that “behavioral health is essential to health,” key to effective medical care and greatly influences over all cost of medical care.

2. Behavioral health initiatives, to be the most effective, must include a public-private partnership especially in areas that involve interface with clinicians and service delivery systems. Leveraging change with all the purchasers of care aligned is more powerful and effective in getting provider buy-in. (i.e. Leapfrog)

Recommendation: Make any project funding contingent on clear demonstration of private public involvement.

II. Execution: Know the People, Capabilities And Industry

3. Consider commissioning an IOM symposium, workshop or report (depending on timeframe for the needed deliverable) with the goal of revisiting recommendations to modify, refine, edit and most importantly prioritize them in light of health care reform and the realities of today’s environmental climate. The commissioned activity should include major public/private stakeholders, consumers, providers, and health care economist to draft an updated behavioral health strategy and refine recommendations that considers the need for increased access, affordability and quality as drivers.

Recommendation: Commission the IOM or another impartial body to conduct a behavioral health symposium workshop or report involving all the major stakeholders with the intent of refining the *Improving the Quality* recommendations to construct a targeted road map that can be effectively executed.

4. Create and fund a behavioral health “czar” an entity, person, existing agency (ies) or a collaborative that can assume the role of creating a behavioral health reform agenda and organizing the structure to convening all the major stakeholders to drive initiatives relevant to today’s needs.

Recommendation: Create and fund a behavioral health “Czar”.

III. Execution: Set Clear Goals and Priorities

The role of the behavioral health “czar” is accountable for:

5. Establishing a national set of priorities for behavioral health and commitment by stakeholders to participate in process improvement.

6. Establishing a national set of goals with measurements that are relevant to public and private agendas.

7. Establishing strategic and integrated partnerships with medical health reform information groups that are the key drivers of medical care modeling and other quality initiatives.

8. Routinely designate a portion of Federal funding earmarked for medical quality initiatives for a behavioral health component. For example, funding to AHRQ or NQF to establish national care priorities should have funds set aside for a behavioral consensus forum to establish behavioral health priorities.

Recommendation: establish priorities, measurements, and medical partnerships.

IV. Execution: Follow Through and Monitor

Through the behavioral health “czar”:

9. Establish an oversight process and facilitate the necessary change to the plan as results indicate.

10. Monitor, report and communicate results and outcomes of the initiatives which were designed to address stated goals in a manner that widely disseminates learnings and creates an atmosphere of transparency.

11. Continue to fund and operationalize the recommendations from the “Chasm” report as they are reprioritized or reformatted.

Recommendation: establish an oversight, monitoring and transparent reporting.

CLOSING REMARKS

The IOM “*Chasm*” and “*Improving the Quality*” reports clearly define the problems in both our health care delivery systems and offer a set of solutions for change. Despite the fact many of the issues and the solutions are similar between the two systems, behavioral health reformation still lags behind its counterpart in the implementation of recommendations. The unique challenges of our economic environment and the rising number of uninsured Americans brings a new twist to the context of health care reform and the recommendations. This environment puts in jeopardy the possibilities of implementing reform and especially behavioral health. Just as parity was enacted as a legislative act, governmental guidance and financial backing is crucial to keep behavioral health in the fore front of importance in the health care reform. In closing, “*Knowing is not enough, we must apply; Willing is not enough, we must do*”—Goethe.

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Senator MIKULSKI. Well, we could hold just a whole hearing on, first of all, each and every one of your testimonies, and I think all of my colleagues would acknowledge that. That was a stunning statistic, Doctor, and we are going to come back to that.

I want to acknowledge that Senator Casey of Pennsylvania is here.

Also one other item before we go to Dr. Davis. There will be three votes at approximately 3:10 p.m., which means we will have about 15 minutes. When we have to leave for the votes, that will conclude the hearing. Because by the time we go for three votes, it will be an hour, and we don't want to inconvenience you more.

So we are going to move right along with our testimony. We will keep our questions to the 5-minute rule, and then if we have time for a second round, we will do it.

Dr. Davis, hit it.

[Laughter.]

**STATEMENT OF KAREN DAVIS, Ph.D., PRESIDENT,
COMMONWEALTH FUND, NEW YORK, NY**

Ms. DAVIS. Thank you, Madam Chairman and members of the committee, for this opportunity to join you today.

As the Nation turns to the issue of reforming our health insurance system, it is important to address simultaneously the way we organize and deliver healthcare services to ensure that we are getting the very best possible outcomes for Americans and the most value for the money we spend on healthcare.

I agree completely with the statement that the Chairman made at the beginning of this hearing that access, quality, and cost are interrelated, and we need to address all of them simultaneously.

According to a recent national scorecard published by the Commonwealth Fund, the U.S. healthcare system scored 65 out of 100 possible points on 37 indicators of performance, capturing key dimensions of health outcomes, quality, access, equity, and efficiency. The scorecard shows that the United States is not making consistent progress in reducing the variability of healthcare quality and is failing to keep pace with gains in health outcomes achieved by our industrialized peers.

We are fortunate, however, that even within our imperfect system, models exist for each of the components that if properly organized, reformed, and financed it can enable the Nation to provide high-quality, affordable care to every American.

Examples of excellence from across the United States and around the world offer insight into what it takes to achieve high performance, including the Geisinger Health System in Senator Casey's district and Denver Health, which are integrated health systems that achieve high performance using electronic health records and a culture of continuous innovation and improvement.

State initiatives in Iowa and Vermont have made them leaders on our State scorecards. Regional associations, like the Massachusetts Health Quality Partners and the Wisconsin Collaborative for Healthcare Quality, have been innovative leaders in transparency and engaging providers in quality improvement. Denmark and The Netherlands are international leaders with accessible primary care and electronic information systems.

The specific policies that will both lead to better outcomes and bend the curve of our Nation's unsustainable healthcare spending revolve around five strategies that are amenable to action at the Federal level.

Provide affordable health coverage for all. Reform provider payment. Organize our care delivery systems, including raising community health centers, the exemplar models of patient-centered care. Invest in a modern health system, including the information technology and information on comparative effectiveness of treatments. And ensure strong national leadership.

By applying these policies simultaneously, the Nation would be able to capture the synergistic benefits of specific changes that would put the United States on the path to a high-performance health system.

Thank you.

[The prepared statement of Dr. Davis follows:]

PREPARED STATEMENT OF KAREN DAVIS, PH.D.*

EXECUTIVE SUMMARY

As the Nation turns to the issue of reforming our health insurance system, it is important simultaneously to address how we organize and deliver health services, to ensure that we are obtaining the best health outcomes for Americans and value for the money we are spending on health care. Unfortunately, the care we receive falls short of the care it is possible to deliver, and the gap is not narrowing. According to the most recent National Scorecard published by the Commonwealth Fund Commission on a High Performance Health System, the U.S. health system scored 65 out of 100 possible points in 2008 on 37 indicators of performance that capture key dimensions of health outcomes, quality, access, equity, and efficiency.

The Scorecard shows that the United States is not making consistent progress in reducing the variability of care quality and is failing to keep pace with gains in health outcomes achieved by our industrialized peers.

- The Nation now ranks last out of 19 countries on a measure of mortality amenable to medical care, falling from 15th in 5 years as other countries raised the bar on performance.
- The widening quality chasm is having real effects on real lives—up to 101,000 deaths could be prevented each year if the U.S.-raised standards of care to benchmark performance levels achieved abroad.
- While we spend more than twice of what other nations spend on health, there is overwhelming evidence of inappropriate care, missed opportunities, and waste within the U.S. health system.

We are fortunate that within our imperfect system there are examples of all the components that, properly organized, reformed, and financed, can enable the Nation to provide high-quality, affordable care to every American. Insight into what it takes to achieve high performance is provided by some examples of excellence within the United States and around the world:

- The Geisinger Health System, on whose board I am pleased to serve, is a leader in innovation and quality improvement that demonstrates the importance of simultaneously aligning incentives, utilizing electronic health records, and creating policies to encourage coordination of care.
- Denver Health, a comprehensive and integrated medical system that is Colorado's largest health care safety-net provider, has succeeded by promoting a culture of continuous quality improvement and lean efficiency, adopting information technology, and providing organization-wide leadership.
- State initiatives in Iowa and Vermont have achieved better health outcomes and increased access to needed health services by encouraging adoption of the medical home model, disseminating performance information and best practices, and launching focused campaigns to cover young children.
- Regional associations like Massachusetts Health Quality Partners and the Wisconsin Collaborative for Healthcare Quality have been leaders in quality improvement efforts by collecting and disseminating performance data on hospitals and physician groups and educating providers and patients to use that information to facilitate quality improvement activities.
- Denmark and the Netherlands have become international leaders in patient-centered, coordinated care by placing great emphasis on accessible primary care and developing information systems that assist primary care physicians in coordinating health care services.

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The specific policies that will both lead to better health outcomes and bend the curve of our Nation's unsustainable spending on health revolve around five strategies amenable to action at the Federal level:

- Provide affordable health coverage for all;
- Reform provider payment;
- Organize our care delivery systems;
- Invest in a modern health system; and,
- Ensure strong national leadership.

Congress can continue to develop the infrastructure for improving quality by making investments in health information technology and information exchange networks. If the United States is serious about closing the quality chasm, it will also need a strong primary care system, which requires fundamental provider payment reform, encouraging all patients to enroll in a patient-centered medical home, and supporting those physician practices with IT and technical assistance in care process design. Funding for comparative effectiveness research and the establishment of a center for comparative effectiveness is also crucial to value-based purchasing and performance improvement initiatives. Finally, the Federal Government can raise the bar for health system performance by setting explicit goals and priorities for improvement—particularly with regard to the most prevalent chronic conditions, which account for a large majority of health care costs.

By applying these policies collectively, the Nation would be able to capture the synergistic benefits of specific changes that, if implemented individually, would yield more modest improvements in quality and less reduction in projected spending trends. The reforms must support providers in their efforts to deliver the best care possible for their patients. Armed with the knowledge that the status quo is no longer acceptable, we have entered a new era ripe with opportunity to close the quality chasm and improve the health and well-being of American families. Working together we can change course—and move the U.S. health system on a path to high performance.

THE COMMONWEALTH FUND

Thank you, Senator Mikulski, for this opportunity to testify on health care quality and delivery system reform in the United States. As the Nation turns to the issue of reforming our health insurance system, it is important simultaneously to address how we organize and deliver health services, to ensure that we are obtaining the best health outcomes for Americans and value for the money we are spending on health care.

Unfortunately, the care we receive falls short of the care it is possible to deliver, and the gap is not narrowing. According to the most recent National Scorecard published by the Commonwealth Fund Commission on a High Performance Health System, the U.S. health system scored 65 out of 100 possible points in 2008, on 37 indicators of performance that capture key dimensions of health outcomes, quality, access, equity, and efficiency.¹ This is down slightly from 67 out of 100 in 2006—we are not on the right path.

The good news is that we no longer simply assert that we have the best health system in the world,² and instead are beginning to take a clear-eyed look at how our system performs overall, across States, and in comparison with other countries. We are beginning to have the information that shows where we are gaining ground, and where there are opportunities to improve. Public reporting of data on quality of hospital care and focused campaigns to improve quality are spurring improvement. Many health care professionals and organizations are responding to the challenge and adopting information technology, redesigning care processes, and mobilizing efforts to improve results. Examples of excellence within the United States, as well as around the world, demonstrate what can be achieved.

But the United States will not have the health system we want for ourselves and our families if the Federal Government does not lead and implement a series of strategies that taken together can close the quality chasm. These include, most importantly, extending health insurance to all; aligning financial incentives to reward

¹The Commonwealth Fund Commission on a High Performance Health System, *Why Not the Best? Results from the National Scorecard on U.S. Health System Performance, 2008*, (New York: The Commonwealth Fund, July 2008); C. Schoen, K. Davis, S.K.H. How, and S.C. Schoenbaum, "U.S. Health System Performance: A National Scorecard," *Health Affairs*, November/December 2006; 25(6): w457-w475.

²E.J. Emanuel, "What Cannot Be Said on Television About Health Care," *JAMA* 2007; 297:2131-2133.

the outcomes we want to achieve; changing the organization and delivery of care to ensure that it is accessible, coordinated, and patient-centered; investing in the infrastructure and support necessary to reach attainable levels of quality and efficiency; and exercising the leadership and collaboration among all parts of the health system necessary to achieve health goals for the Nation.

By applying these policies collectively, the Nation would be able to capture the synergistic benefits of specific changes that, if implemented individually, would yield more modest improvements in quality and less reduction in projected spending trends. The reforms must support providers in their efforts to deliver the best care possible for their patients. Armed with the knowledge that the status quo is no longer acceptable, we have entered a new era ripe with opportunity to close the quality chasm and improve the health and well-being of American families. Working together we can change course—and move the U.S. health system on a path to high performance.

I. HEADED IN THE WRONG DIRECTION: EVIDENCE OF A WIDENING QUALITY CHASM

Despite the best efforts of millions of talented and dedicated health care professionals, the United States is not making consistent progress in reducing the variability of care quality and is failing to keep pace with gains in health outcomes achieved by our industrialized peers.³ The Nation now ranks last out of 19 countries on a measure of mortality amenable to medical care, falling from 15th in 5 years as other countries raised the bar on performance.⁴ This widening quality chasm is having real effects on real lives—up to 101,000 deaths could be prevented each year if the United States raised standards of care to benchmark performance levels achieved abroad.

A focus on preventive care and proper management of chronic disease are key strategies to increase the effectiveness of health care delivery, an area where lack of progress is undermining the Nation's efforts to improve quality. While the benefits of prevention are well documented,⁵ the national scorecard report found that only half of adults receive all age-appropriate preventive care services such as immunizations, cancer screenings, and blood pressure and cholesterol tests. There was no improvement on this indicator between the 2006 and 2008 scorecards. Meanwhile, troubling variation in chronic disease management is evident across health plans and insurance status despite slight improvements in the control of diabetes and hypertension. A recent National Committee for Quality Assurance study found that eliminating this variance would prevent up to 46,000 premature deaths and save up to \$2.4 billion in medical costs.⁶

Indicators of patient safety are also important measures of overall quality within the health care system. One bright spot is that the United States showed progress on hospital standardized mortality ratios, which declined by 19 percent on the 2008 scorecard from the earlier report. This measure was the focus of a 100,000 Lives campaign led by the Institute for Healthcare Improvement. Other organizations that are working to improve patient safety include the World Health Organization, the Joint Commission National Patient Safety Goals, the Leapfrog Group's Hospital Quality and Safety Survey, the National Surgical Quality Improvement Program, the American Medical Association's National Patient Safety Foundation, and the Center for Disease Control and Prevention's National Health Safety Network.⁷

There also have been gains in acute hospital care for heart attack, heart failure, and pneumonia patients—based on quality metrics reported to Medicare. Yet, gaps in the receipt of recommended care for pneumonia and heart failure were particularly wide, with spreads of 20 to 30 percentage points between the bottom and top 10th percentiles. Standardized Federal reporting has shown top hospitals are achieving 100 percent on basic process measures, indicating that full adherence to a set of best practice guidelines is possible. Researchers estimate that if hospitals in the bottom quartile of performance improved to the level of the top quartile, more than 2,000 deaths could be avoided each year.⁸

³ Commonwealth Fund Commission, *Ibid.*

⁴ E. Nolte and C. McKee, "Measuring The Health Of Nations: Updating An Earlier Analysis," *Health Affairs*, January/February 2008; 27(1): 58–71.

⁵ T. Kottke, et al., "The Comparative Effectiveness of Heart Prevention and Treatment Strategies," *Am J Prev Med* 2009; 36(1): 82–88.

⁶ National Committee for Quality Assurance, *The State of Health Care Quality 2008*, (Washington, DC: NCQA, 2008).

⁷ Commonwealth Fund Commission, *Ibid.*

⁸ A. Jha, et al., "The Inverse Relationship Between Mortality Rates and Performance in the Hospital Quality Alliance Measures," *Health Affairs*, July/August 2007; 26(4): 1104–1110.

Substantial variation was also found among risk-adjusted mortality rates for several serious conditions and risk-adjusted costs for Medicare beneficiaries, demonstrating both inefficiency and a vast quality chasm throughout the country. Updated analysis of Medicare data shows that 1-year risk-adjusted mortality rates for heart attacks, hip fractures, and colon cancer varied between 27 and 33 percent among the best- and worst-performing regions, while risk-adjusted cost ranged from \$25,000 to \$30,000. A significant number of those regions with lower risk-adjusted mortality rates also utilized lower total resources, suggesting significant inefficiency among higher spending regions.⁹ If all areas of the country achieved the performance levels of the benchmark regions, Medicare could save more than 9,000 lives and reduce annual costs by nearly \$1 billion a year for these three conditions alone.

Providing quality care during a hospital stay and giving appropriate discharge planning, follow-up, and post-acute care can help prevent patients from being re-admitted to the hospital, thus improving the patient experience and reducing the total costs of care.¹⁰ However, no improvement in the Medicare 30-day hospital re-admission rate was seen in the 2008 scorecard, and regional variation remained stark. Nearly one of five Medicare patients initially hospitalized with one set of selected conditions was re-admitted to the hospital within 30 days, with rates in the worst performing regions 50 percent higher than those in the better performing areas of the country. A Medicare Payment Advisory Commission analysis indicates that three-quarters of re-admissions may be preventable at a potential savings of \$12 billion a year for Medicare.¹¹

The 2008 scorecard also showed increases in the rate of hospitalization and 30-day hospital re-admission of nursing home residents, two indicators of poor coordination and poor quality for one of the most vulnerable populations within the United States. Nearly one of five nursing home long-stay residents was hospitalized according to the most recent analysis of Medicare claims data, up from 17 percent in the previous study. The frequency of hospitalization and 30-day hospital re-admission of nursing home residents increased among both high- and low-performing States.

Rates of potentially preventable hospitalizations for ambulatory care-sensitive (ACS) conditions are another key measure of quality within the U.S. health care system. Widespread variation was again the theme, with two- to four-fold differences across States and hospital referral regions along with associated discrepancies in costs and resource use. At least \$4 billion annually could be saved if these rates fell to benchmark levels.

The 2008 scorecard reported 15 to 24 percentage point differences on important indicators of hospital patient-centered care, including how well staff managed pain, responded when patients pressed a call button, or explained medications and their possible side effects. The best hospitals achieved very high rates of patient ratings on these questions, illustrating that it is possible for hospitals to do much better in meeting patients' needs.

The rate of medical, medication, and lab errors is yet another important quality indicator where the United States has failed to keep pace with gains made by benchmark performers in the international community. Nearly one-third of U.S. patients surveyed in 2007 said that, in the last 2 years, a medical mistake or a medication or lab test error was made during their care. There was little to no improvement on this metric since it was reported in the 2006 scorecard. It would take a 40 percent reduction in the medical, medication, and lab test error rate in the United States to reach the low level reported in Germany, the benchmark country.

Aggregate scores on dimensions of care coordination fell between 2006 and 2008, demonstrating that fragmentation and misaligned incentives continue to plague the U.S. health system. The percentage of adults who reported access to a regular source of primary care failed to improve, a particularly disturbing finding given that those who lack a usual source of primary care are more likely to have unmet health care needs and higher costs of care while being less likely to adhere to treatment

⁹E. Fisher, D. Wennberg, et al., "The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care," *Annals of Internal Medicine*, February 18, 2003; 138(4): 273–287; E. Fisher, D. Wennberg, et al., "The Implications of Regional Variations in Medicare Spending. Part 2: Health Outcomes and Satisfaction with Care," *Annals of Internal Medicine*, February 18, 2003; 138(4): 288–298.

¹⁰Medicare Payment Advisory Commission, "Payment Policy for Inpatient Re-admissions," *Report to the Congress: Promoting Greater Efficiency in Medicare*, (Washington: MedPAC, June 2007).

¹¹MedPAC, *Ibid*.

and receive preventive care.¹² Differing rates of coordination for hospital patients was similarly distressing, with nearly three-fold variation among high and low performers on the percentage of heart failure patients who received complete written instructions at discharge. Proper coordination of care at the time of hospital discharge helps prevent subsequent complications and re-admissions, especially for patients with complex or chronic conditions.¹³

Finally, while studies have shown that expansion of health information technology is a means of facilitating quality reporting and improvement, analysis of the 2006 Commonwealth Fund Survey of Primary Care Physicians demonstrates that the United States falls far behind the Netherlands, New Zealand, the United Kingdom, Australia, and Germany on the utilization and functionality of health IT. The contrast between the United States and the Netherlands is particularly stark, with 98 percent of Dutch primary care physicians reporting the use of electronic medical records compared with only 28 percent of their American counterparts. This general pattern persists when examining the prevalence of other IT functions such as electronic prescribing, decision support, and computerized access to test results.¹⁴

II. IMPEDIMENTS IN THE CURRENT SYSTEM

In short, the U.S. health care system is plagued by significant variability in quality and is failing to match the gains seen among its industrialized peers. Impediments to improvement include a lack of affordable health coverage for all, a wasteful and inefficient provider payment system, a fragmented and disorganized care delivery system, widespread failure to adopt health information technology, and limited Federal oversight and leadership. A recent Commonwealth Fund study found that the United States ranked last among six industrialized nations on health system performance.¹⁵ Despite spending more than twice what other nations spend on health, there is overwhelming evidence of inappropriate care, missed opportunities, and waste within the U.S. health system.

Lack of affordable health coverage is a proven barrier to obtaining quality care and improving the value of the country's significant expenditure on health services. The United States stands alone among its industrialized peers in failing to provide universal coverage, and ranked last among six nations in a recent Commonwealth Fund study on an aggregate measure of health care access.¹⁶ Cost-related problems are widespread, with more than half of respondents to a 2005 survey reporting problems getting recommended tests, treatments, or follow-up care, filling prescriptions, or visiting a doctor when they had medical problems because of cost. Not surprisingly, lack of affordable coverage and the attendant financial barriers to care contributed to underuse of health services among the uninsured, a group much less likely to obtain preventive care, fill prescriptions, and have chronic conditions under control.¹⁷ This phenomenon drives disparities in outcomes, decreases the proportion of the population receiving appropriate primary care to prevent illness, and puts the health of the millions of Americans living with chronic conditions in peril.

Misalignment of financial incentives is also a significant impediment to successful quality improvement in the United States. The 2006 Commonwealth Fund International Health Policy Survey showed that only 30 percent of American primary care physicians received any financial incentive to improve quality, contrasted with their counterparts in the United Kingdom nearly all of whom reported financial bonuses—the result of a bonus system which can account for up to 30 percent of their income based on a broad array of quality measures covering preventive and chronic care and patient experiences.¹⁸ Commonwealth Fund studies have also found the predominance of the fee-for-service payment system in the United States—an arrangement that rewards volume over value—to be a significant barrier to stream-

¹² B. Starfield, *Primary Care: Balancing Health Needs, Services, and Technology* (New York: Oxford University Press, 1998).

¹³ E. Coleman, "Falling Through the Cracks: Challenges and Opportunities for Improving Transitional Care for Persons with Continuous Complex Care Needs," *Journal of the American Geriatrics Society*, April 2003; 51(4): 549–555.

¹⁴ C. Schoen, R. Osborn, P. Trang Huynh, M. Doty, J. Peugh, K. Zapert, "On The Front Lines of Care: Primary Care Doctors' Office Systems, Experiences, and Views in Seven Countries," *Health Affairs*, November/December 2006; 25(6): w555–w571; K. Davis, M. Doty, K. Shea, and K. Stremikis, "Health Information Technology and Physician Perceptions of Quality of Care and Satisfaction," *Health Policy*, forthcoming 2009.

¹⁵ K. Davis, C. Schoen, S.C. Schoenbaum, M.M. Doty, A.L. Holmgren, J.L. Kriss, and K.K. Shea, *Mirror, Mirror on the Wall: An International Update on the Comparative Performance of American Health Care*, (New York: The Commonwealth Fund, May 2007).

¹⁶ Davis, "Mirror, Mirror," *Ibid.*

¹⁷ Commonwealth Fund Commission, *Ibid.*

¹⁸ Davis, "Mirror, Mirror," *Ibid.*

lined and more efficient delivery models.¹⁹ Analysis has shown that doctors and hospitals practicing in the same community and caring for the same patients have little or no incentive or capacity to connect to one another, contributing to unnecessary duplication of tests and procedures, wasteful deployment of resources, and substandard outcomes.²⁰

Fragmentation of the American care delivery system drives low-quality, inappropriate, and inefficient service in a country filled with highly skilled health care professionals. A disjointed mix of private insurers and public programs, each with its own set of rules and payment methods, fuels fragmentation, generating waste and high administrative costs.²¹ Moreover, widespread failure to adopt the patient-centered medical home model, especially among community health centers serving low-income and minority patients, has contributed to uneven performance and exacerbated disparities in quality along racial and socioeconomic lines.²²

Data from high performing health systems across the country show that moving towards more integrated models of care is a proven strategy for increasing quality of care while simultaneously reducing costs and inefficiencies.²³ Over 80 percent of respondents to a recent Commonwealth Fund Health Care Opinion Leaders Survey say that strengthening the primary care system, encouraging care coordination, and facilitating the integration of providers within and across care settings are important steps to improving health system performance.²⁴

Substandard outcomes and insufficient value are also driven by insufficient adoption of health information technology (IT) and the absence of information exchange systems. Analysis of the 2006 Commonwealth Fund Survey of Primary Care Physicians demonstrates that the United States has fallen far behind the Netherlands, New Zealand, the United Kingdom, Australia, and Germany on a number of measures related to the utilization of health IT.²⁵ The contrast between the United States and the Netherlands is particularly stark, with 98 percent of Dutch primary care physicians reporting the use of electronic medical records compared with only 28 percent of their American counterparts. This general pattern persists when examining the prevalence of other IT functions such as electronic prescribing, decision support, and computerized access to test results. A recent Commonwealth Fund-supported study suggests that linking health IT to performance improvement efforts has the potential to both improve the quality of care and significantly reduce costs.²⁶ If automated decision support was utilized among the 37 million hospital admissions in the United States in 2005, facilities across the country would stand to save almost \$20 billion a year.

Finally, limited Federal leadership has contributed to uneven application of quality improvement initiatives and widespread variance in health outcomes. To date, Federal leaders have not clearly identified national priorities and targets for improvement, and have not implemented a Federal system for monitoring and reporting performance on those metrics. Similarly, no Federal all-payer database exists for patients who want to know, for example, the survival and complication rate of their surgeon. In the United Kingdom, this type of information is available through the Internet.²⁷ The U.S. Federal Government is not currently funding comparative effec-

¹⁹ K. Stremikis, S. Guterman, and K. Davis, *Health Care Opinion Leaders' Views on Payment System Reform*, (New York: The Commonwealth Fund, November 2008).

²⁰ MedPAC, "Payment Policy for Inpatient Re-admissions," *Ibid.*; D. Grabowski, "Medicare and Medicaid: Conflicting Incentives for Long-Term Care," *Milbank Q.*, December 2007; 85(4): 579-610; T. Bodenheimer, "Coordinating Care—A Perilous Journey Through the Health Care System," *N Engl J Med.*, March 6, 2008; 358(10):1064-1071.

²¹ A. Shih, K. Davis, S. Schoenbaum, A. Gauthier, R. Nuzum, and D. McCarthy, *Organizing the U.S. Health Care Delivery System for High Performance*, (New York: The Commonwealth Fund, August 2008).

²² M. Abrams, "Achieving Person-Centered Primary Care: The Patient-Centered Medical Home," Invited Testimony, *Special Senate Committee on Aging Hearing on "Person-Centered Care: Reforming Services and Bringing Older Citizens Back to the Heart of Society,"* (New York: The Commonwealth Fund, July 2008).

²³ R.A. Paulus, K. Davis, and G.D. Steele, "Continuous Innovation in Health Care: Implications of the Geisinger Experience," *Health Affairs*, September/October 2008; 27(5): 1235-1245.

²⁴ K.K. Shea, A. Shih, and K. Davis, *Commonwealth Fund Commission on a High Performance Health System Data Brief: Health Care Opinion Leaders' Views on Health Care Delivery System Reform*, (New York: The Commonwealth Fund, April 2008).

²⁵ C. Schoen, "On The Front Lines of Care," *Ibid.*

²⁶ R. Amarasingham, et al., "Clinical Information Technologies and Inpatient Outcomes," *Arch Intern Med.* 2009; 169(2):1-7.

²⁷ K. Davis, *Learning From High Performance Health Systems Around the Globe, Invited Testimony: Senate Health, Education, Labor, and Pensions Committee Hearing*, (New York: The Commonwealth Fund, January 2007).

tiveness research and has not created a national institute to synthesize research, inform benefit design, and guide clinical practice. Such steps have been crucial in value-based purchasing and performance improvement initiatives in other industrialized countries.

III. OPPORTUNITIES AND PROGRESS

We are fortunate that within our imperfect health care system are examples of all the components that, properly organized, reformed, and financed, can enable the Nation to provide high-quality, affordable care to every American. Systematically applying and disseminating what we know works would help put the United States on the path to a high-performance health system.

Several ongoing quality improvement initiatives are contributing to improving performance in hospitals, physician practices, health plans, and public programs in the United States. Over the last 15 years, The Commonwealth Fund has been pleased to support, assess, and disseminate information on a number of efforts to improve quality. It is impossible to give a comprehensive catalog of these efforts, here, but I would like to highlight just a few to give the committee a sense of the richness of activities underway.

- **Public Awareness.** The Institute of Medicine launched the modern quality movement with its report, *To Err is Human* followed by its report on *The Quality Chasm*.²⁸

- **Measurement of Quality.** The National Center for Quality Assurance has been a leader in the development of measures of quality, beginning with a HEDIS set of clinical quality measures, collected and made available at the health plan level. The Agency for HealthCare Quality and Research has added measures of patient experiences with care (CAHPS) to the quality measurement toolkit. Specialty and professional societies have also contributed substantially to the development of an armamentarium of quality measures.

- **Endorsement of Measures.** The National Quality Forum has brought an overarching framework to quality measurement through its endorsement of measures with rigorous standards and its process for expert input.

- **Public Reporting.** The Congress accelerated public reporting of quality information by giving the Medicare program authority to base payment on reporting quality data by hospitals, and more recently by physicians. The National Center for Quality Assurance reports on health plan performance on HEDIS clinical quality measures and patient experiences with care (CAHPS). Its annual state of the Nation's Health report is a valuable source of information on quality of care provided to health plan enrollees, including those in commercial, Medicare, and Medicaid health plans. State and regional collaboratives have also led in generating publicly available data on provider performance to be used for three purposes: provider quality improvement, patient choice, and payer rewards.

- **Quality Improvement.** The Institute for HealthCare Improvement has pioneered efforts to improve quality of care through national campaigns and quality improvement breakthrough series. The Medicare Quality Improvement Organizations have provided technical assistance and support to hospitals, physician practices, and nursing homes to improve quality of care. The Commonwealth Fund is striving to make data and tools useful to quality improvement efforts within hospitals available through its WhyNotTheBest.org Website.

- **Pay for Performance.** The Leapfrog Group initiated the first major purchaser effort to reward hospitals and other providers who met high standards of quality, and maintains a comprehensive inventory of pay-for-performance initiatives. The Integrated Healthcare Association (IHA) is a statewide leadership group that promotes quality improvement, accountability, and affordability of health care in California, including instituting a system of pay-for-performance to reward medical groups for improving quality, patient experiences, and adoption of health information technology. More than half of State Medicaid programs have elements of paying for performance.²⁹ Medicare demonstrations including the Hospital Quality Demonstration Initiative and the Physician Group Practice demonstration have implemented and assessed the impact of financial incentives to improve quality.³⁰

²⁸ Institute of Medicine, *To Err is Human: Building a Safer Health System*, (Washington: National Academy Press, 2000); J. Corrigan, et al., *Crossing the Quality Chasm: A New Health System for the 21st Century*, (Washington: National Academy Press, 2001).

²⁹ K. Kuhmerker and T. Hartman, *Pay-for-Performance in State Medicaid Programs: A Survey of State Medicaid Directors and Programs*, (New York: The Commonwealth Fund, April 2007).

³⁰ S. Guterman and M.P. Serber, *Enhancing Value in Medicare: Demonstrations and Other Initiatives to Improve the Program*, (New York: The Commonwealth Fund, January 2007).

As a result of these and many other activities, we have made extraordinary progress over the last decade in learning about and improving quality. As noted above, these efforts have borne fruit in improved quality on selected aspects of care that have been the focus of improvement efforts—such as reduced hospital standardized mortality rates which were the focus of the IHI 100,000 Lives Campaign; improved control of chronic conditions which have been reported at the health plan level by NCQA for over a decade; and the Medicare-reported hospital quality measures for heart attacks, congestive heart failure, and pneumonia.

Yet, wide variation in quality and efficiency across States, hospital service areas, and providers persists. Nor is there a systematic all-patient data base that contains the information that would help patients make informed choices. For example, a patient who wants to know the cancer survival rate of cancer centers across the United States for his or her form of cancer has no data base to which to turn. A patient who wants to know the survival and complication rates of their surgeon before surgery compared to other surgeons, has no place to turn in most parts of the United States.

Nonetheless, insight into what it takes to achieve high performance is provided by examples of excellence within the United States and around the world. I'd like to highlight some specific examples that point the way to give the committee a flavor of the innovation that is currently going on. This includes a description of what two health care systems in the United States—Geisinger Health System and Denver Health—are doing to achieve high performance; followed by the activities of Iowa and Vermont, two States that score well on the Commonwealth Fund State scorecard; two regional collaboratives which report quality data and work with providers to improve performance—the Massachusetts Health Quality Partners and the Wisconsin Collaborative for Healthcare Quality; and finally health system innovations in the Netherlands and Denmark.

Geisinger Health System and Denver Health

The Geisinger Health System, on whose board I am pleased to serve, is a leader in innovation and quality improvement—contributing to its ranking in this year's NCQA State of the Nation's Health report in the top five health plans in the Nation and top three participating in Medicare. In a September 2008 article in the health policy journal, *Health Affairs*, Geisinger CEO Glenn Steele, M.D., chief innovation officer, Ron Paulus, M.D., and I summarized how Geisinger achieves continuous innovation in health care.³¹ Geisinger is an integrated delivery system in north-eastern Pennsylvania with clinical leadership that focuses on value creation, measures innovation returns, and is appropriately rewarded in the market both because it has its own Medicare Advantage plan and because it is participating in the Medicare physician group practice demonstration for Medicare patients not enrolled in plans. Its pilot test of patient-centered medical homes in two primary care group practice sites has reduced hospital admissions of Medicare patients by 20 percent. Its erythropoietin pharmacist-driven care management model for anemia associated with chronic kidney disease resulted in \$3,800/patient/year in drug cost savings. It has redesigned its care process for coronary artery bypass graft surgery ("CABG") to provide "proven care" and offered insurers a global fee with a "warranty."

Geisinger's mission, dedicated innovation and quality improvement units, electronic health information system, and alignment of financial incentives through its own health plan contribute to its record of innovation. Its innovation experience has three implications for national policy: (1) aligning incentives to reward enhanced healthcare value creation; (2) recognizing that electronic health records are absolutely necessary, but not sufficient to create sustainable change in care delivery; and (3) creating policies that encourage greater organization of care delivery and collaboration among payers and providers to foster propagation of innovation that enhances value.

Denver Health, a comprehensive and integrated medical system that is Colorado's largest health care safety-net provider, has a national reputation as a high-performance organization. Members of The Commonwealth Fund Commission on a High Performance Health System observed Denver Health during a site visit in March 2006, to assess its operation and determine whether it might serve as a model for other public and private health care systems around the country.³² The Commission concluded that Denver Health is indeed a "learning laboratory." It has succeeded at providing coordinated care to the community, promoting a culture of continuous quality improvement, adopting new technology and incorporating it into everyday

³¹R. Paulus, "Continuous Innovation." *Ibid.*

³²R. Nuzum, D. McCarthy, A. Gauthier, and C. Beck, *Denver Health: A High-Performance Public Health Care System*, (New York: The Commonwealth Fund, July 2007).

practice, taking risks and making mid-course corrections, and providing leadership and support to its staff.

Since 2003, Denver Health has transformed itself and created a culture of deliberate improvement. As a result, the organization adopted specific new processes and tools. For example, it systematically applied the principles of “lean manufacturing” based on Toyota’s approach to streamlining its operations and eliminating waste. Denver Health has also focused on building its infrastructure for high performance in two important areas: information technology (IT) and workforce. The organization’s investment in health-oriented IT, which has totaled \$275 million since 1997, has enabled the establishment of a centralized data warehouse that integrates both clinical and financial data and allows for standardized reporting. A single imaged electronic-record format is used across the entire system so that a patient’s information can be retrieved in “real time” by any of his or her providers. To ensure that it has a capable workforce, Denver Health has restructured its hiring practices to recruit and retain the “right people.”

While there are many factors contributing to the overall high quality of care that Denver Health provides to its patients, the Commission highlighted several:

- Denver Health is an integrated system, endowed with appropriate tools including an electronic information system and infrastructure to provide coordinated care to the community.
- It has its own Medicaid-managed care plan, and State officials have been supportive of policies that permit it to use surpluses from its plan to provide care to a large uninsured and indigent patient population.
- Denver Health promotes a culture of improvement, peopled by dedicated staff. The decisions are data-driven and feedback loops allow for continuous quality improvement. Innovation at Denver Health has strong support at the top.

Geisinger Health System and Denver Health differ in major respects: one is a nonprofit integrated delivery system in a rural area with a disproportionate concentration of elderly Medicare patients; the other is a public integrated delivery system in a large metropolitan area with a disproportionate concentration of low-income uninsured and Medicaid patients. But both receive at least a portion of their revenues on a “bundled” capitated rate per person enrolled and their public/non-profit, mission-driven organization leads them to dedicate surpluses gained from eliminating waste and preventing avoidable complications to improving care. They both have invested extensively in health information systems. They have dedicated innovation and quality improvement units that lead the organizations in continuous innovation and improvement. They are led by clinician leaders with a commitment to excellence in patient care, while maintaining fiscal stability of the organization.

Iowa and Vermont

In June 2007 the Commonwealth Fund Commission on a High Performance Health System released a State scorecard on health system performance.³³ This was followed in May 2008 with a child health State scorecard on health system performance. There was wide variation across States on health outcomes, quality, access, equity, and cost. Iowa ranked first on performance of its health system for children and second on the overall State scorecard. Vermont was second on the children’s health scorecard and fourth on the overall scorecard.

Many factors help explain why these States stand out. Both have high rates of health insurance coverage as a result of State Medicaid and SCHIP policies. They rank highly on children and adults cared for in patient-centered medical homes. Both have medical schools with an emphasis on training primary care physicians. And both have a long history of collaboration to promote quality. Both have public health departments that are strongly linked to their communities and that have a mission to serve communities. In both States, public health partners well with Medicaid and with the private sector, especially in terms of outreach to pregnant women and young children.

Iowa has a longstanding commitment to children. In the past decade, the State paid particular attention to the needs of its youngest residents, from birth to age 5. After piloting a variety of early childhood preventive programs in the early 1990s to identify and serve at-risk children and families, the Iowa Legislature established a statewide initiative to fund designated “local empowerment areas” across the State to create local partnerships among clinicians, parents, child care representatives, and educators focused on preventive services. The University of Iowa and a

³³ J.C. Cantor, C. Schoen, D. Belloff, S.K.H. How, and D. McCarthy, *Aiming Higher: Results from a State Scorecard on Health System Performance*, (New York: The Commonwealth Fund, June 2007).

substantial portion of practices in the State have all voluntarily adopted the same EMR system, which is streamlining referral processes.

The Iowa Healthcare Collaborative (IHC) has also been a key means through which the State's healthcare community has come together to improve quality, patient safety, and the value of health care.³⁴ By focusing on transparency and accountability, sharing performance information and best practices among both health care providers and the general public, the IHC has driven important progress in clinical improvement and empowered patients and families across the State. The collaborative has actively facilitated gains in efficiency by distributing the tools and principles of the Toyota Production System, better known as "Lean," on its Website. The group also serves as the Iowa field office, or "node," for IHI's 5 million lives campaign to reduce incidents of medical harm. Further quality improvement efforts include medical home initiatives, establishment of a community advisory council, reduction of healthcare-associated infections, and support of rapid response teams.

The Vermont legislature, in collaboration with public health, Medicaid and the private sector developed a blueprint for health care in Vermont. It builds on the Wagner chronic care model, using measurement and direct support to practices. They have bought into the medical home idea using NCQA criteria. The State is trying to use payment reform to drive quality, and is encouraging adoption of EMR and supporting outreach to help practices implement changes in their micro-processes (appointments, handling messages, tracking laboratory results, creating registries). Also, Medicaid and the health plans have agreed on common measures of quality, which helps the practices focus on a few things, rather than responding to multiple different expectations.

Vermont also has long placed a high priority on children. In 1989, the State enacted the *Dr. Dynasaur* program, which expanded health insurance coverage to children up to age 17 in families earning less than 225 percent of the Federal poverty level, as well as pregnant women in families earning less than 200 percent of poverty.

In 2006, Vermont expanded SCHIP income eligibility levels for children in families with incomes up to 300 percent of the Federal poverty level. Vermont is also home to the Vermont Child Health Improvement Project (VCHIP), a regional partnership of professional society chapters; the Department of Public Health; the State's Medicaid agency; the University of Vermont's Department of Pediatrics faculty; the Banking, Insurance, Securities and Health Care Administration; and three Vermont-managed care organizations. These public and private partners use measurement-based efforts and a systems approach to improve the quality of children's health care. VCHIP shares lessons learned and other findings with public health agencies and policymakers to inform decisionmaking, enhance services, and target resources. Disease management programs are also being introduced into public insurance plans.

Massachusetts Health Quality Partners and Wisconsin Collaborative for Healthcare Quality

Commonwealth Fund-sponsored work shows that open sharing of quality performance data through public reporting can be effective as an impetus to quality improvement. Massachusetts Health Quality Partners has been a leader in collecting and disseminating quality data on hospitals and physician groups, and educating providers and patients to use that information to facilitate quality improvement activities.³⁵ Formed in 1995, Massachusetts Health Quality Partners (MHQP) pioneered the collection and public release of data on patient experiences with hospital care. In the mid-2000s it collected information from the State's five largest private health plans on the quality of care provided by 150 medical groups on 15 measures of clinical quality developed by the National Committee on Quality Assurance (the Health Plan Employer Data and Information Set, or HEDIS). The coalition then posted this data in 2006 on its Website to encourage consumers to search for high-quality providers and guide physicians looking to improve their performance.³⁶ It followed with data on patient experiences with physician care at the medical group level.

The Wisconsin Collaborative for Healthcare Quality (WCHQ), founded in 2003, involves physician groups, hospitals, health plans, employers, and labor organizations

³⁴ Iowa Healthcare Collaborative, *2008 Annual Report*, (Des Moines: Iowa Healthcare Collaborative, 2008).

³⁵ M.W. Friedberg, D.G. Safran, K.L. Coltin, et al., "Readiness for the Patient-Centered Medical Home: Structural Capabilities of Massachusetts Primary Care Practices," *Journal of General Internal Medicine*, published online December 3, 2008.

³⁶ <http://www.mhqp.org>.

that want to enhance transparency and promote quality in the health care system.³⁷ WCHQ publicly reports comparative information on its member physician practices, hospitals, and health plans through an interactive Web-based tool.³⁸ The WCHQ has earned credibility among health care providers because the measures are reported in ways that allow member groups to identify variation by physician practice and target areas for improvement. WCHQ also developed and unveiled a quadrant analysis to demonstrate the relationship between quality outcomes and risk-adjusted charges. This innovative approach to quantifying the *value* each member hospital provides when caring for patients with specific conditions was developed in response to the business community's desire for a more sophisticated measure of a hospital's efficiency.

Netherlands and Denmark

A Commonwealth Fund survey of chronically ill adults in eight countries found that the Netherlands consistently outperformed other countries, while the United States typically fared worst.³⁹ The Dutch had the highest satisfaction with their health system, the best access to needed care, the longest relationship with a regular doctor, the easiest time getting a same-day appointment with their doctor, the least difficulty getting care on nights and weekends, the best care coordination and least duplicate tests or missing records, and the lowest reported rates of medical errors—while the United States fared worst on all these measures.

The Netherlands has historically had a strong primary care system that requires primary care referrals for specialized care. They have an organized system of off-hours care. Over 90 percent of primary care physicians have electronic medical records. Peer physicians visit and audit each others' practices every 3 years. They have an advanced system of public reporting of quality.

Denmark also places great emphasis on patient-centered primary care, which is highly accessible and has an outstanding information system that assists primary care physicians in coordinating care. Denmark, like most European countries, has a universal health insurance system with no patient cost-sharing for physician or hospital services. Every Dane selects a primary care physician who receives a monthly payment per patient for serving as the patient's medical home, in addition to fees for services provided. Incomes of primary care physicians are slightly higher than those of specialists, who are salaried and employed by hospitals. Patients can easily obtain care on the same day if they are sick or need medical attention, and an organized "off-hours service" provides telephone consultations (for which they are paid a fee) and clinic services on nights and weekends. The patient's own primary care physician receives an e-mail the next day with a record of the off-hours consultation.

All primary care physicians (except a few near retirement) are required to have an electronic medical record system, and 98 percent do. Danish physicians are now paid about \$8 for e-mail consultations with patients, a service that is growing rapidly. The easy accessibility of physician advice by phone or e-mail, and electronic systems for prescriptions and refills cuts down markedly on both physician time and patient time. Primary care physicians save an estimated 50 minutes a day from information systems that simplify their tasks, a return that easily justifies their investment in a practice information technology system.⁴⁰

Primary care physicians prescribe electronically and information systems provide information at the point of prescribing on the lowest cost drug available in a given class. Patients pay the difference if physicians prescribe a more expensive drug. Drug prices are updated automatically every 2 weeks in physician and pharmacy electronic information systems.

In many ways what the Netherlands and Denmark have done is not remarkable—they emphasize primary care and patients are enrolled with a physician and typically maintain that relationship over a long period of time. Primary care physicians are paid well, they have reasonable working hours since they are supported by off-hours systems of care on nights and weekends, and they have information systems that make it possible for them to provide highly coordinated care. They are com-

³⁷ A.L. Greer, *Embracing Accountability: Physician Leadership, Public Reporting, and Teamwork in the Wisconsin Collaborative for Healthcare Quality*, (New York: The Commonwealth Fund, June 2008).

³⁸ <http://wchq.org/Reporting/>.

³⁹ C. Schoen, R. Osborn, S.K.H. How, M.M. Doty, and J. Peugh, "In Chronic Condition: Experiences of Patients with Complex Health Care Needs, in Eight Countries, 2008," *Health Affairs*, January/February 2009; 28(1): w1–w16.

⁴⁰ I. Johansen, "What Makes a High Performance Health Care System and How Do We Get There? Denmark," Presentation to the Commonwealth Fund International Symposium, November 3, 2006.

mitted to providing the best quality care for the resources available. Yet, they spend less than half per capita what the United States spends. The United States has made other choices—a payment system that rewards highly specialized care and procedures, financial barriers that deter patients from seeking care or filling prescriptions written by their physicians to manage their conditions, no organized system of care on nights and weekends other than emergency rooms, lack of investment in health information technology, and inadequate commitment to transparency and quality improvement.

IV. POLICY SOLUTIONS

Health care reform is a unique opportunity to transform the U.S. health care system. The Commonwealth Fund Commission on a High Performance Health System has identified five strategies for improving access, quality, and efficiency:

- *Provide affordable health coverage for all.* The most important factor determining the ability to obtain health care is adequate health insurance coverage. The uninsured are much less likely to obtain preventive care. They are much less likely to fill prescriptions and to have their chronic conditions controlled, with the consequence that opportunities are missed to save lives and prevent disability. In Commonwealth Fund international surveys, the United States stands out for reported difficulties obtaining needed care. It is time that all Americans receive the security of health care coverage enjoyed by citizens of every other major industrialized country. Providing everyone—regardless of age or employment status—with affordable insurance options, including a comprehensive package of benefits, will enhance access to care. This, in turn, will help reduce disparities in care, increase the proportion of people receiving appropriate primary care to prevent illness, and improve the care and health of millions of Americans living with chronic conditions.

- *Reform provider payment.* Our open-ended fee-for-service payment system must be overhauled to reduce wasteful and ineffective care and to spur innovations that can save lives and increase the value of our health care dollars. We need to revamp our system for paying health care providers—reform that will reward high-quality care and prudent stewardship of resources, move toward shared provider accountability for the total care of patients, and correct the imbalance in payment whereby specialty care is rewarded more than primary or preventive care.

- *Organize our care delivery systems.* We need to reorganize the delivery of care, moving from our current fragmented system to one where physicians and other care providers are rewarded for banding together into integrated or virtual organizations capable of delivering 21st-century health care. Patients need to have easy access to appropriate care and treatment information, and providers need to be responsive to the needs of all their patients. Providers must also collaborate in delivering high-quality, high-value care, and they should receive the support needed for continuous improvement. Community health centers—a major source of care in many low-income communities—should be assisted in meeting the standards of patient-centered medical homes.

- *Invest in a modern health system.* The United States lags behind other countries in the adoption of health information technology and a system of health information exchange. In such a system, patient information would be available to all providers at the point of care, as well as to patients themselves through electronic health record systems, helping to ensure that care is well coordinated. Early investment in the infrastructure of a high performance health system—including information technology, research on comparative effectiveness of drugs, devices, and procedures, data on provider performance on quality and affordability, and a workforce that ensures a team approach to care—is an essential building block.

- *Ensure strong national leadership.* None of the above will be possible if government does not take the lead. The Federal Government—the Nation's largest purchaser of health care services—has tremendous leverage to effect changes in coverage, care delivery, and payment. National leadership can encourage the collaboration and coordination among private-sector leaders and government officials that are necessary to set and achieve national goals for a high performance health system. It can also help set priorities and targets for improvement, create a system for monitoring and reporting on performance

INFORMATION TECHNOLOGY

Congress has already begun to make important investments in the infrastructure required to improve quality and efficiency in consideration of the economic stimulus package. While some have questioned whether information technology will generate significant health system savings, The Commonwealth Fund report, *Bending the Curve*, put the aggregate systemwide savings of promoting health information tech-

nology at \$88 billion over 10 years.⁴¹ The authors estimated that the cost reductions would result from a lower rate of medical errors, more efficient use of diagnostic testing, more effective drug utilization, and decreased provider costs, among other improvements. Additional savings would likely flow from better care coordination among multiple providers—and improved chronic care management—that would lead to a decrease in provider utilization and better health outcomes. Financial benefits accrue to all payers, with investments in health IT estimated to result in substantial cumulative net savings to all levels of government and households over 10 years and cumulative savings to private insurers after 11 years.

A recent Commonwealth Fund-sponsored study of health IT in Texas hospitals led by Ruben Amarasingham of the University of Texas Southwestern Medical Center has shown that hospitals with more advanced information technology capacity have fewer complications and decreased mortality rates.⁴² Amarasingham and his colleagues' findings importantly show that utilizing IT to automate test results, order entry, and decision support was not only associated with better quality but also lower average adjusted costs for hospital admissions and lower mean hospital costs for a variety of clinical conditions, including heart failure and coronary artery bypass grafting. Computerized decision support was particularly effective at generating savings. Higher degrees of decision support automation was associated with lower average adjusted costs of \$538 for all conditions. If these reductions were realized among the 37 million hospital admissions in the United States in 2005, hospitals across the country would stand to save almost \$20 billion a year.

Modern health care also requires replacing antiquated paper-based medical records with systems that take advantage of modern health information technology. Medicare can do its share by joining with private payers in contributing funds to help those who cannot afford to purchase such technology on their own—especially safety-net clinics and hospitals serving uninsured and low-income patients. It can also create incentives for the adoption of information systems meeting approved standards, and help establish “health information networks” that allow patients and the health professionals that care for them to have all relevant medical information available at their fingertips. While such a change requires upfront investment, it would begin to pay dividends in the future.

PRIMARY CARE

If the United States is serious about closing the quality chasm, it will need to build a strong primary care system. This will require fundamental provider payment reform, encouraging all patients to enroll with a patient-centered medical home that is accessible and accountable for patient outcomes, and supporting those physician practices with information technology and technical assistance in care process design to improve quality and reliability of care.

One important place to start is to ensure that all the Nation's community health centers meet the standards of a patient-centered medical home, and have the information tools and technical assistance necessary to reach benchmark levels of quality. Work by staff at the Commonwealth Fund has found that racial/ethnic disparities in access to needed care can be eliminated if patients are enrolled in such systems of care.⁴³

COMPARATIVE EFFECTIVENESS

Medicare, Medicaid, and private insurers can also ensure that the care they cover is based on the best and latest research findings on effectiveness. Insurers should cover all medications, devices, and procedures that have been scientifically shown to improve patient outcomes and quality of life. But insurers also should be prudent purchasers, paying no more for a device or treatment than they would for another that is equally effective. The *Bending the Curve* report estimates that a center on medical effectiveness and health care decisionmaking could save \$368 billion over 10 years, if insurance benefit design and payment were tied to evidence on cost-effectiveness.

⁴¹ C. Schoen, S. Guterman, A. Shih, J. Lau, S. Kasimow, A. Gauthier, and K. Davis, *Bending the Curve: Options for Achieving Savings and Improving Value in U.S. Health Spending*, (New York: The Commonwealth Fund, December 2007).

⁴² R. Amarasingham, “Clinical Information Technologies,” *Ibid.*

⁴³ A.C. Beal, M.M. Doty, S.E. Hernandez, K.K. Shea, and K. Davis, *Closing the Divide: How Medical Homes Promote Equity in Health Care: Results From The Commonwealth Fund 2006 Health Care Quality Survey*, (New York: The Commonwealth Fund, June 2007).

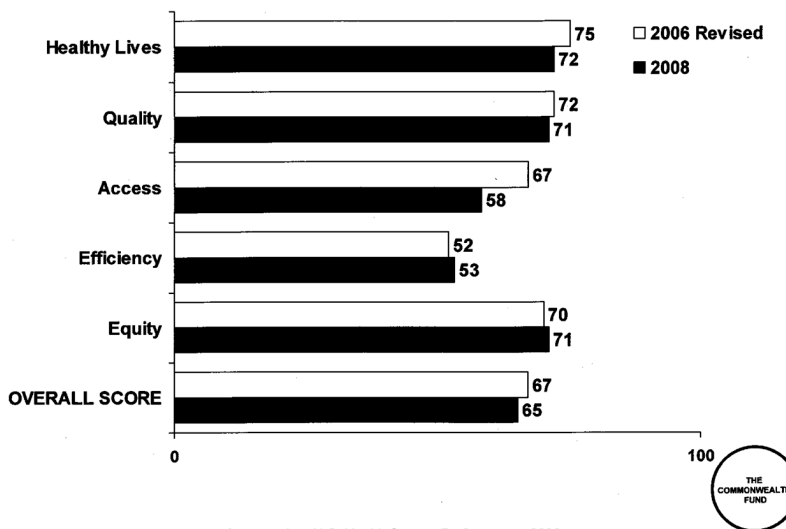
HEALTH GOALS AND TARGETS FOR IMPROVEMENT

The Federal Government can also raise the bar for health system performance and help providers get the tools they need to reach the highest attainable levels of performance. This should start with setting explicit goals and priorities for improvement—including a focus on the most prevalent chronic conditions, which account for a large majority of health care costs.

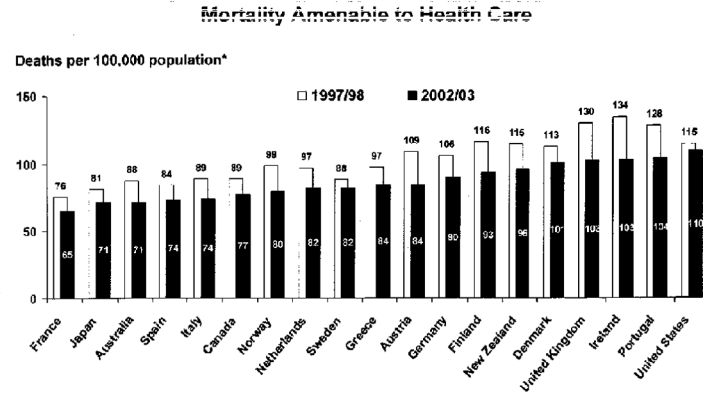
For example, Medicare could join with private insurers and other payers to develop a database that lets providers and the public know how they are doing relative to what is possible. Having reliable comparative data, adjusted for differences in patient characteristics, is the first step along the path to improvement. Such a database should provide timely feedback on how each and every provider—whether health system, hospital, physician, or long-term care facility—is doing on quality and health outcome metrics that are tied to achievable benchmarks. The Commonwealth Fund is helping to support such a tool through its WhyNotTheBest.org Website with data and tools to improve hospital clinical quality and patients' experiences.

In sum, experience shows that policies to alleviate the quality chasm and improve the performance of our health care system must be multifaceted and mutually reinforcing. Work by the Commonwealth Fund demonstrates that it is not only possible—but critical—to employ strategies that simultaneously improve quality, reduce costs, and increase access for all Americans.

Armed with the knowledge that the status quo is no longer acceptable, we have entered a new era ripe with opportunity to close the quality chasm and improve the health and well-being of American families. Working together we can change course—and move the U.S. health system on a path to high performance.

Scores: Dimensions of a High Performance Health System

Headed in the Wrong Direction: Evidence of a Deepening Quality Chasm



* Countries' age-standardized death rates before age 75, including ischemic heart disease, diabetes, stroke, and bacterial infections.

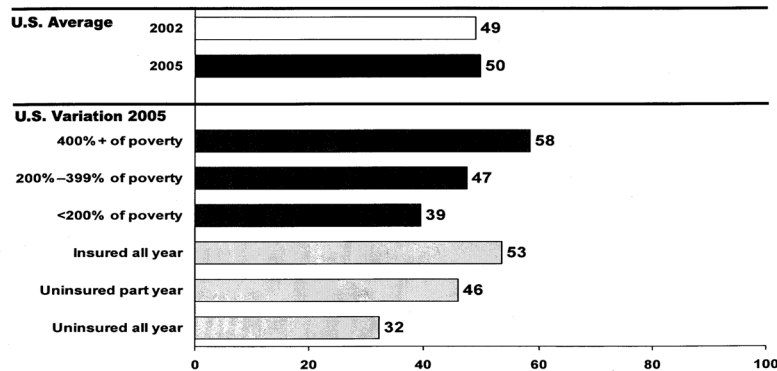
See report Appendix B for list of all conditions considered amenable to health care in the analysis.
Data: E. Nolte and C. M. McKee, London School of Hygiene and Tropical Medicine analysis of World Health Organization mortality files (Nolte and McKee 2006).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Receipt of Recommended Screening and Preventive Care for Adults

Percent of adults (ages 18+) who received all recommended screening and preventive care within a specific time frame given their age and sex*

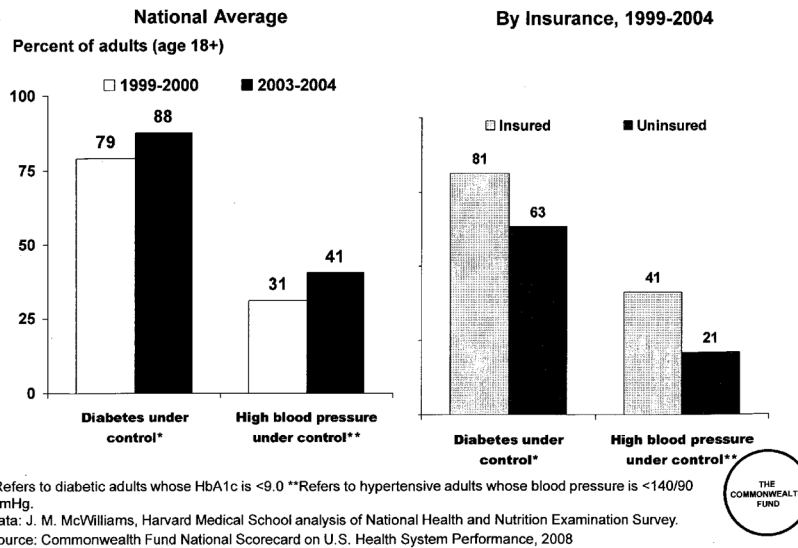


* Recommended care includes seven key screening and preventive services: blood pressure, cholesterol, Pap, mammogram, fecal occult blood test or sigmoidoscopy/colonoscopy, and flu shot. See report Appendix B for complete description.
Data: B. Mahato, Columbia University analysis of Medical Expenditure Panel Survey.

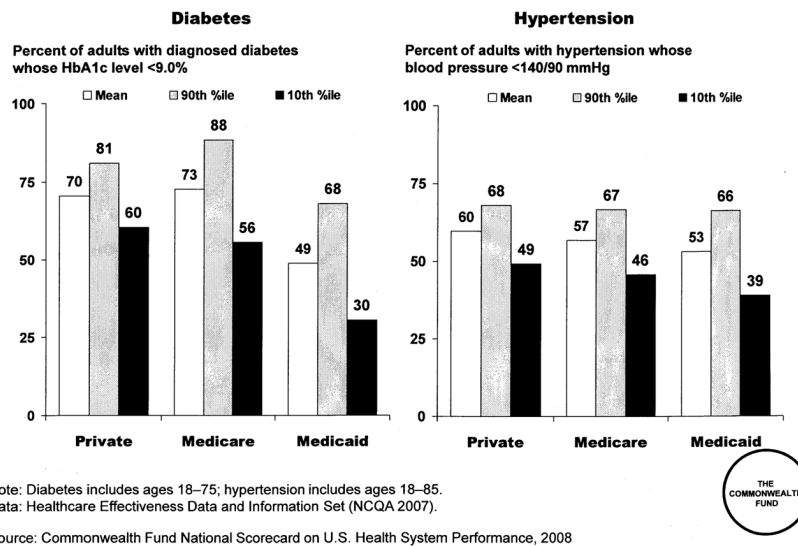
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Chronic Disease Under Control: Diabetes and Hypertension



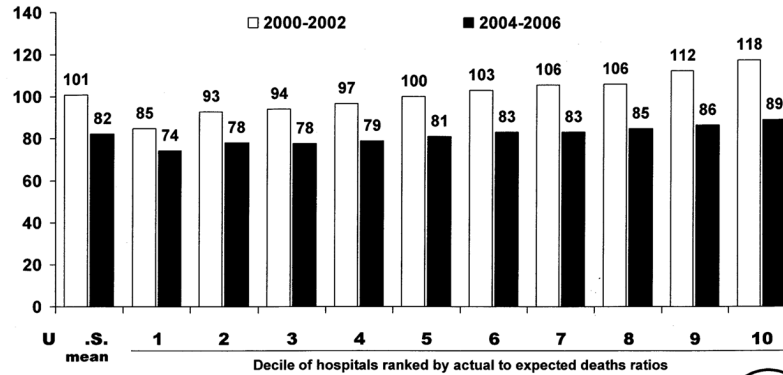
Chronic Disease Under Control: Managed Care Plan Distribution, 2006



Hospital-Standardized Mortality Ratios

Standardized ratios compare actual to expected deaths, risk-adjusted for patient mix and community factors.* Medicare national average for 2000=100

Ratio of actual to expected deaths in each decile (x 100)



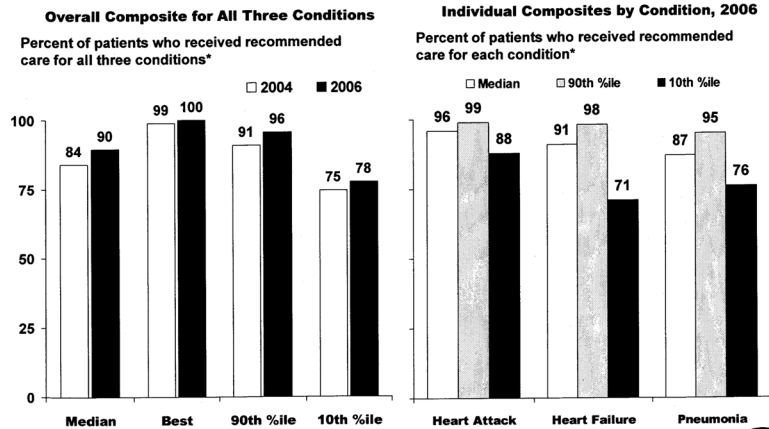
* See report Appendix B for methodology.

Data: B. Jarman analysis of Medicare discharges from 2000 to 2002 and from 2004 to 2006 for conditions leading to 80 percent of all hospital deaths.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Hospitals: Quality of Care for Heart Attack, Heart Failure, and Pneumonia



* Composite for heart attack care consists of 5 indicators; heart failure care, 2 indicators; and pneumonia care, 3 indicators.

Overall composite consists of all 10 clinical indicators. See report Appendix B for description of clinical indicators.

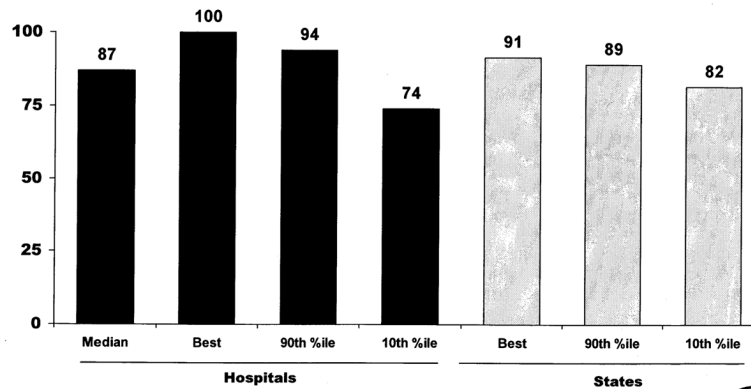
Data: A. Jha and A. Epstein, Harvard School of Public Health analysis of data from CMS Hospital Compare.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Hospital Quality of Care for Heart Attack, Heart Failure, and Pneumonia: Overall Composite Using Expanded Set of 19 Clinical Indicators*, 2006

Percent of patients who received recommended care for all three conditions



*Consists of original 10 "starter set" indicators and 9 new indicators for which data was made available as of December 2006; heart attack care includes 3 new indicators; heart failure care, 2 new indicators; and pneumonia, 4 new indicators
Data: A. Jha and A. Epstein, Harvard School of Public Health analysis of data from CMS Hospital Compare.
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



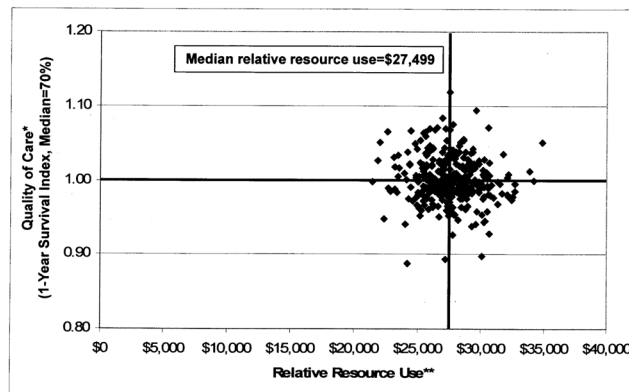
Hospital Quality of Care by Condition: Composites for Heart Attack, Heart Failure, and Pneumonia

Percent of patients who received recommended care:	HOSPITALS				STATES		
	Median	Best	90th percentile	10th percentile	Best	90th percentile	10th percentile
Acute myocardial infarction							
(Original: 5 indicators)							
2004	92	100	98	80	97	96	89
2006	96	100	99	88	98	97	93
(Expanded: 8 indicators*) 2006	95	100	98	87	98	97	92
Heart failure							
(Original: 2 indicators)							
2004	83	100	94	62	91	89	79
2006	91	100	98	71	94	93	81
(Expanded: 4 indicators*) 2006	83	100	95	61	90	87	75
Pneumonia							
(Original: 3 indicators)							
2004	78	99	88	66	82	79	69
2006	87	100	95	76	92	91	83
(Expanded: 7 indicators*) 2006	87	100	94	77	91	90	83

*Consists of original "starter set" indicators and new indicators for which data was made available as of December 2006.
Data: A. Jha and A. Epstein, Harvard School of Public Health analysis of data from CMS Hospital Compare.
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



**Quality and Costs of Care for Medicare Patients Hospitalized
for Heart Attacks, Hip Fractures, or Colon Cancer,
by Hospital Referral Regions, 2004**



* Indexed to risk-adjusted 1-year survival rate (median=0.70).

** Risk-adjusted spending on hospital and physician services using standardized national prices.

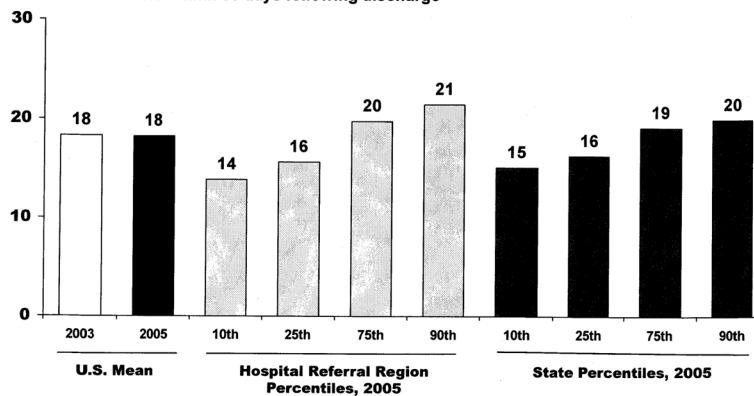
Data: E. Fisher, J. Sutherland, and D. Radley, Dartmouth Medical School analysis of data from a 20% national sample of Medicare beneficiaries.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Medicare Hospital 30-Day Readmission Rates

**Percent of Medicare beneficiaries admitted for one of 31 select conditions
who are readmitted within 30 days following discharge***



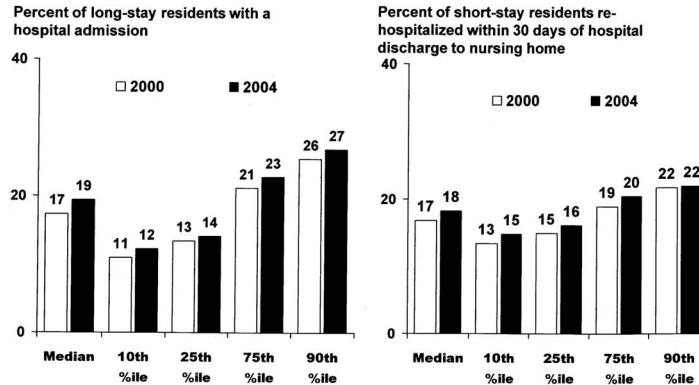
* See report Appendix B for list of conditions used in the analysis.

Data: G. Anderson and R. Herbert, Johns Hopkins University analysis of Medicare Standard Analytical Files (SAF) 5% Inpatient Data.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Nursing Homes: Hospital Admission and Readmission Rates Among Nursing Home Residents

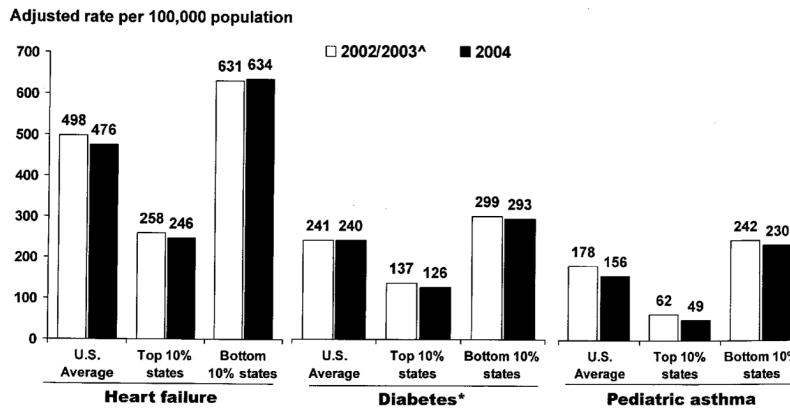


Data: V. Mor, Brown University analysis of Medicare enrollment data and Part A claims data for all Medicare beneficiaries who entered a nursing home and had a Minimum Data Set assessment during 2000 and 2004.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Ambulatory Care-Sensitive (Potentially Preventable) Hospital Admissions for Select Conditions



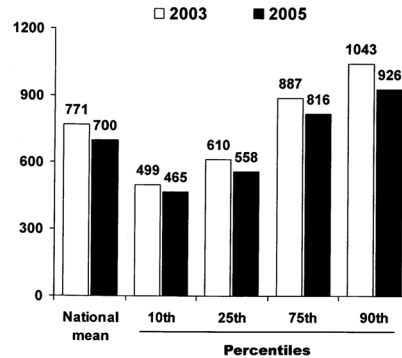
[^] 2002 data for heart failure and diabetes; 2003 data for pediatric asthma. *Combines four diabetes admission measures: uncontrolled, short-term complications, long-term complications, and lower extremity amputations. Data: National average—Healthcare Cost and Utilization Project, Nationwide Inpatient Sample; State distribution—State Inpatient Databases; not all states participate in HCUP (AHRQ 2005, 2007a).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008

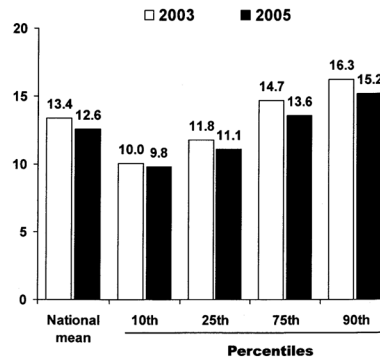


Medicare Admissions for Ambulatory Care–Sensitive Conditions, Rates and Associated Costs, by Hospital Referral Regions

Rate of ACS admissions per 10,000
beneficiaries



Costs of ACS admissions as percent of all
discharge costs



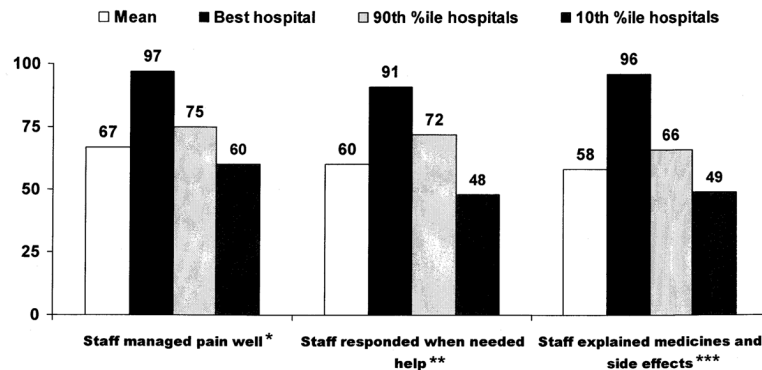
See report Appendix B for complete list of ambulatory care-sensitive conditions used in the analysis.
Data: G. Anderson and R. Herbert, Johns Hopkins University analysis of Medicare Standard Analytical Files (SAF)
5% Inpatient Data.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Patient-Centered Hospital Care: Staff Managed Pain, Responded When Needed Help, and Explained Medicines, by Hospitals, 2007

Percent of patients reporting "always"



* Patient's pain was well controlled and hospital staff did everything to help with pain.

** Patient got help as soon as wanted after patient pressed call button and in getting to the bathroom/using bedpan.

*** Hospital staff told patient what medicine was for and described possible side effects in a way that patient could understand.

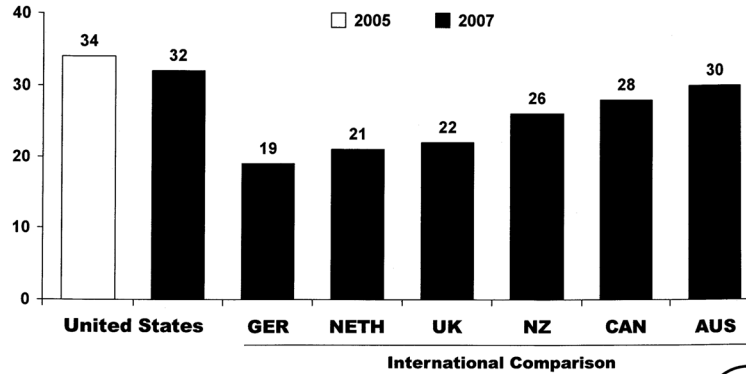
Data: CAHPS Hospital Survey (Retrieved from CMS Hospital Compare database at
<http://www.hospitalcompare.hhs.gov>).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Medical, Medication, and Lab Errors, Among Sicker Adults

Percent reporting medical mistake, medication error, or lab error in past two years



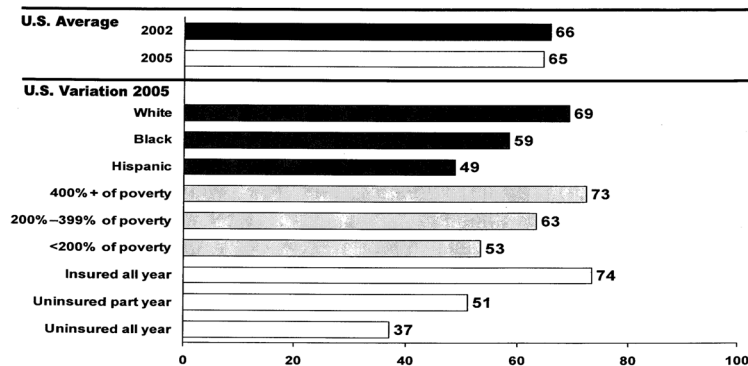
AUS=Australia; CAN=Canada; GER=Germany; NETH=Netherlands; NZ=New Zealand; UK=United Kingdom.
Data: 2005 and 2007 Commonwealth Fund International Health Policy Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Adults with an Accessible Primary Care Provider

Percent of adults ages 19–64 with an accessible primary care provider*



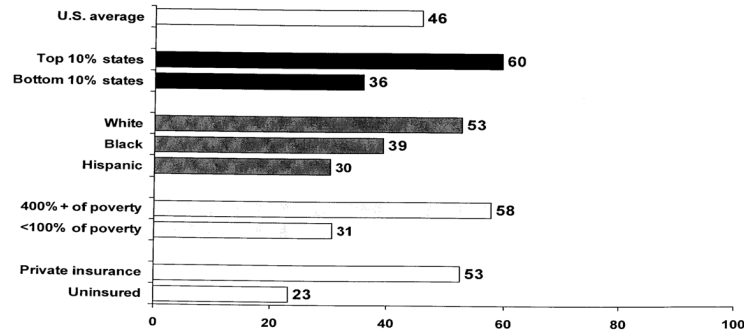
* An accessible primary care provider is defined as a usual source of care who provides preventive care, care for new and ongoing health problems, referrals, and who is easy to get to.
Data: B. Mahato, Columbia University analysis of Medical Expenditure Panel Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Children with a Medical Home, by Top and Bottom States, Race/Ethnicity, Family Income, and Insurance, 2003

Percent of children who have a personal doctor or nurse and receive care that is accessible, comprehensive, culturally sensitive, and coordinated*



Note: Indicator was not updated due to lack of data. Baseline figures are presented.

* Child had 1+ preventive visit in past year; access to specialty care; personal doctor/nurse who usually/always spent enough time and communicated clearly, provided telephone advice or urgent care and followed up after the child's specialty care visits.

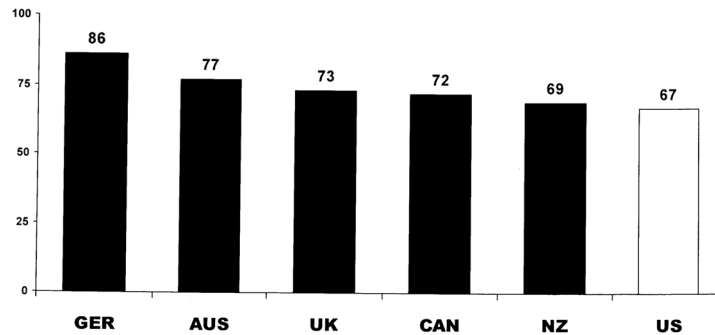
Data: 2003 National Survey of Children's Health (HRSA 2005; retrieved from Data Resource Center for Child and Adolescent Health database at <http://www.nschdata.org>).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Medications Reviewed When Discharged from the Hospital, Among Sicker Adults, 2005

Percent of hospitalized patients with new prescription who reported prior medications were reviewed at discharge



Note: Indicator was not updated due to lack of data. Baseline figures from Scorecard 2006 are presented.

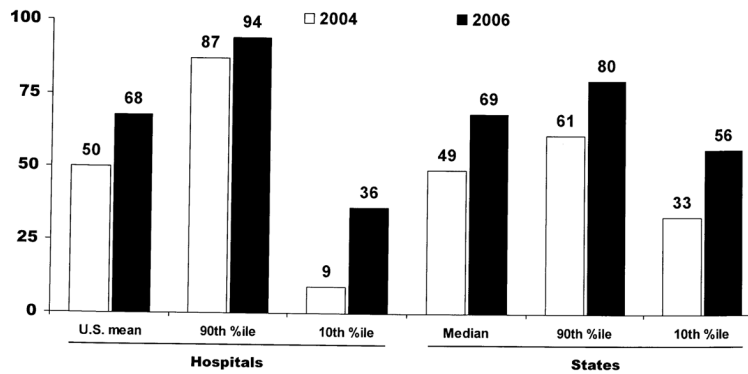
AUS=Australia; CAN=Canada; GER=Germany; NZ=New Zealand; UK=United Kingdom; US=United States. Data: 2005 Commonwealth Fund International Health Policy Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Heart Failure Patients Given Complete Written Instructions When Discharged, by Hospitals and States

Percent of heart failure patients discharged home with written instructions*

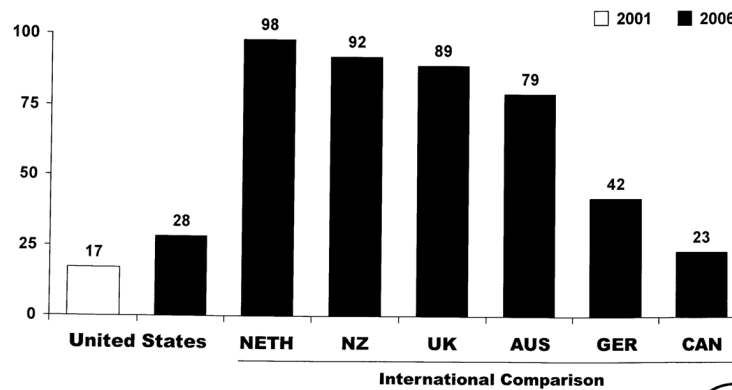


* Discharge instructions must address all of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen.
 Data: A. Jha and A. Epstein, Harvard School of Public Health analysis of data from CMS Hospital Compare; State 2004 distribution—Retrieved from CMS Hospital Compare database at <http://www.hospitalcompare.hhs.gov>.
 Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Physicians' Use of Electronic Medical Records

Percent of primary care physicians using electronic medical records



AUS=Australia; CAN=Canada; GER=Germany; NETH=Netherlands; NZ=New Zealand; UK=United Kingdom.
 Data: 2001 and 2006 Commonwealth Fund International Health Policy Survey of Physicians.
 Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Impediments in the Current System

Mirror Mirror: US and Canada Fall Behind

Country Rankings							
	1.0-2.66						
	2.67-4.33						
	4.34-6.0						
		AUSTRALIA	CANADA	GERMANY	NEW ZEALAND	UNITED KINGDOM	UNITED STATES
OVERALL RANKING (2007)		3.5	5	2	3.5	1	6
Quality Care		4	6	2.5	2.5	1	5
Right Care		5	6	3	4	2	1
Safe Care		4	5	1	3	2	6
Coordinated Care		3	6	4	2	1	5
Patient-Centered Care		3	6	2	1	4	5
Access		3	5	1	2	4	6
Efficiency		4	5	3	2	1	6
Equity		2	5	4	3	1	6
Long, Healthy, and Productive Lives		1	3	2	4.5	4.5	6
Health Expenditures per Capita, 2004		\$2,876*	\$3,165	\$3,005*	\$2,083	\$2,546	\$6,102

* 2003 data

Source: Calculated by Commonwealth Fund based on the Commonwealth Fund 2004 International Health Policy Survey, the Commonwealth Fund 2005 International Health Policy Survey of Sicker Adults, the 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians, and the Commonwealth Fund Commission on a High Performance Health System National Scorecard. Source: K. Davis, C. Schoen, S. C. Schoenbaum, M. M. Doty, A. L. Holmgren, J. L. Kriss, and K. K. Shea, Mirror, Mirror on the Wall: An International Update on the Comparative Performance of American Health Care, The Commonwealth Fund, May 2007



Cost-Related Access Problems, Sicker Adults, 2005

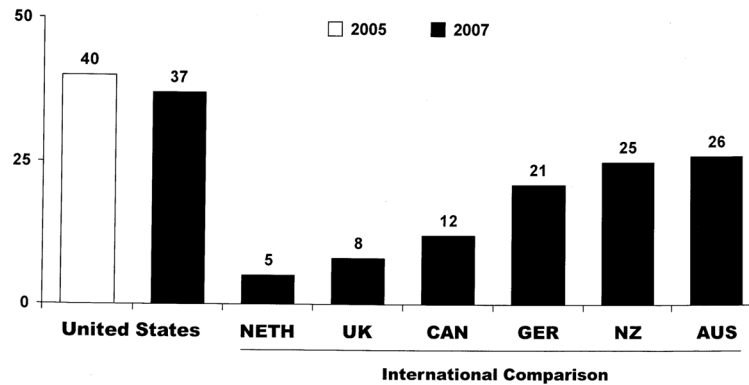
Percent in past year due to cost:	AUS	CAN	GER	NZ	UK	US
Did not fill prescription or skipped doses	22	20	14	19	8	40
Had a medical problem but did not visit doctor	18	7	15	29	4	34
Skipped test, treatment or follow-up	20	12	14	21	5	33
Percent who said yes to at least one of the above	34	26	28	38	13	51



2005 Commonwealth Fund International Health Policy Survey of Sicker Adults

Access Problems Because of Costs

Percent of adults who had any of three access problems* in past year because of costs



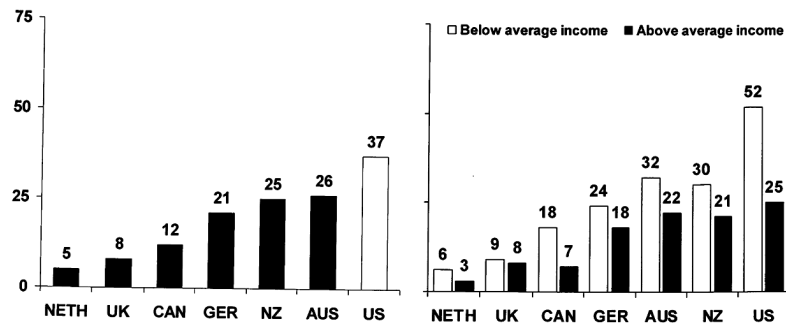
* Did not get medical care because of cost of doctor's visit, skipped medical test, treatment, or follow-up because of cost, or did not fill Rx or skipped doses because of cost.
 AUS=Australia; CAN=Canada; GER=Germany; NETH=Netherlands; NZ=New Zealand; UK=United Kingdom.
 Data: 2005 and 2007 Commonwealth Fund International Health Policy Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Access Problems Because of Costs, By Income, 2007

Percent of adults who had any of three access problems* in past year because of costs



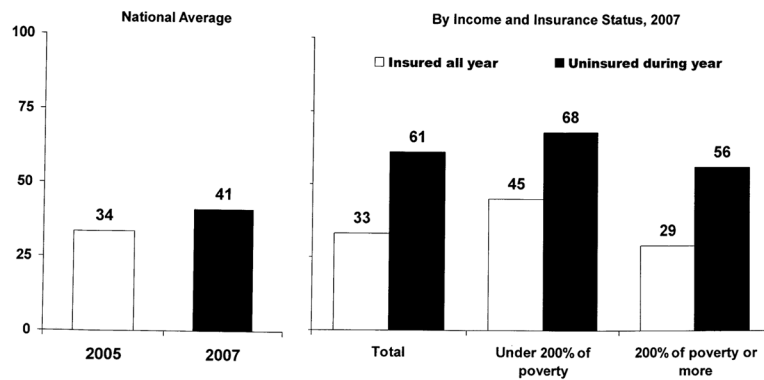
* Did not get medical care because of cost of doctor's visit, skipped medical test, treatment, or follow-up because of cost, or did not fill Rx or skipped doses because of cost.
 AUS=Australia; CAN=Canada; GER=Germany; NETH=Netherlands; NZ=New Zealand; UK=United Kingdom;
 US=United States.

Data: 2007 Commonwealth Fund International Health Policy Survey.
 Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Medical Bill Problems or Medical Debt

Percent of adults (ages 19–64) with any medical bill problem or outstanding debt*



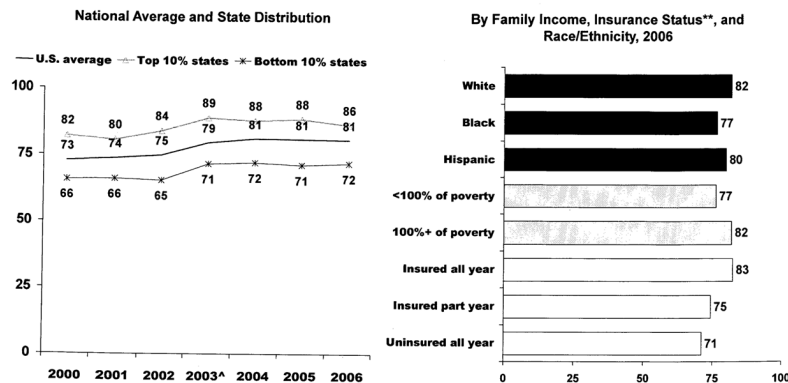
* Problems paying or unable to pay medical bills, contacted by a collection agency for medical bills, had to change way of life to pay bills, or has medical debt being paid off over time.
Data: 2005 and 2007 Commonwealth Fund Biennial Health Insurance Survey.

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Immunizations for Young Children

Percent of children (ages 19–35 months) who received all recommended doses of five key vaccines*



[^] Denotes baseline year.

* Recommended vaccines include: 4 doses of diphtheria-tetanus-pertussis (DTP), 3+ doses of polio, 1+ dose of measles-mumps-rubella, 3+ doses of Haemophilus influenzae type B, and 3+ doses of hepatitis B vaccine. **Data by insurance was from 2003.

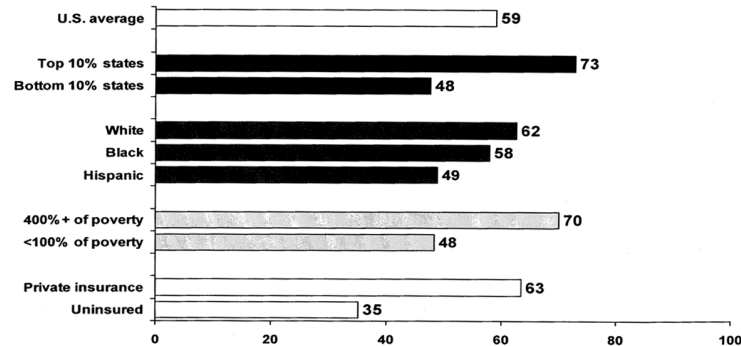
Data: National Immunization Survey (NCHS National Immunization Program, Allred 2007).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Preventive Care Visits for Children, by Top and Bottom States, Race/Ethnicity, Family Income, and Insurance, 2003

Percent of children (ages <18) who received BOTH a medical and dental preventive care visit in past year



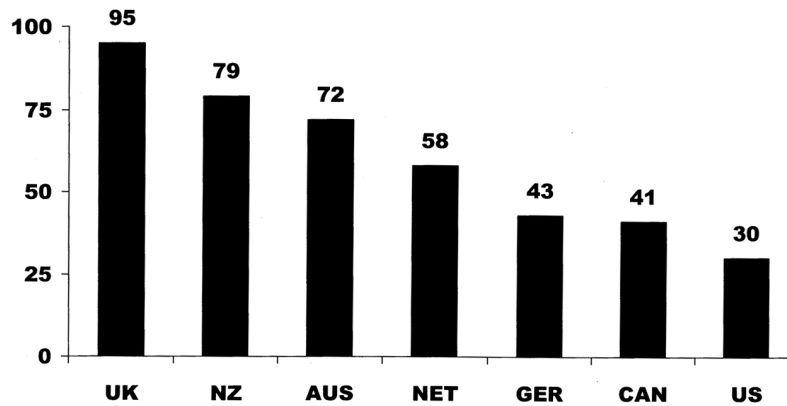
Note: Indicator was not updated due to lack of data. Baseline figures from 2006 Scorecard are presented.
Data: 2003 National Survey of Children's Health (HRSA 2005; retrieved from Data Resource Center for Child and Adolescent Health database at <http://www.nschdata.org>).

Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2008



Primary Care Doctors' Reports of Any Financial Incentives for Quality of Care Improvement, 2006

Percent of physicians reporting any financial incentive*



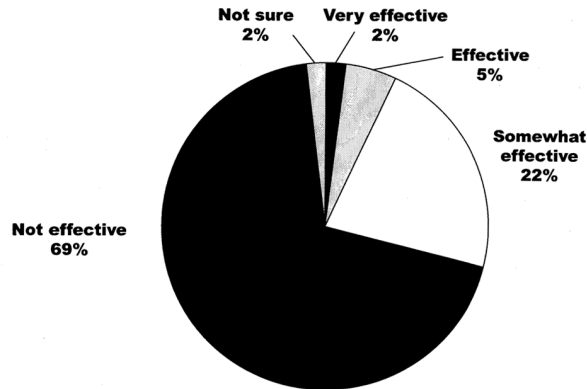
*Receive or have potential to receive payment for: clinical care targets, high patient ratings, managing chronic disease/complex needs, preventive care, or QI activities

Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians



More Than Two-Thirds of Opinion Leaders Say Current Payment System Is Not Effective at Encouraging High Quality of Care

"Under the current payment approach, payment is given to each provider for individual services provided to each patient. How effective do you think this payment system is at encouraging high quality and efficient care?"



Source: Commonwealth Fund Health Care Opinion Leaders Survey, September/October 2008.

2006 Fund Quality of Care Survey Indicators of a Medical Home (adults 18–64)

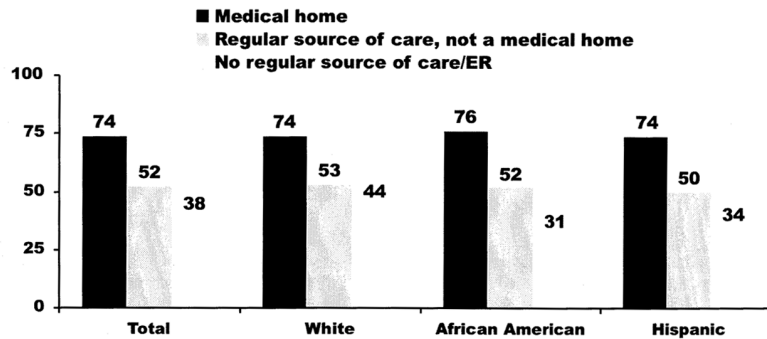
Indicator	Total		Percent by Race			
	Estimated millions	Percent	White	African American	Hispanic	Asian American
Regular doctor or source of care	142	80	85	79	57	84
<i>Among those with a regular doctor or source of care . . .</i>						
Not difficult to contact provider over telephone	121	85	88	82	76	84
Not difficult to get care or medical advice after hours	92	65	65	69	60	66
Doctors' office visits are always or often well organized and running on time	93	66	68	65	60	62
All four indicators of medical home	47	27	28	34	15	26



Source: Commonwealth Fund 2006 Health Care Quality Survey.

Racial and Ethnic Differences in Getting Needed Medical Care Are Eliminated When Adults Have Medical Homes

Percent of adults 18-64 reporting always getting care they need when they need it

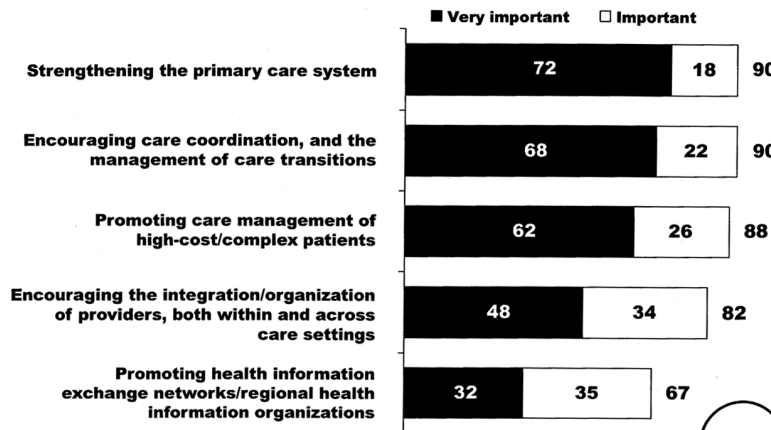


Note: Medical home includes having a regular provider or place of care, reporting no difficulty contacting provider by phone or getting advice and medical care on weekends or evenings, and always or often finding office visits well organized and running on time.
 Source: Commonwealth Fund 2006 Health Care Quality Survey.



Policy Strategies to Improve Health Care Delivery Organization

"How important do you think each of these are in improving health system performance?"

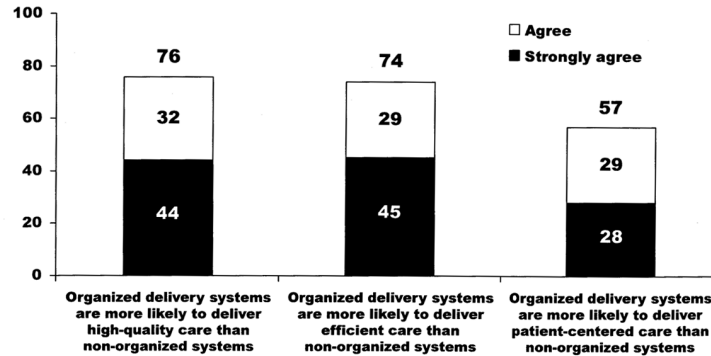


Source: Commonwealth Fund Health Care Opinion Leaders Survey, April 2008.



Three-Quarters of Health Care Opinion Leaders Think Organized Delivery Systems Are More Likely to Deliver High-Quality and Efficient Care

"Please indicate whether or not you agree with the following statements about organized delivery systems."



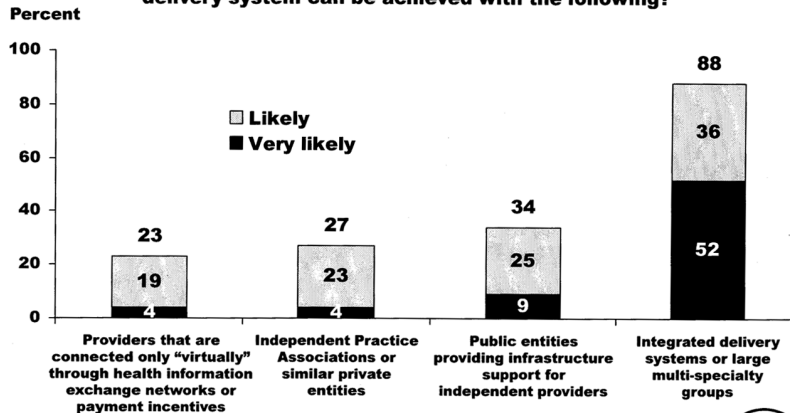
Note: Organized delivery system is defined as one which provides enhanced access to care, care coordination, participates in health information exchange, and has hospitals, physician practices, and other providers working together to improve quality and efficiency.

Source: Commonwealth Fund Health Care Opinion Leaders Survey, April 2008.



Integrated Delivery Systems and Multi-Specialty Group Practices Very Likely to Achieve Organized Delivery Systems

"How likely do you think it is that the results of an organized delivery system can be achieved with the following?"

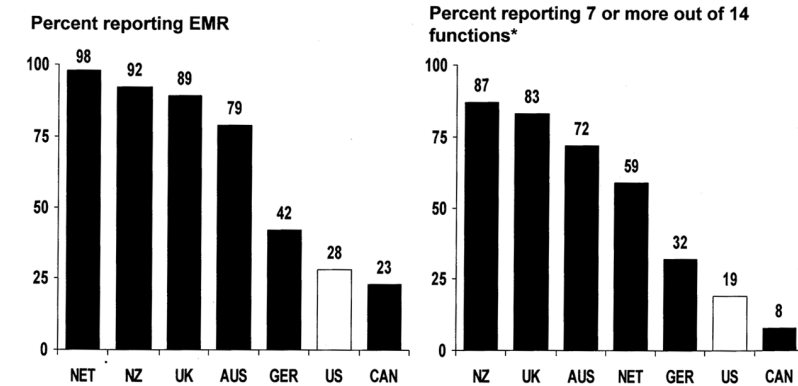


Note: Organized delivery system is defined as one which provides enhanced access to care, care coordination, participates in health information exchange, and has hospitals, physician practices, and other providers working together to improve quality and efficiency.

Source: Commonwealth Fund Health Care Opinion Leaders Survey, April 2008.



Only 28% of U.S. Primary Care Physicians Have Electronic Medical Records; Only 19% Have Advanced IT Capacity

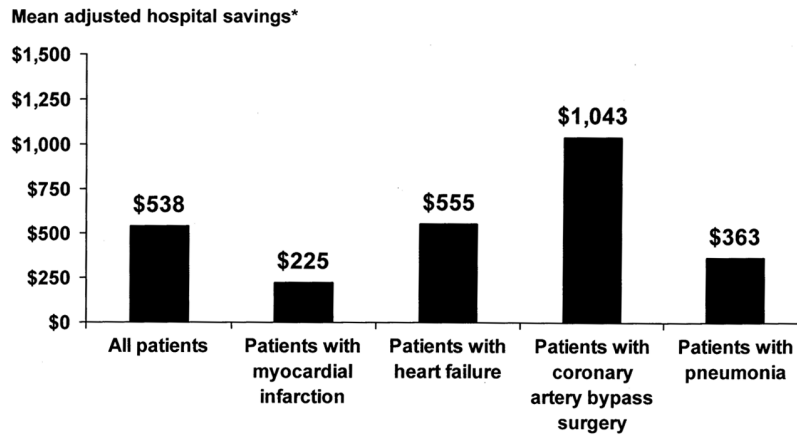


*Count of 14: EMR; EMR access other doctors, outside office, patients; routine use electronic ordering tests, prescriptions; access test results, hospital records; computer for reminders, Rx alerts; prompt tests results; and easy to list diagnosis, medications, patients due for care.

Source: 2006 Commonwealth Fund International Health Policy Survey of Primary Care Physicians.



Hospitals with Automated Clinical Decision Support Generate Savings



* Adjusted for patient complication risk; patient mortality risk; and hospital size, total margin, and ownership. Savings associated with a 10-point increase in Clinical Information Technology Assessment Tool subdomain score. R. Amarasingham, L. Plantinga, M. Diener-West et al., "Clinical Information Technologies and Inpatients Outcomes: A Multiple Hospital Study," *Archives of Internal Medicine*, Jan. 26, 2009 169(2):1-7.



British Surgeon Survival and Complication Rates Available on Internet

Heart surgery in Great Britain

Homepage **Survival rates** Information for patients Media centre About this site

Home / [Survival rates](#) / [About coronary artery bypass graft operations](#) / [Coronary artery bypass graft](#) / [Surgeon](#)

W. Andrew Owens
The James Cook University Hospital

About W. Andrew Owens

Specialisms

Adult cardiac surgery
Adult thoracic surgery

Qualified

Queens University Belfast, 1990

Trained

Royal Victoria Hospital Belfast 1994-1995
Papworth Hospital Cambridge 1995-1996
Freeman Hospital, Newcastle upon Tyne, 1996-1999
21 Vincent Hospital, Sydney, Australia, 1999-2001
James Cook University Hospital, Middlesbrough 2001-2002
Freeman Hospital, Newcastle upon Tyne, 2002

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Papworth Hospital Cambridge, 1996-1999

Address:

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Middlesbrough,
TS4 3BQ

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Email:

andrew.owens@jcuhs.nhs.uk

[Webpage](#)



Practice profile for the 3 years ending March 2005

Total number of operations performed: 143

☒ Isolated coronary bypass operations performed
☐ Isolated valve operations performed
☐ Combined and other operations performed



Source: R. Boyle, "National Strategies to Improve Quality and Healthcare Delivery: Heart Disease," Presentation to the Commonwealth Fund International Symposium, November 3, 2005.

British Surgeon Survival and Complication Rates Available on Internet

Survival rates after selected types of heart operation

How you can use this information

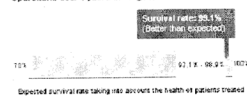
Patients who are going to have certain heart surgery may find it useful to look up survival rates for surgeons or units they are considering and discuss this information with their GP or their surgeon.

What it can't tell you

Your own chances of surviving a heart operation

Coronary artery bypass graft operations

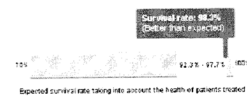
Operations over 3 years ending March 2005



120 operations performed
Statistic calculated from all first time patients

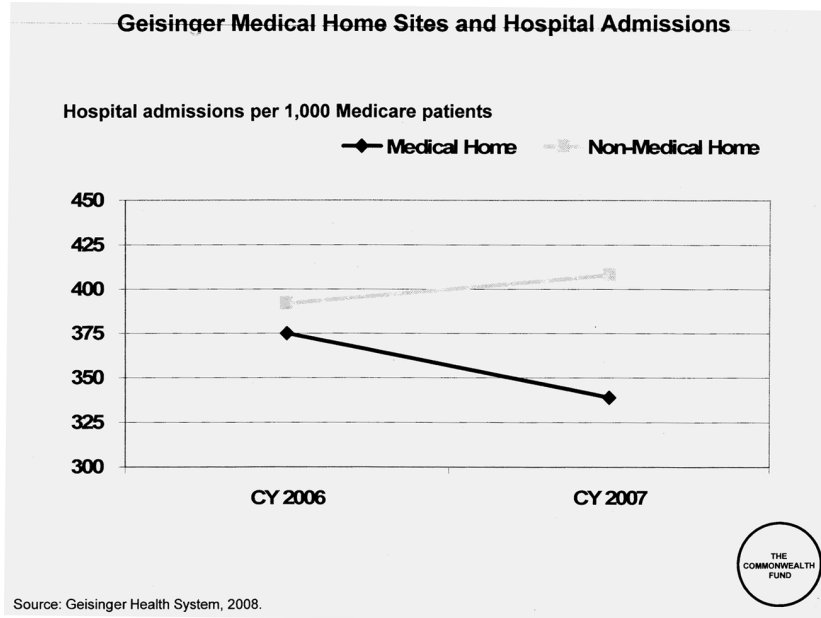
Survival rates for all kinds of surgery

Operations over 3 years ending March 2005

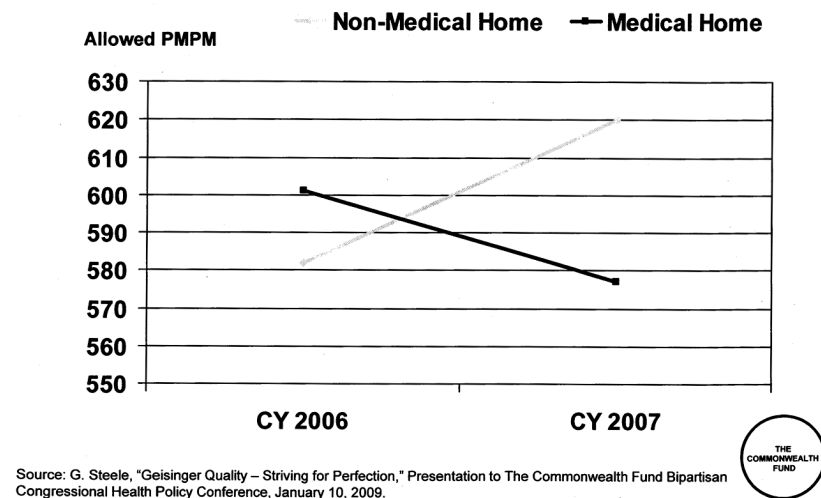


Source: R. Boyle, "National Strategies to Improve Quality and Healthcare Delivery: Heart Disease," Presentation to the Commonwealth Fund International Symposium, November 3, 2005.

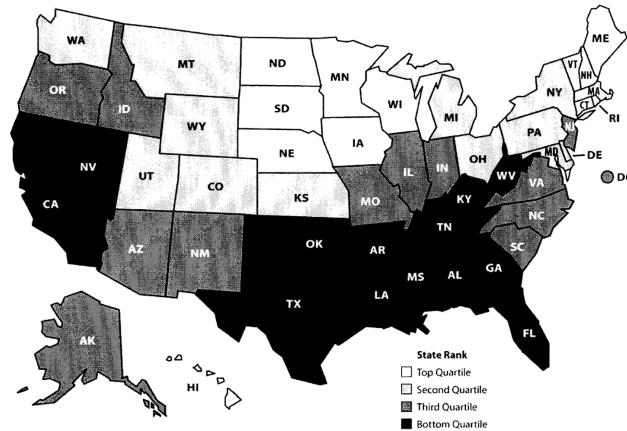
Opportunities and Progress



Geisinger Medical Home Pilot Sites Reduce Medical Cost by Four Percent in First Year



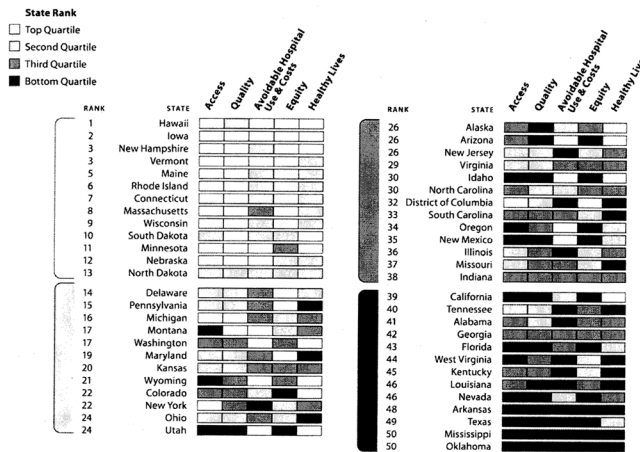
State Rankings on Overall Health System Performance



Source: Commonwealth Fund State Scorecard, 2007.



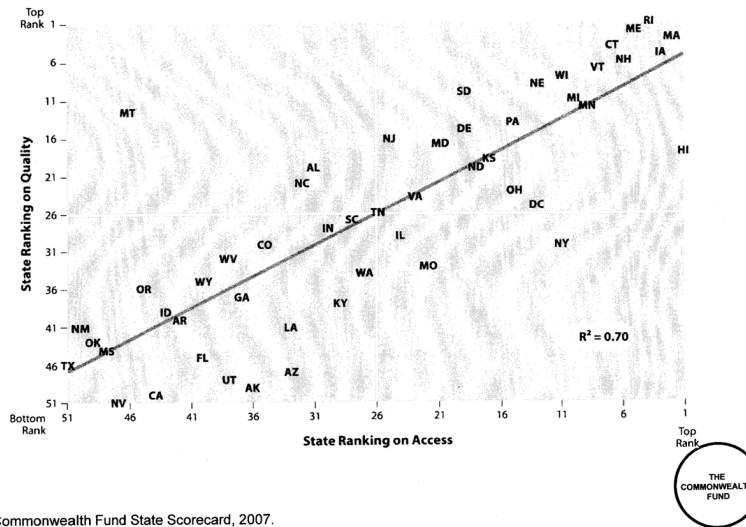
State Scorecard Summary of Health System Performance Across Dimensions



Source: Commonwealth Fund State Scorecard, 2007.

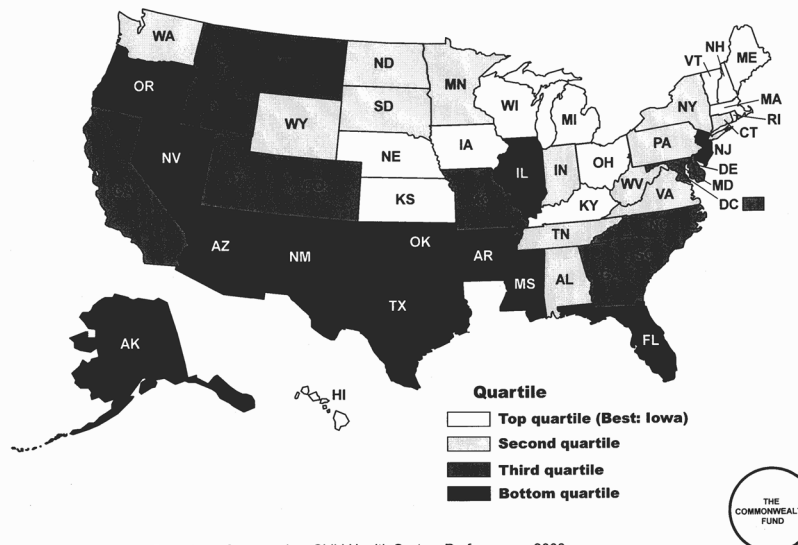


State Ranking on Access and Quality Dimensions



Source: Commonwealth Fund State Scorecard, 2007.

State Ranking on Child Health System Performance



Source: Commonwealth Fund State Scorecard on Child Health System Performance, 2008.

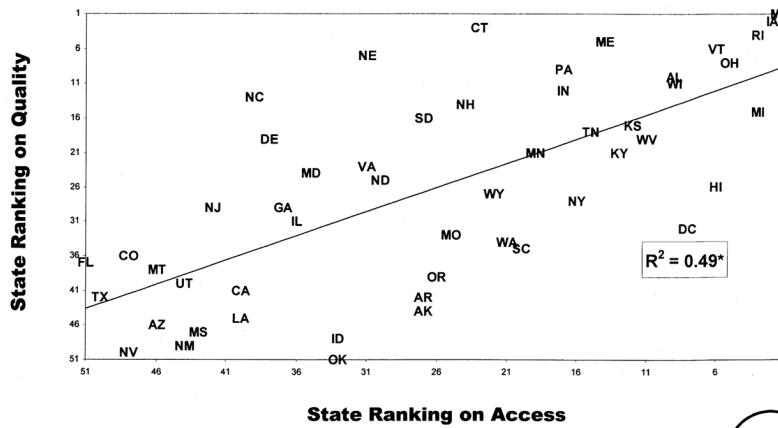
Summary of Variation in Child Health System Performance

Overall Rank*	State	Access	Quality	Costs	Equity	Potential to Lead Healthy Lives
1	Iowa	2	2	12	19	17
2	Montent	4	6	41	1	1
3	Arkansas	14	1	1	2	2
4	Massachusetts	11	3	13	7	3
5	Ohio	5	8	34	10	21
6	Illinois	6	26	5	11	41
7	New Hampshire	24	14	40	7	4
8	South Island	3	4	45	5	21
9	Wisconsin	12	21	22	18	18
10	Connecticut	12	22	22	22	22
11	Michigan	9	11	28	14	26
12	Michigan	3	15	28	17	34
13	Idaho	21	21	22	23	18
14	Connecticut	23	3	45	23	23
15	Arkansas	14	1	1	2	2
16	Idaho	21	21	22	23	18
17	Idaho	21	21	22	23	18
18	Pennsylvania	17	9	42	8	37
19	Washington	21	24	32	20	6
20	West Virginia	11	19	31	4	43
21	North Dakota	20	25	27	22	9
22	North Dakota	20	25	27	22	9
23	Minnesota	18	21	26	25	23
24	Minnesota	18	21	26	25	23
25	Virginia	31	23	8	35	25
26	New York	16	28	45	8	27
27	Minnesota	15	18	26	24	43
28	Idaho	44	40	7	30	3
29	Idaho	44	40	7	30	3
30	Idaho	44	40	7	30	3
31	Idaho	44	40	7	30	3
32	Idaho	44	40	7	30	3
33	Idaho	44	40	7	30	3
34	Idaho	44	40	7	30	3
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37	Idaho	44	40	7	30	3
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39	Idaho	44	40	7	30	3
40	Idaho	44	40	7	30	3
41	Idaho	44	40	7	30	3
42	Idaho	44	40	7	30	3
43	Idaho	44	40	7	30	3
44	Idaho	44	40	7	30	3
45	Idaho	44	40	7	30	3
46	Idaho	44	40	7	30	3
47	Idaho	44	40	7	30	3
48	Idaho	44	40	7	30	3
49	Idaho	44	40	7	30	3
50	Idaho	44	40	7	30	3
51	Idaho	44	40	7	30	3

Source: Commonwealth Fund State Scorecard on Child Health System Performance, 2008.



State Ranking on Child Health Access and Quality Dimensions



* $p < .05$

Source: Commonwealth Fund State Scorecard on Child Health System Performance, 2008.



Overall Views of the Health Care System in Eight Countries

Base: Adults with any chronic condition

Percent	AUS	CAN	FR	GER	NETH	NZ	UK	US
Only minor changes needed	22	32	41	21	42	29	38	20
Fundamental changes needed	57	50	33	51	46	48	48	46
Rebuild completely	20	16	23	26	9	21	12	33

Data collection: Harris Interactive, Inc.
Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Cost-Related Access Problems in Past Two Years

Base: Adults with any chronic condition

Percent	AUS	CAN	FR	GER	NETH	NZ	UK	US
Did not fill Rx or skipped doses	20	18	13	12	3	18	7	43
Did not visit a doctor when had a medical problem	21	9	11	15	3	22	4	36
Did not get recommended test, treatment, or follow-up	25	11	13	13	3	18	6	38
Any of the above access problems because of cost	36	25	23	26	7	31	13	54

Data collection: Harris Interactive, Inc.
Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Length of Time with Regular Doctor or Place

Base: Adults with any chronic condition

Percent	AUS	CAN	FR	GER	NETH	NZ	UK	US
Has regular doctor or place of care	96	97	99	99	100	98	99	91
With regular doctor or place for five years or more*	58	64	75	79	79	61	73	49

* Base includes those with and without a regular doctor or place of care.

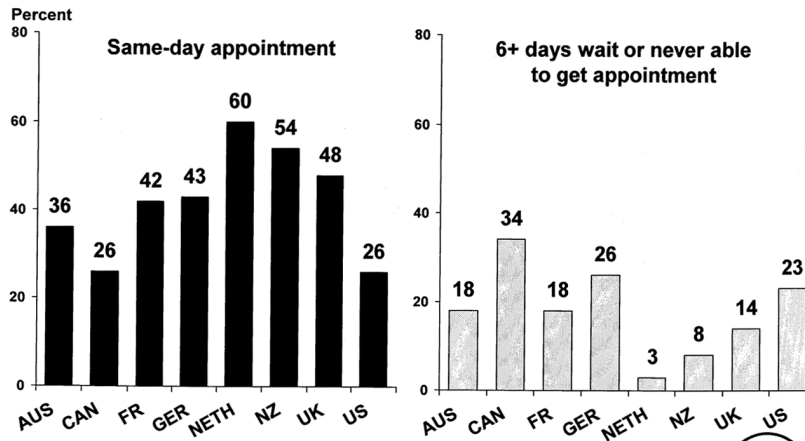
Data collection: Harris Interactive, Inc.

Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Access to Doctor When Sick or Needed Care

Base: Adults with any chronic condition



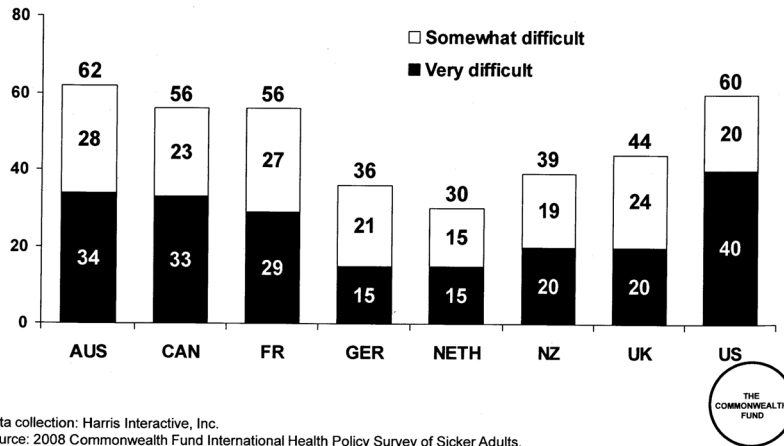
Data collection: Harris Interactive, Inc.

Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Difficulty Getting Care After Hours Without Going to the Emergency Room

Base: Adults with any chronic condition who needed after-hours care
Percent reported *very/somewhat difficult* getting care on nights, weekends,
or holidays without going to ER



Data collection: Harris Interactive, Inc.
Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.

Coordination Problems with Medical Tests or Records in Past Two Years

Base: Adults with any chronic condition

Percent	AUS	CAN	FR	GER	NETH	NZUK		US
Test results/records not available at time of appointment	16	19	15	12	11	17	15	24
Duplicate tests: doctors ordered test that had already been done	12	11	10	18	4	10	7	20
Either/both coordination problems	23	25	22	26	14	21	20	34

Data collection: Harris Interactive, Inc.
Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Medical, Medication, or Lab Test Errors in Past Two Years

Base: Adults with any chronic condition

Percent	AUS	CAN	FR	GER	NETH	NZ	UK	US
Wrong medication or dose	13	10	8	7	6	13	9	14
Medical mistake in treatment	17	16	8	12	9	15	8	16
Incorrect diagnostic/lab test results*	7	5	3	5	1	3	3	7
Delays in abnormal test results*	13	12	5	5	5	10	8	16
Any medical, medication, or lab errors	29	29	18	19	17	25	20	34

* Among those who had blood test, x-rays, or other tests.

Data collection: Harris Interactive, Inc.

Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.



Policy Solutions

Bending the Curve: Fifteen Options that Achieve Savings Cumulative 10-Year Savings

Producing and Using Better Information

- Promoting Health Information Technology - \$88 billion
- Center for Medical Effectiveness and Health Care Decision-Making - \$368 billion
- Patient Shared Decision-Making - \$9 billion

Promoting Health and Disease Prevention

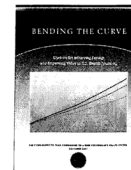
- Public Health: Reducing Tobacco Use - \$191 billion
- Public Health: Reducing Obesity - \$283 billion
- Positive Incentives for Health - \$19 billion

Aligning Incentives with Quality and Efficiency

- Hospital Pay-for-Performance - \$34 billion
- Episode-of-Care Payment - \$229 billion
- Strengthening Primary Care and Care Coordination - \$194 billion
- Limit Federal Tax Exemptions for Premium Contributions - \$131 billion

Correcting Price Signals in the Health Care Market

- Reset Benchmark Rates for Medicare Advantage Plans - \$50 billion
- Competitive Bidding - \$104 billion
- Negotiated Prescription Drug Prices - \$43 billion
- All-Payer Provider Payment Methods and Rates - \$122 billion
- Limit Payment Updates in High-Cost Areas - \$158 billion

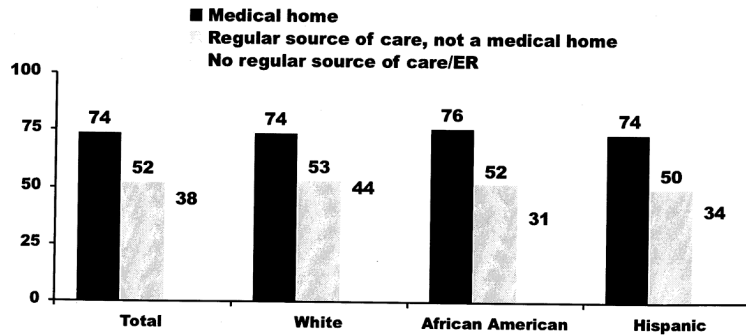


Source: C. Schoen et al., *Bending the Curve: Options for Achieving Savings and Improving Value in U.S. Health Spending*, Commonwealth Fund, December 2007.



Racial and Ethnic Differences in Getting Needed Medical Care Are Eliminated When Adults Have Medical Homes

Percent of adults 18-64 reporting always getting care they need when they need it



Note: Medical home includes having a regular provider or place of care, reporting no difficulty contacting provider by phone or getting advice and medical care on weekends or evenings, and always or often finding office visits well organized and running on time.
 Source: Commonwealth Fund 2006 Health Care Quality Survey.



Five Key Strategies for High Performance

1. Extending affordable health insurance to all
2. Organizing care around the patient
3. Aligning financial incentives to enhance value and achieve savings
4. Meeting and raising benchmarks for high-quality, efficient care
5. Ensuring accountable national leadership and public/private collaboration



Source: Commission on a High Performance Health System, A High Performance Health System for the United States: An Ambitious Agenda for the Next President, The Commonwealth Fund, November 2007



Senator MIKULSKI. Wow, all that in 5 minutes.
 Ms. Davenport-Ennis.

**STATEMENT OF NANCY DAVENPORT-ENNIS, CEO, NATIONAL
PATIENT ADVOCATE FOUNDATION, WASHINGTON, DC**

Ms. DAVENPORT-ENNIS. Thank you, Madam Chairwoman, for the opportunity to be with you today. Thank you, members of the panel.

I am Nancy Davenport-Ennis, and I am the founder of the National Patient Advocate Foundation, which is a policy organization whose mission is to try to remove and work with legislators and regulators to inform and improve healthcare access in America. Our heart lives in Patient Advocate Foundation, founded at the same time, that provides direct patient services to patients in each of the 50 States in the United States.

My testimony is grounded in more than 12 years of documentation across more than 350,000 closed patient cases, reporting the concrete gaps and failures in our current healthcare delivery systems.

I would like to share that my testimony today will focus on how the use of three specific tools, we feel, could help to improve the level of quality care that patients receive in our healthcare system and lead to improved outcomes and better coordinated care for patients.

They are health information technology, widespread use and adoption of medical guidelines across all disease areas, and comparative effectiveness research.

In the area of health information technology, it is known to reduce medical errors and to improve patient safety. However, only 25 percent of healthcare providers in the United States today, as reported in a study released in January, are currently using health information technology. In other countries, such as the United Kingdom and Australia, adoption is at about 75 percent.

In 2006, one-third of patients reported a medical, medication, or laboratory error during the previous 2 years. These errors resulted in the unnecessary deaths of nearly 100,000 patients annually, as reported by the Commonwealth Fund.

NPAF does support health IT funding in the stimulus and believes that it should be available to all providers regardless of practice size. We are pleased that today we do have, through the Certification Commission for Healthcare Information, 55 electronic health records that have been certified.

There is no better example of how health information technology can benefit patients than a story of a 13-year-old patient whose parents reached out to us. The child had terrific headaches and uncontrollable vomiting. When she went to her primary care physician, after X-rays and several tests, they could not determine what the problem was with the child.

They electronically transmitted her records to a specialist in a nearby city, where there was a research center. And within hours, the records were reviewed, and the child was scheduled to be there the next morning. The child was diagnosed with Chiari syndrome.

We also feel that medical guidelines afford some degree of consistency in care that can be delivered routinely and uniformly. Within the cancer community, guidelines are fairly routine. The guidelines are developed by panels of experts, and these guidelines provide us some system to know that when a treating physician,

perhaps in a smaller community, is deciding what is the best course of care, the guideline can give them recommendation.

We would also like to say that guidelines provide a process through which these treatments have been well vetted. We feel that medical guidelines are based upon clinical trials' research. A story of a 45-year-old patient who came to us with a disease that had been diagnosed as incurable. We enrolled her in a clinical trial at the National Institutes of Health. Today, Mary Schwartz is disease free 3½ years after being told that she had approximately 6 years to live.

This clinical trial information also, we feel, is what is going to drive the comparative effectiveness research in the United States of America. We strongly support comparative effectiveness research and would ask that the panel join us in supporting clinical focus in that area.

We are pleased to take additional questions.

Thank you, Madam Chairperson and members of the panel.

[The prepared statement of Ms. Davenport-Ennis follows:]

PREPARED STATEMENT OF NANCY DAVENPORT-ENNIS

SUMMARY

National Patient Advocate Foundation believes our healthcare system should incent quality and promote transparency to encourage patients to be better purchasers of health care. The use of health information technology, medical guidelines, clinical trials, and comparative effectiveness research are tools that should be utilized to help improve the level of quality care Americans receive in our health care system.

Quality healthcare coverage leads to improved outcomes and better coordinated care for patients. One tool that has proven valuable to patients and providers is health information technology. In the United States, the Veterans Administration (VA) leads in complete adoption of health information technology (HIT); however, only 10–30 percent of U.S. primary care providers utilize electronic medical records.

The IOM report, *Crossing the Quality Chasm*, explains that re-designing the health care delivery system will require many changes. One of which, applying evidence to health care delivery, can be partially addressed with adoption of proven medical guidelines such as those developed by the National Comprehensive Cancer Network (NCCN).

Clinical research has improved the treatment of various diseases and has helped doctors make well-informed decisions about what particular therapy is best for their patients. In cancer, clinical trial research has vastly improved survival rates for many cancers and led to improved cancer care. However, according to the National Cancer Institute, less than 5 percent of adults diagnosed with cancer annually enroll in a clinical trial.¹ Broader enrollment in cancer clinical trials will enable researchers to discover new and better ways to treat and prevent cancer leading to higher quality cancer care for patients.

National Patient Advocate Foundation supports comparative effectiveness research to determine the comparative clinical effectiveness of various treatment options for those with chronic and debilitating diseases. However, it is our belief that using comparative effectiveness research findings to limit access, deny treatment or reimbursement will not benefit patients or our healthcare system as a whole. One-size-fits-all will not help us achieve a high quality healthcare system since we know that patients can have very different reactions to certain medications or therapies.

National Patient Advocate Foundation supports the IOM report's premise that "narrowing the quality chasm will make it possible to bring the benefits of medical science and technology to all Americans in every community, and this in turn will mean less pain and suffering, less disability, greater longevity, and a more productive workforce."

¹ Boosting Cancer Trial Participation. National Cancer Institute, February 2006.

PREPARED STATEMENT OF NANCY DAVENPORT-ENNIS

Good morning. Thank you, Mr. Chairman and members of the committee, for the opportunity to testify before you. My name is Nancy Davenport-Ennis, and I am the Founder of the National Patient Advocate Foundation and the Patient Advocate Foundation. National Patient Advocate Foundation is a policy organization based in Washington, DC that is dedicated to providing the patient's voice in order to improve access to health care at the Federal and State levels. Patient Advocate Foundation is a direct patient services organization which provides case management services to patients throughout the country seeking information and assistance for access to care issues resulting from a diagnosis of a chronic, debilitating or life-threatening disease. My testimony is grounded in more than 12 years of documentation across 300,000 closed patient cases reporting the concrete gaps and failures in our current healthcare delivery and financing systems.

When the Institute of Medicine published their report, "*Crossing the Quality Chasm: A New Health System for the 21st Century*," back in March 2001, the hope was that doctors, elected officials and patients would demand that we fix our payment policies which have been reimbursing for unnecessary and ineffective care, adopt electronic medical records to help coordinate care in our complex healthcare system, and provide doctors with independent clinical research to help guide them when prescribing a treatment protocol. Unfortunately, almost 8 years have passed and progress is moving very slowly. In health information technology, only 10-30 percent of primary care providers utilize electronic medical records (EMRs). In other countries, such as the United Kingdom and Australia, adoption is around 75 percent.¹ In terms of treatment guidelines, while we have very specific and notable guidelines in cancer, that is not the case for many other chronic diseases in the country where we still lack good scientific and evidence-based research to guide many clinical diagnoses. There are gaps in the utilization of treatment guidelines and in the availability of guidelines for specific patient and/or disease populations, such as the pediatric population. These gaps impact all healthcare stakeholders, including the patients I am here to represent.

Even though the United States spends 16 percent of GDP on healthcare, which is more than any other industrialized country, there is significant evidence that the quality of medical care trails other developed nations. The United States continues to fall behind other industrialized countries when comparing various dimensions of health system performance including: healthy lives, quality, access, efficiency, and equity. In The Commonwealth Fund's National Scorecard on U.S. Health System Performance, the United States achieved an overall score of 65 out of 100. Compared to 19 countries, the United States now ranks last on a measure of mortality amenable to medical care. However, the report did show that hospitals are showing "measurable improvement on basic treatment guidelines for which data are collected and reported nationally on Federal Websites."²

Our system often reimburses for services independent of quality measurements. Currently, many providers lack incentive to promote and prescribe preventive care for their patients. Addressing these systemic reimbursement issues could greatly improve the quality of medical care patients receive. NPAF recommends we undertake reimbursement reform and include direct processes to incent providers to provide quality care.

In 2006, a study by The Commonwealth Fund found that one-third of patients reported a medical, medication or laboratory error during the previous 2 years.³ These errors result in the unnecessary deaths of nearly 100,000 patients annually.⁴ In addition to the deaths that medical errors impose, the total financial cost of preventable adverse events, including lost income, lost household functioning, disability, etc., are estimated to be \$35 billion a year.⁵

¹ R Atkinson, D Castro & S Ezell. The Digital Road to Recovery: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America. The Information Technology & Innovation Foundation, January 2009.

² Why Not the Best? Results from the National Scorecard on U.S. Health System Performance. The Commonwealth Fund Commission on a High Performance Health System, July 2008.

³ The Commonwealth Fund Commission on a High Performance Health System, Why Not the Best? Results from a National Scorecard on U.S. Health System Performance. The Commonwealth Fund, September 2006.

⁴ J Corrigan, L Kohn, M Donaldson, eds. To Err is Human: Building a Safer Health System. Committee on Quality of Health Care in America, Institute of Medicine, The National Academies Press, 1999.

⁵ J Corrigan, L Kohn, M Donaldson, eds. To Err is Human: Building a Safer Health System. Committee on Quality of Health Care in America, Institute of Medicine, The National Academies Press, 1999.

The Agency for Healthcare Research and Quality (AHRQ) estimates that treating the Nation's 10 most expensive medical conditions cost nearly \$500 billion in 2005. The conditions beginning with the least expensive include: normal childbirth, back problems, osteoarthritis and other joint diseases, diabetes (type 1 & 2), hypertension, asthma and chronic obstructive pulmonary disease (COPD), mental disorders including depression, cancer, trauma disorders, and heart disease. Many of them—including cancer, heart disease and diabetes—are common, chronic conditions that may be reduced and in some instances prevented. Promoting and rewarding high-quality health care will help reduce unnecessary healthcare spending as we move away from acute, episodic care needs and towards disease prevention and management.

Transforming our healthcare system into a system that incents high-quality healthcare services is a long-term initiative, but there are steps we can take now to improve the care patients receive throughout the country. In the last 2 years, the World Health Organization's (WHO) Safe Surgery Saves Lives program implemented a 19-item surgical safety checklist in eight countries to improve patient care and reduce complications and death associated with surgery. Similar to the checklist a pilot runs through before takeoff, surgeons and nurses participating in the study completed a series of basic safety checks before and after each operation. The study found that the checklist cut surgical deaths and complications by a third. Study authors say that work is already underway to develop additional checklists for maternity and childbirth, heart disease, pneumonia, HIV and mental health. This WHO study illustrates that something as simple as a checklist can improve quality and safety in our healthcare system in ways that will be of enormous benefit to patients. Study authors assert that few U.S. hospitals currently use these surgical safety checklists. While various hospitals and physicians have developed checklists, utilization needs to be more widespread in our health care system.

National Patient Advocate Foundation believes our healthcare system should incent quality and promote transparency to encourage patients to be better purchasers of health care. The use of quality measures, comparative effectiveness research, medical guidelines and evidence-based medicine are tools that should be utilized to help improve the level of quality care patients receive in our healthcare system.

Quality healthcare coverage leads to improved outcomes and better coordinated care for patients. One tool that has proven valuable to patients and providers is health information technology. In the United States, the Veterans Administration (VA) leads in complete adoption of health information technology (HIT). In addition, institutions such as the Cleveland Clinic have universally adopted HIT. The American Health Information Community, a federally chartered advisory committee, officially certified HIT systems and developed interoperability standards so that with financial support, such as the funding included in the economic stimulus, providers can adopt and use HIT thus reducing medical errors.

The parents of a 13-year-old patient sought the assistance of Patient Advocate Foundation after their daughter began experiencing severe headaches that caused extreme pain and vomiting. Even after her pediatrician ordered X-rays and other tests, no diagnosis was reached. The family remained concerned, however, and after being provided a disc which contained all of the tests performed as well as radiology reports, the parents made an appointment with a pediatric neurologist. The neurologist and a pediatric radiologist, who specialize in neurological disorders, were able to review thoroughly the patient's electronic medical records and all of the tests included on the disc and to diagnose the girl with Chiari Malformation, an abnormality in the lower part of the brain. The appointment with the specialists had been scheduled in very short order due to the immediate availability of the patient's health record in an electronic format. This example illustrates how health information technology allows instant access to medical records resulting in improved patient care.

The National Comprehensive Cancer Network (NCCN) is dedicated to improving the quality and effectiveness of care provided to cancer patients. Through the leadership and expertise of clinical professionals at their member institutions, NCCN develops clinical practice guidelines appropriate for use by patients, clinicians, and other healthcare decisionmakers. NCCN guidelines are considered "the gold standard" because they are developed by medical professionals adhering to strict standards on conflicts of interest. Our healthcare system should support and adhere to medical guidelines that are independently developed by skilled medical professionals and free from conflicts of interest. When assisting patients, case managers at Patient Advocate Foundation frequently cite medical guidelines when successfully appealing to insurance companies that have denied a particular treatment protocol.

NCCN guidelines are practical, up to date, easily accessible online at no charge, and relevant to a physicians' practice. These guidelines are developed by panels of unpaid, multidisciplinary experts including surgeons, nurses, patient representatives, radiation therapists, hematologists and clinical oncologists, who to date, have developed over 100 guidelines for therapeutic interventions covering 98 percent of all cancers. The guidelines specify best practices from a point of screening and diagnosis, through development of treatment plans, including all protocols selected, as well as maintenance and follow-up recommendations. NCCN guidelines also provide specific information concerning supportive care needed for patients to tolerate and respond favorably to therapeutic interventions. The American Society of Clinical Oncology (ASCO) has also developed guidelines specific to cancer that are focused on technology assessments, which evaluate the appropriate use of specific therapeutic interventions.

Other disease areas, including cardiology, also develop and utilize national guidelines. Guidelines are a tool routinely used in the field of cancer by treating physicians, patients, nurses, social workers and insurers. In addition, PAF case managers use guidelines frequently when assisting patients with pre-authorizations or when negotiating appeals. Finally, the Centers for Medicare and Medicaid Services (CMS) uses NCCN guidelines to make coverage determinations about the use of off-label drugs and biologics in cancer care as well as in technology assessments.

Patient Advocate Foundation predominantly assists patients with healthcare access issues, but many patients also have underlying issues with the quality of care they are receiving. Approximately 78 percent of patients contacting Patient Advocate Foundation in 2007 had a cancer diagnosis.⁶ After a serious diagnosis like cancer, many patients wish to seek a second opinion, but insurance companies are increasingly refusing to cover this important service. Research conducted by the University of Michigan Comprehensive Cancer Center found that more than half of breast cancer patients who sought second opinions received a change in their recommended treatment plan.⁷ For some patients, a change in diagnosis and/or treatment results in less-invasive and higher-quality care.

Clinical research has improved the treatment of various diseases and has helped doctors make well-informed decisions about what particular therapy is best for their patients. In cancer, clinical trial research has vastly improved survival rates for many cancers and led to improved cancer care. However, according to the National Cancer Institute, less than 5 percent of adults diagnosed annually with cancer enroll in a clinical trial.⁸ Broader enrollment in cancer clinical trials will enable researchers to discover new and better ways to treat and prevent cancer leading to higher-quality cancer care for patients. Unfortunately, access to clinical trials is decreasing here in the United States because many companies are moving their clinical trials abroad where it is not only less expensive, but where accrual rates are improved thus allowing trials to close earlier. While this may seem like a positive development because it may lower the cost of drug development and reduce the clinical time to accrual completion, our Nation must address disparities in outcomes from one population group to another. These very disparities may be extrapolated to the whole U.S. population who may ultimately engage in the treatment protocols resulting from the trial. NPAF encourages the Federal agencies to work collaboratively with manufacturers to address regulatory barriers that may contribute to the exodus in recent years of these clinical trials.

Patient Advocate Foundation assisted a 45-year-old woman diagnosed with an adrenal tumor who was unable to locate treatment for her rare cancer. After accumulating nearly \$10,000 in unpaid medical bills for out-of-network care, she was told she had 6 months to live and she should go home and prepare herself and her family. Immediately after contacting PAF, the patient's case manager began investigating clinical trials. PAF was successful in enrolling the patient in a clinical trial at the National Institutes of Health (NIH); the trial was successful, and the patient is cancer free today, 3 years after enrollment in the clinical trial. Unfortunately, many patients are unaware that clinical trials may be a good treatment option for them and seek less effective and/or lower-quality care as a result.

Patients seeking the assistance of Patient Advocate Foundation describe many reasons for not enrolling in clinical trials including: high costs and/or lack of insurance coverage; trial location; age restrictions; fear that the trial will reduce their quality of life; and fear they may receive a placebo. Patient Advocate Foundation assisted a 30-year-old man diagnosed with stage IV olfactory neuroblastoma, a pediatric disease that is only seen in 1 percent of adults, who had difficulty enrolling

⁶ Patient Data Analysis Report. Patient Advocate Foundation, February 2008.

⁷ University of Michigan Comprehensive Cancer Center, November 2006.

⁸ Boosting Cancer Trial Participation. National Cancer Institute, February 2006.

in an appropriate clinical trial. The PAF case manager facilitated an agreement with the sponsors of a pediatric clinical trial at Duke University so that the clinical trial could be administered at the University of Alabama at Birmingham Hospital where the patient was located. Enrollment in this clinical trial ensured the greatest opportunity for control of disease for the longest period of time.

In 2005, cancer expenditures cost patients, insurers and the government \$69 billion making it one of the top 10 most expensive diseases. Clinical trials are critical in fighting cancer and improving the quality of care that cancer patients receive. We must strengthen our efforts to enroll patients in clinical trials if we wish to understand and effectively treat some of the most costly diseases.

The IOM report, *Crossing the Quality Chasm*, explains that re-designing the healthcare delivery system will require many changes. One of which, applying evidence to healthcare delivery, can be partially addressed with adoption of proven medical guidelines.

National Patient Advocate Foundation supports comparative effectiveness research to determine the comparative clinical effectiveness of various treatment options for patients with chronic and debilitating diseases. However, it is our belief that using comparative effectiveness research findings to limit access, or deny treatment or reimbursement will not benefit patients or our healthcare system as a whole. A one-size-fits-all approach will not help us achieve a high-quality healthcare system since we know that patients can have very different reactions to certain medications or therapies. Moreover, denying access to some of the newer and/or more expensive treatments will only move us further away from personalized medicine which should be our ultimate goal. As we continue to learn more about genetics and gene profiles, science will enable us to further tailor medical care to an individual's needs which will benefit patients and payers by eliminating ineffective and sometimes costly treatments. Comparative effectiveness research should be used as a tool for doctors and patients to determine the best course of action for individual patients. Similar to clinical trials, comparative effectiveness research and medical guidelines must be sensitive to different patient populations since we know that ethnic populations react differently to medical treatments, as do patients with multiple co-morbidities.

In addition, National Patient Advocate Foundation strongly advocates that all relevant stakeholders, including patient and consumer groups, representatives from the public and private sectors, such as government, physicians and other healthcare providers, medical specialists, insurers, and manufacturers of drugs and medical devices, should be involved in every step of the process, from setting the research agenda, and developing study methodology, to the translation and dissemination of findings.

National Patient Advocate Foundation strongly supports the goal stated in the IOM report:

"Narrowing the quality chasm will make it possible to bring the benefits of medical science and technology to all Americans in every community, and this in turn will mean less pain and suffering, less disability, greater longevity, and a more productive workforce."

Senator MIKULSKI. Well, those were excellent examples, and each one with such specific recommendations.

I am going to go to a broad-based question that perhaps all could jump in on. Just a brief comment, and then get to my question, because it goes to case management.

My background is that of a social worker. I was a foster care worker, and I was a child abuse and child neglect worker. The key to helping a family was ongoing, intrepid, and unrelenting case management.

Here goes my question. Dr. Beale, you talked about behavioral medicine, and often that is synonymous for mental or emotional illness or challenges. Also the biggest thing, in no matter what is diagnosed, is compliance with what you are asking the patient or the family to change, even if it is the treatment of cancer and so on.

No. 1, how do you motivate people to comply? How do you stand sentry in a free society without being a "health nanny?" Because we don't want health nannies or health nags, we want compliance.

Also with our practitioners, no matter how dedicated and duty-driven, given the demands of time, they will see a patient, and they will pass them on, and nobody keeps track.

Dr. Cassel, I am going to open with you to share your thoughts on the much talked about medical home. Tell me what you think that means, and do you agree that compliance and follow-through is a significant part of that? And should we have a human being, or can we do it with HIT, which is being talked about all the time?

Can we have a techno-case manager? Do we need a human being as a case manager? And is a primary care physician really able to be a case manager?

Dr. CASSEL. Thank you, Madam Chair.

Those are excellent questions, and I think the one-sentence answer is that the techno-case manager won't do it alone. You need to have human beings enabled by technology, and then the reach can be much farther.

I completely agree with you about the importance of compliance, although I personally prefer other terms that suggest that it really is a partnership between the clinicians and the patient. There actually is research that shows that if there is a better relationship between the doctor and the patient, the patient is much more likely to comply with the recommendations of the treatment.

Sometimes it is just a matter of not really understanding, not really having somebody who can answer your questions, not really being able to juggle the requirements of the treatment with all of the other requirements of your life.

What the case manager helps you to do is to understand that interface between the patient and family and their life and what the doctor thinks they should do. And the doctor—you are absolutely right. A primary care physician in a one- or two-person practice is not going to be able to be a medical home with just the addition of an electronic medical record.

That is why the emphasis on the team. You have got to have people who can actually have that interaction, proactive interaction, with the patient to be able to make that phone call, and ask, "How are you doing? Do you have any questions?" Respond to their needs. Understand what their situation is in the community.

You probably know better than anyone, a social worker is the best person to really do that. A social worker and a nurse and a primary care physician together would be my idea of the minimum for what would really constitute a medical home.

If they then have the technology to connect to all of the other specialists and maybe even do e-mail with the patient and other kinds of communications with the pharmacy, then that is a truly empowered medical home.

Senator MIKULSKI. Well, Dr. Cassel, do you think that is realistic? The whole discussion will be to expand the concept of primary care.

Dr. CASSEL. Right.

Senator MIKULSKI. If we look at the Massachusetts model—and others could comment on it—do you think it is a realistic expectation that a primary care operation, the physician's office, would have exactly what you said?

First of all, social workers are usually not even included in the discussion.

Dr. CASSEL. Right.

Senator MIKULSKI. They are included because, quite frankly, I am here.

[Laughter.]

Dr. CASSEL. Well, you are talking to a geriatrician. So the social worker is our best friend.

Senator MIKULSKI. And we would be a hell of a team.

Dr. CASSEL. Right. But let me answer your question, because I think that the large physician practices—and Karen Davis will tell you this. The Commonwealth Fund Commission has really looked into this. That is why there are great advantages to the scale of a large, integrated system of care.

The real challenge for the medical home will be how can you get small practices who aren't used to practicing in that setting to have some kind of virtual team coming together even in rural areas to offer those kinds of services to their patients?

I believe it can be done. But I don't think that doctors alone can do it.

Senator MIKULSKI. Well, my time is up. Dr. Davis, do you think you could fill us in there?

Dr. DAVIS. There are some practical models. In North Carolina, Community Care of North Carolina is a network. The State is divided into 15 regions. The Medicaid program funds the network, which are social workers and nurses to work with the physician practices in that region to do exactly what you have said about case management.

At the Geisinger Health System in Pennsylvania, they are large enough that their health plan pays the salaries of nurses who are embedded in physicians' practices and responsible for working with Medicare patients who are high risk, have complex problems.

But the key, as Dr. Cassel said, is trust in the physician, a good relationship, and then adding to that these extra services that can work with patients who have very difficult problems to handle.

Senator MIKULSKI. Not extra, integrated? They are not extra services. They have to be integrated services.

Dr. DAVIS. Right. Integrated services.

Senator MIKULSKI. They have to be viewed as an essential part of primary care, not "isn't it swell if we could afford it?"

Well, my time is up. Let me turn to Senator Dodd, and hopefully, we will have time for another round. That was just the kind of exchange I had hoped for.

Senator DODD. Yes, that is great. Madam Chairman, thank you very much again.

Thank you to our panel of witnesses. You are just excellent witnesses and are providing a tremendously valuable service.

Obviously, the challenge in many ways to our healthcare system is how we promote quality, achieve value, and ensure the system is equitable. In many ways, those three elements will have a lot to do with bending that curve on cost, even though I think all of us recognize there are going to be some up-front costs we will have to make.

If we promote the ideas of quality, value, and equitability, I think you have a chance of really moving in that direction.

I just want to mention, Madam Chairman, I have started last week a series of town hall meetings in my own State on healthcare, inviting the people of my State to come and talk about what they anticipate and what they would hope would be achieved with healthcare reform.

As all of us know on this side of the panel, you never know when you hold a town meeting what is going to happen. Seven hundred people showed up at 8:30 a.m. on a Friday to come out and talk. We thought maybe 100 people might show up to come and talk about it.

The issues they raised are ones you have been talking about here today—the need for improved patient incentives for primary care. We need to recruit and retain primary care providers. A good deal about eliminating duplicative, unnecessary testing, these various items that people raise all the time.

Obviously, expansion of health information technology, and again, the numbers from the Commonwealth Fund or others, we have all used them. I used them last Monday. It is a staggering number. Every time I say it, I can't believe I am accurate. That 98,000 people lose their lives every year in this country because of medical errors, it is just a stunning number. When you think we are in the 21st century and this is going on in the United States, it is really hard to believe.

I was pleased to see—and I know that Senator Mikulski and others had a lot to do with this. I know Senator Kennedy did as well. The \$23 billion investment in health IT that is in this stimulus package that is moving its way through here.

While people complain about various aspects, when we hear about sod on the Mall and so forth, I wish they would talk as much about putting resources, in the health IT area. It would make a huge difference.

I have a number of questions, but let me focus on two quickly, if I can. In Connecticut, we have the Help Me Grow program. I know, Ms. Davis, you are very familiar with this, and I want to mention it because it has been a tremendous success.

This is a statewide program in Connecticut since 2002. It is a comprehensive, statewide coordinated system of early identification and referral for children at risk for developmental or behavioral problems. We are now serving about 4,000 at-risk children in Connecticut per year as the care coordinator so that these children access and receive healthcare services, including preventive screenings and treatments.

A fellow by the name of Dr. Paul Dworkin, who I know you know, and the Connecticut Children's Health Medical Center, among many others, are doing some tremendous work. In fact, Commonwealth Fund has recently given them a grant to help replicate the Help Me Grow model in five States across the country because of their success. Polk County, IA, Orange County, CA, already have programs that are up and running.

Dr. Dworkin and his colleagues' program is really a model, Madam Chairman, for changing our current healthcare delivery system for children, which is what we have been working on this

week and the votes we will be cast in a few minutes on the CHIP program and are indicative of our interest in the subject matter.

In doing so, they have identified two critical gaps in the current system. First, they found that care coordination is critical. It is the critical missing element to the current care model for children. And second, they have cited a need to establish and promote a mid-level assessment capacity for screening at-risk children and intervening quickly where necessary.

I wonder, Karen, since this is something you are so familiar with, that you might comment on these observations and provide your recommendations on how to implement them in the context of healthcare reform?

Dr. DAVIS. Yes, the Help Me Grow program is a very important model. That also picks up on Senator Mikulski's point that any pediatrician, any parent can call this toll-free number and make sure that that child gets the services that that child needs.

It is a way of not putting all of the burden on the pediatrician to know everything that is available in the community, but to make it very easy to make that linkage and then have absolute certainty that they will follow up and connect that child or that parent with the necessary service. It is an excellent model.

Senator DODD. Yes. I wanted to jump quickly because the long-term services and supports, Dr. Cassel, they are a particular interest of Senator Kennedy's. It is an interest, I know, of Senator Mikulski's and mine as well. There is some debate as to whether or not—as we talk about universal healthcare reform—whether or not long-term services are going to be a part of that. That is an ongoing debate around here as to whether or not it should be.

I am an advocate of it. I think it is critical if we are going to have universal care that we provide long-term care and services and support. I just wonder—

Senator MIKULSKI. Can I ask you what you mean by “long-term services?”

Senator DODD. Well, providing the kind of living conditions where people don't need much necessarily, but need some. You have a graduated care process as their health conditions deteriorate, but they don't have to wait until they absolutely reach the point where there is very little options for them. They can have longer lives.

Senator MIKULSKI. You mean the continuum, all the way from independent living—

Senator DODD. Yes. Right.

Senator MIKULSKI [continuing]. Supportive at-home health services.

Senator DODD. Absolutely. Choices, where people have choices, they can make as well. We have an aging population. The great news is people are living longer, but they want the quality of life to be there as well.

I can't imagine us having a universal healthcare reform package and not including a long-term support and services for people.

Senator MIKULSKI. Absolutely.

Senator DODD. I wonder if you might just, in the context of our discussion here today, comment on that as well, since I know you have done so much work in this area.

Dr. CASSEL. Well, thank you, Senator Dodd. I appreciate that.

I have often thought it was kind of a blind spot in our health policy world that people didn't want to include long-term care in these discussions. Yet, I think it is also a place where we can get tremendous advances in affordability by coordinating acute and long-term care services.

There is a place where there is both huge redundancies and also huge gaps in care, huge opportunities for errors to occur when the long-term care providers aren't talking to the acute care providers, and vice versa. There is huge amounts of data on that.

There is both outcome reasons, but also financial reasons to bring them together. One is Medicare. One is Medicaid. They don't connect financially so you have the silo problem that Senator Mikulski mentioned earlier.

In fact, I believe, if you look at models from other countries, which the Commonwealth Fund has done, that you can get real efficiencies as well as better quality of care if you actually take it on as a part of the care and try to figure out a way to do that.

Senator DODD. Yes. You know, one point, and my time is up. Someone made, I thought, a very wise suggestion. And that is to begin, in Medicare, providing screening and prevention to people at the age of 55. I know there is talk about moving the enrollment age down to 55, but I don't know how much support there might be for that.

But certainly to begin to provide prevention to people at age 55 rather than waiting until they are 65 so that you begin, you can start treating people in anticipation, before something becomes an acute chronic illness. Having the ability to intervene at an earlier time and save an awful lot.

If you are not impressed by the ethical question, certainly the financial motivations ought to be there to promote that idea.

Senator MIKULSKI. Senator Dodd, there are a couple of issues here. One is the management of chronic illness. And that could begin at any age.

For example, the autistic child would have, even through early adulthood, these kinds of living arrangements, graduated living arrangements for independence. But then there are other kinds of challenges, such as the management of diabetes. And all those illnesses that have the underpinnings of inflammation, which can cause even Alzheimer's, etc.

One is the management of chronic illness, and then the other, though, is when you are getting older and you do go from independent living to supportive services at home to the need for assisted living to perhaps a more substantial in-residence thing. Those are two separate things, but they need to be viewed as the continuum. You are onto something.

One of the things I would like to suggest, as we then move on to our colleagues, we are coming up on the 20th anniversary of legislation you and Senator Kennedy helped George Mitchell and I do, which was the anti-spousal impoverishment legislation.

Do you remember the old Reagan rules of spend down—or I should say David Stockton rules—so you only had \$3,000 left in your bank account before you could get Medicaid. We changed

those laws so that you could keep more of an asset, as well as your family home or your family farm.

It was meant to be a down payment. It is now the 20th anniversary coming up, and nothing new has happened.

As we look through this, I would like to join with you and our colleagues on both sides of the aisle to say it is nice to have the 20th anniversary, but what is the new thinking that can really look at not only the issues around financial assets, but what are we going to do with people with the need for long-term care?

It shouldn't be at home or nursing home as your only two choices. We have got a lot of work to do and a lot of Senators who want to ask questions.

Senator DODD. Well, we can submit some questions.

Senator MIKULSKI. Absolutely. Please. Your full statements will be included the record.

We are going to go according to seniority. Senator Casey and then Hagan and Merkley.

Senator CASEY. Chairwoman Mikulski, thank you for calling this hearing and for your leadership on the whole host of issues we are talking about today.

I am going to be very brief. I have to be in the chair in the Senate. The place doesn't operate unless someone is in the chair. I will probably be below 5 minutes.

It is difficult to choose here because we have great questions for a wonderful panel. Dr. Cassel, if you will pardon me, I know you have roots in Philly, but the Geisinger plan was mentioned over here. I have got to ask a quick question about that. Then I will run out the door.

To Karen Davis, I wanted to ask you about Geisinger in terms of their health IT system. Dr. Steele will be glad that I mentioned it, but I am serious about the importance of it.

How do you see that model and the methodology—the way they set it up, the way it has been implemented and effective, I think, very effective—how do you see that playing out on a national scale? That is part A. Part B is the challenge on balancing that kind of technology with privacy.

Dr. DAVIS. Well, thank you very much. I should say that I am on the board of the Geisinger Health System, a nonprofit system.

I obviously think it is a terrific model, and the IT, which they have had for over 10 years, facilitates quality improvement. But the fact that they have a dedicated innovation and quality improvement unit makes all the difference.

Again, it is not up to the individual physician to figure out how to have systems that make sure every diabetic gets appropriate care, that makes them provide perfect care for coronary bypass surgery. They really re-engineer their care processes and build it in.

So the question you raise is about how do we do this on the national basis? I think, first of all, we need to provide incentives for integrated delivery systems to flourish and give bonuses, as Dr. Teisberg has said, for performance on health outcomes and results.

Second, I think many of the smaller practices are going to need financial help with IT adoption. That is why what you are doing in the stimulus bill is very important.

But the third point is I think they are going to need technical assistance. A big system like Geisinger, with 750 physicians, they have an organization that helps them adopt these changes that let them provide better care. We are going to need either to change the way we fund the quality improvement organizations in Medicare and charge them with this task or to fund models like they have in North Carolina of an infrastructure of support.

I think it is not enough to have the IT. That makes a lot of good things happen, but you need more than that.

Senator CASEY. Thank you very much.

Senator MIKULSKI. I am going to turn to the Senator from North Carolina. We have been hearing so much about it.

Senator Hagan.

Senator HAGAN. Thank you, Madam Chairman. I also thank you for my offer to move up in seniority, but I was kind of worried somebody else might come in. I had so many papers. I decided just to stay right here.

This is an excellent panel, and actually Dr. Allen Dobson was here last week specifically talking about the community care centers in North Carolina. My question relates, too, to the health information technology.

I know that in the reports I have read, we know that that is probably a very, very important tool, and I understand that the Veterans Administration is using that quite a bit now. I was budget chairman in North Carolina for a number of years, so I am very familiar with the community care centers.

One of the things that we also talked about quite a bit was actually having physicians with a palm-held device that, as they are prescribing medication, they can find out what other medications the patient is currently taking, what the contraindications are. It would reduce, No. 1, fraud, but also any medical errors that might take place.

As sort of a roundabout question—and I guess this is directed to Ms. Davis—can you tell us anything about what the VA is doing in relation to this? And then if there is any very cost-effective model such as hand-held devices, that would help in implementation that wouldn't cost a whole lot of money immediately? To start getting special small practices and the individual silos actually on-board at an earlier point in time.

I think we have got to be moving toward health information technology across the United States in order to be sure that the quality of care can be handled in an appropriate fashion.

Dr. DAVIS. Well, I am sure Dr. Cassel can also comment on the electronic prescribing. It certainly is a very powerful and low-cost approach to eliminating medical errors, eliminating the hand-writing problems.

Decision support—suggesting to the physician a different medication that because a patient has an allergy or because maybe there is something at a lower cost. That is a system they have in Denmark, where the doctor is told, when they prescribe electronically, there is a lower cost drug that is equally effective.

But on the VA, first of all, the records do show that their health outcomes, quality indicators are above the rest of the United

States. They have just done an extraordinary job over the last 10, 15 years.

One simple example, they are doing home monitoring of patients with chronic conditions. The person at home enters information every morning in a pad by the phone. If they don't do it, the phone rings, and they get asked that information.

Then nurses, again, are monitoring that information, and red lights go off if the patient is out of control or getting into a yellow danger zone.

So, yes, there are a lot of applications that really can improve care. I think there are others here who may be familiar with it.

Ms. DAVENPORT-ENNIS. Senator Hagan, I would like to also answer your question, if I may, having served on AHIC 1.0 for the last 3 years and working in this particular area.

In the VA, I think we know there are two major advantages. Not only do they have electronic health records domestically and internationally where we have troops, and they do use the hand-held devices. Literally, if a patient is injured today in Iraq, we know within moments the medical record while our people are standing with him to evacuate him.

In the United States, we have also moved the VA population to the use of personal health records. By doing that, the very example that we were citing with the home health monitoring, through the PHRs now the patients are getting prompts of appointments that they need to follow. Medications—if they are having any types of side effects or adverse events these are immediately recorded. And there is immediate intervention.

When we look at the VA model, certainly I think all of us in the country feel it is the most complete and ideal model. I think we have a significant step to get from there to taking the remaining 75 percent of providers to get them into some form of utilization, and dollars will certainly help us do that through the stimulus.

Thank you for your consideration of that when it comes to the Senate.

Senator MIKULSKI. Senator Hagan, do you have a follow-up question?

Senator HAGAN. Do we have time?

Senator MIKULSKI. If you have a short question.

Senator HAGAN. Well, it was concerning the nursing shortage. I think that at least in North Carolina, it is certainly an issue that we have grappled with for quite a while, and one of the issues has to do with the qualification of the nursing instructors to be sure that they have either the master's or the Ph.D.

Many people can earn more money than at that level, and it is just sort of a compounding problem. I know that money, obviously, will help some of it. We know, too, that nurses are very responsible for a lot of this care. But do you have any other ideas or suggestions on that?

Dr. TEISBERG. It is a great question. In all of the follow-up work that we have done in the 2 years since "Redefining Healthcare" published, we have worked with groups implementing the idea of how to do integrated multidisciplinary practice, which includes, of course, nurses and social workers and others.

One of the things we have found is there is tremendous leverage on the pressures on nurses and doctors when you actually put together team care around patient needs rather than simply structuring things by medical specialty.

When Ms. Davis tells you that we need organization and delivery done differently, she is absolutely right. If you organize a team around the patient needs, then you have these other roles. I call them a "compagnie autour," which is what they get called internationally.

But it can be a nurse. It can be a social worker. It can be a family member. It can be a community member. You end up with additional members of the team who provide a lot of those coordination services that today fall on nurses but don't necessarily require a nursing degree.

As we move to truly patient-centered care, truly coordinated care around multidisciplinary teams, we have other options, and they provide leverage. So instead of forecasting forward shortages with a ruler, we create a different set of possibilities.

Senator HAGAN. Thank you.

Senator MIKULSKI. Senator Hagan, in the economic stimulus package, along with a beginning investment in health IT, there are also additional resources to deal with the nursing shortage, again making the down payment in anticipation of the changes that we hope to achieve over the next couple of years in the area.

None of this is throwing money at anything. The health IT is not only to get some of the investments going, but the language to ensure interoperability so we don't have a techno boondoggle.

In the area of nursing shortage, all the work shows that we don't have a shortage of talent, and we don't have a shortage of people who want to go into nursing. We have a shortage of people who teach the people who want to go into nursing. We make some investments in that area at our wonderful university-level 4-year programs and also at the community college level for our 2-year nursing graduates that, again, could perform many of these vital functions.

We would like to visit with you even on the vote to discuss it. So we invite you in dealing with this.

Now we are going to turn to our new Senator from Oregon, Senator Merkley.

Senator MERKLEY. Thank you very much, Madam Chair.

Thank you for your presentations. Many of you have dealt in some aspect with "results-based" healthcare, and there is a pilot project in Oregon that is set up like this.

They provide a quarterly report, and the clinic receives bonuses based on three tiers. The first tier is really for participating in the pilot, sending the data, compiling the data, helps compensate them for their cost.

The second is for improvement in access and in—you all can help me with this term—but H-E-D-I-S? HEDIS? HEDIS benchmarks, reaching those benchmarks for progress. The percent of the population that receives preventive care. For example, are diabetics getting their blood sugar level testing, etc?

A third is for benchmarks such as avoiding emergency room visits, hospital visits, and so forth.

I am not sure if any of you are familiar with this model or if it is very similar to ones you are familiar with. Is this a type of strategy that is worth experimenting in and that makes some sense?

Dr. DAVIS. I would like to learn more about it. I think the third tier is pretty unique. I would like to learn more about that.

In California, the Integrated Healthcare Association has the first two tiers. All the major health plans reward medical groups for reporting data, adopting information technology. They give bonuses for doing the preventive care like the Pap smears.

I haven't heard of an initiative that really rewards avoiding ambulatory-sensitive hospitalizations, reduces re-admissions by reducing complications, or is sufficiently accessible 24-7 that people don't have to go to the emergency room.

I think that is very, very interesting. I would like to follow up with that.

Senator MERKLEY. Thank you. I would be delighted to follow up with you and learn more about how that compares to other experiments around the country.

Any other thoughts or comments on that?

Ms. DAVENPORT-ENNIS. I think the comment that I would like to make to you, Senator Merkley, is that from the patient perspective, if that model, indeed, can be successful, it means that mom and dad and children can get care in the community and with their primary care physician.

When that happens, we see there is usually greater compliance to care and less cost involved. We hope that model can work.

Senator MERKLEY. Thank you.

Dr. TEISBERG. Yes, I would add that as you are looking to measure quality to drive results-based care that you want to make sure that you are measuring results. In Minnesota, when they measured processes such as did the patient get their blood sugar measured, they got very good process compliance. Then when they checked to see whether the outcomes for patients had actually improved, they discovered that the outcomes were not what they were hoping for.

When they started measuring the results—was the HbA1c, the blood sugar level, below the threshold? Once they were measuring the result, the percentage of patients who actually achieved the result more than doubled in the first couple of years of reporting.

Measuring processes alone may not get the results that you want because you actually want to get the health results so that you do avoid the complications. You want to set up a situation where they are not just getting to the doctor, but they are actually not needing amputation, not going blind, not having heart attacks. You want to get clinically meaningful outcomes.

Senator MERKLEY. Thank you.

To that point, there is a former governor of Oregon, and this governor, Governor Kitzhaber, heads a group called the Archimedes Movement. This is about evidence-based practice, but also about finding ways to pay for, if you will, the course of treatment as opposed to the set of procedures. Does that fit with what you are saying?

Dr. TEISBERG. Yes, absolutely. What we have talked about is creating payment for the cycle of care rather than for the pieces, that there are just tremendous efficiencies in coordinating care. This is

the essence of why care needs to be reorganized into integrated practice units around the common sets of medical circumstances that patients face.

Senator MERKLEY. Can you help us get a clear vision of how one actually does that on a practical level? A patient comes in who has—maybe you can give us an example of a problem, and how the difference between how you would pay for the procedures and pay for this cycle of care?

Dr. TEISBERG. Yes, think about a patient with diabetes. A patient with diabetes would often—Type 2 diabetes would often also have hypertension, also have vascular problems. From my perspective, if I were a patient with diabetes—thank goodness I am not. If I were, that would be one medical condition, not three or four. We need to think about it from a patient perspective.

Then we can—our DRGs right now are too narrow. We think about these in pieces.

Senator MERKLEY. And DRG is? For us outside the profession.

Dr. TEISBERG. I am sorry. That is the payment structure that is used in hospitals, and then we have a payment structure used for outpatient, RBRVS.

They are set up in these narrow buckets that you are talking about, and what we need to do is allow for teams to be paid for wider episodes of care. It would be common in other services, other businesses to do it that way. If we set up payment around the cycle of care, around the episode, rather than around the individual procedures or interventions, then we can do it.

One of the reasons for measuring results by teams rather than by individuals is to pull people together that way. My written testimony talks about restructuring payment. I didn't talk about that orally because it is short.

Senator MERKLEY. I appreciate very much your input. Thank you.

Senator MIKULSKI. Well, we are just concluded about 3:10 p.m., and I know the votes will be beginning shortly. This has been a very, very informative panel.

Before I conclude, I want to go back to Dr. Robinson-Beale and her startling statistic of the number of people on antidepressants. Doctor, could you repeat that number? I think it was between 9 percent and 17 percent?

Dr. ROBINSON-BEALE. Nine percent and seventeen percent. Again, I am basing that not only on the work that we have done at United, but also in other venues where I have been, where it seems to be consistent. That is what is alarming.

Where you have 9 percent to 17 percent of the medical population—that is the population that is seeking medical care, so there is a claim out there—that are on antidepressant medications.

Even if you assume, and we have done a little bit of study on that, that maybe 20 percent are on those medications needlessly, that is still a staggering number of individuals who are being treated for forms of depression and anxiety in the primary care arena.

Senator DODD. Barbara, can I just—why is that? Why is there such a disparity in that number? I would understand 9 to 17 is a rather large gap.

Dr. ROBINSON-BEALE. It depends upon, one, the type of practice that you are looking at, also the type of individuals. We see a big difference in terms of access to behavioral healthcare depending upon whether the person is blue collar, white collar, whether or not they are living in certain parts of the country.

In New York and in California, where it is stylish to seek a mental health therapist because it is just a nice thing to have, you have higher incidence of people accessing care. Those variations are not uncommon. I think the staggering thing is that it is much higher than any other chronic medical illness that you have out there in terms of the prevalence.

Senator MIKULSKI. Are you saying that there are more people on antidepressants than, say, insulin or insulin-resistant drugs, going back as we used diabetes as an excellent example of a chronic condition?

Dr. ROBINSON-BEALE. What I am saying is that when we look at those numbers, I am saying that in your diabetic population, 40 percent to 42 percent of those individuals will have depression. We are finding more and more there is a close—

Senator MIKULSKI. No, no, no. Here is my question.

Dr. ROBINSON-BEALE. OK.

Senator MIKULSKI. Do they have depression, or have they been given antidepressive medication? I don't consider those to be the same thing.

Dr. ROBINSON-BEALE. Sure, and let me answer it this way. The dispensing of an antidepressant medication is linked to many times a physician who feels that they see someone who has some symptoms of depression. It doesn't mean that they necessarily have major depressive disorder, which is one of the DSM-IV diagnoses, but it is very clear that they have depressive symptomatology.

We have found that even treating mild or moderate depression that you will get a tremendous improvement in that individual's compliance with—for diabetes, there was a lot of work done on that in terms of medication adherence, in terms of their diabetic medication, also compliance in terms of following through on their medical regimes.

It doesn't change their habits as it relates to exercise, unfortunately, or maybe diet compliance. But it does have a great deal to do with their compliance as it relates to medical regimes.

Senator MIKULSKI. Well, that is also what Dr. Teisberg has been talking about, which is to measure the outcome. So for a diabetic, you can measure whether you are taking your blood sugar every day.

One of the keys to chronic management, Dr. Cassel would say, is aggressive testing. It is a tried and true technique. You might have started, when you found this out, at an A1c of 8.5. That is a little scary. That is up over 200 points.

Everybody works hard. You might get your A1c down to 7.5. Under the ADA guidelines, you want to be 7.0 or down to 6.5 or 6.0. Is that right?

Dr. CASSEL. Not always.

Senator MIKULSKI. Not always. OK, but I want to go to this point, which goes to the team approach. One of the things, and again, just in reading, my general reading in some of this testi-

mony and others today, there are certain issues where depression sometimes appears when people find out they either have a problem or the circumstances in their life that are triggering other traditionally medically diagnosed issues are causing great either anxiety or depression.

That then takes the team approach in terms of the appropriate medication, but without getting to the underlying symptom. A woman could come in and have terrible symptoms of depression, but it could be that she is a victim of wife beating and abuse. What she needs is a shelter and a way out along with the temporary bridge to bring her over.

There is talk of people, as you know in the geriatric population, the issue of depression versus Alzheimer's. Many patients who are diagnosed with Alzheimer's get depressed because they have Alzheimer's, which is a natural reaction. So they need a lot of help.

The point, with her statistic and your case management, would go to this more comprehensive approach. We can't expect a primary care physician to do it all and to do it all by him or herself. They need to be using other specialists and other people to work with other aspects of the patients overall condition.

When we are talking about reforming healthcare, we have got to really get a new paradigm, not only a new insurance mechanism. Isn't that really what you are saying? And because of new breakthroughs in metrics, we can actually measure outcomes, measure results as well as process. We don't have to make it either/or.

At the same time, success, meaning the improved quality and, in case of chronic illness, really preventing the deterioration into a far more serious problem. The diabetic who is vibrant and in compliance is a lot better off than the one who isn't, because noncompliance is going to lead to kidney dialysis, amputation, and retina disintegration.

I think what our colleagues need to think about, and I think this is what the challenge of quality is, is how do we bring new thinking and not only new ways of financing?

Dr. Teisberg, and then we are going to wrap it up. The vote has just begun.

Dr. TEISBERG. Thank you.

It is a critical insight that you are identifying that we need to have a new way of organizing healthcare, a new way of thinking about the structure of delivery. If you think about it, what can the Senate do, what can the Congress do to enable that and to spur that to happen?

If we measure results by teams, you have to be on one. You can't organize everyone into teams, but you can require the measurement of the results so that people have to be part of it. They have to be part of coordinated care.

It is your most powerful lever to achieve change in the structure, and I would encourage you to use it. You have people ready to go with it. If you say we are going to measure results by coordinated teams, people will find their way to them.

Senator MIKULSKI. Go ahead, Dr. Robinson-Beale. I am listening.

Dr. ROBINSON-BEALE. I would also like to say, as part of the team, to make sure that behavioral health is considered and not forgotten. The *de facto* system for treating behavioral health now

is the primary care arena. Without their having the tools to do so and being able to detect and being able to diagnose and do it objectively—and there are tools out there—I think we will have a very difficult problem.

Unless those measures that are out there that are comprehensive measures so you are not just measuring, with the diabetic, the hemoglobin A1c, but you are also measuring the screening rate for depression, without those kind of comprehensive approaches, I think we will still miss the ball.

Dr. TEISBERG. Yes, you will need multiple measures, and if you have multidisciplinary teams, you will get them. When you put multidisciplinary teams together, they suggest a more comprehensive set of measures. That is what they want to live with.

Senator MIKULSKI. That is good.

Ms. DAVENPORT-ENNIS. I would like to say, Madam Chair, as a closing statement that if we look within the cancer community, the use of multidisciplinary teams is routine in the treatment of cancer patients, and I think there are lessons that can be learned from that model as you move forward.

Senator MIKULSKI. Well, the Institute of—I am sorry. Dr. Cassel, did you want to say something?

Dr. CASSEL. I just wanted to add to Elizabeth's point about measures, that the measures alone can't do it. That you have got to have the skills among the providers who know how to work together.

It is medical knowledge and clinical nursing knowledge and social work knowledge. It is also teamwork and management skills, which we don't teach enough of, and I think that needs to be a big part of the new model that you are talking about.

Dr. TEISBERG. Yes, if you measure—

Senator MIKULSKI. Well, Thank you.

Dr. TEISBERG [continuing]. Results, the team has to achieve it together.

Senator MIKULSKI. Thank you, Dr. Cassel.

We are going to adjourn this committee until February 5, when we are going to be holding another hearing on quality. This hearing will be on the best practices. In other words, actual case examples on the best practices.

Later on during the month, we will be holding a hearing on integrative healthcare. We also note that when we turn to the Institute of Medicine during the last week in February, we will be holding a 3-day summit on integrative medicine, which I believe is what everyone at this table is talking about.

You need integrative medicine to help create the kinds of teams we are talking about, but you need integrative healthcare because it is really the new paradigm.

Well, with that, we are going to go and actually vote on expanding healthcare for children. This committee is in recess until February 5th at the hearing on best practices.

Thank you very much for coming, being so patient and willing to shoehorn in so much content in such a short amount of time.

Thank you so much.

[Whereupon, at 3:19 p.m., the hearing was adjourned.]

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