

**DELIVERY REFORM: THE ROLES OF PRIMARY
AND SPECIALTY CARE IN INNOVATIVE NEW
DELIVERY MODELS**

HEARING

OF THE

**COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS**

UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

ON

**EXAMINING DELIVERY REFORM, FOCUSING ON THE ROLES OF PRI-
MARY AND SPECIALTY CARE IN INNOVATIVE NEW DELIVERY MODELS**

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MAY 14, 2009
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DELIVERY REFORM: THE ROLES OF PRIMARY AND SPECIALTY CARE IN INNOVATIVE NEW DELIVERY MODELS

THURSDAY, MAY 14, 2009

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

The committee met, pursuant to notice, at 10:04 a.m. in Room SD-430, Dirksen Senate Office Building, Hon. Sherrod Brown presiding.

Present: Senators Brown, Murray, and Whitehouse.

OPENING STATEMENT OF SENATOR BROWN

Senator BROWN. The Senate Health, Education, Labor, and Pensions Committee comes to order.

Thank you for joining us today. Thank you to the witnesses especially and to others in the audience, and thank you for being here on time.

For the first time in a long time, there is widespread consensus that to improve the health of our people and the strength of our Nation, we must act to reform a healthcare system that has failed far too many Americans.

Nearly 50 million Americans, as we hear over and over, are uninsured. Tens of millions of others underinsured. With our Nation spending more than any other Nation on healthcare, a whole lot more, some \$2 trillion overall annually. Yet we rank below most other developed nations across a broad range of health indicators.

We must not settle. This year, as we move toward real healthcare reform, we must not settle for simply improvements at the margins. Instead, we must fight for substantial reforms that will improve care, that will combat unjustifiable spending, and will close the coverage gaps that leave Americans without the healthcare they need.

That is why we are holding this hearing today to examine ways in which we can restructure our healthcare delivery system so that it better and more fully meets the needs of our citizens.

As this committee has examined our Nation's healthcare system over the past year in dozens of hearings, one thing has become glaringly obvious. Our healthcare system lacks cohesion. It lacks coordination. It lacks cost efficiency. It is a patchwork system grounded in good intentions, to be sure, but derailed by unjustifiable variations in healthcare utilization, unproductive barriers to

care coordination, and misaligned incentives that compromise effective and efficient healthcare delivery.

For this reason, it becomes imperative that any discussion of healthcare reform focuses on how to build a healthcare delivery structure that capitalizes on existing strengths like our exceptional healthcare workforce, but dispenses with our existing weaknesses. Among those weaknesses, I put inefficiency at the top of the list because it captures a multitude of sins—lack of coordination, lack of information, lack of basic standards of care and standards of coverage to become the norm across the Nation. And the list goes on and on and on.

That is why we are here today to discuss the roles of primary and specialty care in innovative new delivery models. In an effort to address the fragmentation of our healthcare system, one policy proposal under consideration is the medical home. The concept of the medical home has evolved over some 40 years since its introduction by the American Academy of Pediatrics. It has gone from a specific place to receive care for children, if you will, with chronic disease to an entire system providing care for all Americans.

The basic premise of the medical home is that continual care managed and coordinated by a personal physician with the right tools will lead to better health outcomes. This concept shifts the paradigm from episodic acute care to a continuous, comprehensive model of care.

Central to the medical home is the premise that patient-centered care requires a fundamental shift in the relationship between patients and their primary care physicians. The idea that there must be a higher degree of personalized care coordination, access beyond the acute care episode, and identifications, therefore, of key medical and community resources to meet the patient's individual needs.

While there is widespread agreement that the concept of medical home is a good one, there are concerns about how best to design and implement such a model. For instance, some have expressed concern that the medical home, by requiring physician referral for specialty services, can sometimes or more than sometimes add a costly and needless step to the process of linking patients to the right source of care.

Additionally, some have argued that it might not make sense for a primary care physician to always serve as the medical home coordinator. For example, many women view their obstetrician/gynecologist as their primary care provider and would choose that their medical home be based out of their OB/GYN's office.

The financing of delivery changes is another issue that has drawn significant scrutiny and deserves our attention. Reforming our healthcare system is a tall order. The public deserves reforms that reduce unnecessary costs, improve the quality of care, and increase access so that all Americans have meaningful health coverage.

We must be careful as we undertake this task to evaluate each change to ensure that the goals and the means of achieving them are, in fact, truly aligned. This is as true for health delivery reform as it is for health insurance reform.

I am confident today's hearings will provide valuable insights that will help us reshape health delivery to squeeze out wasted spending and build in improved health outcomes. I look forward to hearing from our panel of five distinguished witnesses, who represent primary care providers, specialty care providers, and community-based providers on some of these complicated and pressing issues.

And particularly, I would like to thank Michael Nochomovitz, president and chief medical officer, University Hospitals Medical Practice in Cleveland. Thank you for joining us, especially. I only pick him out because he is the only one from Ohio. So don't take that personally, anybody else.

[Laughter.]

University Hospitals has worked closely—and it is the one I am certainly most familiar with, living in an area served by UH—has worked closely with primary physicians and specialists to introduce new technologies and quality measures which have helped with care coordination in northeast Ohio, the most populous part of the State. I look forward to hearing more about these successful models and how they can be adopted nationwide.

I would like to thank the witnesses. I will look forward to discussing how the patient-centered medical home model can play an important role in delivering a reformed healthcare system.

So I will introduce each of the panelists and then begin listening to their opening statements, and then we will do questions.

I will start with Dr. Ken Thorpe, professor of health policy at Emory University—where my mother attended, I might add—in Atlanta, GA. Dr. Thorpe was Deputy Assistant Secretary for Health Policy in the U.S. Department of Health and Human Services from 1993 to 1995. In this capacity, he coordinated all financial estimates and program impacts of President Clinton's healthcare reform proposals for the White House.

Dr. Thorpe has authored and co-authored over 85 articles, book chapters, and books and is a frequent national presenter on issues of healthcare financing, insurance, and healthcare reform at healthcare conferences and in television and the media.

Dr. Richard Cooper is a professor of medicine at the University of Pennsylvania. Dr. Cooper has been a physician for 50 years whose early career was an academic hematologist, first at Harvard and then at Penn. He helped to found a comprehensive cancer center and served as the dean of the Medical College of Wisconsin.

Dr. Steven Schlossberg, welcome, is the chair of health policy for the American Urological Association, a member organization of the Alliance of Specialty Medicine. He is a practicing urologist from Norfolk, VA, and part of the management team of a 400-physician multi-specialty group practice.

Dr. Michael Nochomovitz—that is pronounced correct? Dr. Michael Nochomovitz, right, is the president and chief medical officer of University Hospitals Medical Practices at University Hospitals Management Services Organization in Cleveland, a position he has held for a little more than a decade.

He is a practicing physician, board certified in internal medicine and pulmonary medicine. He is the architect of University Hospitals regional multi-specialty physician network in northeast Ohio,

which is the single, largest portal of entry into the system. This network of some 450 medical providers includes the largest primary care group in the region, as well as 6 urgent care sites and 5 hospitalist programs.

And Dr. Marsha Raulerson is a graduate of the University of Florida College of Medicine, and a fellow at the American Academy of Pediatrics. She is a primary care physician who has practiced in Brewton, AL, for 28 years and has received many awards in recognition of her commitment to the health and the welfare of children.

Thank you, Dr. Raulerson, for joining us.

Dr. Thorpe, would you begin your opening statement?

STATEMENT OF KENNETH E. THORPE, Ph.D., PROFESSOR OF HEALTH POLICY, EMORY UNIVERSITY, ATLANTA, GA

Mr. THORPE. Well, thank you, Senator Brown. And thank you for holding this important hearing.

I am going to make seven points very quickly. First point, I think a central challenge we face in healthcare reform is how to build primary prevention and care coordination into the fee-for-service Medicare program, with the intent that it would spill over into other payers.

Today, if you think about it, about 30 percent of the growth in Medicare spending is linked directly to the doubling of obesity among Medicare beneficiaries. Ninety-five percent of what we spend in Medicare is directly linked to chronically ill patients.

And I may add, in addition to my Emory position, I am also the executive director of the Partnership to Fight Chronic Disease. We just held a press event this morning with Senator Harkin where we had most of these facts in our almanac, and we will be sharing this with you and your colleagues.

There are six conditions in Medicare driving most of the growth in spending—diabetes, hypertension, hyperlipidemia, asthma, back problems, and depression. Those are all conditions that are largely ambulatory based and require medication therapy. And in the traditional fee-for-service program, most of that is completely unmanaged.

Second point, the performance in the program is suboptimal. We don't coordinate care in it. So, as a result, admission rates are high. Re-admission rates within 30 days are 20 percent. We can do a lot better if we really build some type of a formal coordination program into Medicare.

Third point, there is some good news here. We have a lot of data in randomized trials and examples of systems that work effectively in managing Medicare patients. Intermountain Healthcare, Geisinger—you have heard of these examples. They are largely large integrated group practices.

And in those settings, they can reduce admissions by 25 percent and reduce re-admission rates to 6, 7, 8 percent within 30 days, not 20 percent, which is the norm in fee-for-service Medicare.

The problem is, those things are not easy to replicate and scale. While the large integrated group practices that work, we can't build them everywhere in the country.

So one of the things that we have been talking about as a proposal is to let us look at what they do well. What is it about the functions of those systems that really make them effective? Let us see if we can't find ways to build them into community settings to work with smaller physician practices so that we can scale it and replicate it nationally quickly.

And if you think of the functions that work well, it is formal transition care, close integration of care coordination with the primary care physician's practice, having community-based primary care prevention programs available, and having care coordinators working directly with patients at home to make sure that they are executing the care plan effectively.

The dilemma we face, I think, in terms of building care coordination into the program is that 83 percent of physician practices are in groups of one or two. That is about 40 percent of primary care physicians.

While the medical home vehicle is a great vehicle, and we should continue to encourage it, most Medicare beneficiaries don't get their care through these large integrated systems. So I think the challenge is to figure out how can we find the good elements of those programs, replicate them, and scale them?

The fourth point is, we can do this through what some States like Vermont, North Carolina, Rhode Island are already doing, using community health teams. A community health team is a collection of care coordinators, nurse practitioners, mental and social health workers, community outreach workers that work hand-in-hand with primary care practices to help patients execute the care plan that is put together by the primary care physician.

The community health teams have all the functions that are built into the successful programs like Geisinger and Intermountain Healthcare, including the transitional care models, close integration with that practice, and so on. We have seen in North Carolina in the Medicaid program, this has saved between 5 and 15 percent relative to unmanaged care since 2003.

Fifth point is that if we make a modest investment nationally to take this community health team concept and make it available everywhere to work with Medicare fee-for-service patients and spend 0.6 percent of Medicare on it, I think, based on the data, that it is not unreasonable to expect not only better outcomes and better quality, but a return in terms of savings of anywhere from 3 to 7 percent, based on published data that we have seen.

So I think, in closing, we face a choice. We are either going to not do care coordination and traditional fee-for-service Medicare, or we have got to find a way to scale it and replicate it in a way, building on the best elements of the medical home model but recognize its limitations in terms of replication and scalability. But a community health team approach to doing this is one that I think holds much promise.

I look forward to working with you and the committee and would be happy to answer any questions at the end of the remaining testimony.

[The prepared statement of Mr. Thorpe follows:]

PREPARED STATEMENT OF KENNETH E. THORPE, PH.D.

Good morning, Senators. Thank you for inviting me here today to discuss the urgent need to reform health care delivery in the United States and the pivotal role that primary care providers must play in a changed system. I am Ken Thorpe, chairman of the department of health policy and management at Emory University. I also lead the Partnership to Fight Chronic Disease, a national coalition of patients, providers, community organizations, business and labor groups, and health policy experts that are working with State partnerships to prevent chronic illness and reform how we deliver care to patients.

I believe a central challenge we face in health reform is how to integrate effective primary prevention and care coordination into the traditional fee-for-service (FFS) Medicare program. Success in integrating these care delivery components into Medicare will surely have spillover effects in how Medicaid and the private sector work to prevent and manage chronic illness as well. The following six facts highlight the nature of the challenge we face and provide insights about the design of a successful solution to the problem.

1. The majority of all U.S. medical practices (83 percent) are composed of just one or two physicians.¹ More than a third of primary care physicians (36 percent) work in these small practices.² Most Medicare patients are not treated through larger integrated group practices.

2. Eighty-one percent of Medicare beneficiaries are enrolled in traditional FFS Medicare, and they account for about 79 percent of the program's overall health care spending.³ Today, there is no care coordination in the program, leading to high rates of preventable hospital admissions, re-admissions, clinic and emergency room visits.⁴

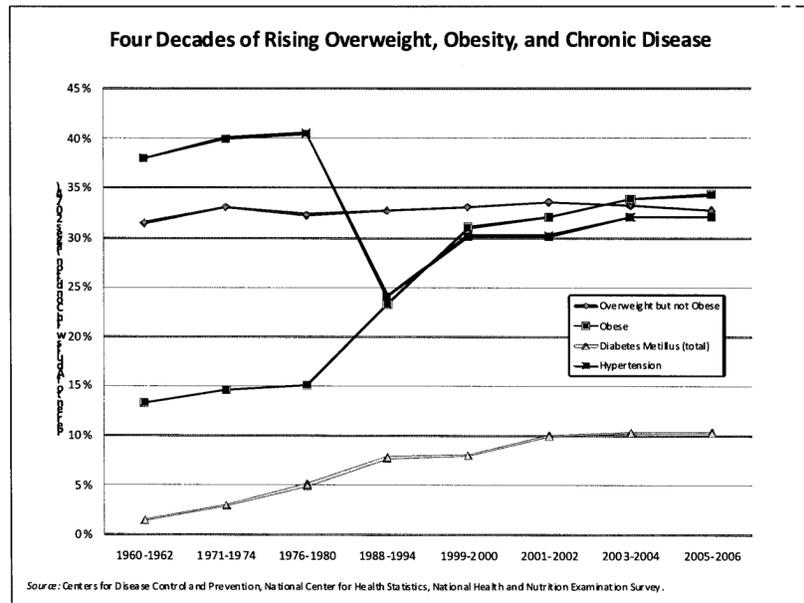
3. In 2010, we will spend about \$395 billion in the traditional FFS Medicare program. Over 95 percent of total spending in Medicare is linked to chronically ill patients.

4. Multiple morbidities among these patients are common: More than half of Medicare beneficiaries are treated for five or more chronic conditions yearly.⁵ On average, the top spending 5 percent of Medicare beneficiaries account for roughly half the FFS program's costs.

5. Over 30 percent of the recent rise in Medicare spending in the last 10 years is associated with the persistent rise in obesity in the Medicare population. (Exhibit 1, graphically depicts rising rates of overweight—obesity, and two associated chronic conditions, diabetes and hypertension—in the United States over the last 40 years.)

6. The increase in obesity-related chronic diseases among all Medicare beneficiaries and particularly among the most expensive 5 percent is a key factor driving growth in traditional FFS Medicare.⁶ Six medical conditions—all related to obesity: diabetes, hypertension, hyperlipidemia, asthma, back problems and co-morbid depression—account for most of the recent rise in spending in the Medicare population. Treatment for these patients is largely uncoordinated, and relies largely on therapeutic interventions in ambulatory care.⁷

Exhibit 1: Rising Rates of Overweight and Obesity and Associated Chronic Conditions



Today, Medicare spends nothing to help coordinate health care in the traditional fee-for-service program. As a result, Medicare spending is higher than it would be if care were coordinated. For instance, 20 percent of Medicare patients are re-admitted within 30 days of leaving the hospitals. Well-managed and coordinated plans such as Geisinger, Puget Sound, and others have re-admissions rates of half this amount. Moreover, since they manage and coordinate care their hospital admission rates are about 25 percent lower than unmanaged Medicare.

Nationally, the private sector and the Federal Government (through Medicaid) currently spend approximately 2.5 percent of total spending to invest in care management. Well-managed programs have been associated with savings of 5 to 7 percent—well over a 2 to 1 return on investment. To generate these savings, private plans, Geisinger, and others invested in new technology, transition care programs, and other care management tools.

Medicare spends nothing on care management—and so generates no savings from it. If Medicare took the best practice approaches with proven results from the private sector (formal transition care model, integration of the care management function and the physicians' office, financial and payment incentives) and made it available nationally in FFS Medicare, the program would save money.

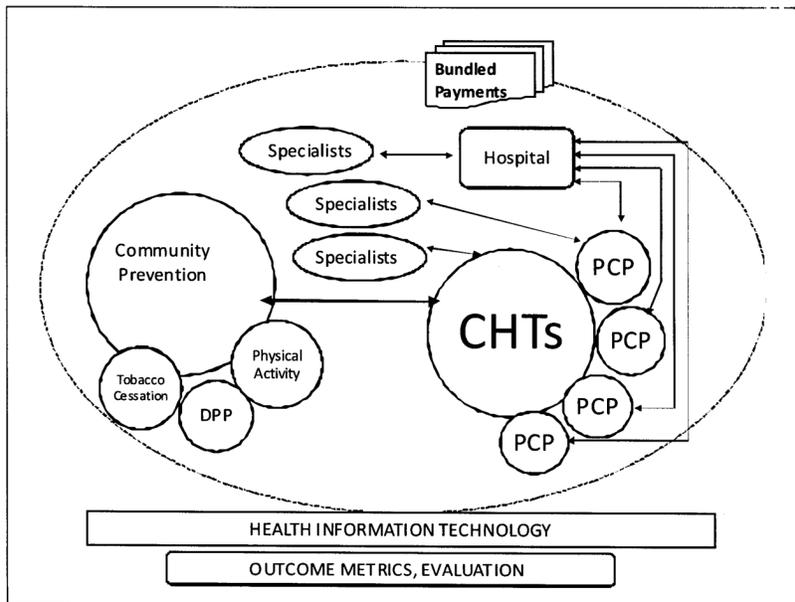
The challenge is most of the good care management models are large clinics such as Mayo, Geisinger, Cleveland, and Marshfield. Their approach to preventing and managing disease has proven effective. However, these models are not replicable or scalable nationally.

As an alternative, the key design features of these successful integrated system prevention and care management programs could be identified and incorporated into community settings to work with smaller physician practices. These community-based health teams would provide care coordination and prevention using the same tools and approaches used successfully in larger integrated practices like Geisinger. This approach would allow Medicare to quickly replicate these effective practices nationally.

The community health team concept is an approach already used in Vermont, North Carolina, Rhode Island and soon West Virginia and Pennsylvania. According to several evaluations from Mercer Consulting, North Carolina has saved between 5 to 15 percent annually in their Medicaid program with these models.

In Vermont and elsewhere, CHTs work with primary care practices, patients, and their families to prevent and manage chronic illnesses. These teams variably include care coordinators, nutritionists, behavioral and mental health specialists, nurses and nurse practitioners, and social, public health, and community health workers. These trained resources already exist in many communities, working for home health agencies, hospitals, health plans, and community-based health organizations. To better leverage their systemic impact, dedicated teams are needed to work seamlessly with small primary care practices in communities across every State.

Exhibit 2: Schematic of Integrated Community Health Teams



The CHT model is replicable and scalable nationally and quickly, unlike other approaches. Like other payers, Medicare must make a very modest investment to coordinate care if it ever hopes to generate savings, reducing admission and re-admissions in the program. A \$2.5 billion per year investment—or 0.6 percent of total Medicare FFS spending, and about 50 percent less than other payers currently invest to generate savings in their programs—would allow CHTs to work nationally with Medicare FFS patients.

Community health teams have the potential to reduce spending in the program and working in tandem with other health reform proposals (hospital bundled payments and penalties for high re-admission policies) should generate savings higher than already scored by CBO. The Medicare program's fragmented benefit design and reimbursement policies discourage care coordination and disease management. At the same time, these very same conditions present opportunities for prevention, better care, and long-run cost savings.⁸ Health reform should seek to reduce the rate of rise in targeted chronic conditions (primary prevention) and implement evidence-based care management (secondary and tertiary prevention), starting with current FFS Medicare beneficiaries.

The most recent evaluation of the Medicare Coordinated Care Demonstration (MCCD) and several other randomized controlled trials substantiate the importance of five care elements that CHTs should provide: (1) monthly (or more frequent) in-person contact with patients, (2) targeting the right patients (treatment-control differences were concentrated entirely in the highest severity enrollees), (3) patient education on medication adherence and other self-care, (4) transition care coordination to avoid preventable re-admissions, and (5) close collaboration between care coordinators and physician practices.⁹

To realize fully both health gains and potential cost savings, each patient should have a care coordinator who works closely with primary care providers in executing the care plan developed by the primary care physician collaboratively with the patient. Depending on the patient's constellation of illness, several members of a CHT may be involved in working with the patient to execute the individualized care plan. Care plans should be developed for at-risk populations (pre-diabetic, overweight and obese, tobacco users) as well as patients with one or more diagnosed chronic conditions.

A critical CHT focus must be transitional care. Potentially avoidable re-admissions have been identified as a major quality and spending problem in Medicare: About 18 percent of admissions result in re-admissions within 30 days of discharge, accounting for \$15 billion in spending each year. Not all of these re-admissions are avoidable, but some are, potentially as much as \$12 billion worth.¹⁰ The CHT care coordinator would track patients as they enter the hospital or skilled nursing facility, conduct an on-site visit, and, most importantly, work with the patient and admitting physician at discharge. The care coordinator would provide information and input to make sure the discharge plan and medication reconciliation for the patient are completed.

CHTs are a vital link to community-based prevention programs that can deliver effective primary prevention to avert disease as well as programs to detect and mitigate existing conditions and avert complications (secondary and tertiary prevention). Each team should have a public health practitioner familiar with effective community-based lifestyle, exercise, diet/nutrition, smoking cessation, and other risk-reduction programs (e.g., substance abuse and mental health). An emerging example of the value of these community-based resources is the replication of the diabetes prevention program (DPP) and other protocols shown through randomized trials to reduce dramatically the incidence of diabetes among pre-diabetics and other at-risk populations.

Absent an investment to prevent and manage disease, Medicare has no workable tools for slowing the growth in spending and will save less. Cutting provider payments may save money in the short term, but could drive spending up in the longer term, as fewer physicians accept Medicare patients and those with chronic illnesses are untreated and their diseases unmanaged.

Chronic illnesses—mostly preventable—take an increasing toll on Americans' health, productivity, and quality of life. Reversing or at least slowing the rise in incidence and prevalence is critical to better health and reduced health spending over the long term. The stimulus bill endows a national "Prevention and Wellness Fund" with \$1 billion, including \$650 million for "evidence-based clinical and community strategies that deliver specific, measureable health outcomes that address chronic disease" in title VII.

Reforming the way in which the U.S. health system provides care to chronically ill patients is also essential. Episodic, uncoordinated care is ineffective and inefficient for patients like most Medicare beneficiaries who have multiple, chronic comorbidities. Reforming the traditional FFS Medicare program would go a long way in spurring needed transformation in health care delivery. The United States leads industrialized nations in per capita and total health spending, but is last in preventable mortality. Preventing disease, particularly chronic illness, and providing better care for those with life-long illness, along with how we finance and pay for care, must change.

Thank you again for the opportunity to discuss these vital reforms. I'm happy to take your questions.

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Senator BROWN. Dr. Thorpe, thank you.

Senator Murray, welcome. You don't want an opening statement or are you—

Senator MURRAY. Mr. Chairman, I just really appreciate the opportunity to have this hearing, and I will submit my opening statement for the record.

So thank you.

[The prepared statement of Senator Murray follows:]

PREPARED STATEMENT OF SENATOR MURRAY

Thank you Senator Brown for holding this hearing.

I am pleased that we are discussing ways that we can reform our health care delivery system.

This is such an important issue—especially now as we work to reform the health care system to reduce costs, make care more affordable, and ensure that all Americans have access to high quality health care.

I go home to Washington State almost every weekend and spend a lot of time talking to families and business owners about the challenges they face.

And one thing I hear from them again and again is that they are deeply concerned about health care, and they desperately want meaningful reform.

They tell me that especially now—as jobs are being lost across the State, and families are worried about their economic future—they want a health care system that they can count on—that they know will be there for their families when they need it.

They tell me that they want a modernized health care system—and affordable, accessible health care for every single American.

We all know our health care system is broken and it needs real reform. And we have an historic opportunity to finally tackle this challenge. These investments are not luxuries—they are essential to our future strength.

I was very encouraged to see President Obama stand with representatives from across the medical community this week as they committed to bringing down health care costs by \$2 trillion over 10 years.

This was a big step—but the work to reform the delivery system is going to be just as important.

We need to alter the payment structure in health care to ensure that there is true coordination across medical disciplines.

Models that encourage this coordination of care—like the medical home model—benefit the overall system by:

- Encouraging disease management—particularly of chronic diseases;
- Focusing on prevention and wellness;
- And cutting down on duplicative and repetitive tests and treatments.

And while we encourage these new and innovative ways to deliver health care, we also need to remember that not everything can be prevented and planned, and we still need to ensure that trauma centers continue to be there for anyone who needs life-saving care.

I believe that all Americans deserve high quality health care that reduces costs and makes care more affordable—and I know that delivery reform is going to be a big part of that.

I thank our witnesses for coming in to speak with us. They are on the front lines of health care in America—and I look forward to hearing from them.

Senator BROWN. Thank you, Senator Murray.

Dr. Cooper, welcome. Thank you for joining us.

**STATEMENT OF RICHARD A. COOPER, M.D., PROFESSOR OF
MEDICINE AND SENIOR FELLOW, LEONARD DAVIS INSTI-
TUTE OF HEALTH ECONOMICS, UNIVERSITY OF PENNSYL-
VANIA, PHILADELPHIA, PA**

Dr. COOPER. Thank you, Senator. Thank you so much for allowing me to be here today, and thank you for your introductory remarks, which certainly dramatically frame the problem.

My message today is simple and direct. The problem that we are facing is that there are currently too few physicians, and we are training too few for the future.

There is more to say about how this occurred and much more to say about how these shortages will affect physician practices and the models of practice. But the fundamental problem is too few physicians, too few generalists and too few specialists—too few physicians overall.

These shortages actually began more than 5 years ago, but they were initially limited to certain specialties, including urology and some of the others represented here, and to certain locales. But because they were limited, they largely escaped public attention. Now that they have spread to engulf primary care, the secret is out. There are too few doctors.

When concerns were raised in the past about too few primary care physicians, the strategy was to shift the balance of training from specialist to generalist. But this time, the problem is not one of balance. There aren't enough physicians overall.

This problem is further complicated by the fact that although we need more physicians today, we can't get more for a decade or more. The math is easy. It will take several years to expand medical schools and residency programs, 4 years for students to complete medical school, 3 to 6 years of residency. And then it is 2025, and the Nation will be coping with shortages far more severe than today.

These facts make it important to work doubly hard. Medical school expansion has begun, but it needs help. And it won't yield more physicians unless residency programs are also expanded. And for that to happen, Medicare's caps on graduate medical education will have to be lifted. That is one place Congress can help.

But Congress must be aware that healthcare reform is occurring in a new era of physician shortages. No one alive today has carried out healthcare planning under such conditions.

When we projected these shortages more than a decade ago, we cautioned that if steps were not taken to correct them, the medical profession would be forced to redefine itself in ever more narrow scientific and technological spheres while other disciplines evolve to fill important gaps. And that is what is happening now.

Specialists are necessarily concentrating their efforts on technologically advanced care, on the care of patients with major acute disorders and complex chronic diseases and, of course, on advanced diagnostic services.

Some specialists are trying to organize their practices to serve as the principal physicians for patients with chronic disease and, to do that, they are relying heavily on nurse practitioners and physician assistants to provide general care.

The specialties are narrowing, and the overlaps among them are decreasing. That presents challenges of the very sort you spoke of Senator Brown—challenges for the coordination and communication among physicians, which makes information systems even more critically important.

There is a great deal of innovation, and we have heard a little bit about it already from Dr. Thorpe. Lots of ways to do it, and there will be more. No one model will fit every circumstance, and the circumstances will be more complex as the physician shortages deepen.

Generalists, too, are gravitating to services with a higher average acuity and complexity. Some are now serving as hospitalists. Some concentrate—some continue to practice in rural communities, where a whole range of services are needed. Many are continuing to care for patients with uncomplicated chronic illness and for older patients with multiple infirmities. And like specialists, many are partnering with nurse practitioners, PAs, absolutely key to the success of such efforts.

But the important point for consideration as one plans ahead is that fewer will be available for front-line primary care. Generalists instead will have to serve as consultants to nonphysician primary care providers. This is not a matter of taste. This is not a matter of desire. This is a matter of reality.

It is a matter of choices. This is democracy. You represent the people. You can choose what physicians will do. Will they be neurosurgeons, or will they involve themselves in smoking cessation? These are very important choices.

So these various transitions that are occurring naturally will allow physicians to do more than physicians normally do if there are enough physicians to do it. But there still won't be enough.

So my message to you is simple and direct. Open the gates for residency training so that physician supply can be increased and free physicians to develop innovative approaches to clinical practice of a great variety of ways.

Ultimately, high-quality care depends on the autonomous exercise of clinical judgment by competent and empathic physicians. We need to be sure that there will be enough for everyone in the future.

Thank you.

[The prepared statement of Dr. Cooper follows:]

PREPARED STATEMENT OF RICHARD A. COOPER, M.D.

Mr. Chairman and members of the committee, I very much appreciate the opportunity to provide testimony to the committee as it undertakes this important inquiry into the critical role that physicians will play in a reformed health care system. It is a topic that I feel deeply about.

OVERVIEW

The problem that we are facing is that there are worsening shortages of physicians. I will say more about these shortages and about how physician practices are likely to evolve because of them, but it is important not to lose sight of the fundamental problem: too few physicians to serve the needs of the Nation. Too few generalists and too few specialists. Too few physicians.

This problem will have to be addressed in two ways. The first is by expanding the capacity to train more physicians. Although difficult to accomplish, the ways to accomplish it are generally known. The second is more elusive. It is through innovative practice arrangements among physicians and between physicians, hospitals and

nonphysician clinician (NPC) providers. There are infinite numbers of such arrangements, and infinite regional and local circumstances in which they will be carried out. Innovation is key. While some believe that the “true” way can be known and applied generally through practice incentives or otherwise, that approach is fraught with danger. Experiences can be shared, but practices cannot be shaped by widely-applied incentives or regulations. In health care, as in politics, everything is local.

These two lines of thinking come together when it is appreciated that no one has carried out health care planning in the context of physician shortages of the magnitude that are now developing. At times like this, it is best to work toward minimizing long-term shortages, make efforts to assure that disadvantaged populations do not bear the brunt of the problem, and sustain an atmosphere that is conducive to practice innovation.

BACKGROUND

I come to this after almost 50 years as a physician. My early career was as an academic hematologist, first at Harvard and then at Penn. While at Penn, I also helped to found a Comprehensive Cancer Center, which I later directed. After almost 15 years there, I was drawn back to Milwaukee, the city of my birth, to serve as dean of the Medical College of Wisconsin. It was toward the end of that tour of duty that the Clinton Health Plan was in the making. I was attracted to these deliberations by the notion that there would be a vast surplus of physicians by Century’s end.

In examining the way that the Bureau of Health Professions projected these surpluses, it quickly became apparent that outmoded census data had been used. When correct data from the Census Bureau’s were substituted, a very different picture emerged. It was not one of mounting surpluses but of a “turn of the century bulge” in physician supply followed by increasing shortages as the new Century unfolded—which is what is happening now.

The view that shortages would develop was very unpopular at the time, but it has proven to be correct. Sadly, rather than beginning then to prepare for an expansion of medical education now, the consensus was to stop any further expansion of physician training by freezing the number of residency positions. That was accomplished in the Balanced Budget Act of 1997, which capped Medicare funding for graduate medical education (GME) at its 1996 level. And that is why we are here today.

DEFINITION OF THE PROBLEM

As I stated at the outset, the Nation is producing too few doctors for its current and future needs. As my colleagues and I forecasted a decade ago, economic and demographic trends, combined with insufficient training capacity, are leading to deepening shortages of physicians. But now there is a second part to the forecast. Because so much time has passed, a further deepening of physician shortages cannot be avoided. Regardless of how much effort is made to add training capacity now, it will not be possible to correct the problem soon enough or fully enough to avert still worse shortages over the next decade. And that makes your deliberations doubly important, for they concern not only the need for adequate numbers of physicians but the need for innovative models of practice in this coming era of physician shortages. This is uncharted territory. There is no time in the past when the United States has had shortages of physicians of the magnitude that are now developing. Innovation is the operative word, both for expanding training capacity and structuring the practice of medicine.

The shortages that are now being experienced are not new. They began to appear 7–8 years ago, even earlier than we had anticipated. But they were limited to certain specialties, such as cardiology and urology, and because they were limited, they largely escaped public attention. However, they were noticed by national organizations. Following our initial projections a decade ago, the Council on Graduate Medical Education adopted a similar planning model and made similar projections, and these were confirmed by a series of follow-up reports from the Association of American Medical Colleges. With these projections and early evidence of shortages in many specialties and many communities, most major medical organizations called for expanding physician supply. They included the American Medical Association, the American Osteopathic Association, the Association of American Medical Colleges, the American Association of Colleges of Osteopathic Medicine and the Association of Academic Health Centers. More than 20 specialty societies and an equal number of State medical and hospital associations joined this chorus. Yet, it was largely ignored. However, now that the shortages have spread to engulf primary care physicians, whose care is sought by most patients, even when they are healthy, the secret is out. Everyone knows. We don’t have enough physicians.

On past occasions when there was concern about too few primary care physicians, the strategy was to shift the balance of training from specialists to primary care. But this time the problem is not simply one of balance—it is global—there are too few physicians across specialties. Unlike the past, there’s no “robbing Peter to pay Paul.” The only solution is to train more physicians and allow them to distribute among the various specialties where they are needed.

The problem is further complicated by the fact that, although we need more physicians now, we really can’t get any more for a decade or more. This is because, even with sufficient financial support, it will take several years to increase medical school output and expand residency training capacity, and then it will take 4 years to educate medical students and another 3 to 6 years for these graduates to undergo residency and fellowship training. And by then it will be 2020, and the Nation will be coping with shortages far more severe than today.

EXPANDING MEDICAL EDUCATION

The fact that future shortages are unavoidable is not a reason to do nothing. It is a reason to work doubly hard to minimize them. In response to that need, many medical schools have already begun to increase class size, and a small number of new schools are in various stages of development. The pace of both is commendable, but it is too slow and not enough, and without national support, it is unlikely to be sufficient. Medical schools need financial help in this endeavor.

But most of all, residency programs must be expanded. Medicare’s caps on residency positions must be lifted, and support must be made available to assist existing training programs to expand and to help hospitals that are capable of starting new programs. And that is where Congress can help.

Why is expanding graduate medical education so important? It is because, regardless of where physicians are schooled (U.S.-M.D. schools, U.S.-Osteopathic schools, U.S. citizens trained abroad or foreign nationals trained abroad), physicians must receive residency training in the United States in order to be licensed for practice in the United States. This limitation does not hold for most other countries, which allow the entry of practicing physicians, albeit with some restrictions. However, in the United States, GME is the portal to practice. It’s a good portal, one that enhances the quality of care.

HOW MANY MORE PHYSICIANS ARE NEEDED?

Estimating the future demand for physicians requires a consensus about the future dimensions of health care. Over the past several decades, health care spending has grown at an annual rate approximately 2 percent higher than the rate of GDP growth (which averaged 3 percent). The 2 percent differential was not because no more health care was desired, but because desire encountered downward pressure, and 2 percent became the equilibrium point. Even if downward pressure is greater in the future, it seems unlikely that health care spending would grow more slowly than the economy overall. It also is unlikely that its growth could exceed GDP growth by as much as 4 percent, double the historic level. So the range of predicted spending is rather narrow.

President Obama’s announcement earlier this week concerning proposals by major health care providers to rein in the annual growth of health care spending is in line with projections of growth within 1–2 percent of GDP growth, a level that would cause health care’s portion of GDP to reach 20 percent by 2020 or shortly thereafter.

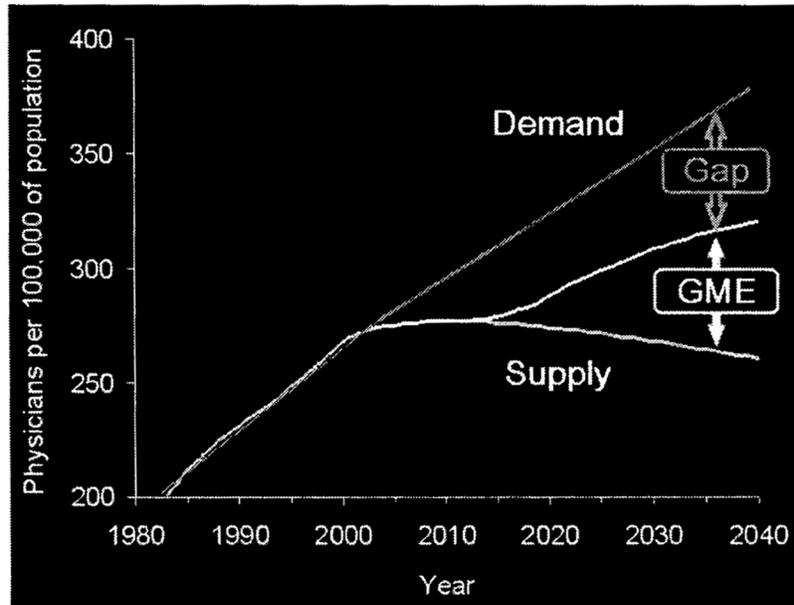
Long-term trends also indicate that spending will not be the same everywhere—more prosperous States spend more, not only on health care but on other social services. And they have better outcomes when their diverse sub-populations are taken into consideration. While it is difficult to predict the future, and there are extreme views in both directions, it seems prudent to make long-term plans for facilities and personnel based on these estimates.

Historically, as health care spending has grown, the supply of physicians has grown much slower, while other health care workers undertook important tasks. During the 1920s, physicians accounted for 25 percent of health care workers, but now account for fewer than 7 percent. This trend has been associated with new technical disciplines, a vast expansion of nursing and a progressive increase in the number of nonphysician clinicians (NPCs), principally nurse practitioners (NPs) and physician assistants (PAs), reflecting the greater complexity of the tasks that physicians now delegate or defer to others.

WHAT IS POSSIBLE?

The illustration below depicts the trends in physician supply and demand over the past several decades, expressed in per capita terms. It also shows how demand will

change over the coming years, assuming a slowing of spending growth, as indicated above. And it shows that, if the rate of training is not increased appreciably, there will be as many as 200,000 too few by 2020, 20 percent of the projected demand, and larger shortages thereafter.



The illustration also shows what could happen if the number of entry-level residency positions were increased by 10,000 over the next decade, from approximately 25,000 to 35,000, a 40 percent increase. While such an increase is seemingly large, it is equal to the expansion of residencies that occurred in the 1960s and 1970s, the last major effort to expand supply. Such an expansion would clearly lead to meaningful increases in physicians long-term. But, because of the long lead-times, little will occur until after 2020, and a gap between supply and projected demand equivalent to 100,000 physicians will continue well into the future.

Thus, there are two problems. A near-term shortage, about which we can do very little, and a long-term shortage, which we can work to ameliorate, recognizing that it will be impossible to correct completely. But it is essential that Congress act quickly to aid in that process. Helping medical schools is important, but increasing the number of residents trained annually is the key.

While there is a tendency to want to use the funding for residency training as a lever to influence specialty mix, it is difficult to anticipate the precise roles that physicians will serve 20 and 30 years hence, which is the timeframe during which current efforts to increase the supply will come to fruition. Therefore, it is hazardous to attempt detailed adjustments to the specialty mix of trainees. Physicians will have to be trained to deal with the changing knowledge base of medicine, and they will have to distribute in a manner that is consistent with medical care in that somewhat distant future.

REDEFINING PHYSICIANS' ROLES

In 2002, we prophesized that:

“shortages of physicians will force the medical profession to redefine itself in ever more narrow scientific and technological spheres while other disciplines evolve to fill important gaps.”

That transition is now occurring, as physicians gravitate to higher complexity services that only they can provide. Faced with deepening shortages, this trend seems certain to continue. The following scenarios describe ways that physicians are

likely to distribute responsibility. Implicit in all of them is an interdependence among physicians and between physicians and NPC. But most important is innovation. The processes of restructuring physician practices will be very fluid and will undoubtedly include characteristics that are not evident today. It would be a mistake to favor any particular form of organization.

Specialists will increasingly concentrate their efforts on technologically advanced care and on the care of patients with major acute disorders and complex chronic illnesses, and, of course, on advanced diagnostic services. The degree of overlap among specialties has decreased over time, as each has evolved to encompass a special body of knowledge, and this seems certain to continue, which brings interdependence more sharply into focus. Many specialists who care for patients with chronic disease will organize their practices to serve as "principal physicians" for these patients, sharing the responsibility for general care and care coordination with NPCs within their own practices and with generalist physician colleagues. Relationships like these will also facilitate the ability of some specialty practices to retain the continuing responsibility for patients whose chronic illnesses are quiescent or "cured." Innovation and experimentation will be important. No one model will fit every circumstance.

Generalists, too, will serve a variety of roles, but the hall marks will be greater acuity and complexity. One is their comparatively new role as hospitalists, an example of generalist physicians gravitating to higher complexity care. A second is the collaborative care of patients with complex chronic illness, as mentioned. Third, is the traditional role of generalists in caring for patients with uncomplicated chronic disease and multiple co-morbidities, responsibilities that they will increasingly discharge in partnership with NPCs. And fourth are areas with special needs, such as rural communities, prisons and the military.

Generalist physicians have traditionally been major providers of front-line primary care, including wellness care, patient education, prevention and the care of acute self-limited disease. However, the lack of sufficient numbers of physicians, combined with the decreased interest of young physicians in such tasks and the doubtful wisdom of committing such highly-trained professionals to this purpose, predicts that more such care will be provided by NPCs and, through the use of the Internet and other resources, by patients themselves. While some have argued that this spectrum of responsibilities should be retained by physicians and provided through physician-directed "medical homes," it seems improbable that there would be sufficient numbers of such physicians, even if the model were ideal everywhere and for everyone. Rather, the provision of primary care services will have to be responsive to particular regions and subpopulations in each and to the spectrum of providers who are available to participate. Retail clinics, some in cooperation with hospitals or health plans, are only the most recent innovation. As generalists relinquish their roles in front-line primary care, they will be called upon to serve as consultants for these various primary care systems. And they must be appropriately compensated for the higher average acuity and complexity of the patients they serve.

DOES IT MATTER?

This analysis of the need to expand physician supply and encourage innovation in physician practices stands against a set of beliefs that more physicians and more health care may not be good for the Nation and that primary care should supplant specialty care for patients with chronic illness. In fact, the preponderance of data do not support these conclusions. Moreover, when the studies underlying them are exposed to scrutiny, it becomes evident that some were confounded by the anomalous distribution of family physicians in the upper Midwest; some suffered from the error of aggregation and averaging; some relied on statistical permutations rather than measures of actual physicians; and many relied exclusively on analyses of Medicare spending, which is not a proxy for health care spending overall. As an example, Mississippi and Nevada, where quality is low, do not have high health care spending, nor do they have an abundance of specialists, as portrayed. They devote the least resources to health care, and have corresponding outcomes.

Most important in understanding regional comparisons is an understanding of the interplay between communal wealth and individual income in determining health care utilization and outcomes. Viewed in that light, more physicians, both specialists and generalists, and more health care spending are associated with better outcomes. Simply stated, "more is more." The Nation may not be able to afford all of the health care that would be beneficial, but it would be a mistake to assume that spending less, or limiting physician supply in order to spend less, would be beneficial. Rather, it seems prudent to base the future demand for physicians on realistic

projections of health care spending, to respond to that demand by training as many physicians as is practical, and to foster innovations in practice structures that can aid in meeting needs as they evolve. Ultimately, high quality care depends on the autonomous exercise of clinical judgment by competent and empathic physicians who are accountable to their patients and society.

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Senator BROWN. Thank you, Dr. Cooper.
Dr. Schlossberg, welcome.

STATEMENT OF STEVEN SCHLOSSBERG, M.D., MBA, VICE PRESIDENT, CLINICAL OPERATIONS, HOSPITAL-BASED SURGICAL SPECIALTIES, SENTARA MEDICAL GROUP, CHAIR, HEALTH POLICY, AMERICAN UROLOGICAL ASSOCIATION, ON BEHALF OF THE ALLIANCE OF SPECIALTY MEDICINE, NORFOLK, VA

Dr. SCHLOSSBERG. Mr. Chairman and members of the committee, I am the chair of health policy for the American Urological Association, a member of the Alliance of Specialty Medicine, which I am here to represent.

As a practicing urologist and part of the management team of a 400-physician multispecialty group, I am keenly aware of the necessity of collaboration between primary care and specialists. Currently, I am responsible for hospital-based and surgical specialists within our medical group, which includes hospitalists, pulmonary critical care, general surgery, neurology, vascular surgery, and urology.

Therefore, effective partnerships between specialty care and primary care are absolutely essential to the delivery of high-quality, cost-effective patient care. Through the dissemination of clinical guidelines, offering of continuing medical education courses, and innovative collaborations among primary care and specialty practices, specialties educate primary care providers and ensure timely and appropriate referrals and resource use.

Not everything can be prevented. People get sick. They need specialists. They need surgeons, and they need hospitalists and emergency rooms. Primary care will not always be the most efficient and effective provider for every condition and disease. In fact, evidence indicates that specialists achieve better outcomes in the

treatment of their specialty area compared to primary care providers and other specialists.

An article in the American Journal of Medicine looked at the treatment of arthritis, rheumatic, and musculoskeletal conditions and found that primary care providers often lack adequate rheumatologic training. They are less skilled in the diagnosis and management of these diseases and may order more diagnostic studies, drugs, and consultations. Rheumatologic care for these conditions provides better patient outcomes and is less costly.

To foster collaboration, Congress should not divide medicine and strive to strengthen primary care at the expense of specialty care, whether through budget neutral changes to reimbursement or by limiting access to specialists.

Congress must address the underlying physician payment problem. Without a long-term solution to the flawed Medicare payment formula, our healthcare delivery system cannot truly be reformed. When the Government programs do not provide stable and fair reimbursement, it equally impacts the private insurance programs and leads to discrepancies in the true cost of care.

One of the innovative delivery models being discussed is the medical home. A key feature of this concept, as you have said, is a personal physician responsible for overseeing all of a patient's healthcare and coordinating care. Unfortunately, the current medical home models do not include all qualified physicians able to provide medical homes and may, in fact, result in limiting access to some specialists.

The design of the CMS-proposed medical home excludes many specialties, including surgery. Urology is a surgical specialty, and a urologist may be the most appropriate medical home for patients with certain chronic urologic conditions, such as prostate cancer and bladder problems.

These patients often have long established relationships with their urologist and have trust and confidence in their care. Arbitrary severance of this relationship through the exclusion of surgical specialties does not serve the goals of this program. We should think in terms of having a principal provider and not assume it is always the primary care provider.

Rather than having the Government decide which providers are most appropriate, let individual physicians in consultation with their patients together decide if they want to participate. Many may not.

Finally, Congress should not move forward with innovative delivery system models that have not been fully tested. Implementation of the medical home is scheduled to begin next year. Before the program is made permanent, Congress should fully analyze the data from the demonstration project.

Finally, a couple of thoughts on information technology. Certainly, HIT, or health information technology, has the potential to increase collaboration, efficiency, and quality of care and to lower healthcare costs. The alliance strongly supports the development of an electronic health information network that is both reliable, interoperable, secure, and protects patient privacy.

The specialty community is appreciative for the opportunities available for physicians to receive enhanced Medicare payments to

support the adoption and effective utilization of HIT. I currently am doing e-prescribing, PQRI, and using electronic medical record.

However, the alliance is concerned that many surgical physicians will not be able to take advantage of the enhanced payments. Therefore, the alliance urges you to consider amending the current HIT bonus and penalty timelines.

Finally, a thought on quality. Each of the alliance's specialty association members has been actively engaged in the process of developing evidence-based and clinically relevant quality measures and establishing data registries. While much progress has been made, it takes time to develop the extensive quality infrastructure needed for quality improvement and simply is not yet established for the majority of physicians. That makes participation in quality measurement and improvement efforts very different from other providers.

Finally, just to amplify Dr. Cooper's comments about the workforce, specialists are an integral part of American medicine, and we cannot take for granted that specialists will always be there. The Council on Graduate Medical Education reported that in rural areas, there is a clear need for specialty care and although primary care would be an essential area of medical service and training, subspecialty and surgical disciplines are also sorely needed in underserved areas.

It is important to consider workforce issues as you consider healthcare reform because it takes 12 years to produce a specialist. Like many specialists, urology requires training, extensive training—4 years of college, 4 years of medical school, and 5 years of residency.

As a professor of urology at Eastern Virginia Medical School, I caution you against going too far in discouraging young physicians from entering specialty medicine. By the time a true crisis is visible, we will be unable to correct it.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Schlossberg follows:]

PREPARED STATEMENT OF STEVEN SCHLOSSBERG, M.D., MBA

Mr. Chairman and members of the committee, thank you for inviting me to testify regarding the role of specialty care.

My name is Steven Schlossberg from Norfolk, VA. I am the chair of Health Policy for the American Urological Association, a member organization of the Alliance of Specialty Medicine, which I am here to represent. The Alliance was founded in 2001 and its mission is to develop sound Federal health care policy that fosters patient access to the highest quality specialty care and improves timely access to high quality medical care for all Americans. As patient and physician advocates, the Alliance welcomes the opportunity to be here today and participate in the national health care reform debate.

I am a practicing urologist and part of the management team of a 400 physician multi-specialty group practice. This makes me keenly aware of the necessary collaboration between primary care and specialists.

Effective partnerships between specialty care and primary care are absolutely essential to the delivery of high quality, cost-effective, patient-centered care. Through the dissemination of clinical guidelines, offering of continuing medical education (CME) courses, and innovative collaborations among primary care and specialty practices; specialties educate primary care providers and ensure timely and appropriate referrals and resource use. Not everything can be prevented. People get sick. They need specialists. They need surgeons. They need hospitals and emergency rooms.

Primary care will not always be the most cost efficient and effective provider for every condition and disease. In fact, evidence indicates that specialists achieve bet-

ter outcomes in the treatment of the diseases they focus on than primary care providers and other specialists. For example, an article in the American Journal of Medicine looked at treatment of arthritis, rheumatic and musculoskeletal conditions and found that primary care providers often lack adequate rheumatologic training. They are less skilled in the diagnosis and management of these diseases and may order more diagnostic studies, drugs, consultations and follow-up visits than rheumatologists, making the care they provide lower quality and more costly. Rheumatologic care for these conditions provides better patient outcomes and is less costly to the health care system.¹

A recent article in the Journal of the American Medical Association (JAMA),² directly relates subspecialty training to improved patient outcomes. This particular case looked at outcomes for implantable cardioverter-defibrillators (ICD) and used cases submitted to the ICD Registry. The study confirms that specialized training enables physicians to lower risk of complication and select the most appropriate treatment for the patient's unique needs.

To foster collaboration, Congress should not divide medicine and strive to strengthen primary care at the expense of specialty care—whether through budget neutral changes to reimbursement or by limiting access to specialty care.

REIMBURSEMENT

Congress must address the underlying physician payment problem. Without a long-term solution to the flawed Medicare payment formula, our health care delivery system cannot truly be reformed. When the government programs do not provide stable and fair reimbursement, it equally impacts the private insurance programs and leads to discrepancies in the true cost of care. Nor should Congress rob Peter to pay Paul. The Alliance recognizes the importance of improving access to primary care and strengthening the role of primary care providers. The Alliance can not support proposals that would provide additional payments to primary care physicians at the expense of specialists, e.g., through budget neutral adjustments in payments made to specialists.

INNOVATIVE DELIVERY MODELS

One of the innovative delivery models being discussed is the Patient-Centered Medical Home—a healthcare delivery model intended to promote patient-centered, longitudinal, integrated care. A key feature of Medical Home is a personal physician responsible for overseeing all of a patient's health care and appropriately coordinating care with other qualified professionals to enhance access, improve integration, and increase safety and quality.

Unfortunately, the current Medical Home models do not include all qualified physicians able to provide Medical Homes and may, in fact, result in limiting access to some specialists. Through the Tax Relief and Health Care Act of 2006, the Center for Medicare and Medicaid Services (CMS) was directed to launch a Medical Home demonstration. However, the design of the CMS-proposed Medical Home excludes many specialties such as surgery. Urology is a surgical specialty and may be the most appropriate Medical Home for patients with certain chronic urologic conditions, such as prostate cancer or bladder control problems. These patients often have long-established relationships with their urologists and have trust and confidence in their care. Arbitrary severance of this relationship through exclusion of surgical specialties does not serve the goals of this program. We should think in terms of having a “*principal*” provider and not assume it always will be a primary care provider. Rather than having government decide which providers are most appropriate, let individual physicians, in consultation with their patients, together decide if they want to participate; many may not. I believe that will foster the patient-centeredness care around which this program is built.

Finally, the Alliance requests that Congress, before enacting Medical Home as a permanent model, fully analyze the data after the completion of the demonstration to determine if Medical Home significantly improved care coordination, was patient-centered, delivered improved patient outcomes and saved money. Currently, implementation of the demonstration project is slated to begin January 2010.

¹ Katz JN, Solomon DH, Schaffer JL, Horsky J, Burdick E, Bates DW. “Outcomes of care and resource utilization among patients with knee or shoulder disorders treated by general internists, rheumatologists, or orthopedic surgeons.” American Journal of Medicine Jan 2000; 108 (1) PP. 28–35.

² Curtis JP, Luebbert JJ, Wang Y, Rathore SS, Chen J, Heidenreich PA, Hammill SC, Lampert RI, Krumholz HM. “Association of Physician Certification and Outcomes Among Patients Receiving an Implantable Cardioverter-Defibrillator.” Journal of the American Medical Association Apr 22/29 2009—Vol. 301, No. 16, PP. 1661–1670.

If Medical Home or other innovative delivery systems are to succeed, there must be collaboration between primary care and specialty medicine. Specialists are working with primary care physicians to ensure appropriate referral and promote continuity of care. For example, the American Urological Association has spearheaded a free continuing medical education (CME) update tailored exclusively to primary care practitioners on major urologic conditions, reaching out to the American Academy of Family Physicians (AAFP) and the American College of Physicians (ACP).

The North American Spine Society/National Association of Spine Specialists (NASS) is unique in that it encompasses multi-specialty care including non-operative and surgical care from entry into the healthcare system through all phases and types of care, thus demanding routine coordination among a range of practitioners, including primary care providers. NASS provides specific evidence-based guidance to spine care providers in the form of clinical guidelines to benefit patient care, helping them diagnose, treat, and properly manage, among other conditions, back pain.

The American Gastroenterological Association (AGA) provides educational materials for primary care providers on such highly prevalent GI conditions as appropriate management/evaluation of diarrhea, Gastroesophageal reflux Disease (GERD), colorectal cancer screening and polyp/cancer surveillance. Additionally, some larger gastroenterological practices are working closely with primary care practices to develop clinical care protocols for four areas: pediatric chronic diarrhea, adult chronic diarrhea, acute abdominal pain and chronic abdominal pain. These protocols include, for example, what diagnostic steps should occur at the primary care level and then what should be included in the information transfer. Having electronic medical record (EMR) interface will help with the proper information flow and the development of future protocols.

These are just a few examples of the kinds of essential exchange of clinical knowledge and practice expertise that specialists are proactively providing to primary care professionals to promote cost-effective, timely, efficient and clinically appropriate patient care. Other Alliance member organizations also have developed similar tools for primary care physicians. We ask that such fruitful and functional partnerships be explicitly recognized and actively fostered by supportive government policies that unite diverse segments of medicine around the *patient as the center of attention*, rather than artificially, through divisive payment policies and arbitrary definitions, perpetuate dysfunctional silos of care that both patient and physician must struggle to navigate. Specialty care is and can continue to be an effective, knowledgeable contributor to a reformed healthcare system and is able and willing to do so.

HEALTH INFORMATION TECHNOLOGY (HIT)

Health information technology (HIT) provides a building block for innovation and the delivery systems of the future. It has the potential to increase collaboration, efficiency and quality of care, and to lower health care costs significantly. The Alliance strongly supports the development of an electronic health information network that is reliable, interoperable, secure, and protects patient privacy. Congress made significant strides towards the implementation of HIT with the passage of the "American Recovery and Reinvestment Act of 2009" (ARRA)(PL11-5), and the specialty community is appreciative for the opportunities available for physicians to receive enhanced Medicare payments to support the adoption and effective utilization of HIT.

My practice has moved forward in this area. We viewed this as a shared responsibility. The only reason my practice was successful is because we had the resources to do this. If I was in a small or solo practice, I could not have done it. Smaller physician practices, which include the majority of the physicians practicing medicine in this country, continue to face barriers to purchasing HIT systems. In addition, for those practices that manage to adopt HIT, it takes a further investment of significant time and resources to use their systems to the fullest capacity.

However, the Alliance is concerned that many specialty physicians will not be able to take advantage of the enhanced payments to purchase HIT because of the ambitious bonus and penalty timelines and the fact that current specialty systems lack certification and interoperability standards. Further, the current certified HIT systems have been developed for primary care settings and have not yet been fully adapted for specialty or surgical care. The financial incentives and penalties are based on the adoption and "meaningful use" of certified HIT systems and will have a profound impact on our members and their ability to adopt and become meaningful users. Physicians are hesitant to make the considerable investment until certified systems are available that meet their unique needs.

I call your attention to the fact that there are surgical specialties that have made significant accomplishments toward achieving interoperable HIT solutions for their

members and have been placed on the Certification Commission for Health Information Technology (CCHIT); the only recognized certification body, roadmap for HIT Certification. However, due to the obstacles that must be overcome to be identified by CCHIT as one of the planned expansion areas, and the lack of CCHIT financing and staff, most specialties are not even in the pipeline. In addition, even those who are on the roadmap are facing challenges in the timelines that have been outlined by the Commission.

As a result, and under the current timelines, it will be virtually impossible for the majority of surgical specialty physicians to purchase certified systems that are designed for their specialty, become meaningful users, and qualify for the majority of the vitally necessary financial incentives. Specialty medicine continually strives to provide quality care, and the Alliance recognizes that HIT can play an important role in achieving and maintaining high performance. Therefore, the Alliance urges you to consider amending the current HIT bonus and penalty timelines.

QUALITY

Likewise, quality improvement programs cannot be one-size-fits-all. Each of the Alliance's specialty association members has been actively engaged in the process of developing evidence-based and clinically relevant quality measures and establishing data registries through initiatives within their own specialty and/or through the AMA's Physician Consortium for Performance Improvement. While much progress has been made, it takes time to develop the extensive quality infrastructure needed for quality improvement which simply is not yet established for the majority of specialty physicians. That makes participation in quality measurement and improvement efforts very different from other providers to whom most physicians are readily compared. Since many times the private market follows Medicare's lead, I would like to share the Alliance's concerns with implementation of the Physician Quality Reporting Initiative (PQRI).

Process of care measures may be more relevant for primary care, but we need to move to a quality system that focuses also on clinical outcomes. For the program to succeed, it first needs to extend the timeline for full implementation so that physicians can catch up to other providers, some of whom have had decades to create, test, and report on measures; it must provide physicians with access to their data in a timely manner and it must have a reasonable appeals process. Also, the information should be verified before it is made public and quality reporting should be voluntary, not punitive. Congress should consider establishing a public private partnership to provide long-term support for clinical data registries and measure development currently undertaken solely through the limited resources of medical specialty societies. Additionally, the PQRI program could reward physicians who report clinical data to such registries. Finally, Congress must recognize the increased cost to report quality measures and should provide physicians with adequate funding to implement reporting requirements.

PHYSICIAN WORKFORCE

Specialists are an integral part of American medicine. As a Nation, we pride ourselves on having the best medical care has to offer. Regardless of what insurance product people have, Americans want to know they may see their doctor of choice when needed. However, we can not take for granted that those specialists will be there.

The Council on Graduate Medical Education (COGME), reported that: "*In rural areas, there is a clear need for specialty care.*"³ The report goes on to say that: "*Though primary care would be an essential area of medical service and training, subspecialty and surgical disciplines are also sorely needed in underserved areas.*"⁴

The Bureau of Health Professions (BHP) has cited significant workforce challenges across the surgical specialties. Between 2005 and 2020, BHP projects an increase of only 3 percent among practicing surgeons—with projected significant declines in a number of surgical specialties. Over the same time period, BHP projects that the number of practicing primary care physicians will increase by 19 percent.

The Association of American Medical Colleges (AAMC) published an updated physician workforce study demonstrating essentially equivalent shortages between primary care and surgery. Specifically, the study projects physician supply and demand through 2025 and finds that: "*in terms of the general projected shortage of 124,000 FTE physicians, while 37 percent of the shortage will be in primary care [46,000],*

³COGME 18th Report: "New Paradigms for Physician Training for Improving Access to Health Care," Sept 2007, page 5.

⁴Ibid, page 13.

33 percent will be in surgery [41,000] . . .” In addition, the study projects a shortage of 8,000 medical specialty physicians.⁵

It is important to consider workforce issues as you consider health reform because it takes more than 12 years to produce a specialist. Like many specialists, urology requires years of training. In my case, 4 years of undergraduate education, 4 years of medical school, 5 years of urology residency; some then also do an additional 2 or 3 years of Fellowship training. As a professor of urology at Eastern Virginia Medical School, I caution you against going too far and discouraging young physicians from entering specialty medicine. By the time a true crisis is visible, we will be unable to quickly correct it. Already, there are shortages in many specialty areas and as I mentioned earlier, the projections are that the problem gets worse.

Mr. Chairman, thank you again for including the Alliance of Specialty Medicine. I'm happy to answer any questions.

Senator BROWN. Thank you, Dr. Schlossberg.
Dr. Nochomovitz, welcome again.

**STATEMENT OF MICHAEL NOCHOMOVITZ, M.D., PRESIDENT
AND CHIEF MEDICAL OFFICER, UNIVERSITY HOSPITALS
MEDICAL PRACTICES AND UNIVERSITY HOSPITALS MAN-
AGEMENT SERVICES ORGANIZATION, CLEVELAND, OH**

Dr. NOCHOMOVITZ. Senator Brown and distinguished members of the committee, it is an honor to speak to you today about the role of primary and specialty care physicians in current and proposed healthcare delivery models.

Senator Brown, I am particularly pleased to be here as a physician from Ohio. Thank you for inviting me to testify.

I am a practicing physician and lead a 450-member physician provider organization, which is the community arm of University Hospitals System in Cleveland.

Our organization includes the largest primary care network in northeast Ohio composed of specialists, seven urgent care centers, and five hospitalist programs. 2008 saw 1.2 million office visits at more than 100 locations in 42 communities, serving 650,000 patients, and producing more than 1 million electronic prescriptions.

I am acutely aware of the challenges daily faced by our primary care physicians. Our model is structured with local physician authority and responsibility, similar to private practice, but with the leverage of our organization's technologies, economies of scale, funded quality programs, and self-funded malpractice insurance. We are a microcosm of healthcare delivery in the heartland of our country.

Our overall success, however, masks the daily struggles by primary care physicians to navigate the complexity of the healthcare system despite our enhanced resources. Suburban, rural, and urban populations have a myriad of healthcare coverages with varying access to services, causing physicians to spend significant time in unreimbursed activity.

We deal daily with issues of complex healthcare plan structures interfering with medical decisionmaking, overly complex regulatory requirements, inadequate reimbursement for cognitive work and disease management, pressures to practice defensive medicine, and provision of care to the uninsured or working poor. These factors discourage medical trainees from specifically considering primary care careers, and that trend is compounded by the magnitude of

⁵The Complexities of Physician Supply and Demand: Projections through 2025, Michael J. Dill and Edward S. Salsberg, Center for Workforce Studies, Nov. 2008.

educational loans and the stresses on earning opportunities in primary care.

Our ideal future State must have seamless access to coordinated care, utilizing primary and specialty care providers as well as allied health professionals. This is not a unidimensional concept. Major public and private wellness initiatives should become the norm, and this will take years.

Cost reductions will be driven by quality, and outcome-based bonus payments to providers based on evidence-based quality and outcome measures. Simpler Federal rules governing safe harbors are required to encourage the development of real or virtual delivery networks, such as accountable care organizations, which would include independent and employed physician constituencies, hospitals, and other providers, all incentivized to participate.

There are a number of significant risks to consider as we restructure. We must not damage what works well, and we must not disrupt existing doctor-patient relationships. Cutting costs to pay for reform must not result in the creation of new shortages in essential services. The concepts will fail without appropriate technological infrastructure for timely quality and performance reporting.

The exclusion of physicians and organized medicine from any component of the planning and implementation process will severely limit the chance of success. The selection of appropriate quality measures are always key in making the most significant impact on cost and outcome. We can't do everything.

In our organization, we were early adopters of e-prescribing and one of the five national sites selected by CMS for its demonstration project. We funded an American Diabetes Association self-management program at six regional sites, in addition to pursuing recognition for all our primary care physicians by the National Committee for Quality Assurance, NCQA, in diabetes. And we recruited six full-time endocrinologists for the community.

We have opened seven urgent care centers for patients to access care in a low-cost environment after hours or as an extension of their physician's office rather than present at an emergency room, and more complex diagnoses can be done in those facilities because of the capabilities we have.

Irrespective of the initiatives, primary care disciplines clearly need help. Multi-year increases in reimbursement with immediate change in the sustainable growth rate methodology will avoid reductions in reimbursement and worsening of the situation. Reimbursement for care management will result in reduction of admissions to hospital.

Reimbursement methods which recognize realistic practice costs for physicians and health professionals will avoid the current situation in reimbursement. The lifting of the Medicare resident cap and enhancement of Government-sponsored loan options and loan repayment programs that target primary care and selected specialists in underserved areas are needed.

Finally, the fundamental issue of healthcare coverage and its components with methodologies to include all Americans must be addressed through a combination of existing payers, employment-based coverage, and expansion of safety net Government programs.

Thank you again for the opportunity to address you today. I welcome any questions you may have.

[The prepared statement of Dr. Nochomovitz follows:]

PREPARED STATEMENT OF MICHAEL NOCHOMOVITZ, M.D.

Senator Brown, Ranking Member Enzi and distinguished members of the committee, it is an honor to speak to you today about the role of primary and specialty care physicians in current and proposed health care delivery models. Thank you for inviting me to submit this testimony.

I am Michael Nochomovitz, the President and Chief Medical Officer of University Hospitals Medical Practices (UHMP) and its associated Management Services Organization (UHMSO) in Cleveland, OH.

I am a practicing physician and lead a 450-member multi-specialty physician network in northeast Ohio. This includes the largest primary care network in the region, complemented by a diverse group of specialty practices, seven urgent care centers and five hospitalist programs.

I have led the development of these organizations through the last decade. The enterprise has evolved into a regional force that in 2008 provided 1.2 million office visits at more than 100 locations in 42 communities. The network cared for 600,000 patients requiring more than 1 million electronic prescriptions.

I am acutely aware of the challenges primary care physicians face in attempting to coordinate care and also am cognizant that the optimal and most cost-effective health care cannot rely on one single specialty or service.

UHMP is the largest portal of patient entry into the University Hospitals system and accounts for more than 50 percent of the patients utilizing system services.

PRIMARY CARE FOCUS

From the outset, primary care has been the foundation of the organization. There always has been a clear vision of the critical nature of primary care physicians in the delivery and coordination of care. This view was unrelated to considerations of health care reform but rather to the practice of medicine and the vision of University Hospitals.

The organization has grown largely by merger of key established primary care practices into the organization in many diverse communities. Within UHMP, we are fortunate to count numerous examples of the finest-trained and seasoned physicians in all primary and many specialty care disciplines. The care provided by our primary care physicians associated with regional multi-service ambulatory facilities translates into an exceptionally high level of continuity of care. This is, indeed, the type of care any of us in this room would want.

LIMITATIONS

Our success does not tell the entire story. Despite the enhanced infrastructure and resources available to the physicians in our University Hospitals (UH) system, the challenges of coordinating care on a daily basis remain formidable. We all are familiar with the patchwork of components that make up our current health care system and the potential obstacles to patient and physician satisfaction. Our organization spans northeast Ohio and includes suburban, rural and urban locations each with varying levels of access to the full scope of physician and allied health services. In the best situations, there are still significant limitations on physicians who seek to provide comprehensive services and continuity of care. The limitations include our overly complex administrative and payer system, inadequate payer recognition for cognitive work of primary care physicians, pressures to practice defensive medicine, a shortage of new primary care providers to replace the mature workforce, and the challenge of providing necessary care to the uninsured and the working poor.

The lessons learned from our specific experience are cogent, as our model, despite physician employment, has unique features to meet physician and local community needs. Our model gives the local community primary care physicians unique authority and responsibility for managing their practices and staff in a manner akin to private practice. We utilize our resources to grow these practices, provide the leverage of the integrated delivery system and ensure replacement for any attrition. The model is characterized by unusual physician empowerment and autonomy and has promoted significant physician engagement and physician satisfaction. Their alignment with University Hospitals has allowed us to introduce new technology and quality measures, which would have been impossible in the current private practice environment. The pressures in recent years on human and financial capital and lack

of leverage with payers have impeded progress in many ways in traditional models for the majority of physicians in the United States.

We have a real life experience in diverse communities that represent a microcosm of regional health care delivery in the heartland of the country.

THE SCOPE OF AN INTEGRATED DELIVERY SYSTEM

The University Hospitals system was founded upon its academic hub, University Hospitals Case Medical Center and Rainbow Babies & Children's Hospital. Its physician network has become the backbone of this system. These institutions were created more than a century ago to serve the community and to serve as the teaching and research hospitals affiliated with the Case Western Reserve University School of Medicine.

Today, UH has expanded to include seven hospitals, which consist of critical access hospitals, suburban hospitals, a long-term care hospital and skilled nursing facility, a children's hospital, and a 900-bed adult academic medical center. Currently, UH has two new hospitals under construction: a free-standing Cancer Hospital and a community hospital. In addition to the community-based physician practices, UH also employs its full-time academic physicians, the Case Western Reserve University School of Medicine faculty, in an integrated practice plan. These physicians, who include national and international leaders in their fields, serve the tertiary and quaternary needs of our regional system at UH Case Medical Center. This tertiary and quaternary component is a critical part of the ultimate continuity of care to which we all aspire.

THE MEDICAL HOME CONCEPT

Many hearings have addressed the glaring gaps and weaknesses in health care coverage in our country, as well as the dislocation and fractionation of care that many citizens experience, whether insured or uninsured. The idea of continuity of care provided through a Medical Home with access and comprehensive services is under substantial discussion. These concepts cannot be grounded in jargon, but need to address the substance of patient care delivered appropriately in an evidence-based fashion in the appropriate setting for an affordable cost. The Medical Home is likely to be a methodology within a more global approach to continuity of care.

HEALTH CARE REFORM: QUALITY OF CARE, COORDINATION OF CARE AND COST CONTROL

There will be critical success factors to change the direction of health care in the decades to come. Some of the critical success factors include:

Wellness

It is a truism that our health care must be grounded in the lifelong pursuit of wellness and prevention.¹ The latter realistically is a more difficult long-term challenge as it involves population behavioral change. Major impacts on population behavior will require both public and private programs to promote wellness as an integral part of our society. Incentives for employers to promote wellness in the workplace will need to be instituted.

The Role of Primary Care

It is on this background that primary care providers evaluate symptoms and abnormal findings for evaluation and diagnosis. Subsequently, the best treatment will result in either cure or the transition into chronic disease management. The latter accounts for a significant percentage of our health care costs and offers the most opportunity for the care coordination provided access to the necessary resources are made available and reimbursement for care management is provided in an unequivocal manner.²

It should be apparent that this ideal State will not be unidimensional and will require a multi-disciplinary approach that involves access to coordinated, convenient, affordable and humanistic care for an array of medical providers. These will include primary care physicians, specialists, and a wide variety of allied health professionals who cover the entire spectrum of care from cradle to grave.

Structures of Care Delivery

There will not be one solution that meets the needs of every community and all constituencies of patients and providers.

¹Ross DeVol and Armen Bedroussian, et al., *An Unhealthy America: The Economic Burden of Chronic Disease*, The Milken Institute, 2007: 4-5.

²Ibid, 184.

We will need to create vehicles for integrated care that could affect the necessary changes in all our communities. These would provide opportunities for participating providers to be eligible for quality and outcome-based bonus payments as well as benefit from more global savings. Accountable Care Organizations (ACO) and existing structures such as integrated delivery systems could be empowered to manage the continuum of care.

The consolidation of health care in recent years could turn out to be a distinct advantage in many communities in terms of building on existing infrastructures to deliver coordinated care. Further modeling will no doubt result in a variety of unique public and private vehicles which would be evaluated in demonstration projects. In some areas we should anticipate a growth in community health centers, and an expansion of the National Health Service Corps locations, as well as the optimal use of the Veterans Administration Health System and the Indian Health Service.

There are a number of significant risks that must be called out:

- We must not damage what already is working well.
- We must not remove patient choice or disrupt existing doctor patient relationships.
- All physicians should have an opportunity to participate on the basis of standards to be determined.
- The imperative of cutting costs to pay for reform could result in creating new shortages.³
- The infrastructure for quality and performance reporting will likely be more expensive and challenging in implementation than predicted.
- The reporting methodology for quality measures must be timely and accurate.
- Health care is a local phenomenon and there will be unique regional and community specific challenges, which may or may not be associated with cost-differentials.
- The cost to expand coverage may exceed the projected savings in the early years.
- The exclusion of physicians from any component of the planning implementation process is likely to limit the effectiveness of implementation.

LESSONS LEARNED FROM THE UHMP EXPERIENCE: MAKING CHOICES

In our own experience, we have created a large, regional network built mostly on aligning the best physicians in local communities who were previously in traditional private practice. We have taken these physician practices empowered them to succeed by investing in an enhanced infrastructure and the ability to introduce new technologies, quality measures and outcome evaluation which would not have been possible in their former States.

Over the last few years despite the presence of incentives we have chosen to make significant expenditures to position the physicians in their local communities for quality measurement and outcome evaluation. In a growing organization which was merging physicians from the private practice environment we were required to make choices to achieve in our mind the maximum impact on patient care.

The following were areas of focus:

a. Electronic Prescribing

We targeted electronic prescribing 5 years ago, as the most useful technology for a primary care physician office. We were early adopters long before health information technology incentives were a reality. Indeed, we created our own incentives by affording those physicians who utilized e-prescribing a discount on their malpractice insurance. The cost was borne by UH because we felt that it was a critical technology to enhance quality of patient care. We subsequently were one of the five national sites selected by CMS for the e-prescribing demonstration project to develop foundation standards for the current program. In the past year our physicians submitted more than 1 million electronic prescriptions and the number continues to grow. This has greatly increased patient satisfaction and assured increased awareness of drug interaction and oversight on dosage and compliance.

b. Chronic Disease Management: Diabetes

We also embarked on an ambitious program targeting diabetic care as a prototype for chronic disease management. We funded the necessary initiatives for the following components:

³ Elliott Fisher, M.D., MPH, "Building a Medical Neighborhood for the Medical Home," *New England Journal of Medicine* 359 : (2008) 1202-5.

- *Adopted the American Diabetes Association Diabetes Self Management Programs.*—We obtained ADA certification for six regional locations to deliver educational/instructional programs with diabetic nurse educators working closely with primary care physicians and endocrinologists. Particularly in the management of diabetes, there is a need for collaboration among primary care providers, specialists and allied health professionals. We have recruited six full-time endocrinologists to our network to provide the specialty services needed by the primary care physicians and their patients, and to complement the work of diabetic nurse educators, podiatrists, nutritionists and other professionals. This is an excellent example of what some might call a “Medical Home” for diabetic patients and it relates to the establishment of an appropriate continuity of care for diabetic patients in any setting or structure.

- *National Committee for Quality Assurance (NCQA).*—We have systematically worked with our adult primary care physicians to obtain recognition from NCQA for diabetic care. This was achieved through an extended and ongoing educational program for physicians and their staffs. We hired additional staff to audit medical records through our document imaging system which has been an outstanding transitional modality for establishing a paperless workflow and preparing physicians and practices for our new University Hospitals electronic medical records.

c. Alternative Sites of Care

- *Urgent Care Centers.*—UH has established a total of seven regionally based Urgent Care centers to provide care for patients who need urgent but not emergent care in convenient locations, as well as care after regular hours. We have instituted a national model for an urgent care Fellowship program. This is done in collaboration with the Department of Family Medicine at Case Western Reserve University at University Hospitals Case Medical Center.

These regionally based centers serve as an extension of the primary care physicians’ office as well as a site where non-emergent presentations are evaluated in a more sophisticated fashion and at lower cost than an emergency department.

We have introduced a variety of system-wide protocols that can be delivered in this low-cost environment. These include management of dehydration, asthma, fracture care, minor trauma as well as a protocol for chest pain which includes measuring serum troponins, a diagnostic indicator for heart attacks, which may be positive in the presence of a normal EKG. We also are able to rule out other serious conditions like pulmonary embolism with the appropriate care paths established.

RETAIL CLINICS

We also are investigating and evaluating the prospects for retail clinics staffed by nurse practitioners linked directly to our urgent care centers for both incidental care and work-related health care. As more payers recognize this environment as a site of care, there should be ongoing reporting of the outcomes of this model and its cost-effectiveness as part of a broader continuum.

PRIMARY AND SPECIALTY CARE NEEDS

The primary care disciplines do need help. They will be the backbone of any cost-effective health system provided they have the resources to provide necessary care for their patients. There are also specific specialty shortages that significantly impact the provision of cost-effective care in our communities.

Support for these deficiencies could come in a variety of methods including:

- Increase reimbursement for primary care physicians, with appropriate change to the Medicare SGR methodology. Increases in reimbursement must be guaranteed as increments to the current base over the next number of years and not be subject to SGR-related cuts. The methodology must recognize realistic practice costs for physicians and other health professionals. These increases should not be at the expense of other physicians’ reimbursement.

- Reimbursement for care coordination and management for selected chronic disease beyond the confines of the office encounter and the acute hospitalization.

- Lift and expand the Medicare resident cap, established in 1998. Achieving an increase in the physician supply requires lifting residency training caps as well as increasing medical school enrollment.

- Enhance government-sponsored loan options and loan repayment programs to increase the supply and retention of primary care physicians, nurses, mid-level providers and practitioners who will be critical in ensuring better coordination of patient care. Loan forgiveness should be offered in exchange for true long-term commitment to primary care practice in any location.

e. Early identification of medical students interested in primary and selected specialty care that could make long-term commitments to a clinical career. Increase funding for the National Health Service Corps (NHSC). The number of NHSC awards should be increased by at least 1,500 per year to help more physicians practice in underserved areas while enabling more new physicians to practice primary care.

INTEGRATED CARE DELIVERY

It is necessary to reiterate the paradox that for those in a stable health care delivery environment in the United States, we have arguably the most advanced and refined health care in the world. The lack of uniformity, the exclusion of many and the spiraling costs are mandating change for what is not sustainable.

Medicine does not have simple metrics and most complex conditions are multifactorial. The current luxury and advantage derived by those who have access to strong stable and supported primary care would be an important component of our health care reform but not a sole solution. We must target the development of a new "Continuum of Care for America" which would achieve the goals of necessary care for all our citizens and optimal utilization of resources while maintaining international leadership in specialty innovation and advancements.

This approach could include concepts such as value-based purchasing, bundling of hospital and physician payments, and Accountable Care Organizations (ACO). Each of these efforts would need to be substantiated with voluntary demonstration projects for validation before any system-wide expansion. The substantive background for many relates to the commonsense components of access, prevention, acute care management, chronic disease coordination and prudent use of the full spectrum of specialty services needed to practice evidence-based medicine and meet the needs of our patients.

Remove legal and regulatory impediments to delivering coordinated care:

a. Make targeted changes to laws and regulations to allow physicians, hospitals and others to work together as teams, and to be able to use financial incentives to reduce cost and improve care.

b. Establish a simpler, consistent set of Federal rules for how hospitals, physicians and others may structure their financial and contractual relationships.

c. Provide clearer guidelines under Federal antitrust law to enable clinical integration and joint hospital-physician contracting with payers to ensure aligned performance incentives and to facilitate continuity of care, particularly in light of electronic health record technology.

d. Provide a simple and meaningful "safe harbor" under Federal laws and regulations to encourage the development of real or virtual delivery "networks" (such as Accountable Care Organizations).

e. Ensure HIPAA continues to enable providers to share information to enable patients to receive higher quality, safer care. Misunderstanding HIPAA requirements has led to reluctance among providers to share information, even though doing so is in the best interest of patient care.

There are numerous critical success factors for the massive undertaking of health care reform. In recent days, numerous major provider organizations and associations have petitioned our congressional leaders with their concepts and concerns relating to health care reform implementation.

As these ideas relate to primary and specialty physicians, there are a number of key recommendations that I will highlight.

1. Ensure health care coverage for all Americans through a combination of existing payers, employment-based coverage, and expansion of safety-net government programs.

2. Drive the introduction of physician and patient-friendly technologies to facilitate care and the physician practice environment.

3. Drive cost-reduction through evidence-based quality and outcome measures, which are established through federally sanctioned quality organizations, national specialty societies and organized medicine.

4. Eliminate unnecessary administrative complexity and cost through the establishment of uniform, interoperable technologies that promote both clinical and administrative data-sharing.

5. Reduce the impact of malpractice claims on defensive medicine through Federal tort reform.

Thank you again for the opportunity to address you today. I welcome any questions you may have.

Senator BROWN. Thank you very much, Dr. Nochomovitz.

Dr. Raulerson, your testimony? Thank you.

STATEMENT OF MARSHA RAULERSON, M.D., FAAP, PRIMARY CARE PEDIATRICIAN, ON BEHALF OF THE AMERICAN ACADEMY OF PEDIATRICS, BREWTON, AL

Dr. RAULERSON. Yes, thank you, Senator Brown. And I thank you so much for the opportunity to testify before this committee.

I am Marsha Raulerson. I am a pediatrician, and I am representing the American Academy of Pediatrics, an organization of over 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists. We are all dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

I am a pediatrician. I have been in private practice in the same town for my entire career—Brewton, AL. It is a town of approximately 10,000 people in the pine forests in beautiful lower AL.

The closest large city is Pensacola, FL, which is over 60 miles away and not in my State. The closest children's hospital is in Mobile, AL, which is over 90 miles away, and our large children's hospital for the State of Alabama is in Birmingham, 200 miles from my home where I practice.

So I want to talk to you a little bit about what it is like to be a primary care doctor in a rural area with no subspecialists close by. Seventy percent of my practice is Medicaid, about 25 percent private insurance, and about 5 percent Children's Health Insurance Program.

In 2006, my practice did not break even for the first time. At that time, I lost my office manager, who went back to school to become a nurse because I could not pay her an adequate salary. I lost my head nurse because I could no longer pay her. And my own salary was less than the physician's assistant who has worked with me for the last 6 years, and I knew that I had to make some changes.

I had been able to change to a rural health clinic, but it took 1½ years to do the paperwork and work through the Government regulations to become a certified rural health clinic, which I finally was able to do in July 2007 and, once again, have a viable practice that could pay for the services that we needed to run an office seeing approximately 2,000 children a year from a large rural area in lower Alabama.

I want to tell you a little bit about what it is like to have a medical home. I was very fortunate when I started my training as a pediatrician. The medical home concept was just starting. It started with an idea of providing comprehensive, coordinated care to children with special healthcare needs, and that is what I learned at the University of Florida.

But as the concept has developed, the medical home, as aspired to by the American Academy of Pediatrics, is not just a place, but it is a coordinated effort led by a physician to provide the best care for all children, adolescents, and young adults. So that they get not only care for illnesses when they are acute or chronic illnesses, but they also get the preventive care that they need to be healthy adults.

You know, most adult diseases start in childhood, and we feel that it is our responsibility to try to prevent many diseases that adults have.

I want to tell you about a few of my patients. I work very closely with specialists in pediatric care in Mobile and in Birmingham.

Several years ago, a cardiologist from Mobile called to tell me about a young girl who lived in a small rural area north of me about 30 miles who was dying of congenital heart disease. He said she was a beautiful child. He had done everything that he could for her. She needed some special surgery that could only be done in one place in the United States, and he got a door slammed in his face when he tried to refer her there.

The problem was she had Medicaid. She had no other private insurance. She needed to go to San Francisco to have a very special procedure done by a cardiac surgeon who specialized in children.

I was president of my State pediatric chapter at that time, and I called the chapter president in California, discussed this child with her. She got very excited about it and said she knew the surgeon and she knew that he would want to do the surgery.

Her cardiologist in Oakland Children's Hospital called me, and he got the records from Dr. Mayer in Mobile. Soon the community raised the money to send the child and her parents to California, where she had the surgery, and the surgery was performed at Oakland Children's Hospital. She was there for 3 weeks, came home, and has not been hospitalized since. That was 4 years ago.

She still has a lot of chronic problems, but she is pink. She is no longer blue, suffering from severe congenital heart disease.

Also, as my practice has aged, I have taken on more and more children with chronic health problems who live in rural Alabama. I have two children in my practice with heart transplants. One of them born with congenital heart disease, and the second one had a virus that destroyed his heart when he was a year old.

I manage these patients with the help of pediatric surgeons and cardiologists in Birmingham, 200 miles away. My feeling is that the medical home should be able to coordinate the care of all the children in our area, that we should have access to specialists. There are some specialists that I can't reach.

Pediatric psychiatry is one of those areas. So 5 years ago, Dr. Vaughan, a full professor of children's psychiatry at UAB in Birmingham, and I began to work on a telemedicine project where he sees approximately 15 children a month with serious psychiatric illness from rural Alabama through telemedicine.

He e-mails me immediately his workup. I write the prescriptions. I coordinate the counseling services through our local mental health. Also, most of the children in my practice have to receive part of their healthcare at school because that is where they are. They spend their day at school.

Just yesterday, I wrote three care plans for school nurses who live in two different cities in my area—medications and what to do if the child has a problem or has a seizure at school. Two of the children have asthma, and one of them has insulin-dependent diabetes. So I work on those care plans, and at least once or twice a week, I talk with school nurses.

Another thing that I do in coordinating the care of patients, which I think is important, is I conference not only with school nurses, mental health workers, and other people like this, I also have to have time spent with the parents when the child is not there. And are you aware that we are not paid for that time?

This week, already I have had conferences with three sets of parents. One of the mothers came in because we had discovered as her child was going through puberty that she was developing a significant chest wall deformity. I referred her to a pediatric surgeon in Birmingham. He saw the child and said that she was going to need a number of things, and he sent paperwork to the mother.

The mother came to my office, and we sat down and went through the child's chart and wrote down every illness that she had had since birth. And then the mother began to talk about the problems she was having with her teenage rebellion and the fact that her chest wall deformity was causing a lot of social problems and things that she was even more concerned about, that the child had no friends at school. She came home at night and went in her room and shut the door.

Mom and I spent a long time talking about that child's emotional well-being and some services that we could find in the local community to help her right away. When the mother left, she told my receptionist, "This is the best office visit I have ever had. I need to come by myself more often."

The problem is pediatricians are not paid to see parents and conference with them, and I have had three of those conferences this week. With the medical home, there needs to be a different way of paying for services. There needs to be a way for us to coordinate the care of our patients and work with our subspecialists that are available to us to provide for the child the best care that that child can receive.

I have to also speak about the problems with workforce, which has already been raised here. There are not enough primary care pediatricians for every rural community like mine in the Nation. And perhaps there never will be.

But I have difficulty, when a child has a seizure disorder, finding a pediatric neurologist who can see that child now and not 6 months from now. When I have a child who has some form of arthritis, and I have several of those in my practice, there is only one pediatric rheumatologist in my State, and getting an appointment there is very difficult.

Also, one of the other problems that we have, we do not have mass transportation in Alabama. I have to also work the transportation system to see that my child who has an illness and his family can get 200 miles one way to Birmingham.

I also have to take care of children when they come home from those tertiary care centers and they get in trouble. Last year, we had a newborn who came to our office, who was seen by my physician's assistant.

She came and grabbed me and said, "Come, see this baby. Something is terribly wrong. Mom says her stomach doesn't look right." I went in and palpated the little baby's belly and felt a huge mass in her stomach. We immediately got an ultrasound that showed she had a liver tumor.

I called the surgeon in Birmingham. He said, "Send her now." And I said, "Well, it is Friday afternoon. Do you really want her on Friday afternoon?" "Well, not really on a Friday afternoon."

So mother made arrangements to take a leave of absence from her teaching assistant's job and on Monday morning traveled to Birmingham, where the diagnosis was made of a hepatoblastoma, which is a type of liver cancer. This beautiful little baby underwent treatment for the next year. She had radiation therapy. She had chemotherapy, and then she had surgery and removal of the tumor.

I saw her 2 weeks ago, and she has hair for the first time in her life. And we are so proud that she is doing well.

Well, why did I mention this child? She got the most significant care that I could not give her at a wonderful children's hospital 200 miles away. But when she came home and her central line got infected, I was the first person to see her, to diagnose this, to stabilize her, and send her away.

When my heart transplant patient last summer came in trying to die from hemolytic uremic syndrome that we thought how could somebody with a heart transplant have this other horrible disease? It turned out to be a reaction to one of the rejection drugs that he was receiving for his transplant.

I had to type and cross him in my rural hospital and get blood hanging to save that child's life and then send him by helicopter to Birmingham.

That is what it is like to be a rural physician. But I could not do it if I did not have my specialists—that they were not available to me by e-mail or by telephone—in an emergency situation.

I thank you very much for letting me testify, and I would be glad to answer any questions about what the medical home means to me as a primary care physician.

Thank you.

[The prepared statement of Dr. Raulerson follows:]

PREPARED STATEMENT OF MARSHA RAULERSON, M.D., FAAP

Good morning. I appreciate this opportunity to testify today before the Committee on Health, Education, Labor, and Pensions on Primary and Specialty Care. My name is Marsha Raulerson, M.D., FAAP, and I am proud to represent the American Academy of Pediatrics (AAP), a non-profit professional organization of 60,000 primary care pediatricians, pediatric medical sub-specialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

I am a pediatrician in private practice in Brewton, AL; I serve as a member of the AAP's Committee on Federal Government Affairs. I have been taking care of children and adolescents in Brewton since 1981. In the 2000 census, Brewton had a population of 5,498. The largest close city is Pensacola, FL and the closest Alabama hospital specializing in children is 90 miles away in Mobile. Brewton is located in the piney woods of Alabama and its major industry is pulp wood. My practice, Lower Alabama Pediatrics, is 70 percent Medicaid and we do our best to provide a medical home to all of the children we can reach.

In 2006, I did not break even in my practice because Medicaid patients require so many services and payments are so low. I had to dip into my own savings to keep my practice afloat. Nevertheless, I believe that I have a calling to provide these services to this population, many of whom are children who have severe and long lasting health needs. I have since converted my practice to a rural health clinic.

WHAT IS A MEDICAL HOME?

AAP believes that every child, regardless of health status, should have a medical home. A medical home is a place, a process and people who partner to improve health outcomes and the quality of life for children and families. In a medical home,

care is delivered or directed by competent, well-trained physicians who provide primary care, managing and facilitating all aspects of pediatric care: preventive, acute and chronic. The Academy has led the development of a body of literature surrounding the medical home, including dozens of studies that examine the impact of care coordination on patient outcomes.¹

Children and adolescents deserve a high performance health care system that includes medical homes to promote system-wide quality with optimal health outcomes, family satisfaction, and value. A medical home offers families full service high quality health care and provides comprehensive, coordinated, compassionate, culturally competent care for children.

HISTORY OF MEDICAL HOME

The Academy first pioneered the concept of the medical home in the 1960's as a way to describe the "gold standard" of primary care for children—particularly children with special health care needs.

In March 2007, the AAP joined with the American Academy of Family Physicians, American College of Physicians and the American Osteopathic Association to publish a set of joint principles for the patient-centered medical home. This consensus statement describes the principles of a patient-centered medical home: personal physician, physician-directed medical practice, whole person orientation, coordinated care, quality and safety, enhanced access, and appropriate payment. In addition to these important concepts, the specific needs of pediatric populations also include:

- Family-centered partnership: A medical home provides family-centered care through a trusting, collaborative, working partnership with families, respecting their diversity and recognizing that they are the constant in a child's life.
- Community-based system: The medical home is an integral part of the community-based system. As such, the medical home works with a coordinated team, provides ongoing primary care, and facilitates access to and coordinates with, a broad range of specialty and related community services.
- Transitions: The goal of transitions is to optimize life-long health and well-being and potential through the provision of high-quality, developmentally appropriate, health care services that continue uninterrupted as the individual moves along and within systems of services from adolescence to adulthood.
- Value and Payment: To assure optimal quality of care for all children, the health system must provide appropriate payment for medical home services. A high-performance health care system requires appropriate financing to support and sustain medical homes that promote system-wide quality care with optimal health outcomes, family satisfaction, and cost efficiency.

MAKING A MEDICAL HOME AVAILABLE TO ALL CHILDREN: FINANCING THE MEDICAL HOME

Medical homes do not just happen. Transforming a medical practice into a medical home has been described as trying to rebuild a bicycle while riding it. But change cannot just be limited to the willingness of the doctor—everyone in the health care system has a role to play. Thus, AAP calls for partnerships among private and public payers, employers, clinicians, and families and patients to ensure that medical home payment reforms are implemented in ways that assure quality, financial sustainability, and equity among payers and providers that assure children and youth receive all recommended and needed services.

These reforms should be based on the medical home joint principles and the payment structure should encompass recognition of relevant payment codes, expanded care coordination responsibility, new quality improvement activities, and up-front investments and support for infrastructure. AAP recommends the following:

- All private and public payers should adopt a comprehensive set of medical home payment reforms that include three components:
 - A contact or visit-based fee component that recognizes and values evaluative/cognitive services and also preventive counseling based upon Bright Futures.
 - A care coordination fee to cover physician and non-physician clinical and administrative staff work (telephone care, on-line communication, conferences with the "care team") linked to the delivery of medical home services.

¹The U.S. Department of Health and Human Services' Healthy People 2010 goals and objectives state that "all children with special health care needs will receive regular ongoing comprehensive care within a medical home," and multiple Federal programs require that all children have access to an ongoing source of health care.

- A performance or pay-for-performance fee for evidence-based process, structure, or outcome measures and paid as a bonus. This bonus should take into consideration the complexity of the patients who are in the panel of the practice. In return for this bonus, physicians should assist payers in addressing such cost centers as emergency department utilization and unnecessary hospitalization.
- Vaccines and their administration costs must be adequately paid for to exceed total direct and indirect expenses and updated when new vaccines are adopted into recommended schedules or when vaccine prices increase.
- Payments should be closely tied to evidence-informed medicine, and methods used for payment should consider the child's age, chronicity, and severity of underlying problems, and geographic adjustment.
- Payment policies should recognize and reward systems of care that promote continuous and coordinated care "24/7", including care coordinated between generalists and specialists, population-based prevention, and should discourage the use of clinics that provide episodic care only for minor conditions.
- Competition should be structured so that practices are rewarded for providing access, service, and quality; cheaper care is probably not better care.
- The Centers for Medicare and Medicaid Services should update the Resource-Based Relative Value Scale to take into account the value of the complex and comprehensive nature of cognitive care and practice expenses associated with the medical home model of care, provide health information technology support, and create incentives for continuous quality improvement.
- Congress should sponsor ongoing, large-scale Medicaid medical home pilot projects for children and youth. It should also support an all-payer pilot project of the medical home model for children and youth. Congress should evaluate current State Medicaid and CHIP programs and share information among the States about State programs that are providing good medical homes for children.

MAKING A MEDICAL HOME AVAILABLE TO ALL CHILDREN: ENSURING SUFFICIENT
WORKFORCE TO MEET CHILDREN'S NEEDS

Meeting the health needs of America's 80 million infants, children, adolescents, and young adults and providing them with a medical home will require a strong and stable pediatrician workforce comprised of appropriate numbers of well-trained pediatricians, pediatric medical subspecialists, pediatric surgical specialists, and other child health professionals and specialist physicians. Moreover these professionals will be needed where children are—in all rural, suburban and urban communities.

Workforce shortages exist in pediatric medical subspecialties and pediatric surgical specialties. I previously stated that the nearest locus of comprehensive specialty care is 90 miles away. This specialty shortage has real impacts in my community and in urban areas as well. Initiatives are needed to recruit medical students and residents into specific pediatric disciplines and to underserved geographic regions. These initiatives must address the comprehensive needs of children and adolescents.

Federal policies should address and improve the uneven geographic distribution of the physician workforce, including pediatrics, enhance the delivery of culturally effective health care and include mechanisms to educate and train an appropriate supply of pediatric medical subspecialists and pediatric surgical specialists.

Congress should consider the extension of student-loan deferment until the completion of residency education, and make educational loans tax deductible. In addition, federally sponsored student loan deferment and forgiveness programs and other incentives for residents and pediatricians should be expanded to ensure a health care workforce that is adequate to meet patients' needs. These incentives also should support pediatricians pursuing academic research careers or practicing in designated underserved communities.

CONCLUSION

In conclusion, on behalf of the American Academy of Pediatrics and the children and adolescents I take care of in Alabama, I would like to urge the committee to keep children foremost in mind while you consider reforms to our health care system. This is a unique moment on our country's history and an opportunity for us to finally place children first.

Providing all children with health care designed for them—a medical home—that emphasizes their healthy development and prevents illness when possible is an investment in our country's future. This investment coupled with needed improvements in health care financing and a strong primary and specialty workforce will

provide all children and adolescents the greatest chance to lead long and healthy lives.

Thank you again for the opportunity to testify. I look forward to your questions.

Senator BROWN. Thank you, Dr. Raulerson.

My guess is you know the names of most of the 10,000 people in Brewton, AL. So thank you.

I want to ask one question that all of you take a shot at, and then I will turn it to Senator Murray for her questions. Then I will come back and ask each of you some specific questions.

The one question generally is, as we discuss—and I will just start with you, Dr. Thorpe, and work your way down, and each take a couple of minutes to answer it, if you would. As we work on healthcare reform and we look at the inefficiencies that you all pointed out very well, I thought, the inefficiencies of having some Americans insured and others uninsured, talk through, if you would, how or if ensuring that every American has meaningful health coverage will have an impact on the efficiency of this system.

How covering everybody will increase the efficiency. How do we make that happen? And Dr. Thorpe, if you would start?

Mr. THORPE. Covering everybody is certainly a necessary condition to make the system work efficiently, both in terms of the premium base. So if we can change the whole nature of how health plans set premiums and how competition in the health insurance market works and move it away from competing on risk selection to have it compete on better metrics like outcomes and cost, that is a step in the right direction.

So I think there is no question that we need to move to universal coverage in order to increase and improve the functioning of the health insurance system.

On the care delivery system, one of the problems that we face with uninsured folks is that they come to the system too late and at the wrong time, at the wrong place. And so, to the extent that we have a system in place that is more geared toward early diagnosis, early detection, and then appropriate treatment in the right setting, that is also a plus.

So we know from all kinds of data internationally that early detection and primary care, getting to patients earlier to prevent disease, and if they are sick, getting treatment to them earlier makes a big difference in terms of their healthcare outcomes.

Senator BROWN. Dr. Cooper. Oh, I am sorry.

Mr. THORPE. Just in closing, again, as I started out, I think our challenge here is that we have a system that works in thousands of unconnected silos. And I use Medicare as sort of an opening to try to make a change here, but the type of model I am talking about really applies to everybody. It is not just a Medicare model. It is a model that we should have for all Americans, and it is one that really is building integration in the system between care coordination, primary care physicians, specialists, hospitals, and community-based resources. I think healthcare reform can play a major role in building those integrated links that you have heard that are not as functional today as they could be.

Senator BROWN. Thank you.

Dr. Cooper.

Dr. COOPER. Well, I won't repeat what Dr. Thorpe said. I think it is well appreciated that insuring everyone is a matter of fairness, and it will have its major effect on efficiency at sort of the—picture a pyramid, a pyramid where there is a lot of very inefficient early care, and patients who aren't insured don't have access easily to that care.

But as the pyramid goes up, utilization goes down because there are a lot of relatively healthy people or people who aren't very sick who need care. But they don't use a lot of resources.

There are very few people at the top, but then it is an inverted pyramid. The people at the top who are the sickest use the most resources.

There is an overlap because the people at the top who use the most resources of all are poor. Many poor people are uninsured. And so, one has to sort of differentiate in this notion of adding efficiency or what causes inefficiency, uninsurance and poverty.

The major source of inefficiency—and I hate to apply that particular word to this circumstance, but the major source of inefficiency is poverty. Poor people, as low as 15 percent on the economic scale, use double the healthcare resources that more affluent people do.

They are the people who are re-admitted. That is inefficiency. And they are the people who have recurrence of disease, and that is inefficient. The real inefficiency is the disorganized life and health and care among the poor.

So, yes, have expectations that insurance will add fairness to the system and will spread the responsibility for costs more fairly. All of that is very important for efficiency. But the real inefficiency, if it all was perfect in every other way, if we had an absolute single-payer system and everybody was the same, the poverty problem won't disappear. And that is the major inefficiency in healthcare today.

That has to be addressed in some of the ways that we heard in rural areas and others, systems that cope specifically with the poor. It is not going to be through physicians alone. But poverty is the major source of inefficiency.

Senator BROWN. Thank you, Dr. Cooper.

Dr. Schlossberg.

Dr. SCHLOSSBERG. Yes, thank you, Senator Brown.

I think the inefficiency—as you call it, and certainly if we fix the financing mechanism—I don't think we will necessarily fix the inefficiency through the system because I think, just as Dr. Raulerson said, all of us experience the hassle factor. It took her 2 years to bring up the rural health clinic.

We all suffer from a system where you walk into the office, you buy the service, and somebody tells you 60 days later how much you are going to get paid, if you are going to get paid, and what is going on. As we think about fixing the system and doing the financing, there are probably some other things we should do as well, which is maybe real-time adjudication for insurance reform when a patient walks in the door.

Certainly, as specialists, we don't want to see end-stage disease. It is a lot more work for all of us. It is terrible for the patient. And so, I think getting people in earlier is also helpful.

I think the other thing—as I see it, and I experienced it this weekend when I was on call—is I don't see much conversation about personal responsibility for all of us.

I think of it as healthcare being a right, but we should treat it as a privilege. And when people have a privilege, they protect it. I don't hear that conversation in Washington. Maybe that is a difficult political conversation?

This weekend, I was on call, and there was an older gentleman. He was a Medicare patient who, unfortunately, has bad bladder cancer. One of my partners operated on him, and his right kidney is blocked. So he has got a tube in his back. And as it just so happens, he can't urinate. So he is going to have a tube in his bladder with two bags.

And the daughter was in the room, and somebody said, "Well, home health will not take him with two bags. That is their rules." So, therefore, he has to stay in the hospital.

So I turned to the daughter, and I said, "What do you think?" I looked at both of them, and I said, "What do you think?" They said, "No, we can take care of this. We are going to go home."

Well, they were responsible. They didn't feel the entitlement, and they were willing to participate in their care. And I think whether it is through public service or other things, we need to fix the financing mechanism. We need to decrease the hassle factor. But ultimately, I think we need to change the personal responsibility quotient in this country.

Thank you.

Senator BROWN. Thank you, Dr. Schlossberg.

Dr. Nochomovitz.

Dr. NOCHOMOVITZ. Thank you, Senator Brown.

I think I would make five points as it relates to inefficiency. As far as the universal coverage is concerned, I think that that is a matter of public policy, and I agree with everybody else in terms of its necessity and the fact that we have reached a point where we just must do that.

One of the major areas of inefficiency can be improved by administrative simplification. On the payer's side, there could be uniform documentation and uniform approaches to credentialing of doctors, to payment procedures, to the method that payments are made. And technology can really assist from the doctor's office or from the clinic's office in introducing that degree of administrative simplification, which is now a Byzantine collection of potpourri that is very difficult to get one's arms around.

The third point would be related to information technology, where true interoperability, which is not easy to achieve, would prevent duplication of tests. We have a lot of duplication of tests because people don't know what the patient has had. And when a doctor sees a patient in the emergency room, the patient may have had all sorts of diagnostic tests a week earlier, but they are just not available to the physician.

The fourth point relates to coordination of care, and that would be different in different communities. This is not a one-shoe-fits-all issue. Concepts like the medical home certainly have a place, but it is not a one-shoe-fits-all issue. You have different issues in coordination of care in rural communities, as so eloquently described.

You have got different issues of coordination in suburban communities or in urban communities.

I think we need to create the necessary structures and build on existing structures, whether they be large or small, incorporating all constituencies to provide this coordination to create the efficiencies.

And last, one must reiterate that there has to be a focus on practice guidelines, evidence-based medicine, that we can stop doing redundant tests. And we need to call upon the physicians of this country, whether they be in organized medicine, specialty societies, academic centers, to step forward and assist us in creating these guidelines that are not necessarily all available and not necessarily self-evident.

But whatever we do will go a long way toward reducing waste and improving efficiency and cutting costs.

Senator BROWN. Thank you, Dr. Nochomovitz.

Dr. Raulerson.

Dr. RAULERSON. I have three points I would like to make. First, having insurance coverage is not the only thing that you need. As I mentioned, Alabama has done an excellent job of covering children through Medicaid, the Children's Health Insurance Program, and Blue Cross Blue Shield's Caring Foundation.

But with children in my practice, even with insurance, I still went in a hole. A lot of it had to do with the way Medicaid pays and the fact that they would be on again, off again. And sometimes I would see them for 3 months, and I wouldn't get paid for those 3 months. And then they would be back on, and trying to get paid was really a hassle. So that was a problem.

The second thing, when my patients turn 19, in Alabama, they lose their Medicaid, and they have no hope of insurance. A 19-year-old who is in school or who has a job at Wal-Mart cannot afford insurance. And so, I have a lot of 19- and 20-year-olds in my practice with asthma, with diabetes, with other kinds of problems, who have no health insurance when they turn 19.

And finally, it is not just the people in poverty because sometimes an illness makes you in poverty. I have a family in my practice whose child was born with a problem that she has outgrown. She is 5. She is starting to kindergarten this year, and she is a healthy little girl.

But she had a severe, life-threatening disease the first few months of her life. Her mom, who is a college graduate, had to quit her job and stay home and take care of her. Her dad, who is also a college graduate and has a pretty good job, was trying to pay the health insurance, trying to pay for their travel to go to Mobile and to go to Boston, where she got some of her care. And they actually ended up on Medicaid because they went broke.

And now that she is 5 and doing so well and over her illness and is going to be a beautiful, healthy child, they are still paying on medical bills and will be for a very long time.

Senator BROWN. Thank you, Dr. Raulerson.

Senator Murray.

Senator MURRAY. Thank you very much, Mr. Chairman.

An excellent hearing, and I really appreciate all of you coming and giving us your very important time to help us understand these issues.

Dr. Cooper, I wanted to ask you, you talk in your testimony a lot about innovation and how we should deal with both the long-term and short-term healthcare workforce shortage. I agree it is really important to make some investments so that we can have people in the pipeline, but it is going to be a while before they get there.

So I have a question about the short term. What do we do in the short term? You talked in your written testimony about innovative practice arrangements. Can you talk to me about how you think perhaps other primary care workforce providers, nurse practitioners, or physician assistants could be helpful?

Dr. COOPER. Well, they are going to be absolutely helpful and absolutely necessary. And you will hear a lot of discussion, of course, of whether a physician can do it better or a nurse practitioner can do it better. And they are interesting conversations to have, but they become irrelevant because there aren't enough people.

We don't have that choice. We don't have the opportunity to choose from column A or column B. We either get column A or column B.

Not only in primary care, but in specialty care offices, nurse practitioners and physician assistants (PA) are very effective in giving and providing the general care of specialty patients and the vast majority of care that we consider primary care.

Most acute self-limited disease, wellness, patient education, prevention, all of those skills are commonplace among nurse practitioners, and many of them are commonplace among physician assistants. And increasingly, physicians, whether they are in generalist or specialist practices, are seeking to work in consort with a nurse practitioner or a PA to even urologists or general internists, either one, to do those tasks that a physician doesn't have to do.

If you put this in a historic context, in the 1920s, 25 percent of healthcare providers were physicians. Now it is about 7 percent. When I was an intern, the nurses all had pink stethoscopes, and I couldn't exactly figure out why that was. They worked just as well as my stethoscope. In fact, I had to use theirs because mine broke, and I couldn't afford to get a new one.

Only later did I find out that they were pink because in the years before I was an intern, the AMA insisted that nurses couldn't take blood pressures. It was too technical a task. And therefore, nurses didn't have stethoscopes.

[Laughter.]

You laugh today, but they will laugh 20 years from now about things we are arguing about today. And so, nurses, of course, take blood pressures today.

But they couldn't have—it was unacceptable professionally, politically unacceptable like what we are dealing with. To be objective about primary care is politically unacceptable. To be objective today, just as being objective about nurse practitioners doing blood pressures was politically unacceptable then.

It has been a moving process, but with the process, the educational level of those to whom work has been delegated has risen

from nurses to nurse practitioners, now to doctoral-level programs. From brief training for a physician assistant, to longer training, to specialty certificates.

We need that workforce. It is not large enough. I didn't have time in my comments to comment on it. But the number of nurse practitioners graduated annually has plateaued at about 8,000, up a little bit last year. Unclear where it is going. It has been that way for more than 5 years. That whole population of practitioners is aging, and the supply will plateau. The same for PAs.

The answer is, they play an integral partnership role—that is No. 1—with a practitioner, generalist or specialist. And in primary care, in that spectrum of primary care services, they are quite capable of practicing independently with a collegial relationship, distant supervision, and accomplishing the vast quantity of services that otherwise would have to be given by a physician.

I would view that as a real step in the direction of efficiency, and we see it, on the one hand, happening and, on the other hand, being fought back by those just the same ones who tried to fight back in the 1950s about nurses taking blood pressure.

But the world is moving, and that is where it is moving, and that is what they have to do.

Senator MURRAY. OK. Very helpful.

My time is up, but I just want to mention, Mr. Chairman, that we do have to look at the short term, and I hope we look not just at healthcare reform in dealing with these issues, but in some of the things we already have in place, like graduate medical education.

We also have the National Health Service Corps that provides scholarships and loan repayments for doctors and nurses and healthcare professionals. Dr. Nochomovitz, I think I saw it in your testimony, talking about the National Health Service Corps and the importance of that.

I have been working very hard on the Budget Committee to try and increase those numbers for access to those programs. In fact, this Administration increased the National Health Service Corps, too. But those are some of the things I hope we don't say we will have to wait until healthcare reform passes. We have got to focus on a lot of this in our current budget and appropriations process.

But my time is out, and I really appreciate all of your testimony today.

Thank you.

Senator BROWN. Thank you, Senator Murray.

Dr. Cooper, thank you for your answer. I want to pursue that after Senator Whitehouse.

Senator Whitehouse.

STATEMENT OF SENATOR WHITEHOUSE

Senator WHITEHOUSE. Thank you, Chairman.

This is a happy occasion for me, not just because such a distinguished panel is here and not just because a fellow member of my class of 2006 is chairing a significant hearing in the Senate, but because this is my first opportunity to speak as a new member of the HELP Committee.

Perhaps a temporary member, I have been warned. But nevertheless—

[Laughter.]

Nonetheless, happy to be here for that.

Senator BROWN. My guess is after Senator Whitehouse's performance today, we will want him on permanently.

Senator WHITEHOUSE. My timing certainly could not be better. If you are going to be a temporary member, this is the time to be a temporary member. And it is a great honor for me to serve on this committee while Senator Kennedy chairs it, given his long and distinguished career of interest and struggle on these issues.

It is a great lesson for a new Senator to see Ranking Member Enzi and Chairman Kennedy work together on issues. The HELP Committee has a wonderful model of bipartisan cooperation that I think is a testament to both of their characters.

Of course, the work ahead of us is daunting. I hope, Dr. Cooper, that when people look back at the struggles we are having 20 years from now, they actually laugh and not weep. If they laugh, we will have succeeded.

This hearing is important. In Rhode Island, we have a story board that I have put up on my Web site. I do community dinners, and I go around the State. Rhode Island is a small enough State I can actually invite pretty much everybody to dinner.

[Laughter.]

That is a bit of an exaggeration, but we have regular community dinners. And people come, and they talk about different issues.

Healthcare is the one that most captivates people because you have stories like your young lady in Alabama who, through no fault of her own, became ill as a child. And the result of that was the bankruptcy of her family. Her family was financially ruined because of that through no fault of their own because our system is so poorly managed.

We have hundreds of people who have come in across that story board and told their stories. And while many of them are stories that come out of the finance, access, and coverage failures of our healthcare system, equally as many and, indeed, I would say probably more come out of the delivery system failures. And we are really not as experienced yet in getting our hands around those.

That finance, access, and coverage fight is a mature political fight here. It goes back to the Clinton struggles of 1993 and 1994. We know less about the delivery system issues.

My question to all of you—just picking out some of the things that have been said—there has been a reference to the Byzantine billing and approval systems that be-devil practices across the country, the need to move from just having equipment on doctors' desks to true interoperability of HIT and the establishment of health information exchanges to do that.

About how you establish meaningful guidelines for practitioners with consequences so they don't just go gather dust on the shelf someplace, but without getting to the point where you have Government dictating what medicine should be practiced or not.

How you cure the interruption of the risk and reward feedback loop that is the fundamental premise of capitalism and entrepreneurship, which is broken in the healthcare system, particularly for

quality investments and prevention investments, where the party who has to take the trouble and take the risk and put out the funds and retrain their folks and actually assume the risk of getting it done gets a very small sliver of whatever the reward is from that.

So we are built in to drastic underinvestment in quality and prevention unless we fix that. And then there are all the organizational questions about accountable care organizations and medical homes and what the different models should be.

Given that array of issues, and I have just touched on a few that have come up during the course of this hearing, a question I would like your thoughts on is whether you think that in our structure of Government right now we have the authorities and the power in place, the accountability in place to manage a delivery system reform that has to take all of those questions on in an interlocking way, because they affect each other. There are virtuous cycles that emerge, and there are problems that emerge if it is not done in a consistent way across many issues.

And if not, and we have had CBO testify that that authority does not exist in Government, I would like to get you thinking a little bit about what steps we need to take to make sure we can manage this transition before the healthcare system finally falls in around our ears.

Mr. THORPE. Well, that is quite a macro——

[Laughter.]

Mr. THORPE [continuing]. But it is a good question. I will just sort of try to highlight a couple of things. I do think the good news is that there are good models out there in our healthcare system today that we should study closely, try to replicate and scale them. And the lessons from those models, one is in North Carolina's Medicaid program. One is in the State of Vermont. One is starting to evolve in your own State—what Chris Kohler and others are doing in Rhode Island.

The lessons from those models are that if you look at the successful approaches—the Geisingers, the Mayos, the Intermountain Healthcares—those are great case studies. Our challenge is we can't replicate and scale those. We can learn from why they work and how they work and see if we can't pull those functions out and start building more integration into the system.

You build more integration and coordination into the system by doing two or three things. One is through payment reform. So you have got to align the financial incentives with the delivery system incentives. And so, much of what is being talked about in terms of hospital bundled payments, focusing on high re-admission rate hospitals really starts to move us down the path of getting to think about the relationships and the transitions as patients move from hospitals back into the home and community and so on.

So I think we have got to change the payment environment.

Senator WHITEHOUSE. I guess my question that I tried to ask is can you do something like that—can we do it, something like that just once in a piece of legislation and walk away?

Or is it too dynamic a forward-going environment not to have to establish some continuing authority that can look at where the payment is going and moderate it as new things are learned? That

can look at how HIEs are developing and moderate that as new things are learned that can go through these issues and not just sit here like a mortar and launch a trajectory that you know is going to land someplace but understand that it is a more dynamic environment, and you have to fly it like an aircraft. And somewhere, somebody has to be doing some piloting.

Mr. THORPE. No, I think that is right. I think you have to focus on the payment side. I think you have got to build, as I have been talking about, a chronic care infrastructure that deals with the fact that most of healthcare is balkanized smaller physician practices. We don't have the types of care coordination built into our system.

We can do that, and then we can align them with financial incentives to make a difference. So I think we can go in the right trajectory, but you need feedback and study and improvement as you go along the way. So it is not going to be a one-shot deal, where you just sort of do the legislation and then walk away and think we have got it done.

One of the—

Senator WHITEHOUSE. Mr. Chairman, I know I am over the time at this point, and I apologize. And maybe what I should do is invite anybody who wishes to add to the doctor's remarks to do so for the record—

Senator BROWN. Well, you have as much time as you need. So if you want everyone to answer, unless you keep interrupting each one and asking three additional questions of each one.

[Laughter.]

I don't know if he acts like this in his other committees, but take what you need, Senator Whitehouse.

Senator WHITEHOUSE. I am taking liberties. I am taking liberties because of my friendship and affection for the distinguished Senator who is chairing this hearing.

Dr. COOPER. I think you raise a very important issue. And as I heard you describing it, I couldn't help but think of the NIH. What the NIH does, it enables. What is very clear is we don't have the answer. There isn't one answer. And in fact, the medical home, which barely exists, if we were using medical effectiveness techniques to evaluate the medical home—I mean, the medical home is like a new drug that has been tried on four people.

It is an anecdote that we are now going to have the FDA approve a drug that was used on four people. So it makes no sense whatsoever. But it happened to appear, and whatever.

As I commented in my opening remarks, nobody has ever organized medicine, organized the practice of medicine under the circumstances that we are entering. That is why there is all this talk about Marcus Welby primary care because people know about that from the 1960s. I mean, the students don't even know about Marcus Welby. It was too long ago.

So the NIH is the example. I would say don't build, but enable. I would say I don't know how to say this politely. I am too old to be polite. Get out of the way and let it happen. Let the hundreds of Geisingers and hundreds of rural communities and many specialties figure out what to do and learn from themselves.

You know, medical effectiveness wasn't invented yesterday. I mean, we have actually, as physicians—you may not believe this. We have actually been concerned about doing the right thing.

I mean, there have been textbooks. Osler wrote about how to do things well. It wasn't called the "Osler book of medical effectiveness," but that was the authority. We look to those authorities, Conn's Current Therapy, clinical trials.

I mean, Congress didn't invent medical effectiveness. We actually—I know this will surprise everyone. We actually have been concerned about this as long as I have been in medicine, which is half a century.

So let us do it. Enable us. Fund medical effectiveness. Fund ways that people can actually do the sorts of things you heard about in a rural community. Here, I want to do an experiment in my rural community, but where can I go for the money for infrastructure, the very thing you refer to in your comment.

Where can I get some money to see if maybe this would work? I would have to do it out of my practice funds. No, but if I could go someplace. And then there would be a clearinghouse, as there is for the NIH.

I say look to the NIH. If the NIH had done in the 1950s what is being talked about for healthcare reform today, we would be a Third World country in medical research.

I think we all have a lesson to learn, and that is, really, I know it is popular not to trust physicians. They are bad. You can succeed in life by saying physicians churn the system and so forth. Honestly, we are not all that bad. We are actually rather good, and most of us are really quite wonderful. Trust us a little bit.

[Laughter.]

Trust us a little bit, and I think you will find that without all of the machinations and all of the strangleholds that we have to get ourselves out of, to do the very job we want to do, we'll probably do it better.

Dr. RAULERSON. Could I speak a little bit about the medical home? Because in pediatrics, medical home is more than just for patients. I actually have been working in the medical home concept for over 30 years now, and I feel that my practice is a medical home and has been for a very long time.

But I think all of us are in a continuum. We are somewhere along the pathway of doing the best thing we can for our patients. I look to the experiments that have been done in North Carolina, and I wish that Alabama could model our medical home system after North Carolina.

What they have done, with the guidance of the American Academy of Pediatrics and what we call Bright Futures, which is what healthcare should be for children, they have used this model in North Carolina. And they are providing excellent care for children there, and they have shown that it is financially very sound. And they are saving that State's Medicaid program a great deal of money by providing a medical home using pediatricians, along with their nurse practitioners and their physician assistants, to take care of children from the get-go and to prevent things before they get to be big problems.

Senator BROWN. Dr. Schlossberg, would you like to continue on Senator Whitehouse's question?

Dr. SCHLOSSBERG. Sure. It is always hard to follow Dr. Cooper, but I am not sure it will be quite—

Senator BROWN. Dr. Raulerson actually just did it pretty well.

[Laughter.]

Dr. SCHLOSSBERG. Yes, I will do it poorly, I will tell you that. I would offer two threads.

One is related to health information technology and how you change that because I think you talked about change. And so, a month ago, we brought up at our health system, which is seven hospitals, our tertiary care hospital, 600 beds, 1 day, big bang. So all the systems went live with physician order entry documentation.

It was a 4-year journey that started 3½ years ago because we created a vision. We created a culture of shared responsibility, and it was going to be event-driven. And we said to the medical staff, "If you do this, we will do that."

We brought people along slowly. We communicated. We participated with the medical staff in doing it. So, what I think maybe the Congress could do is develop that vision that says we are not going to tolerate this, this, and this. Whatever the 80 percent is that people can agree on up here, and pick the vision of what people want to do.

Then the specific thing you brought up, I guess, was around guidelines? The American Urological Association is very active in guidelines. We have been doing them for 10 years. The problem with guidelines at the point of care is they are not absolute.

They are not absolute for two reasons. They are not absolute because at times the medical evidence doesn't allow us to be. And again, sorry for an unpopular comment, but they are not absolute because we don't have any malpractice protection if we don't do something.

So if we sit across from a patient, and we said the guidelines—you don't need the CT scan, or you don't need the ultrasound. Or you are 82-year-old, you don't need the PSA. And they say, "Sorry, I want it. Order it, and Medicare will pay for it." What do we do? We order the PSA. We order the CT scan. We order the ultrasound.

I had that ultrasound conversation yesterday with a lady about a renal mass that probably didn't need another ultrasound. So somehow at the point of care, we don't have that protection to try to do the right thing, even though a lot of us want to do it.

So I think the answer is I think Congress could strategically help us with some of those things. And as Dr. Cooper said, then maybe let us solve some of the problems.

Senator BROWN. Thank you.

Did you want to add something, Dr. Nochomovitz?

Dr. NOCHOMOVITZ. Yes. I think that the Federal Government clearly can and is going to do something, and it does have substantial power, which will influence a lot of things. Because historically, whatever gets done in Medicare tends to trickle down into the commercial markets, and that is a very serious responsibility that our leaders and legislators have.

Because even if it is a mortar shell that is going, landing somewhere, it does have an enormous trickle-down effect, and we all have to live with it. And I think whatever is done will immediately snowball throughout this country because of that impact.

Now what the ongoing stewardship of that is what I think you were asking, I think that is where we do need to look at the different provider constituencies for help, and it is not exclusively—with respect to Dr. Cooper—it is not exclusively academic. It may be rural. It may be inner city. It may be urban.

There are a lot of people who should participate in this, organized medicine, the trade associations, because basically what you are trying to look at is you are trying to look at three things. You are looking at access, continuity, and coordination.

So to the extent that what we do can impact in different communities and different settings access, continuity, and coordination, we are winning. And the guideline issue will just be a work in progress forever.

Senator BROWN. Thank you, Senator Whitehouse, for your good insight and your incisive questioning.

I am going to ask each member one or two questions or each panelist one or two questions to conclude the hearing. And if Senator Whitehouse wants a second round, I suppose we can do that.

I will start with Dr. Thorpe. I will just work my way. Dr. Thorpe, you had some part of your testimony about the issue of community health workers. And in my hometown of Mansfield, OH, I had my first exposure to what community health workers can do.

I did a roundtable, which Senator Whitehouse takes his constituents to dinner. I serve them water.

[Laughter.]

In a roundtable of 15 or 20 people, and I had one in—

Senator WHITEHOUSE. Not bread and water?

Senator BROWN. Not bread and water. Just water.

In one of the poorest areas of Mansfield, and it is an area that is mostly African-American, bordering on an Appalachian white community. And they had the highest rate, by far the highest rate of low-birth weight babies of anywhere in the area, about four times the national average.

They use community health workers, young white and African-American women, high school graduates or G—I was going to say GME—GED. Sorry, there is a difference, I understand, Dr. Cooper.

Dr. COOPER. Not as big a difference as you think, but there is a difference.

[Laughter.]

But nonetheless, they were dispatched to their neighborhoods where they lived, and they talked about nutrition. They brought them in to OB/GYNs, pregnant women, and they dropped the low-birth weight baby rate almost to the national average over about a 3-year period.

I met with some of these women, and they had great accomplishments in their lives at the age of 22 or 23. I would also add, partly, Dr. Cooper, your comments about getting people into the business of medicine and other ancillary healthcare services that some of these women will be so empowered from this experience, I would

bet they will be nurses and doctors, even though they have had little opportunity in their lives to this point.

Without belaboring this too much, the community health worker designation has only been in Ohio for 5 or 6 years. I believe they are licensed by the State nursing board. So talk to me about how we scale this up. And we are working on the healthcare bill, particularly with Senator Harkin because this is all about prevention, and he is, at least on this committee, working that piece of it, if you will.

But how we scale this up in terms of training, in terms of bringing them, these kinds of workers into the medical home model, how we can do this nationally in a way better than the pockets that we have seen it in places that you acknowledged earlier?

Mr. THORPE. Well, I think you look at the good case studies of places that are doing this right now. North Carolina has been mentioned. Vermont does this statewide for all patients. And the challenge is building a primary care infrastructure. We don't have a primary care infrastructure that really does primary prevention such as, when somebody has five, six, seven different chronic conditions, particularly in Medicare, and working with patients outside the physician's office to manage and execute the care plan.

So the vision here is to have a team of care coordinators—nurse practitioners, nurses, social workers, mental health workers, community outreach workers—many of the types of community health team workers you were talking about collaborate and, in fact, really fully integrate themselves with smaller physician practices to build a primary care infrastructure that does both primary prevention and care coordination.

North Carolina does this statewide. They have been doing it since 2003. Again, Vermont does this for all their patients in three sites, and it does it very successfully. You build the primary care infrastructure. You build referral patterns appropriately to specialists. You are really building integration in the system in a way to make it more functional.

I just go back to my basic statistics on it. You know, if you have got 30 percent of the growth in spending in Medicare nationally linked to a doubling of obesity, and if 75 percent of spending is linked to chronically ill patients, these same type of diabetic hypertensive patients, we have got to find a way to build a primary care infrastructure and a better way of managing them.

I think the way you do it is pretty simple. You look at the functions that make the multispecialty clinics, that we have seen work well, effective. It is having a formal transition care model. We have seen it at Penn this model, a nursing-led model for years. It has been very effective.

Geisinger does this very effectively. So you build transition care into it. That is just simply a care coordinator working with a patient as they go into a nursing home or a hospital, doing an in-site visit, and working with the admitting physician at discharge to do medication reconciliation and make sure that the care plan is followed.

They have got to be closely integrated with the smaller physician practice, whether it is a specialty practice or primary care practice,

but that collaboration is critical. And having that close interaction with patients, working with them at home.

So you build the functions in. We know the types of people that we are looking for. It is nurses, nurse practitioners, who do a great job of delivering primary health care. And if Medicare wants to get into the game, just like Medicaid does today in the private sector, we have to make a modest investment to build that infrastructure to work with Medicare fee-for-service patients. But it will spill over to work with other patients as well.

So as I mentioned in the testimony, we are looking at something about \$2.5 billion a year when it is up and running fully. It would provide nationally the capacity to have community health teams everywhere in every hospital referral area in the country. That if physicians wanted to work with them or collaborate with them, they could be community health centers, small physician practices, bigger physician practices. You are building that infrastructure out there so that we can do a better job of prevention and managing chronic disease.

And as I have said, if you look at the data on this in terms of how well-functioning systems work, whether it is Intermountain Health, Geisinger, Marshfield—you can go down the list of them—if you can't save 2 percent in terms of the cost structure, then we have got it set up wrong.

So I think that is the way you do it. I think it is easy to scale it. You are focusing on the effective functions, but we have got to make a modest investment to make it available nationally.

Senator BROWN. Thank you.

Dr. Cooper, taking a bit, connecting with that, you talked about the shortage of physicians. And with your conversation with Senator Murray, I thought that shed some light on some of the next steps.

And while you talked about the training of physicians over a 10-, 12-, 15-year period, you are precisely right on that, of course. There are functions that are—or I guess the question is are there functions that physicians now perform that other healthcare workers can do?

Because without causing fights between the nurse anesthetists and the anesthesiologists, I don't want to weigh into that, or between a specialist and a general practitioner. I am looking more for do we, along Dr. Thorpe's ideas and models, is there a way—because in large part, we can train. We can train community health workers and nurse's aides and the physician's assistants and PTs and OTs and a whole lot of other people. We can train them more quickly. There are different educational levels, different training levels.

Is there a way to integrate using the, I guess you would say the much deservedly maligned medical home model—but is there a way of doing this, to answer your both criticisms and prescience perhaps down the line by finding ways to bring that together better perhaps than we have, if that is clear?

Dr. COOPER. Well, you know, you have to differentiate the rhetoric of what should happen, like a medical home, for example, and what is actually happening. What are primary care or generalist physicians or specialists actually doing? And what they are actually

doing is along the lines of your question, so that they are jettisoning things that they don't have to do.

I couldn't help but remember being in Washington about a decade ago. And as I was about to give a talk to the ophthalmology association, the president said to me, as he was putting the microphone on my tie, "You know, 70 percent of what we do is optometry." And in fact, that has been jettisoned to optometrists.

The dentists jettison things to hygienists, dental hygienists. So the physicians are always in the process of offloading or delegating things that people can otherwise do. And yes, I think one thing that is necessary for where this rocket lands is to be sure there are enough physicians out there. If we don't increase physician supply, they will, Senator Whitehouse, cry rather than laugh.

It will be a disaster. It is almost a disaster already. We can have this conversation about how to fill in for a little while, but after all—after a little while, we will have exhausted that ability. We will not have community health workers. We will not have nurse practitioners and PAs, and now physicians are backed into the corner doing what only neurologists or neurosurgeons, urologists and oncologists can do, and there aren't enough of them.

So your question really is, as we back them in the corner, who can pick up what is left? And yes, encourage the nurse practitioner programs. They need help. They are not being developed fast enough. Be supportive of all the other kinds of workers that Dr. Thorpe talks about within these community networks.

Build the infrastructure. But don't look to physicians to run that infrastructure. Look for them to participate in the infrastructure as physicians.

Senator BROWN. Fair enough. Yes, I, first of all, don't want to back you into a corner. It might be a very dangerous thing to do. [Laughter.]

But I do—I wonder, and this is maybe idealizing a little too much. If we did the community health workers right and we did the nurse practitioners right and we did the optometrists, ophthalmology/optometrist construct right, would the shortage of physicians you cite or you predict be so acute?

Dr. COOPER. The answer is yes. The answer is the way we trend this is back to the 1920s, and we assume that this offloading process is continuous. And we don't build into our projections that physicians will be the primary taker of blood pressures, for example.

So as we project forward, it is the changing role of physicians as they delegate. When we project the physician workforce forward, it is a much slower rate than the healthcare labor force overall. The assumption is that tasks will continue to be delegated to others and that physicians will be able to do what physicians do.

Our problem is that those trends can't continue with the number of physicians we have. We don't have enough physicians even if they delegate to community health workers and nurse practitioners and so forth. And so, now we have to figure out how to make it possible for even more, and that means having other people enter into areas of care that they might otherwise not have done.

Senator BROWN. But I—

Dr. COOPER. Therefore, there are the doctoral-level nurse practitioner programs, as an example. I am sorry.

Senator BROWN. No, no, that is all right. I interrupted you.

I would also argue if we do the community health workers right and we do the nurse practitioners right, there will be, in fact, fewer cases of diabetes and low-birth weight babies.

Dr. COOPER. Oh, yes.

Senator BROWN. And fewer need for the specialists to take care of those low-birth weight babies. I mean, that goes without saying.

Dr. COOPER. I would agree with you entirely. And I would say if it turns out, then let us start planning to expand the physician workforce. Let us start building, and we will build toward a target. We can always turn off the spigot if you see this great success.

I am too old to share your great optimism that we are going to prevent diabetes.

Senator BROWN. But you are also wise enough to share my optimism.

Dr. COOPER. But I do think we can cut those low-birth weight babies down.

Senator BROWN. I am going to have to cut you off and go to Dr. Schlossberg next. Sorry. Because I could talk to you a long time, Dr. Cooper. And I know Senator Whitehouse is probably waiting even more, too.

So a bit of a more pedestrian question perhaps for Dr. Schlossberg. You talked about rural providers and how difficult it is to attract specialists to rural America, and almost every one of our States, almost every one has some shortage of rural providers. Give me prescriptively, if you will, some thoughts about attracting specialty providers in underserved areas. And not just rural, but also inner-city areas that also suffer from shortages.

Dr. SCHLOSSBERG. Yes, I mean, that is a tall order that people have been trying to solve. I think if you look at why we got there, I think we are there because of the complexity of specialty medicine.

So if you look at urology, for example, a functional urology group is probably, at a minimum, three or four people because of the medical science that goes with it. When you have this shortage, people seek a job that they think is in their best interest. And so, why should I go work in a rural area if I can work with three or four other physicians?

I think the other thing that drives the lack of specialists in the rural hospitals is the business of medicine, the complexity of medicine, and something we haven't talked about, which is ER call. And I am dealing with today in my job trying to fill emergency room call for specialists because we are trying to recruit pulmonary critical care physicians to a smaller hospital, and none of them want to come because that means, "How much call do I have to do? And how is that?"

As you look at the rural communities, one of the things that they struggle with is staffing the emergency rooms and staffing the acute nature of what happens. I think we do personally need to have a lot more innovative solutions, like Dr. Raulerson talked about, whether it is telemedicine or other things.

I think we may need to reset the expectations of some of these rural hospitals that says we need every specialty. We need every

procedure. In my specialty, it is robots and robotic prostatectomies and laparoscopic stuff. It is complicated stuff.

Should that happen at all these places? What kind of specialty care do you need at all these places? I think we need to look at those creative mechanisms.

Senator BROWN. Thank you.

Dr. Nochomovitz, talk to us in some detail, if you will, about the structure of the UH model in terms of primary care, working into your answer preventive medicine, preventive care. If there are ways that you could suggest nationally for us, for a national model of how to use less-educated, less-trained people like community health workers and others for preventive care, and especially in light of dealing with the disaster that diabetes will bring people individually and society collectively in the next generation.

Dr. NOCHOMOVITZ. I think that is a good segue for me to begin with a comment about some of Dr. Cooper's testimony. I think that one of the questions we should all ask ourselves here for the sake of transparency is who are our doctors? The people in this room and people sitting at this table.

We probably all do have a fine internist or fine primary care doctor who coordinates care for us. This doesn't detract from the need for allied health professionals. But I think, as a specialist, I think there has been somewhat of an understatement here of the value of a well-trained, efficient, primary care physician who can coordinate care, advise, counsel, engage, navigate. And we shouldn't forget that, and this needs to be reiterated.

That goes into—that is a good segue for me into the model that we have used. And what we have done is we have taken, first of all, what we have perceived to be the best physicians in local communities and brought them into a structure that gives them significant independence, authority, and autonomy but allows them to leverage the resources of a larger organization.

Had they not become aligned with our organization, the quality guidelines, the technology, the e-prescribing, the electronic office wouldn't have been possible for these physicians. So therein is a story that is both positive and has a negative side to it.

The positive side is that larger organizations, many of whom have been cited, have the ability to bring in the necessary technology, support to look at guidelines, to look at coordinated care, to provide comprehensive diabetes programs across a region with diabetic nurse educators and endocrinologists and primary care doctors.

But we do need to look to the 60 percent of physicians practicing in small practices, and again, how Dr. Thorpe is—how do you scale that? And it might be that those parameters need to be provided in alternate structures, some of them that have been alluded to. And perhaps the accountable care organizations, perhaps spin-offs or extensions of integrated delivery systems, spin-offs or extensions of new, even from the private sector of integration of independent doctors, hospitals that have incented in the payer mechanism to provide these services with some guidelines that are associated with reward.

Now there will have to be wholesale changes to some of our regulatory laws as far as Stark, anti-kickback, and other things if you

are going to have these kinds of structures. But I think the idea of—healthcare is a local phenomenon. So one, first of all, needs to build on what one has. The easiest way to build is to build on existing structures that can implement these quality programs, technology, etc.

What we have done is we have gone even to smaller communities, some rural communities associated with critical access hospitals. We have organized physicians in clusters and given them the infrastructure to do the diabetic care, the urgent care, the after hours care in a low-cost—and we did the urgent care to create the low-cost environment, even though we were not essentially 100 percent fee-for-service environment.

But we anticipate the need for this, and we think it is the right thing to do.

Senator BROWN. Thank you.

Dr. Raulerson, what can we do in this healthcare legislation, or what can the Federal Government do generally to help you and other pediatricians at your medical homes provide better preventive care? Again, especially about diabetes, but preventive care generally for the children whom you serve.

Dr. RAULERSON. One of the things that comes to mind immediately is our entire vaccine program for children. The vaccine program, I would say, is the A-plus of preventive diseases. It certainly changed my practice.

When I started out in the wintertime, I would see one or two children a week who needed a spinal tap because they might have meningitis, and I don't see that anymore because of vaccines.

When I was young, I was critically ill with the measles, and I will never forget that illness when I was bedridden for many weeks. We don't see measles anymore.

Vaccines are very complicated. In the first year of a child's life, I give vaccines that add up to 30 different vaccines in that first year of life. It is an extremely expensive program, and payment for vaccine always lags the cost for vaccines.

Right now, I am paid \$8 for every shot that I give a Medicaid patient in my office. It costs me somewhere between \$17 and \$27 to give that vaccine, but I am paid \$8. So I think immediately something needs to be done about our vaccine program for children. That is the No. 1 thing.

The second thing is, help us with technology. Don't expect every small doctor in a rural area to come up with his own electronic medical record and e-prescribing.

I have to laugh when I hear about technology. My very closest best friend is a retired math professor and a computer guru. She came and spent a month with me while we tried to get my e-prescribing system working. At the end of the day, we would just fall apart laughing because of all of the problems.

Send it, it goes. My computer, my PalmPilot says it went. Then the Indian reservation calls and says we don't have the technology here to get what you sent so you will have to write it. Well, OK. I can't call it in if it is a drug for ADHD. You have to have a written copy. So now I have to mail it to you.

OK. So I send one to the pharmacy that is 200 yards from my office. They got it 4 hours later.

So if my small rural practice or the practice of doctors where there is two or three physicians together, if we are going to have IT and it is going to be effective, someone else has to help us do it.

There has to be a systematic way. And I am so afraid that all of this money is going to go into a system where I get an electronic medical record that is 14 pages long, and I just want to know if the kid got his blood transfusion or not. And I don't have time to read 14 pages to find out if this child got his blood transfusion before he left Birmingham.

Senator BROWN. Thank you very much, Dr. Raulerson. Well said.

Senator Whitehouse has one brief question that we are going to close with.

Senator WHITEHOUSE. One brief question. I would like to mention first that President Obama's Economic Recovery Act has in it a, I call it "geek squad", for HIT. We modeled it on the Agricultural Extension Service because people in rural areas are very familiar with that and even very conservative Members of the U.S. Senate are also very familiar with that. And they know that the program works. So it is hard to devil it as unwelcome Government intervention.

And so, people, doctors and hospitals who are installing HIT will have access to the HIT extension help, and that is already in the bill. It is passed. It is just a question of standing it up.

So to your specific concern, it is very real. But I hope help is on the way. Certainly, the infrastructure is in place to begin to deliver it.

I would love to go back, while I have got you, to one piece of what I asked, which is the—let me ask it this way. If you are a doctor and you invest in electronic health records for your patients, if you are a hospital and you invest in a quality improvement plan for your intensive care units to minimize infections and complications, if you are a community health center and you invest in a prevention program for the clients that you service, in all of those cases, there is a common problem, which is that you have to put all the money out. You have to take all the risk. You have to adapt your practice to whatever the new regime is. And yet you get very little, possibly even none of the reward of that investment.

We often hear in the Senate that if Government would just get its hands out of the healthcare system, then the market would work, and it would solve all these problems gloriously. I am delighted to see every head just shook no in response to that question because I couldn't agree with you more.

I think we have an infrastructure problem of some kind that we have to solve, and then the market can take off. But right now, when the fundamental risk-reward loop is broken, you are just never going to get that investment.

If you have thoughts on how we solve that problem, because there is an enormous amount of initiative and entrepreneurship and innovation that can be brought to bear on this problem. Once that is solved, a halfway measure is to say, OK, Government is just going to pay for it in the meantime.

A better way would be to figure out how to close that risk-reward loop so that people could actually win the benefits of their savings,

and then they are incited to keep looking and keep digging and the machinery begins to work in the right direction.

Dr. COOPER. If I could respond, I think you answered the question, for me at least, in asking the question. And it reminds me to go back to my comment about the NIH model.

Empower the community health workers in a little town in Ohio to create a system and a demonstration project and a grant structure. Give them access to the resources to do it, and you will have thousands of minds creating thousands of ways to do it.

But they won't bear the financial risk, and the reward will be their system is better, and they will be rewarded in nontangible ways as well. That is the NIH model—Enable.

Pre-suppose that we have geniuses in America, because we do, who are much smarter than anyone in this room, and they will come up with the really good ideas. But just empower them. Don't think that we here can collectively figure out what to do and then say, OK, here is some money. Now you go do it.

The NIH doesn't do that, and I would really encourage the kind of a mild shift in thinking that says, "Look, we don't think the market can do it in the usual market way." But the market, also the pharmaceutical market wouldn't have invented all of the pharmaceuticals if the NIH hadn't supported all this fundamental research that underpins it.

So the analogy obviously breaks down very quickly, but there is a certain superficial analogy that comes across to me, at least, in your question, Senator.

Senator BROWN. Anyone else, or that is it?

Thank you, Senator Whitehouse. And thank you, Dr. Cooper, for that answer.

As in all hearings, the record will stay open for 7 days. If anyone wants to add any comments or thoughts or any other kind of additional information to any of the comments or questions made by each other or by Senator Murray or Senator Whitehouse or me, feel free to submit that to the committee. We appreciate that.

Special thanks to Keith Flanagan for his help, and to Jessica McNease for her very good work on this hearing and on my staff, and Eleanor Dehoney and David Mitchell, and also David Bowen on the committee majority staff.

So the committee will adjourn. Thank you very much.

[Additional material follows.]

ADDITIONAL MATERIAL

PREPARED STATEMENT OF THE AMERICAN COLLEGE OF SURGEONS (ACS)

The American College of Surgeons (ACS) commends the Senate Committee on Health, Education, Labor, and Pensions for holding this important hearing on "Delivery Reform: The Roles of Primary and Specialty Care in Innovative New Delivery Models." On behalf of its more than 74,000 members, the ACS is grateful for this opportunity to present a statement describing the surgical specialty perspective on delivery system reform.

Reform of our Nation's health care system includes a range of important issues, from covering the uninsured, to ensuring patient access to trauma and emergency care, to improving the quality of care to containing the growth of our Nation's rising health care costs. A myriad of problems and challenges calls for not one but many steps and solutions to put us on the path to extending the possibility and promise of quality health care to all Americans.

INNOVATIVE DELIVERY SYSTEM MODELS

ACS Trauma Care Delivery System

An important area of health care delivery that is often times overlooked comes through the emergency and trauma care delivered in our Nation's hospitals and trauma centers. Sadly, the emergency health care system in America is in crisis. Traumatic injury is the leading cause of death for Americans aged 1 through 44. Medical evidence has shown that the care and treatments delivered within the first hour of a severe injury, known as the "golden hour," are likely to mean the difference between temporary and permanent disabilities, as well as between life and death. Studies of conventional trauma care show that as many as 25 percent of trauma patient deaths could have been prevented if optimal acute care had been available. In addition to saving lives, restoring function, and preventing disabilities, ensuring appropriate trauma care also can serve an important role in the larger goal to contain the growth of health care costs. According to a report published by the Agency for Healthcare Research & Quality (AHRQ), trauma injuries were the second most expensive health care condition in 2005, costing approximately \$72 billion. This includes money spent for doctor visits, clinics, emergency room visits, hospital room stays, home health care, and prescription drugs. The cost of trauma-related emergency room visits alone was \$7.8 billion. The National Safety Council's 2005-2006 edition of *Injury Facts* found that the total cost of unintentional injuries for 2004 was \$574.8 billion, with \$298.4 billion in wage and productivity losses and \$98.9 billion in medical expenses alone.

Trauma systems provide for effective and efficient use of scarce and costly community resources. Yet, only one in four Americans lives in an area served by a trauma care system. Both the Institute of Medicine (IOM) and the Emergency Medical Treatment and Labor Act (EMTALA) Technical Advisory Group have documented significant gaps in our trauma and emergency health care delivery systems, showing that hospital emergency departments and trauma centers across the country are severely overcrowded, emergency care is highly fractured, and critical surgical specialties are often unavailable to provide emergency and trauma care. The IOM found that a coordinated, regionalized, accountable system based on the current trauma care system model must be created. Unfortunately, the most consistent element among the States is the lack of uniformity regarding system development. As a result, the quality of care a trauma patient receives largely depends on the quality of the regional and local system in place to respond to emergency and trauma situations.

Since 1976, the ACS Committee on Trauma (COT) has developed criteria to categorize hospitals based on the level of trauma care available. These guidelines are now used by States to certify some hospitals as trauma centers and many hospitals seek certification to become a trauma center from the ACS COT. In addition, in 1989, the ACS COT collaborated with emergency medical organizations, governmental agencies, trauma registry vendors, and other interested parties to develop the National Trauma Data Bank (NTDB), which contains over 2 million cases from over 600 U.S. trauma centers and is the largest aggregation of trauma registry data ever assembled. The goal of the NTDB is to inform the medical community, the public, and decisionmakers about a wide variety of issues that characterize the current state of care for injured persons in our country. The information contained in the data bank has implications in many areas including epidemiology, injury control, research, education, acute care, and resource allocation. Finally, the ACS COT plans to develop a trauma quality improvement program.

To ensure patient access to emergency and trauma care, we recommend that Congress support:

- **Regionalization of Emergency Care** by including legislation like the Improving Emergency Medical Care and Response Act, legislation introduced in the 110th Congress by then-Senator, now President Barack Obama (D-IL) and Representative Henry Waxman (D-CA), in health care reform to ensure a regionalized emergency and trauma care system that provides patient access to prompt definitive care when they need it. The Improving Emergency Care and Response Act would authorize multi-year grants to support demonstration programs aimed at designing, implementing, and evaluating a regionalized, accountable emergency care system. In fact, President Obama's fiscal year 2010 budget request includes \$10 million for the Emergency Care Systems program that would support the development of the Emergency Care Coordination Center (ECCC) and two of its main programs: (1) the regionalization of emergency care services; and (2) national standards on emergency care performance measurement.

- **Improved Reimbursement for Emergency Services** by: (1) providing physicians a tax deduction equal to the amount of the Medicare fee schedule payment; (2) providing a 10 percent added bonus payment through Medicare to all physicians, including on-call specialists, who provide EMTALA-related care to Medicare beneficiaries; (3) allowing all Medicare participating hospitals to include stipends paid to physicians providing emergency on-call services on their cost reports; (4) providing necessary funding to trauma centers that are at serious risk of closing due to the continual increase of uncompensated and charity care costs; and (5) establishing a dedicated Federal funding source for payments to providers for uncompensated emergency health care services.

- **Medical Liability Protections** by: (1) requiring any lawsuits against physicians who provide EMTALA-mandated care be brought under the Federal Tort Claims Act; and (2) providing immunity or limited liability for certain medical personnel involved in the evacuation or treatment of patients during a declared state of emergency.

ACS National Surgical Quality Improvement Program (NSQIP)

Health system reform starts from an important and appropriate premise that patients receive their care in a large system of care rather than from one physician or health care provider. It is this same premise that has been the foundation for the ACS's successful surgical quality improvement efforts. For example, the ACS National Surgical Quality Improvement Program (NSQIP) started with a successful effort within the Department of Veterans Affairs, which decreased VA post-surgical mortality by 27 percent and post-operative complications by 45 percent over 10 years. ACS NSQIP is a prospective peer-controlled, validated database that quantifies 30-day risk-adjusted surgical outcomes and allows for comparisons among all participating hospitals. ACS NSQIP does not merely examine care the surgeon provides in the operating room, but rather it captures data regarding the range of pre-operative, intra-operative, and post-operative care that the surgical patient receives over the 30 days following the surgery. After a pilot to test NSQIP in three non-Federal hospitals in 1999, the ACS applied for a grant from the Agency for Healthcare Research Quality in 2001 to expand the program to 14 hospitals. Based on its successful application in these hospitals, the ACS has spearheaded the effort to implement ACS NSQIP in private hospitals across the country, with ACS NSQIP currently in place in 220 hospitals nationwide. The program has received wide recognition as a successful model for surgical quality improvement and the Joint Commission acknowledges the value of participation in ACS NSQIP and includes a Merit Badge next to the profile of all ACS NSQIP hospitals.

ACS National Cancer Data Base

In the field of cancer care, the American College of Surgeons Commission on Cancer (CoC) is a pioneer in measuring performance. The more than 1,400 hospitals and free-standing cancer treatment facilities approved by the CoC report clinical data to the National Cancer Data Base (NCDB) and receive evidence-based benchmark comparison reports based on accepted standards of care for breast and colorectal cancers. These measures are endorsed by the National Quality Forum. Since 1995, it has captured over 21 million cancer cases and includes data on about 70 percent of all newly diagnosed malignant cases of cancer nationwide annually. To provide better "real-time" feedback, the CoC has also developed a new reporting system that could link into an interoperable, nationwide health information technology (HIT) system, which received significant support in the recently enacted American Recovery and Reinvestment Act of 2009 (H.R. 1). This prospective electronic reporting system, which is called the Rapid Quality Reporting System (RQRS), monitors evi-

dence-based performance measures in real-time, alerting providers when standards of care for select cancers are not being met. The ACS believes RQRS could ultimately play an important part in any new, outcomes-based payment models.

Through these efforts, the ACS has demonstrated a commitment to delivery reform that both includes and extends beyond the care that the surgeon provides to his or her patients. In addition, these efforts are based not simply on doing more for the patient but on doing what is most clinically appropriate for the patient. The ACS recognizes that surgical care is provided through a surgical team in the operating room and through a team of health care professionals, including the surgeon, who treat and monitor a patient's progress before and after an operation.

ENSURING PATIENT ACCESS TO SURGICAL CARE

Addressing Workforce Shortages

The number of surgeons trained in the Nation's graduate medical education system has remained static for the past 20 years. Today, U.S. population growth has far outpaced the supply of surgeons and as a result, the United States is beginning to see signs of an emerging national crisis in patient access to surgical care.

Patients need access to safe, high-quality and affordable surgical care, whether the surgery is planned or unplanned. However, many aspects of the current health care system contribute to workforce shortages that threaten patient access to surgical care. Unlike many other medical specialties, there are no good substitutes or physician extenders for a well-trained general surgeon or surgical specialist. Surgical training is vastly different from other physician training programs. Mastery in surgery requires extensive and immersive experiences that extend over a substantial period of time. Whereas non-surgical residencies can be completed in as few as 3 years, surgical residencies require a minimum of 5 years and often several more for specialties such as cardiothoracic surgery. As a result, ensuring patient access to surgical care will take many years to address.

Workforce shortages affect nearly all surgical specialties and occur in both rural and urban areas. According to 1996 and 2006 data on workforce numbers produced by the Dartmouth Atlas, general surgery, urology, ophthalmology, and orthopaedic surgery declined 16.3 percent, 12 percent, 11.4 percent, and 7.1 percent, respectively. In addition, the *Archives of Surgery* published an analysis last April that showed a decline of more than 25 percent of general surgeons between 1981 and 2005 in proportion to the U.S. population. Looking to the future, between 2005 and 2020, the Bureau of Health Professions projects an increase of only 3 percent among practicing surgeons, with declines projected in thoracic surgery (-15 percent), urology (-9 percent), general surgery (-7 percent), plastic surgery (-6 percent), and ophthalmology (-1 percent).

There are many reasons for the surgical workforce shortage including prospects of reduced payment combined with higher practice costs, bigger liability premiums, and the heightened threat of being sued; a crippled workforce leading to demands for more time on call; heavier caseloads with less time for patient care; and a U.S. health care delivery system that is in flux. Given the rigors of a surgical residency, these challenges can deter would-be surgeons from making the extra sacrifices necessary to enter the surgical workforce and create a dim long-term outlook for the profession.

Compounding the crisis, large numbers of aging, established surgeons are either decreasing their workloads or retiring. According to the American Medical Association's *Physician Characteristics and Distribution in the U.S.* (2007 edition), approximately one-third of the surgical specialists who are key to ensuring adequate emergency call coverage are age 55 or older (general surgeons, 32 percent; neurosurgeons, 34 percent; and orthopaedic surgeons, 34 percent). Hence, it is critical that our Nation's medical schools and training institutions start producing more surgeons in these specialties.

POSSIBLE SOLUTIONS

- Preserve Medicare funding for graduate medical education and eliminate the residency funding caps established in the 1997 Balanced Budget Act;
- Fully fund residency programs through at least the initial board eligibility;
- Include surgeons under the title VII health professions programs, including the National Health Service Corps program, and make them eligible for loan assistance;
- Promote rural/underserved care through loan forgiveness programs that stipulate work in those areas;
- Extend medical school loan deferment to the full length of residency training for surgeons;

- Allow young surgeons who qualify for the economic hardship deferment to utilize this option beyond the current limit of 3 years into residency;
- Increase the aggregate combined Stafford loan limit for health professions students;
- Create a new health professional shortage area (HPSA), separate from the traditional primary care HPSA, with bonus payment structures for surgeons who provide services in designated areas;
- Provide tax relief and liability protections to surgeons who perform EMTALA-related care, especially when that care is uncompensated;
- When hospitals pay stipends to surgeons who take emergency calls, have Medicare recognize these costs, as is currently done for critical access hospitals; and
- Expand the Federal Tort Claims Act to include surgeons who provide services to patients who are referred through their primary care physician at a community health center.

Payment Reform

As the committee studies the important issue of delivery reform, it is critical not to lose sight of the fact that no delivery system, no matter how ingenious, can survive if those who are caring for patients are not being appropriately reimbursed, and the most immediate challenge for patient access to surgical care is the precarious reimbursement situation confronting surgeons and surgical practices. As the committee is well aware, Medicare payments to physicians will be cut 21.5 percent on January 1, 2010 if Congress does not act. The ACS calls on Congress to take action to stop this cut, to provide an increase in Medicare payments for all physicians in 2010, and to initiate reform for Medicare's physician payment system this year. The ACS greatly appreciated the leadership of Chairman Kennedy and others on the committee to enact the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) last July that reversed the 10.6 percent cut in Medicare physician payments. In addition, MIPPA included the largest Medicare payment increase for physicians since 2005 by replacing a scheduled 5.4 percent cut in 2009 with a 1.1 percent increase this past January. MIPPA also made changes to how work was valued under the Relative Value Scale, increasing payments for some surgical services. In spite of these important measures, Medicare payments for many surgical procedures have been reduced significantly over the past 20 years and, in some cases, have been cut by more than half from reimbursement levels in the late 1980's.

In discussing delivery system reform, many often highlight the importance of measures to promote primary care to both prevent illness and disease as well as to manage the conditions that a patient may already have. To this end, some, most notably the Medicare Payment Advisory Commission (MedPAC), have proposed financing increased reimbursement for primary care by simply cutting reimbursement for care provided by other physician specialties. Such proposals, while seeking to promote efforts to help Americans better manage their care, would only exacerbate the workforce challenges described earlier and establish a reimbursement structure that would ultimately undermine patients' ability to access the life-saving acute care services that only surgeons are qualified to provide. The ACS supports efforts to prevent disease and to manage patient care not only because it is in the best interests of the patient and health care system but also because, when these patients need surgery, they are much less likely to encounter complications and much more likely to recover quickly from the operation. However, regardless of how well patients' care is managed, acute situations requiring prompt and definitive access to surgical care will continue to occur. A better alternative would be reforms that recognize the important roles that different specialties play in caring for the whole patient.

Much attention has been paid to the need to provide more Americans with access to health care coverage, to increase Americans' access to care, and to improve the value of care delivered in our health care system. Expanding coverage to more Americans and improving the quality of care will mean little if Americans are not able to access the care they need—particularly in potentially life-threatening situations due to the lack of qualified surgical practitioners. Before adopting any proposed steps or solutions, we must carefully consider what unintended consequences may result. So while our present situation calls for change and health system reform, we must proceed deliberately and thoughtfully to ensure that the policy changes we make today do not lead to unintended consequences that could undermine Americans' access to quality care.

The ACS looks forward to working with this committee to reform our Nation's health care system and to preserve and improve Americans' ability to access high quality surgical care and health care services.

[Whereupon, at 11:50 a.m., the hearing was adjourned.]

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