

**THE FUTURE OF MEDICARE: RECOGNIZING THE
NEED FOR CHRONIC CARE COORDINATION**

HEARING
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UNITED STATES SENATE
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WEDNESDAY, MAY 9, 2007

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Washington, DC.

The Committee met, pursuant to notice, at 3:09 p.m., in room 106, Dirksen Senate Office Building, Hon. Herb Kohl (chairman of the committee) presiding.

Present: Senators Kohl, Lincoln, Casey, Whitehouse, Smith, Craig, and Corker.

OPENING STATEMENT OF SENATOR HERB KOHL, CHAIRMAN

The CHAIRMAN. Good afternoon. At this point, we are going to call this hearing to order. We welcome, of course, all of our witnesses who are with us today.

I am pleased today to be able to turn over the gavel to Senator Blanche Lincoln, who will be chairing today's hearing on the need for chronic care coordination under traditional Medicare.

Today, 63 percent of our Nation's Medicare beneficiaries suffer from two or more chronic conditions. Studies show that Medicare spends two out of every three dollars on seniors with five or more chronic conditions, such as diabetes, emphysema, heart disease, arthritis or osteoporosis. These chronic conditions are largely preventable, treatable, and their onset can often be delayed through coordinated care, nutrition and exercise.

Unfortunately, today's Medicare program is not designed to serve those elderly individuals with multiple chronic conditions that make up the majority of beneficiaries. Traditional Medicare doesn't provide physicians with incentives to coordinate their elderly patients' chronic care conditions. As a result, many seniors are left receiving disjointed care through multiple visits to different doctors every year at an unnecessarily high cost.

Research indicates that Medicare beneficiaries with chronic conditions are more likely to have preventable, costly hospitalizations, experience adverse drug interactions, undergo duplicate tests, and receive contradictory medical information.

At a time when our Nation is growing older, it is clear that the success we have in preventing and treating chronic diseases will directly affect our ability to provide quality health care and contain future growth in Medicare spending.

Today's hearing will shine a light on these shortcomings in Medicare and help us identify ways we can improve the care of our seniors while making Medicare more efficient.

We will now be turning the hearing over to the Aging Committee's greatest advocate for geriatric chronic care coordination, Senator Blanche Lincoln.

Senator Lincoln has shown great leadership highlighting these issues and bringing them to the attention of this Committee. Since 2001, she has worked on legislation to improve the care of our Nation's elderly, and I am proud to join her as she introduces the Geriatric Assessment and Chronic Care Coordination Act of 2007.

I know Senator Lincoln has assembled a distinguished panel of witnesses today, and we are looking forward to learning more about the challenges that these beneficiaries and their physicians face. We have an obligation to modernize the Medicare program and ensure that it is providing the quality care that today's beneficiaries need.

So, we thank Senator Lincoln for all of her work on this issue, and she will now take over this hearing.

STATEMENT OF SENATOR BLANCHE LINCOLN

Senator LINCOLN. Well, thank you, Chairman Kohl. I just want to say a very special thanks for your leadership in this Aging Committee. I think you, working with Senator Smith, have done a tremendous job in helping us to focus on so many of the issues that our American families face as their loved ones start that aging process.

It is critically important for so many across this country that we really do look to modernize our ability to provide the kind of quality of care and the dignity of care that our aging Americans want to see. So I want to thank you so much for allowing me to do this today, and thank you again for your incredible leadership. You have done a wonderful, wonderful job.

He really has done a tremendous job in helping make the opportunity for today's hearing a reality.

I also want to say a very special thanks to our panel, as I was not able to come and greet our witnesses. We had a vote immediately before this. But I want to say a special thanks to both of our panels of witnesses, as well as the advocacy groups that have worked so diligently with us.

It is critically important that we hear from them, and hear from their issues relating to the constituencies that they represent. They have all been very, very willing to come forth with good, honest suggestions and proposals and ideas of how we can do this better. I am very proud to be a part of that team as well, in terms of working with them.

As a member of the so-called Sandwich Generation, who cares for their children and aging parents simultaneously, I am keenly aware of so many issues affecting older Americans and have been an advocate for geriatric chronic care coordination for several years.

Now, I am not just a part of the Sandwich Generation. My husband's grandmother turns 110 in a couple of months, still living in

her own apartment, assisted living. So I am a part of the Club Sandwich Generation. [Laughter.]

But seeing her remarkable ability to still care for herself in so many ways and to live a very active and fulfilling life at almost 110 is pretty remarkable. But it also shows that there is tremendous potential.

There is certainly a lot of commitment that we need to make as Americans continue to live longer lives. We want to make sure that they are very, very healthy.

Studies indicate that when patients are linked with a physician or other qualified health professionals to coordinate care, the results are improved quality of care, increased efficiency, and greater cost-effectiveness.

That is why I am so pleased to chair today's hearing, to raise the awareness of the need for chronic care coordination for Medicare beneficiaries and to discuss how these services can be provided in a cost-effective way.

This hearing will specifically focus on chronic care coordination in the traditional Medicare fee-for-service program. While some chronic care coordination occurs in other programs—such as Medicare Advantage and the Program for All-Inclusive Care for the Elderly, which is known as PACE—nearly 85 percent of Medicare beneficiaries continue to receive health care from the traditional fee-for-service program, which lacks a care coordination component.

As we know, obviously, our focus there is on the high cost, and that high-cost element of Medicare is mostly in the fee-for-service component.

So why focus on chronic care coordination? Well, there are several reasons.

First, the needs of Medicare beneficiaries have changed over time. When Medicare was first established in 1965, it was based on a health insurance model, which focused on acute care, not chronic conditions. But today, many of our older Americans suffer from multiple chronic conditions, and would benefit from care coordination. We know that about 78 percent of the Medicare population have at least one chronic condition, and 63 percent have two or more chronic conditions.

Second, as our population ages, the number of older individuals with chronic illnesses is also expected to rise. A recent article in The Washington Post noted that baby boomers are more likely to be in worse health condition than their parents in retirement, which may result in a greater need for medical services. A RAND Corporation study estimates that half of the population will have a chronic condition in 2020, a total of 157 million Americans.

Third, Medicare beneficiaries with multiple chronic care conditions are expensive to treat. We know that our costs in Medicare are exploding as our number of aging Americans is beginning to explode. According to the Congressional Budget Office, 43 percent of Medicare costs can be attributed to 5 percent of Medicare's most costly beneficiaries. Medicare beneficiaries with four or more chronic conditions are 99 times more likely to experience one or more potentially preventable hospitalizations than those without chronic conditions. If an individual has Alzheimer's disease or dementia, medical costs increase even more dramatically.

Finally, multiple chronic conditions not only affect the individual suffering from them but also their caregivers. About 5 years ago, I watched my own mother devote herself to the care of the man she had loved for more than 52 years. She had pledged to attend to him and honor his life until he departed this world, even if he no longer remembered her name or could recognize her face. My dear father suffered from Alzheimer's disease, and it was a long journey for all of us for almost 10 years. My mother's strength and commitment to my father during his long illness remains a great source of inspiration to me.

Unfortunately, my family's experience with the ravages of Alzheimer's is not unique. Millions of Medicare beneficiaries with chronic conditions who remain at home do so with the help of family and friends. Research shows us that family care for an older adult with chronic illness or disabilities, especially dementia, can have negative health effects, both physical and mental, on family members.

To address these issues, I am pleased to announce that, today, Senator Collins and I have introduced the Geriatric Assessment and Chronic Care Coordination Act of 2007—it is S. 1340—and along with Senators Kohl, Kerry, Mikulski, Clinton, Boxer and Casey. I am also pleased that Representatives Gene Green and Fred Upton are sponsoring a companion bill in the House and that 30 national organizations have endorsed our bill.

This bill realigns Medicare to provide high-quality, cost-effective care to elderly individuals with multiple chronic conditions. It is an important step forward in recognizing and remedying the impact that multiple chronic conditions have on individuals, their caregivers and the Medicare program.

Again, a special thanks to Senator Kohl, our Chairman, and to Senator Smith, Ranking, for all of your incredible leadership on this Aging Committee, and to all of the advocacy groups and our panelists here today for really making all of this a possibility.

We want to go to Senator Smith first, if you are prepared and ready.

Senator SMITH. In the interest of time, let me thank you, Senator Lincoln. It is a pleasure to work with you on this Committee, the Finance Committee, on health care issues. We have done so well, and will continue to do that.

Thank you, Mr. Chairman, for allowing this important hearing to go forward.

I think in the interest of time, I would like to put my statement in the record.

I want to thank Dr. David Dorr, who is here from Oregon.

I appreciate your taking your time and this long trip out here to share with us your important work on chronic care coordination.

He is a distinguished assistant professor at Oregon Health Sciences University, and is the principal investigator of the Care Management Plus Project, which is funded by the John A. Hartford Foundation.

So thanks for coming.

[The prepared statement of Senator Smith follows:]

PREPARED STATEMENT OF SENATOR GORDON SMITH

I want to thank Senator Lincoln for holding this important hearing today. I have had the pleasure of working with Senator Lincoln on many issues related to improving the quality of care for older Americans and look forward to exploring this topic with her.

Medicare is the backbone of the healthcare system for elderly Americans. Now, more than 44.6 million Americans receive benefits from this important program, and the number is expected to grow quickly in the coming years as more and more baby-boomers edge towards retirement.

We also are a nation that is living longer than ever before. Studies tell us that as we live longer we are more likely to have an increased number of chronic health conditions. Americans are suffering from chronic conditions, and asthma, emphysema, dementia, diabetes, arthritis and mental illnesses are just a few of the most frequently diagnosed conditions in the elderly. When these conditions occur together, they significantly compound the daily difficulties of those they afflict. We also know that these conditions take a toll on those suffering. Too often, those suffering are forced by their condition to spend days in bed, become dependent upon family members and experience a general decrease in their quality of life.

The good news is that Americans suffering from chronic conditions are living longer and healthier lives due to medical advances. Where they once would have been confined to their home or a hospital bed, many more are able to live much fuller lives. This is the direction that programs like Medicare should continue to move towards.

Chronic care coordination is a practice that has been tried and tested in many areas of our nation. In fact, we will hear today from Dr. Dorr about work going on in my home state of Oregon. The purpose of chronic care coordination is to ensure that a patient's care providers are working in a collaborative manner and that everyone who provides care does so in an informed way. The hope is that if care providers work closer together on the patient's behalf, that patient will have better care and a better quality of life.

As a member of the Finance Committee, as well as Ranking Member of this Committee, I am always looking at ways to encourage quality care for our elderly. With the skyrocketing cost of healthcare, I am also looking to provide that care more efficiently. Twenty percent of Medicare beneficiaries who have five or more chronic conditions account for about two-thirds of all Medicare expenditures. I look forward to hearing about the body of research today that looks at how chronic care coordination also can achieve the goal of increased quality for these patients as well as how it can improve the fiscal outlook for the ever-increasingly expensive Medicare program.

I want to thank all of our witnesses for being here today. I know that they are tireless in their work to better the healthcare for our aging population, as well as all Americans. Those we will hear from today also include advocates for those with chronic conditions. I appreciate your ongoing work to ensure that their needs, and those of their families, are met.

I especially want to thank Dr. David Dorr for being here today. I greatly appreciate him taking the time to come out here from Oregon and inform us of his work on chronic care coordination. Dr. Dorr is an assistant professor at the Oregon Health and Science University (OHSU), and is the principal investigator of the Care Management Plus project, which is funded by the John A. Hartford Foundation. Care Management Plus is a project that uses information technology and care managers based in primary care clinics to improve coordination and quality of care for older adults and those with complex chronic illness. I look forward to hearing all of your testimony today.

Senator LINCOLN. Great. Thank you, Senator Smith.

We have two panels of very distinguished witnesses with us today, so we will get started, as Senator Smith said, in the sake of time. We will ask our witnesses to present their testimony, and then we will open it up for questions and move to panel two.

On our first panel, we will hear from Dr. Todd Semla, president of the American Geriatrics Society, a clinical pharmacy specialist at the Department of Veterans Affairs and an associate professor at Northwestern University at the Feinberg School of Medicine.

Next we will hear from Dr. Gerard Anderson, a professor of public health and medicine at the Johns Hopkins Bloomberg School of Public Health.

He will be followed by Dr. David Dorr, the principal investigator of Care Management Plus and an assistant professor of medical informatics and clinical epidemiology with a joint appointment in general internal medicine and geriatrics at the Oregon Health and Science University.

Thanks to all of you gentlemen for being here today, and we look forward to continuing our work with you.

Dr. Semla.

STATEMENT OF TODD P. SEMLA, PHARM.D., PRESIDENT OF THE AMERICAN GERIATRICS SOCIETY; CLINICAL PHARMACY SPECIALIST, DEPARTMENT OF VETERANS AFFAIRS; AND ASSOCIATE PROFESSOR, FEINBERG SCHOOL OF MEDICINE, NORTHWESTERN UNIVERSITY, EVANSTON, IL

Dr. SEMLA. Good afternoon. I am Todd Semla, president of the American Geriatric Society. I am a doctor of pharmacy with more than 25 years of experience in the field of geriatrics.

The American Geriatric Society is a nonprofit organization of over 6,700 health professionals devoted to improving the health and quality of life of older Americans. Geriatric medicine emphasizes primary care for older persons. It promotes preventive care, with a focus on care management, and coordination that helps patients maintain functional independence in performing daily activities and improves their overall quality of life.

I thank you, Chairman Kohl, Ranking Member Smith and the Members of the Special Committee on Aging, for having this hearing during Older Americans Month. It is a time to celebrate this fastest-growing segment of our population and also a time to look toward the future of the Medicare program.

Today, I will outline the need for the coordination of care and the many benefits, particularly the increasing number of older Americans with multiple chronic conditions.

As Committee Members know, America is on the threshold of a historic population shift upward. It is no surprise that the prevalence of chronic conditions—conditions that typically last more than one year, such as arthritis, cancer and hypertension—increases with age.

Therefore, as life expectancy increases, so does the number of people living with multiple chronic conditions, conditions whose symptoms and treatment often interact in very complex ways. Currently, about 20 percent of the Medicare beneficiaries have five or more chronic conditions, and these individuals account for almost 70 percent of all Medicare spending.

It is clear that we must find better ways to treat this population, and providers have increasingly recognized the need for care coordination in order to properly manage the health of individuals with complex and multiple chronic health conditions.

Simply put, care coordination puts the patient at the center of care. It holistically views the patient's physical, cognitive and caregiving needs and to result in the development of a plan that addresses all of the patient's medical conditions and takes into ac-

count the patient's ability to self-manage his or her health care, and functional issues in the patient's support system.

A care coordinator, usually a physician, physician's assistant, or nurse practitioner, oversees the plan's implementation by the team. This may entail consultation with other providers, monitoring and managing medication, and patient and family caregiver education and counseling.

Studies show that care coordination raises the quality of care, improves health outcomes, and reduces health care costs for individuals with chronic conditions. This means fewer hospital visits are needed, duplicate services and appointments are eliminated, sudden health crises are avoided. When a comprehensive geriatric assessment is combined with coordinated care, studies have shown even better outcomes.

Medicare, however, is not structured for the delivery of these coordinated care services. Instead, the current Medicare fee-for-service system encourages providers to see patients frequently for short periods of time.

Without a plan or a care team, the patient receives fragmented care by multiple providers who may or may not communicate with each other. This can result in duplicate tests and treatments, and prescribing medications without knowing what medicines the patient is already taking. In turn, this can increase the risk for hospitalizations, drug interactions, and adverse events, placing the patient at risk as well as driving up costs.

Where do we go from here? We believe that a new chronic care coordination benefit needs to be fully integrated into the Medicare program, both in the near term and well into the future. This will be key to improve health outcomes, higher quality of health care, and greater value for every health dollar spent.

Legislation introduced by Senator Lincoln would move us toward this goal. The Geriatric Assessment and Chronic Care Coordination Act will create a patient-centered approach under Medicare that will benefit patients with multiple chronic conditions and lower their health utilization rates.

The bill's establishment of a geriatric assessment and chronic care coordination benefit under Medicare's fee-for-service program will improve the care received by the sickest and most vulnerable patients in the Medicare population. It also will improve the lives of family caregivers by providing them with resources to better care for their parents, grandparents, brothers, and sisters.

Thank you, Senator Lincoln, for your leadership. We look forward to working with you and Members of the Committee to enact this bill, as well as advance other issues to improve the health and quality of life of older Americans. I will be happy to answer any questions as the time allows.

[The prepared statement of Dr. Semla follows:]

STATEMENT OF

TODD SEMLA, MS, PHARM.D., BCPS, FCCP, AGSF

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ON BEHALF OF THE
AMERICAN GERIATRICS SOCIETY

BEFORE THE SPECIAL COMMITTEE ON AGING

UNITED STATES SENATE

May 9, 2007



Introduction

Good afternoon Chairman Kohl, Ranking Member Smith and Members of the Committee:

Thank you for allowing the American Geriatrics Society to testify today on the important role of geriatric assessments and chronic care coordination services in improving health and quality of life for elderly patients.

I am Dr. Todd Semla, a registered pharmacist, Clinical Pharmacy Specialist for Pharmacy Benefits Management and the Strategic Health Group at the VA, and Associate Professor in the Department of Psychiatry & Behavioral Science at Northwestern University's Feinberg Medical School. The views that I express today are solely those of the American Geriatrics Society and do not necessarily represent the views of the Department of Veterans Affairs nor Northwestern University.

I appreciate the opportunity to participate in today's hearing as President of the American Geriatrics Society, a non-profit organization of over 6,700 health professionals devoted to improving the health, independence and quality of life of all older Americans. The Society provides leadership to healthcare professionals, policy makers and the public by advocating for and implementing programs on patient care, research, professional and public education, and public policy.

The American Geriatrics Society strongly supports the Geriatric Assessment and Chronic Care Coordination Act, because it will create a patient based approach to healthcare under Medicare that will benefit patients and lower their healthcare utilization rates. We believe that the geriatric assessment and care coordination benefits this legislation would establish will not only dramatically improve the care received by the sickest and most vulnerable patients in the Medicare population, but it will also impact the lives of their loved ones who are their caregivers by providing them the resources to better care for their parents, grandparents, brothers and sisters.

We applaud Senator Blanche Lincoln and Congressman Gene Green for their continued support and leadership of this issue and this legislation.

Today I will briefly outline the need for chronic care coordination under Medicare.. Tantamount to our discussion today are the needs of our parents, aunts, uncles, and other relatives and friends who have multiple chronic conditions, who are in need of care coordination services.

Simply put, care coordination puts the patient at the center of care. The emphasis shifts from disconnected management of illness by multiple professionals to coordinated, comprehensive management of the patient's health. In June 2006, the Medicare Payment

Advisory Commission ("MedPAC") -- an independent group established to advise Congress on issues impacting Medicare -- stated that "[c]are coordination has the potential to improve value in the Medicare program. Even if individual providers deliver high quality, efficient care, overall care for a beneficiary may be sub-optimal if providers do not coordinate across settings or assist beneficiaries in managing their conditions between visits."

The History of Geriatrics

Before I begin to discuss chronic care issues, it is necessary to place geriatrics in context. Geriatric medicine promotes preventive care, with an emphasis on care management and coordination that helps patients maintain functional independence in performing daily activities and improves their overall quality of life. Geriatric care, and chronic care coordination in particular, emphasizes primary care, which includes continuing care of all medical conditions and is not limited by cause, organ system, or diagnosis.

Geriatricians are physicians who are experts in caring for older persons. Geriatricians are primary care physicians who complete residencies in family practice or internal medicine and who, since 1994, also are required to satisfactorily complete at least one additional year of fellowship training in geriatrics. Following their training, a geriatrician must pass an exam to be certified and then pass a recertifying exam every 10 years.

Geriatric training emphasizes an interdisciplinary approach to medicine. Therefore, geriatricians typically work with a coordinated team of other providers such as nurses, pharmacists, social workers, and others to coordinate the care provided to these very ill patients. The geriatric team most often cares for the most complex and frail of the elderly population. However, with the aging of the Baby Boom Generation, geriatricians and geriatric teams have been caring increasingly for a larger population of aging, healthy Americans. The American Geriatrics Society enthusiastically supports the patient centered model of care outlined in the Geriatric Assessment and Chronic Care Coordination Act.

The Chronically Ill Population

The number of Americans living longer is large and rapidly growing. In July 2003, 35.9 million Americans were aged 65 and older, which constituted 12% of the US population. The US Census Bureau projects that the over-65 Medicare population will more than double to 72 million in 2030, at which time it will account for nearly 20% of the US population. The number of people over 85 is also expected to double from 4.7 million in 2003 to 9.6 million in 2030, and to double again to 20.9 million in 2050 with the aging of the Baby Boom Generation. America is on the threshold of an historic population shift upward.

As life expectancy increases due to the improving quality of healthcare and the achievements in modern medicine, the number of older Americans living with chronic disease also expands. Partnership for Solutions, a Robert Wood Johnson funded initiative

of which we are a partner, has found that about 78% of the Medicare population has at least one chronic condition, while almost 63% have two or more. Of this group with two or more conditions, almost one-third (20% of the total Medicare population) has five or more chronic conditions, or co-morbidities. It is no surprise that the prevalence of chronic conditions increases with age. Americans are no longer dying from the same diseases as they did in previous generations, now they are living with them.

The Board of Trustees of Medicare reiterated two weeks ago that Medicare will be out of money in 2019, unless something is done to control costs. The huge increase in the number of elderly patients with multiple chronic conditions will stress the system more than ever; providing a benefit for chronic care coordination will allow providers to more effectively control costs system wide.

Utilization Patterns

There is also a strong correlation between increasing hospital, physician and prescription drug utilization and the number of conditions for which a patient is being treated.

In terms of physician visits, the average beneficiary has just over 15 physician visits annually and sees 6-7 different physicians in a year. There is almost a four-fold increase in visits by people with five chronic conditions compared to visits by people with one chronic condition. The number of different physicians seen is nearly two and half times greater for people with five or more chronic conditions relative to those with just one chronic condition.

The average community-dwelling Medicare beneficiary 65 years and older takes on average between 4 and 5 different prescription and non-prescription medications regularly; while the average nursing home resident takes an average of 7 to 8 medications with nearly one-third taking 9 or more medications. We know as the number of chronic conditions increases so does the number of medications (and from more medication classes) required to manage them. As the number of medications increases so does the probability for an adverse drug event which can lead to prescribing more medications resulting in a common geriatric syndrome known as Polypharmacy.

These patients with multiple chronic conditions are at very high risk for hospitalization, medication interactions, and poor health outcomes related to their chronic conditions as well as their use of medications.

Chronic care coordination avoids negative medication interactions and prevents hospital stays, because the chronic care team holistically manages and treats illness -- before it worsens to the point where it requires hospitalization.

Care Coordination

Care coordination lays the foundation for a patient centered, consistent care approach across multiple illnesses. As many of us know, coordinating a chronically ill patient's

care creates a bond among the chronically ill patient, and their care givers and family members. Many geriatricians provide care coordination services to frail elderly patients based on their need for extensive family and patient communications, multiple prescription and nonprescription medications, and extensive transitional care as these patients move through different settings in the health care system. In a 2006 survey by USA TODAY, the Kaiser Family Foundation and the Harvard School of Public Health, half of patients and their household members reported problems coordinating care. But at the present time, Medicare does not reimburse care givers for providing these services and, in fact, most geriatricians are unable, for many of their patients, to use the team approach I just described, because they can not afford to develop the infrastructure and hire the staff needed to perform care coordination.

The inability to provide a team approach to care for these patients results in fragmented care offered by many providers who do not communicate with each other, who duplicate tests and treatments, and who prescribe medication without knowing what medicines the patient is on, thereby increasing the risk for hospitalizations, drug interactions and adverse events.

The Medicare system pays on a fee-for-service basis, which encourages a care giver to see patients frequently for short periods of time and does not allow them to formulate a plan that takes into account all of the patient's illnesses. This fragmented system simply does not pay a doctor or other care givers reimbursement for coordinating their activities with others. When large numbers of doctors and care givers treat multiple health conditions, the clashing treatments may unwittingly lead to new illness, or the need for multiple hospital visits. As MedPAC stated in its 2006 report, "[f]ee-for-service payment mechanisms are barriers to coordination among providers and to care management for beneficiaries with complex needs." One might call this a system based on how providers are paid, rather than one based on patient needs.

We believe the data on care of the elderly show that a lot of the care provided to beneficiaries with chronic conditions is not well-coordinated and that this lack of coordination may result in avoidable adverse events and poor health outcomes. In fact, the Partnership for Solutions has found that as the number of chronic conditions increases, so too do the number of avoidable hospitalizations for patients with illnesses that should have been treated more effectively on an outpatient basis. These poor outcomes are likely a result of poor care coordination among many providers who saw the patient.

We are convinced that a new system is required – one that moves the patient to the center of care. A new Medicare benefit for geriatric assessment and chronic care coordination services is an essential element of this patient-centered approach. The health of the Medicare beneficiary is foremost, and the delivery of these coordinated services is vital to the health and well being of those elderly patients with complex and multiple chronic conditions.

Examples of appropriate care coordination services include: (1) a general assessment of all of a patient's illnesses and their overall health that they will use to develop an overall treatment plan; (2) multidisciplinary care conferences; (3) coordination with other providers, including telephone consultations with relevant providers; (4) monitoring and management of medications, with special emphasis on patients using multiple prescriptions, which will avert adverse reactions and emergency room trips; and (5) patient and family caregiver education and counseling (through office visits or telephone consultation).

This coordinated care approach also should result in savings to both Medicare Parts A and B from fewer hospitalizations, emergency room visits, and diagnostic tests. Numerous studies show that an interdisciplinary team providing ongoing geriatric care coordination and management can lower emergency room visits and hospital stays, even though there is a period of time before care coordination results in a decreased rate of utilization. (In addition, the Comptroller General of the U.S. Government Accountability Office recently recommended case management for beneficiaries with multiple chronic conditions as a means of reforming Medicare "to improve the quality and efficiency of care delivered and avoid inappropriate care." ("Medicare Taking Care of Your Future?", The Honorable David M. Walker, Feb. 22, 2007, GAO-07-526CG)).

I want to make a few comments about the interim study recently released by CMS on its chronic care coordination demonstration project where organizational providers, including disease management companies, are delivering care coordination services to Medicare beneficiaries. While this interim study found that care coordination had not yet significantly altered patient self-help behaviors or overall utilization, it did find a trend towards lower hospitalization rates in a number of programs where care coordinators were experienced and where physicians were involved. In general, the programs that did not do well in terms of improving care and decreasing costs were those run by disease management companies, where physician involvement was minimal. The programs that did do well were those where the physician was deeply involved in the management plan, where care delivery was integrated, and where community based providers were the usual point of contact for the patient.

The chronic care coordination outlined in the Geriatric Assessment and Chronic Care Coordination Act puts the physician and the team caring for the patient at the center of the assessment and care coordination effort on an ongoing basis. This is quite different from the type of care provided in most of the CMS care coordination demonstration projects. The Geriatric Assessment and Chronic Care Coordination Act provides incentives for primary care givers and makes them accountable for their relationship to the beneficiary at the point of care. This is the type of coordinated care, under the CMS demonstration, that has, thus far, achieved the most positive results.

Disease Management and Multiple Illnesses

The concept of disease management typically refers to the management of a single illness. We believe disease management is an appropriate practice for certain Medicare

beneficiaries who do not have multiple chronic conditions, such as those people with only diabetes, asthma or hypertension.

Generally focusing on one illness at a time, the disease management approach is not necessarily designed to address the number of issues involved with frail elderly patients that have multiple chronic illnesses and/or dementia. For example, treating a patient with dementia, hypertension, and diabetes in the absence of care coordination could result in unnecessary hospitalizations, polypharmacy, and easily avoided adverse events. Further, disease management often involves only self-management and patient education. For obvious reasons, this simply will not work for people with Alzheimer's disease or another type of dementia. And disease management does not always address functional issues brought on by old age or the complications that arise from multiple chronic illnesses, such as those leading to a dramatically increased rate of falling.

Unlike disease management, care coordination envisions individually tailored care for the patient with multiple chronic conditions. The care coordination team actively cares for the patient's multiple illnesses using a care plan that is constantly reviewed and updated. The care coordination plan would not only address all of the beneficiary's medical conditions but would also take into account the beneficiary's ability to self-manage their healthcare, any functional issues, and their support system. It is also important that there is a trusting, on-going relationship with the patient. We believe it is essential to have frank discussions among the care coordination team, and the patient and family regarding why forgoing certain treatments is medically appropriate, or may be more consistent with a patient's wishes. The nature of chronic illness requires this comprehensive approach utilizing a variety of interventions that change over time and contain both a clinical and a non-clinical component.

Conclusion

The American Geriatrics Society believes that older Americans with multiple chronic conditions will truly benefit from a Medicare geriatric assessment and coordination benefit, with an emphasis on preventive care. For this reason, we strongly support the Geriatric Assessment and Chronic Care Coordination Act sponsored by Senator Blanche Lincoln.

To provide high-quality, cost-effective care to the growing population of elderly individuals with multiple chronic conditions, the Medicare Program must be redesigned. The Geriatric Assessment and Chronic Care Coordination Act of 2007 will redesign Medicare by authorizing coverage of geriatric assessment and chronic care coordination for beneficiaries with complex and multiple chronic health conditions. The Act will properly align the financial incentives within Medicare to encourage the coordination of care and increase the quality of health care provided to the most vulnerable Medicare beneficiaries. By reducing hospitalizations and increasing the efficient delivery of health care through care coordination among providers, it will also create cost savings for the Medicare program.

We hope to work with this Committee and Congress to pass and enact the Geriatric Assessment and Chronic Care Coordination Act as well as on other issues to improve the health and quality of life for Older Americans. The changes embedded in this bill should be strongly considered as the Congress debates how to modernize the Medicare system. We thank you again for inviting us to participate in today's important hearing.

May 9, 2007

Senator LINCOLN. Dr. Anderson.

**STATEMENT OF GERARD ANDERSON, PH.D., PROFESSOR OF
PUBLIC HEALTH AND MEDICINE, JOHNS HOPKINS
BLOOMSBURG SCHOOL OF PUBLIC HEALTH, BALTIMORE,
MD**

Dr. ANDERSON. The Medicare Modernization Act of 2003 was the first step in the transformation of the Medicare program to one better oriented to the needs of beneficiaries with chronic conditions. Mrs. Lincoln and Members of this Aging Committee, thank you for your leadership on that issue. The transformation was long overdue.

Looking to the future, I would like to propose five additional steps for the Aging Committee to consider.

First, we need an evidence base that clinicians can use when they treat Medicare beneficiaries with multiple chronic conditions. Unfortunately, most clinical trials routinely exclude people with multiple clinical conditions, because it is difficult to demonstrate efficacy in this population.

This can leave a doctor treating a Medicare beneficiary with multiple chronic conditions with a difficult clinical decision. First of all, they could assume that the exclusions from a clinical trial just don't matter, and use the new treatment. Or two, they would assume that the exclusions are important, and not use the new information. Both of these could be wrong.

There are two ways to give the doctor the important new information. Thirty years ago, clinical trials routinely excluded women and minorities. Now, the Federal Government mandates that women and minorities be included in clinical trials. One solution is to mandate that clinical trials include complex patients, not just the simplest patients. A second is to fund follow-up studies that include the more complex patients.

Second of all, most clinicians are never taught how to work cooperatively with a complex patient. We did a national study of physicians, and found that a majority of the physicians did not feel that they had the minimum level of training in care coordination or other skills necessary for taking care of people with multiple chronic conditions.

Medicare is spending \$10 billion a year to support graduate medical education. Medicare could use some of its leverage to put more emphasis on training residents to care for complex Medicare beneficiaries.

Third of all, we need integrated electronic medical records that will allow clinicians to communicate easily with each other. Many countries will have integrated electronic medical records by the end of this decade. In these countries, most of the leadership and most of the funding has come from the Federal Government, because nearly all of the financial benefit accrues to the public and to the payers, it is appropriate for the public and the payers to pay the bill.

In the U.S., we are asking the providers to purchase electronic medical records systems. There are two problems with this approach: First of all, it is expensive for providers to introduce electronic medical records, and the payoffs to them are relatively mini-

mal. Second of all, having each provider select his or her own system dramatically reduces interoperability.

What I would do is pay each provider \$5 to send certain clinical information to a secure site maintained by the Medicare program. All clinicians could then access this information through a secure connection. Medicare beneficiaries would be able to restrict access to certain clinical information if they so desire. The cost of the Medicare program would be \$4 billion a year, and it would pay for itself if all the clinicians participated.

Fourth of all, we need to pay for assessment and care coordination. The legislation developed by Mrs. Lincoln, the Geriatric and Chronic Care Coordination Act, goes a long way to achieving this objective.

My suggestion is that each Medicare beneficiary with five or more chronic conditions—which represents about 20, 25 percent of the population—and/or dementia, select this care coordinator, and the care coordinator would help manage the person's care. Most likely, the person would choose a doctor, and the doctor would hire nurses to conduct the analysis and to identify potential problems.

One example of where better care would prevent and save some money is adverse drug reactions. Over half of all Medicare beneficiaries with a chronic condition go to the pharmacist once a year and are told by that pharmacist not to fill a prescription because of another drug that they are already taking that could have a problem. I would pay the care coordinator approximately \$100 per beneficiary per month, which is about the same as the disease-management firms receive.

In my last few seconds, I would like to expand our horizons and point out that chronic disease is now the major problem in every country in the world, including the poorest countries. Yet most international aid agencies focus almost exclusively on infectious disease such as AIDS, TB, and malaria.

However, the three most common reasons for death and disabilities in the world, both in high- and in low-income countries, are circulatory disease, cancer, and injuries. More importantly, chronic diseases can be treated inexpensively, and once the programs are initiated, these programs have a history of sustaining the chronic disease programs.

Thank you for the opportunity to testify.

[The prepared statement of Mr. Anderson follows.]

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TESTIMONY OF

Gerard F. Anderson, Ph.D.

**Johns Hopkins Bloomberg School of Public Health,
Health Policy and Management**

BEFORE THE

Special Committee on Aging

May 9, 2007

Mrs. Lincoln, members of the Aging Committee; my name is Dr. Gerard Anderson. I am a professor of Health Policy and Management and professor of International Health in the Bloomberg School of Public Health and Professor of Medicine in the School of Medicine at Johns Hopkins University. From 1999 to 2004, I was national program director for a Robert Wood Johnson Foundation initiative entitled, Partnership for Solutions: Better Lives for People with Chronic Conditions. Partnership For Solutions conducted some of the research that the Congress used to develop legislation on chronic disease that was incorporated in the Medicare Modernization Act of 2003. These changes began the transformation of the Medicare program to one that is better oriented to the needs of people with chronic conditions. I would like to thank you for your leadership on this important issue and your willingness to have a hearing today on care coordination and chronic care. I have read your bill, Geriatric Assessment and Chronic Care Coordination Act of 2007, and I believe this legislation takes the next step in the gradual transformation of the Medicare program to one that is truly orientated to the needs of the Medicare beneficiary with multiple chronic conditions. Hopefully today's hearing continues the transformation of the Medicare program to one that will be increasingly oriented to the needs of Medicare beneficiaries with chronic conditions.

This afternoon I would like to discuss three topics. The three topics I will highlight in my testimony this afternoon are:

- **Next steps in Medicare care coordination.**
- **Why the U.S. lags so far behind other countries in creating electronic medical records.**
- **Why foreign assistance programs should include prevention and treatment of chronic diseases high on the list of priority conditions.**

Being the academic, I have attached articles on each topic for those with additional interest in one or more of the topics.

I. Care Coordination in Medicare

Improved care coordination is critical if the Medicare program is going to lower spending and simultaneously improve outcomes. The need for better care coordination in the Medicare program is quite compelling. Care coordination is especially important for the 23 percent of Medicare beneficiaries with 5+ chronic conditions and for beneficiaries with dementia who may have difficulty coordinating their own care.

A few numbers about the Medicare beneficiaries with 5+ chronic conditions suggest why they should be a priority population.

- 2/3 of Medicare spending is by beneficiaries with 5+ chronic conditions.
- Medicare beneficiaries with 5+ chronic conditions see an average of 13 different physicians and fill 50 different prescriptions during the year.

- Medicare beneficiaries with 5+ chronic conditions are 100 times more likely to have a preventable hospitalization than someone with no chronic conditions.

Medicare beneficiaries with 5+ chronic conditions acquire many different combinations of chronic diseases over many years. Our analysis of Medicare claims data suggests that many Medicare beneficiaries with 5+ chronic conditions begin with developing hypertension, then high cholesterol, perhaps followed by congestive heart failure, diabetes, COPD and dementia. The path is different for everyone and is often interspersed with visits to hospitals and an increasing number of medical specialists. Disabilities are most likely to occur when the Medicare beneficiary adds new two chronic conditions during the year. Prescription drug use increases with each additional chronic condition. Disabilities may lead to a nursing home stay. Dementia adds to the complexity of care.

Medicare beneficiaries, especially Medicare beneficiaries with multiple chronic conditions, face a number of problems. These problems often affect them and their family members. The problems could be corrected if the financing and delivery system were to change. The Geriatric Assessment and Chronic Care Coordination Act of 2007 address several of these problems.

- Most physicians are unable to communicate electronically with other physicians and this means that care is often uncoordinated. Telephone and fax communication is often difficult, there can be miscommunication, and this can lead to medical errors. Integrated electronic health records would facilitate this communication, but few physicians have computerized medical records in their office. The best estimate is that only 25% of physicians currently use electronic medical records. Perhaps more important is that few of the electronic medical records are interactive and therefore even fewer physicians can communicate electronically with their fellow physicians and share medical information on a patient they have in common. Sharing information is especially critical for complex patients.
- One example of how poor communication can adversely affect patient care are potential drug drug interactions. Drug drug interactions can have serious if not deadly implications. Half of the Medicare beneficiaries with multiple chronic conditions will be told by their pharmacist at least once a year not to fill a prescription because of other drugs that they are taking.
- Physicians will need to be trained to work cooperatively to coordinate care. Unfortunately, most medical education programs emphasize a "siloed" approach to medical education by emphasizing training on a specific body part (heart, kidney) instead of the entire patient. As a

result, many physicians are not trained to work cooperatively to treat a patient with multiple chronic conditions.

- Biomedical research needs to recognize that 70 million people in the U.S. have multiple chronic conditions and physicians will need to know the best way to treat these patients. Evidence based care must be designed for people with multiple chronic conditions. Unfortunately, most clinical trials explicitly exclude people with multiple chronic conditions from the clinical trial. This leaves clinicians treating a patient with multiple chronic conditions with a difficult clinical choice – use the latest scientific discovery in treating their patient although their patient would have been excluded from the clinical trial or wait for other clinicians to try the new discovery on their patients and see what happens.
- In many cases, the “de facto” care coordinator becomes the person themselves or their family member. Often, it is only the patient or the patient’s family member who knows all the chronic conditions the patient has and they are the only ones with contact with all of the clinicians. Often, the patient or their family member must carry around a series of paper files and show the files to each doctor. Often, the patient or the family member is the one who must make the medical decisions because two or more clinicians have not been able to communicate with other.

Next Steps

Several steps will be needed if care coordination for people with multiple chronic conditions is going to improve. These steps require changes in how we conduct biomedical research, how we train clinicians, how we pay for care coordination, how electronic medical records are integrated and how we conduct patient education.

- The NIH, FDA, AHRQ and other federal agencies that conduct, fund, and/or review clinical trials, must include people with multiple chronic conditions into their analyses. Currently most people with multiple chronic conditions are routinely excluded from clinical trials. A study we conducted found that approximately half of all potential patients were excluded from clinical trials and most of the excluded patients had multiple comorbidities. This means that evidence based medicine cannot be practiced on these patients because there is inadequate data. There are two possible approaches for including patients with multiple chronic conditions in clinical studies. One option is to expand existing clinical trials to include patients with multiple chronic conditions. The precedent for this is the mandatory inclusion of women and minorities in clinical trials in the 1980s. Prior to the late 1980’s women and minorities were

routinely excluded from clinical trials. One possibility is that we could mandate that clinical studies must include people with multiple chronic conditions. An alternative is to require follow-up studies that include patients with multiple chronic conditions. The challenge is to develop an information base that allows clinicians to practice evidence-based medicine in patients with multiple chronic conditions.

- Medical schools and academic health centers must revise their curriculum to encourage more care coordination. We did a survey of physicians and found that over half of the physicians reported inadequate or no training in care coordination. In order to correct this problem, medical school curriculum that emphasizes care coordination need to be developed. In addition, care coordination skills need to be measured in the standardized testing of medical knowledge and proficiency testing that occurs during medical education. The Medicare program currently spends almost \$10 billion dollars per year on graduate medical education. Perhaps the Medicare program could insist that residents be taught care coordination. HRSA also supports residency training and these programs could also be required to emphasize care coordination.
- Explicit payments for care coordination are needed in the Medicare program. Currently, physicians are paid for evaluation and management in the Medicare program; however, evaluation and management does not pay for a physician for care coordination, the time spent collecting information from all the clinicians treating the patient, sorting through this information, making a series of clinical judgments and then discussing the revised treatment protocol with each other clinician involved in treating the patient. For Medicare beneficiaries with multiple chronic conditions, this is essential at certain times. The more chronic conditions the Medicare beneficiary has the more important care coordination becomes.
- One precedent for paying for care coordination is section 721 of the Medicare Modernization Act of 2003. These demonstration (and previous demonstrations) have paid entities such as disease management firms to provide care coordination services.
- The literature suggests that it is preferable to include the physicians and other clinicians should be incorporated in the patient care coordination activities to the greatest extent possible. Often disease management programs have difficulty achieving this objective. Other approaches are needed.

- My suggestion is to allow the Medicare beneficiary select their own care coordinator. It should be the person whom the patient feels is best able to coordinate their care. It could be a medical specialist (perhaps they are most concerned about their cancer care) or a generalist or in certain cases a nurse or an allied health professional. The person must be able to conduct all the persons involved in the Medicare beneficiary's care and be able to coordinate their care.
- If care coordination is going to occur, the most likely scenario is that doctors will hire nurses to collect and synthesize the data and identify areas where there are problems in care coordination. Under current Medicare rules, nurses cannot be paid for this care coordination function. In order to involve the physician and any nurses that the doctor may hire, it will be necessary to pay the doctors to provide care coordination. The payment should be similar to what disease management firms are receiving – approximately \$100 per beneficiary per month. These payments should go to the physician the patient has identified as their care coordinator. The payments should be restricted to beneficiaries with complex medical conditions.
- There are a number of ways to identify those who will benefit from care coordination. One is to identify high cost beneficiaries – more specifically beneficiaries with high Medicare Part B costs over an extended time period. Beneficiaries with dementia are a special case primarily because dementia impairs cognitive function. My preferred option is to limit the payment to beneficiaries with 5+ chronic conditions. Approximately one quarter of all Medicare beneficiaries would qualify.
- In order to assist clinicians in the care coordination activity, an integrated electronic medical record is needed. The role and benefits of the electronic medical record will be described in the next section.
- For all of this to happen, patients will need to be educated in a new model of care coordination. Unfortunately, most patients are required to provide the care coordination functions themselves today. Most patients are actively involved in choosing their clinicians except in emergency situations. Under this new model, patients will need to learn to work with one clinician who has complete information about them and who will assist them in planning their care. However, patient education will need to wait until the physicians have the requisite information and are prepared to coordinate care.

For more information on how the Medicare program needs to change to better meet the needs of Medicare beneficiaries with chronic conditions see my NEJM article entitled "Medicare and Chronic Conditions".

II The United States Is Far Behind Other Industrialized Countries in Acquiring Integrated Electronic Health Records

The United States is far behind other industrialized countries in the development of and implementation of integrated electronic medical records. Other countries recognized the importance of electronic medical records and have taken action. These countries recognize that complete information about the patient's clinical condition and treatment modalities is critical for good patient care especially in complex patients because comorbidities can influence how a patient will be treated. Without complete information on the patients' condition, mistakes can occur. For example, the wrong prescription can be written if the physician does not know the other prescription drugs the patient is taking. In Medicare beneficiaries with multiple chronic conditions; over half of them go to the pharmacy once a year only to be told that they should not fill a prescription they are taking because it may cause an adverse reaction with another drug they are taking. Doctors cannot always rely on the patient's memory because patients often forget all the drugs they are taking or all the diseases they have. In addition, doctors often do not have the time and are not paid to transmit information to the other doctor's treating the patient.

The simplest way that physicians can obtain data on the treatment protocols, lab tests, x-rays, etc ordered by other physicians is using integrated electronic medical records. Having an integrated electronic medical will allow all physicians treating a patient to have access to the relevant clinical data and therefore facilitate care coordination. Probably the best example of an integrated electronic medical record in the U.S. is the Veteran's Administration's medical record. All clinicians in the VA have access to all patients' medical records, lab tests, x-rays, etc. for care that is delivered by the VA. This improves outcomes and lowers costs because duplicate tests are not required.

Other countries have been working on developing integrated electronic medical records and have similar experiences to the VA.

- Germany was the first country to start developing a national health information technology network in 1993 and it became fully operational in 2006. Germany is now updating the technology to include smart card technology.

- Canada established an Advisory Council on Health Infrastructure in 1997 and launched the Health InfoWay in 2001. Canada expects that half of all Canadians will have an electronic medical record by 2009.
- The United Kingdom established a National Program for Information Technology in 2002 and expects to be fully operational by 2014.

There are several reasons why the U.S. has fallen behind these other countries in the diffusion of integrated electronic medical records. These include: government inaction, lack of a sustainable funding source, and inaction by physicians.

In all countries with integrated electronic medical records; the initial impetus for integrated electronic medical records has come from the federal government. In contrast, the U.S. government has done virtually nothing.

In all countries with integrated medical records, most of the funding has come from the federal government and/or health insurers. This is appropriate since studies have shown that most of the financial benefit of integrated electronic medical records accrues to the general public or the insurer, not the provider. The provider tends to benefit in very small ways financially and yet nearly all the onus for creating electronic medical records in the US has fallen to the physicians, hospitals and other providers. It is not surprising that they have been reluctant to embrace electronic medical records.

Getting physicians to adopt integrate medical records is critical. Leadership and financial incentives are critical. Other countries have used a variety of approaches to encourage physicians to adopt. Australia and the U.K. identified early physician adopters and used them to contact their colleagues and show them the benefits of integrated electronic medical records. Other countries used financial incentives or mandates. The U.S. has done relatively little to encourage physicians .

Perhaps the greatest barrier to implementation in the U.S. is the fragmented health care system. In other countries a single payment system using standard nomenclature is used. In the U.S. there is a myriad of payment systems all with different rules. Interoperability across payment systems and providers is a key component in any integrated electronic medical record. This is especially beneficial for patients with multiple chronic conditions. All clinicians treating the patient need to know what the other clinicians are doing through an integrated electronic medical record. Provider oriented medical records will not achieve this objective since they will be on multiple systems.

In all countries privacy and confidentiality are major concerns. Germany has an obligatory and optional part and the clinical information is optional. Patients can choose what information they want the clinicians to see. Canada has developed a framework that places restrictions on how and when personal information can be shared. Privacy issues have been addressed in other countries.

For more information on the problems the U.S. is having with integrated electronic medical records, see my article in Health Affairs entitled "Health Care Spending and Use of Information Technology in OECD Countries"

III Why Foreign Assistance Should Include Chronic Diseases in the List of Priority Conditions

Currently most international aid funding for health care is for infectious diseases, primarily AIDS, TB, and malaria. All of these infectious diseases are important and deserve funding. However, the funding priorities of entities such as USAID, World Bank, Global Fund and some of the private foundations ignore chronic disease which is now the major cause of death, disability, and lost productivity in the world including low income countries and can be treated inexpensively. .

A greater emphasis on funding chronic disease in low income countries is important for the U.S. for two reasons. First, the U.S. is a leader in health care innovation and should chart a new direction in international funding for health care that addresses the major reasons for premature deaths, illnesses and disabilities in low and middle income countries. The epidemiology of disease has changed in recent years and the US funding agencies should recognize this change and take the international leadership on this issue. Second, chronic disease is a major reason for lost productivity in many countries. Next month I will be going to Russia to speak with Russian leaders who are concerned that most Russian men have to stop work before age 60 for health reasons. Premature death in Russia has both financial and military impacts for the U.S. Most other countries in Eastern Europe have a similar problem with chronic disease and many countries are actually losing people in their country to premature illness.

The rationale for greater international funding for chronic disease should begin by examining the burden of disease in the world and in low income countries. Surprisingly, chronic diseases now represent the largest portion of the deaths and premature deaths in the world and this is true even in most low income countries.

- In the world and also in low income countries, the three most common reasons for death are: (1) cardiovascular disease, (2) cancer, and (3) injuries. For comparison purposes, HIV

infection/AIDS is number 6 in death rates in both the world and in low income countries.

- Disability adjusted life years (DALYs) takes into account the fact that certain diseases affect primarily younger people. It measures life expectancy and adjusts for health status. It therefore gives greater weight to diseases that strike children and young adults. In the world, the three most common reasons for reductions in DALYs are 1) mental illness, (2) injuries, and (3) cardiovascular disease. In low income countries the same three reasons for DALYs apply although the order is slightly different: (1) injuries, (2) mental illness, and (3) cardiovascular disease. HIV infection/AIDS is again number 6 on both lists.

In spite of these numbers most international aid focuses on AIDS, TB, and malaria. Although these infectious diseases are very important, they are not responsible for most of the deaths and DALYS in the world or even in low income countries. Among low income countries AIDS is number 6 in DALYS, malaria is number 10 and TB is not even in the top 10. For death AIDS is 6 and TB is 9 and malaria is not even in the top 10.

There are also myths associated with chronic diseases that keep international aid agencies from targeting chronic diseases. Four of the most common misconceptions are:

- Chronic diseases only affect older people
- Chronic diseases affect mostly men
- Chronic diseases can wait until infectious diseases are under control in low income countries.
- Chronic diseases are more expensive to treat than infectious diseases.

There are definitely reasons for international aid agencies to continue funding programs in AIDS, TB, and malaria. There are also equally compelling reasons to expand funding for chronic conditions such as cardiovascular diseases, certain types of cancer, diabetes, etc. USAID, the World Bank and private foundations and other foreign aid programs should begin making preventing and treating chronic diseases a higher priority.

Training people to recognize chronic diseases like hypertension is quite inexpensive and is also inexpensive to treat. The World Bank has identified programs in chronic disease that cost less than \$50 dollars for an additional health life year.

Last year I received funding from USAID to investigate chronic care programs that have worked in Eastern Europe. We identified many cost effective

programs that were sustained by the countries once initial funding ended. I have also worked in Russia and Mongolia on other programs and hope to undertake a new study of chronic care programs in Latin America this fall. The goal is to identify programs that improve health status at a low cost and that will be sustained by the countries once the foreign assistance ends. Programs to treat chronic diseases in low and middle income countries already exist and with more funding more people can be helped and the productivity of the country expanded. The United States needs to recognize the changing pattern of disease in the world and restructure the foreign assistance programs in health care.

For more information see my article in New England of Medicine article entitled "Expanding Priorities – Confronting Chronic Disease in Countries With Low Income".

Senator LINCOLN. Dr. Dorr.

**STATEMENT OF DAVID DORR, M.D., ASSISTANT PROFESSOR,
MEDICAL INFORMATICS AND CLINICAL EPIDEMIOLOGY
JOINT APPOINTMENT: GENERAL INTERNAL MEDICINE AND
GERIATRICS, OREGON HEALTH AND SCIENCE UNIVERSITY,
PORTLAND, OR**

Dr. DORR. Thank you. Good afternoon. My name is Dr. David Dorr, and I am honored to present testimony here today.

I am an internal medicine physician who works in a primary care clinic. I am also a medical informatics researcher on the faculty of Oregon Health and Science University. My work has focused on the use of information technology to improve care coordination for older adults with complex chronic illnesses in a program called Care Management Plus.

There is a crisis in chronic illness care. Consider Ms. Viera, a 75-year-old patient with five chronic illnesses. In most clinics, coordination of the care for her multiple chronic illnesses would be limited, leading to worsening of her conditions, unnecessary hospitalizations, and significant costs.

Guidelines of care for her illnesses may conflict, and she and her husband may struggle to integrate the sometimes conflicting recommendations of six different physicians with their own values.

With careful care coordination, as in Care Management Plus and other models, a care manager can help educate and guide the Vieras through their options. Care coordination for people with these complex illnesses can help limit the costs, improve health, and provide better quality of life for the growing number of older adults in our country.

Care Management Plus is the integration of a tested information technology system with trained care managers in primary care clinics to treat older adults with complicated conditions respectfully and effectively.

In its initial testing, Care Management Plus saved lives and improved health care outcomes by reducing hospitalizations by 24 percent, improving patients' experience with care, and improving disease status. Savings were estimated at more than \$.25 million annually per clinic. If 2 percent of the Nation's primary care providers adopted similar care coordination programs, Medicare would potentially immediately save over \$100 million each year.

We are in the process of disseminating the Care Management Plus model from seven clinics to more than 40 with another grant from the John A. Hartford Foundation. We have discovered three significant challenges as we do so.

First, clinicians want to provide care coordination services, but especially in smaller and rural clinics, face significant unreimbursed costs if they do so. For instance, having a care manager is essential to many such models, but services by the care manager such as providing education, motivation, coaching, and monitoring over time, do not receive adequate payment.

Second, the use of information technology is essential, but must be adapted to the needs of coordinating care. Current incentives have compelled most practices to use electronic health records to

better capture billing documentation rather than address the needs of coordination over time.

Third, models like ours and Eric Coleman's Care Transitions nurse-coaching model require time and effort to learn and implement. Incentives must reflect these costs.

We are heartened that the Committee on Aging is holding these hearings today. With your help, we can make sure that all persons with multiple chronic illnesses get health care that meets their essential needs in the most cost-effective way possible.

I thank you for the opportunity to share some of our exciting work with you today.

[The prepared statement of Dr. Dorr follows:]

Care Coordination for Older Adults with Complex Chronic Illness

Written Testimony to the
Senate Special Committee on Aging
Senator Herb Kohl, Chairman

May 9, 2007
Washington, D.C.

David A. Dorr, MD, MS
Principal Investigator, Care Management Plus
Asst. Professor, Medical Informatics and Clinical Epidemiology / General Internal Medicine
and Geriatrics, Oregon Health & Science University

Good afternoon. My name is Dr. David Dorr and I am honored to present testimony today. I am an internal medicine physician in a primary care clinic. I am also a medical informatics researcher on the faculty of Oregon Health & Science University. My work has focused on the use of information technology to improve care coordination for older adults with complex chronic illnesses in a program called Care Management Plus.

There is a crisis in chronic illness care. Consider Ms. Viera, a 75 year old patient with 5 chronic illnesses. In most clinics, coordination of the care for her multiple chronic illnesses would be limited, leading to worsening of her conditions, unnecessary hospitalizations, and significant cost. Guidelines of care for her illnesses may conflict, and she and her husband may struggle to integrate the sometimes conflicting recommendations of 6 different physicians with their own values. With careful care coordination as in Care Management Plus, a care manager can help educate and guide the Vieras through their options. Care coordination for people with these complex illnesses can help limit these costs, improve health, and provide better quality of life for the growing number of older adults in our country.

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We are in the process of disseminating the Care Management Plus model from 7 clinics to more than 40 primary care clinics through a grant from The John A. Hartford Foundation, and we have discovered three significant challenges. First, clinicians want to provide care coordination services but – especially in small and rural clinics – face significant, unreimbursed costs as they do so. For instance, having a care manager is essential to many such models but services by the care manager such as providing education, motivation, coaching, and monitoring do not receive adequate payment. Second, the use of information technology is essential but must be adapted to the needs of coordinating care. Current incentives have compelled most practices to use electronic health records to better capture billing documentation, rather than address the needs of coordination over time. Third,

models like ours and Eric Coleman's Care Transitions nurse coaching require time and effort to learn and implement. Incentives must reflect these costs.

We are heartened that the Senate Special Committee on Aging is holding these hearings today. With your help we can make sure all persons with multiple chronic illnesses get health care that meets their essential needs in the most cost-effective way possible. Thank you for the opportunity to share some of our exciting work with you today.

The Challenges of Managing Chronic Illnesses

Caring for patients with chronic illnesses is not easy. Consider the case of Ms. Viera. She is 75 years old, has diabetes, high blood pressure, mild congestive heart failure, arthritis and recently has had difficulty remembering to pay her bills and to take her pills. Her family practitioner is Dr. Smith, but she also sees 5 other physicians sporadically for her various illnesses. Ms. Viera and her caregiver husband come to clinic to see Dr. Smith and have several new issues to discuss, including hip and knee pain, questions about her 12 medicines, dizziness, low blood sugars, and a recent fall. Dr. Smith knows there are separate guidelines that apply to many of her individual conditions, but he also knows that the studies behind this evidence often excluded patients like Ms. Viera. In addition, the caregiver often is exhausted. In a typical primary care physician's office, the ability to track these multiple concerns is limited. Likely, Dr. Smith, a busy practitioner, will focus on her joint pain, and have limited time to address other issues. Without a thorough care plan and follow-through, Ms. Viera's diseases are likely to cause frequent hospitalizations and emergency visits. In addition, her 6 physicians may not communicate about her plan, give conflicting recommendations, or order medications that interact, raising the risk of problems down the road. Without incentives to coordinate her care, Ms. Viera is a serious risk of avoidable complications.

Our care model, Care Management Plus (caremanagementplus.org) attempts to comprehensively address Ms. Viera's health and quality of life. Once in Care Management Plus, a specifically trained nurse or social worker care manager assesses Ms. Viera's needs, co-creates a plan of care with her, acts as a catalyst to ensure the care plan takes place, and is a single point of contact for Ms. Viera's health care needs. The model focuses three themes: self-management and navigation over time; prevention of illness and disability; and information technology. For the Vieras, the care manager may assess home safety, connect them to community resources that provide services to help the caregivers cope, use assessment protocols for chronic illnesses, and facilitate discussions with providers and other

specialists. The information technology will track the progress of the Vieras and others over time to ensure they will not be forgotten.

The Benefits of Care Management Plus

The clinical and cost outcomes of the Care Management Plus approach are significant and positive. In our initial research and testing of Care Management Plus, care managers in 7 clinics cared for more than 23,000 patients over five years, rendering more than 100,000 services. In the program, people with diabetes have better control of their blood sugars and are more likely to be tested, which corresponded to 15-25% fewer long term complications, which translates into significant savings in medical costs, social service costs, and allows patients like the Vieras to live independently far longer. Seniors with diabetes had a 20% reduction in mortality and a 24% reduction in hospitalizations, saving Medicare up to \$274,000 per clinic. Perhaps most importantly, patients and health care providers are extremely satisfied, referring to the program as a “lifesaver” and a “dramatic improvement in healthcare.”

Looking Ahead: The Challenges of Dissemination, the Need for Reimbursement

We now are disseminating the Care Management Plus model with our coordinating center at Oregon Health & Science University, increasing seven pilot clinics to more than 40 clinics nationwide. In this effort, we see a number of challenges as we translate our research into broader practice.

First, these models provide cost savings but the services are minimally reimbursed. Smaller clinics run a serious risk of a net loss by providing coordination. Second, the ability to track and coordinate care requires a system currently in place in few clinics. Use of information technology is essential, but even with an electronic health record, the specific needs of care managers – care plan creation, best practices reminders and tracking, and facilitation of communication with the entire team – are not met. Understanding these information technology needs, encouraging their further development, and helping clinics implement them was crucial to our success and should be encouraged.

Finally, and most salient to the discussion today, is that we found significant variation in the goals of the patients and the roles of the care managers. In developing Care Management Plus, we created protocols for and focused on the management of specific diseases. But patients have more holistic concerns about the overall quality of their life and health, as well as the interactions among their multiple conditions. We found that care managers' ability to spend face-to-face time with patients and offer a variety of services (e.g.,

education, motivation, addressing barriers) was strongly correlated with better disease and health outcomes. Not every patient's trajectory was changeable, but thoughtful, experienced care managers improved most patients' quality of life and care.

Continued work on our capacity to care for older adults is required. In recent testimony to the Institute of Medicine, Corinne Rieder, the executive director of The John A. Hartford Foundation, highlighted the ongoing issues to build capacity to care for our vulnerable elders. She discusses three strategies that are pertinent to our discussion today. First, the numbers of our geriatrics specialists – physicians, social workers, nurses, pharmacists, and others – are insufficient to meet current and future needs. Second, creating capacity to deliver better care to older adults also requires investment in research in models like Care Management Plus. Research and development in such models has not developed through traditional business models and requires support by the government and foundations to support. Third, excellent researchers need to be encouraged to pursue research in efficiently, effectively provide care for older adults.

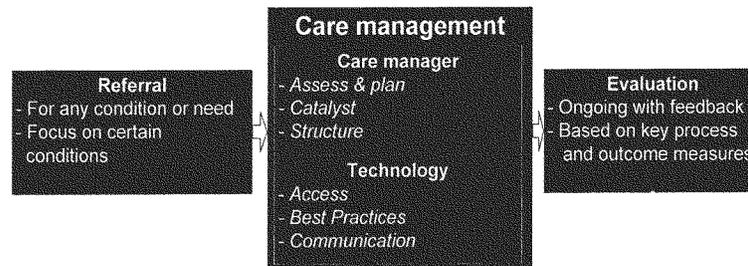
Care Management Plus

Care Management Plus uses IT and care managers to help patients and caregivers 1) self-manage their conditions; 2) prioritize health care needs and prevent complications through structured protocols; and 3) navigate an increasingly complex health care system. Specialized Information Technology includes the care manager tracking database, patient summary sheet and messaging systems to help providers access care plans, remind providers about best practices, and facilitate communication among the health care team.

The positive results of this model have caused many stakeholders to take notice. However, adoption of Care Management Plus requires primary care clinics to make a substantial investment: hiring a care manager, upgrading or acquiring Information Technology, and devoting the time and resources of other staff members to training and protocol implementation. In all, each clinic's investment is about \$100,000 over the first year of the program. In addition, Care Management Plus was estimated to save Medicare \$274,000 per year per clinic by comparing care managed patients with diabetes and other illnesses with matched controls.

Programs that use care management techniques, such as the Chronic Care Model, use team-based approaches to reorganize care. Information technology may also be used to remind physicians about best care for conditions. However, previous uses of information technology and care management only address part of the issue; with the complexity of a

patient's needs, information technology alone may provide too many alerts without a clear plan.



Care Management Plus focuses on three areas. First, care managers enhance a patient's and caregiver's *self-management* ability. The program has adapted other models to focus on needs of the elderly and patients with multiple chronic illnesses, for whom self-management is most difficult. It uses both computer-based tools and trained clinicians to enhance primary care. The primary information technology tool - the Care Management Tracking database - organizes the delivery of care and tracks tasks and outcomes. This enables both the patient and family and the primary care team to proactively identify the patient's disease status, to help them receive recommended care, and to meet specific goals. For those patients who have greater barriers to self-management, care managers work collaboratively with them and with their physicians to develop strategies to overcome these barriers, and then monitor progress. Physicians can refer patients in high numbers since the IT tools remind the care manager about the complex care plans and needs of patients.

Some patients have substantial challenges that can interfere with their self-management ability and overall health. The care manager partners with patients to help them overcome these challenges. For example, patients who have multiple chronic diseases or lack sufficient confidence or social support to manage the diseases may have a difficult time following through on a doctor's counsel without extra help. The care manager empowers such patients to organize and prioritize their tasks, and then monitors their progress. The care manager collaborates with the patient, the family and their physician(s) to

adjust the plan as needed. The benefits of improved self-management persist beyond the time that the care manager is involved accounting for better outcomes even years later.

Second, *prevention and early recognition is key* in Care Management Plus. The primary care team treats patients' chronic diseases early, trying to prevent problems rather than treating them after they occur. Information technology tools help monitor the status and needs of an entire population of patients, and remind the team of what needs to be done. A Patient Summary Sheet (known as the patient worksheet) also identifies which patients may not be getting monitored or treated appropriately; lab work that is due, and indicated medications that should be prescribed. It can be used as a reminder and to reinforce these goals when it is sent home with the patient. Third, many patients seek care from urgent locations (the emergency room, the hospital) because *the health care system can be complex and difficult to access*. The care managers help patients and caregivers navigate the system, providing links to community resources, helping compile care plans from multiple different providers, and taking the time to ensure patients at high risk receive best practice care. For example, if Mr. Viera were exhausted, the care manager could arrange for respite care and caregiver support classes to help him cope. If Ms. Viera were extremely depressed, the care manager would assure that the patient was seen by a counselor and/or a psychiatrist, and then communicate changes back to the primary care team.

The combination of the integration of these care managers into the primary care team with these tools has led to improvement of health of thousands of persons and significant decreases in the exacerbations of illness for seniors. Seniors with complex diabetes cared for under the program had a 20% reduction in mortality, 24% reduction in hospitalizations (including a 40% reduction in preventable hospitalizations), and up to 42% improvement in control of disease.

Other models

The Care Transitions Model, developed by Eric Coleman, has shown significant reductions in costs and significant improvements in patient-centered outcomes. During a 4-week program, patients with complex care needs and family caregivers receive specific tools and work with a "Transition Coach," to learn self-management skills that will ensure their needs are met during the transition from hospital to home. Patients who received this program were also more likely to achieve self-identified personal goals around symptom management and functional recovery. These patients were also significantly less likely to be readmitted to the hospital, and the benefits were sustained for five months after the end of

the one-month intervention. Anticipated cost savings for 350 chronically ill adults with an initial hospitalization over 12 months is \$ 295,594.

To date, the Care Transitions Program team has collaborated with 16 leading health care delivery organizations to adapt the model to their unique environments and this number will exceed 50 by September 2007. Please visit www.caretransitions.org where you can learn more about the model and its evidence.

Senior Health and Wellness Centers, like that developed by Ron Stock at PeaceHealth in Oregon, use interdisciplinary team approaches to coordinate care for the frail elderly. Such centers have been shown to improve function of patients, an important quality outcome. Other models, such as the Virtual Integrated Practice team model from Steven Rothschild at Rush University in Chicago, the IMPACT model by Jürgen Unutzer from the University of Washington, and many others have great promise for delivering the kind of chronic disease coordination that brings benefits to patients. Developing the expertise in care coordination takes time and effort; any reimbursement changes and health care reform initiatives should take into account the dissemination of expertise required to successfully implement them.

Senator LINCOLN. Thank you, Dr. Dorr.

Thanks to all of you all for your helpful input into this issue. We are grateful for that.

I will just ask a few questions and then turn it over to the Chairman and the other Members for their questions.

Dr. Semla, Dr. Dorr brought up some of this issue, but I was hoping that maybe you might elaborate as well on the doctors working in rural areas, the capacity or the infrastructure needs that they have for a team approach to coordinate their care. In particular, my State, in Arkansas, is rural, and many, many areas are medically underserved.

Any of you that may have recommendations—and Dr. Dorr, you have mentioned some in terms of reimbursements and how we could do that—but how we would assist rural providers with providing care coordination, considering that there is a shortage of medical professional providers in many of those areas.

Obviously, in terms of reimbursement, there is a challenge as well. But hopefully, there is more that we can do, if you have got some suggestions.

Dr. SEMLA. Yes, thank you, Senator Lincoln.

I was fortunate enough to train at the University of Iowa and was there for nine years, and so have some experience in delivering rural health care. I would look at it from a two-pronged approach.

First is to look at increasing the workforce that is either specializing in geriatrics or can employ the principles of geriatric medicine. There are a couple of things that are currently under way.

One is that the Institute of Medicine is currently working on a report on the workforce, will come forth with recommendations in March of next year on how we will meet the needs of caring for older adults.

Another would be the continuation of funding for things such as geriatric fellowship, geriatric residency programs, and Title VII, which funds the geriatric education center that not only trains individuals who want to specialize within their profession in geriatrics, but also teaches others in medicine and other professions the principles of geriatrics, so you are going to eventually get that down into the communities.

The other idea I would have is another along those lines, would be loan forgiveness programs for people who choose to go into geriatrics as their specialty, and particularly to encourage people to go into rural practices. Whether that is through State or Federal funding, that would be a huge incentive.

With regard to the delivery of care, I think looking at things such as telemedicine, whether that be videoconferencing or phone conferencing or some ways. When I was at Iowa, the dental school had a van that was actually a mobile dental office with several suites that went to nursing homes and provided care.

So if a patient can't come to the team for geriatric assessment, the team may be able to come there and then work with the person who is going to be their care coordinator, either a physician, nurse practitioner, physician's assistant in that area. So those are some suggestions that I would offer.

Senator LINCOLN. That is great. I know we have worked with great programs through Easter Seals to get that same type of team

delivery in to special-needs children, particularly in underserved areas, where we can get different therapies out there to them. That same van travels across the State with seven therapists for different things.

So there are a lot of good suggestions there. Without a doubt, increasing both the workforce, but more importantly, recognizing that we are not training the geriatricians or the academic geriatricians that we are going to need for the enormous onslaught of seniors that we will see when the baby boomers really do hit their full peak.

Dr. Anderson, the health care privacy is also a major concern in our country. Looking at your research on care coordination and health technology in other countries, I was hoping that you maybe could enlighten us a little bit on how they may have handled some privacy issues.

Maybe you might have some recommendations for how we can keep patient medical information private when trying to coordinate care for Medicare beneficiaries with these multiple providers.

Dr. ANDERSON. I think the easiest example is Germany, where essentially, they have been working on this issue for about 15 years. They have an electronic medical record. They are moving to the smart card that you would be able to walk around and could have all your electronic medical record information on it. You would have the ability to take off certain things if you chose to do so.

So if you were particularly concerned about a mental illness, or you are concerned about something on your medical record that you didn't want all the physicians to know, you could take that off, and it would be your choice. So, essentially, it is your card, and you get to deal with it. So you would have control over the information very easily. I think that works pretty well in Germany.

Senator LINCOLN. Well, it is interesting. In our State, we now have a consortium group that is working to bring greater efficiency and quality of care through medical records.

Wal-Mart has partnered with Intel and the University of Arkansas Medical Sciences to really begin to develop a very similar-type card that gives the information in the hands of the patient the ability to transfer or take that information with them, and to control the information in terms of things that they may want to keep some privacy element with.

Dr. ANDERSON. About a year ago, I was down in New Orleans, and the New Orleans City Health Department was passing out smart cards, because they saw during Hurricane Katrina, there was a huge problem when people lost all of their medical records. If you had it with you in your wallet, and you ended up in Arkansas, you would have that information. It was a critical thing that they learned as a result of Katrina.

Senator LINCOLN. Well, Dr. Dorr, last—my time is up—but based on your experience with the Care Management Plus, you talked about some of the benefits that you have seen for patients and their caregivers since they have begun receiving coordinated services for their chronic illnesses.

Is there anything else there? You talk about the information technology needing to be adapted, and I would think that as op-

posed to just making sure that we are having this coordination of information and care for the purposes of efficiency and cost-effectiveness, there are also other benefits too.

Dr. DORR. Yes, thank you. That is an excellent question about information technology and its use. I think that we have highlighted health information exchange as a very important part of the care coordination that really has to occur, and keeping privacy carefully monitored as we do that.

I think there is one core way we could do that, while still allowing a fair amount of choice, which is to continue to divine the core functions and standards that are necessary to be able to share care plans and coordinated care between physicians so that it is easy to keep track, and keep track of the six different components as well as the patient's preferences.

Senator LINCOLN. That is great. Thank you very much.

Mr. Chairman.

The CHAIRMAN. Thank you very much, Senator Lincoln.

Dr. Semla, will you tell us more, as specifically as you can, which I believe you touched on, why it is that a direct physician involvement in the care plan rather than the use of disease management companies is more productive and more efficient?

Dr. SEMLA. The demonstration project that CMS has done has largely focused on disease management companies, more focused on a specific disease as opposed to multiple illnesses and chronic conditions that all interact, so that their interventions are designed specifically for that particular intervention.

They may be targeting heart failure, but they are not taking into account the patient's diabetes, their arthritis, all of which can lead to complications in terms of managing their heart failure, or lead to drug interactions, as one of the reasons.

So having care coordination, some patient-centered focus on all of those chronic conditions, will help to make that system more efficient and lead to better outcomes for the patient.

The CHAIRMAN. You don't believe a disease management company can do that?

Dr. SEMLA. I don't believe that they have demonstrated it as well as chronic care coordination, particularly when combined with geriatric assessment, where you have an initial plan, and then you have the implementation of that plan. You have to have multiple chronic disease management systems for the patient, and sort of what we have now.

The CHAIRMAN. Dr. Anderson, what role do you believe that the Federal Government will have to play, or should play, in implementing electronic systems nationwide?

Dr. ANDERSON. As I said in my testimony, I think it is the benefit of electronic medical records accrue pretty much only to the payers. They don't accrue to the providers.

If I look at other countries, almost all of the expenditures come from the Federal Government, come from whoever is paying for care. They are the ones who benefit from fewer drug interactions, fewer hospitalizations, fewer readmissions, all these things that occur because you have an electronic medical record.

The hospital gets fewer admissions, so they don't benefit from this. The doctor gets fewer admissions. They don't benefit from

this, but yet we are asking them in the United States to pay for this electronic medical record. The benefits accrue to the payer, because you get fewer hospitalizations.

If I may take a second, in terms of your previous question, the evidence base, as I said, doesn't exist right now for taking care of people with multiple chronic conditions. So, a disease management firm going by the book doesn't know how to take care of somebody with multiple problems.

Medicine is an art, not a science, in many of these people, with multiple chronic conditions until we have got a better scientific basis, disease management, as much as it tries, doesn't have the evidence to take care of these complex patients.

The CHAIRMAN. All right. Thank you so much.

Dr. Dorr, implementing a program like Care Management Plus, as you know, may cost clinics upwards of as much as \$100,000. Small rural clinics, such as those in my State as well as across the country, may not be able to afford that investment.

So what other options exist for small clinics that may assist them in coordinating patient care?

Dr. DORR. That is a great question. We are actually working with the Oregon Rural Practice Research Network to come up with an answer to that question.

I will tell you our general approach, which we started in Utah, which was to invoke more of community support for the kinds of people who do care management in the community, to broaden the concept of the care team with the primary care clinics, as a center, but not necessarily providing all the care. To do that, developing relationships with the other resources that are available in that community, to help fill out the care as well.

Health information exchange about care plans, about the nature of a person's needs, need to be able to be spread more broadly. So one of the ways we have done this, just on the ground, is have a nurse that is shared between multiple clinics who actually might otherwise be competing. Basically, she goes to two different clinics, and sees the patient specifically for care coordination.

That is one example. Might not work in all places. But I don't think we have the answer to that yet, except to look to the broader rural communities and try and enhance the workforce, as Dr. Semla mentioned.

The CHAIRMAN. Thank you, Dr. Dorr.

Madam Chairwoman.

Senator LINCOLN. Thank you, Mr. Chairman.

Senator Whitehouse.

Senator WHITEHOUSE. Thank you.

Dr. Anderson, I would like to follow up a little bit on the comments you just made about health information technology. This is something that interests me a great deal, entirely apart from the question of where, within the health care system, the benefits of HIT accrue.

I would agree with you that they accrue first to payers, second to patients, and third to providers, perhaps even not at all to providers, or perhaps even at cost to providers overall.

Nobody contests that it is a wise idea to expend taxpayer money maintaining a national highway system, because we are all very

pleased that goods can travel rapidly around, and we can drive to visit our grandmothers and family.

Should we be looking at the national highway system as a model for a federally managed health information network?

Dr. ANDERSON. I think if we look at other countries, we see in fact that that is exactly what they have done, they use that model. Now, the difference is that I think that the national highway system has both Federal money and State money.

I think this is really a Federal responsibility, because many of the people spend 6 months in New York, or Rhode Island, and then they spend 6 months in Florida. Which State should pay for that cost?

So you have got to have an information system that is in fact national. So with that slight modification to your idea, I think it makes complete sense to make it a nationally funded system.

So I would prefer that, recognizing the health care system. I think my second choice is to have the payers pay for it, with Medicare taking the lead.

Senator WHITEHOUSE. Before you can fund something like this, there has to be some agreement on what it is going to look like. The sort of simple analytical model I have is back when we were a much more primitive country, and the railways were the technology of the future.

One thing Uncle Sam had to do, in a hurry, was decide how far apart the rails were going to be from each other. Simple decision, but once you made it, then the boxcar could get from Providence all the way down to Arkansas. If you don't make that decision, and you have got different track widths all over the country, you really don't have a railway system that can work.

In the health information technology world, it seems to me that there are some similar rail-width issues having to do with interoperability, with what goes in an electronic health record, with what the privacy and confidentiality requirements are going to be.

Are you comfortable that we are making enough progress on that in this country right now, when you consider the potential savings that are awaiting us if we can build out adequate health information technology?

Dr. ANDERSON. No, I am not. I think we are in fact doing it the wrong way. We are essentially, by putting all the responsibility on the providers to develop these electronic medical records. We are making it almost impossible to have interoperability.

At Johns Hopkins, we have one electronic medical record. The University of Maryland has a different one. A doctor doesn't know which one to use. So it is exactly like your railroad analogy here. They are dealing with two different, three different, five different electronic systems to try to connect with all of the things.

Each one of them, Johns Hopkins wants to get as many doctors into their system as possible. That is how the competitive system would work. But in this regard, the competitive system may make it more difficult.

So we do need that standardization of rails. There is some work at AHRQ and other places on that issue that I don't think is nearly enough. Until we decide we are going to put some real money into this activity, it is a lot of academic exercise.

Senator WHITEHOUSE. In terms of talking about the real money in this activity, I have come across three studies. The RAND Corporation study shows that the minimum likely level of savings is about \$81 billion a year from adequate HIT investment. Before David Brailer left ONCHIT, he said it was about \$100 billion a year. There is a Massachusetts group CITL which said \$75 billion a year. That is a pretty good set of numbers. In fact, the RAND Corporation high-end number estimates \$346 billion a year in savings.

Are you aware of other work that has been done to cost out the benefits of adequate HIT investment? Those are the three studies that come to mind. Are you aware of others that are out there?

Dr. ANDERSON. There are others, but I think those are for me very reputable ones. They all show about the same number in terms of savings. Really, it depends on how many physicians actually participate into the system.

The higher number, I think, is potentially achievable, by RAND. If we got nearly universal working on this system, and that physicians started to really accept the interoperability of it. In other countries, they are seeing significant savings.

Senator WHITEHOUSE. For the record, Madam Chair, in the context of these, the annual budget for the Office of the National Coordinator of Health Information Technology in the Federal Government has just been doubled, nearly, to \$112 million a year. If you took the \$81 billion, and you divided it down to days, that is \$220 million a day in savings. So we are investing about 12 hours' worth of the potential savings in trying to achieve them.

My time has expired.

Senator LINCOLN. Thank you, Senator Whitehouse. It is really difficult to mention those kind of savings around Senators, because we all can think of the many places we would like to see them invested.

Senator Craig.

Senator CRAIG. First of all, Madam Chairman, thank you very much for this hearing, and to Chairman Kohl and Ranking Member Smith.

Thank you all.

Let me ask unanimous consent that my full statement become a part of the record.

Senator LINCOLN. Without objection.

[The prepared statement of Senator Craig follows:]

PREPARED STATEMENT OF SENATOR LARRY CRAIG

Good afternoon Madam Chairman. I want to thank you as well as Chairman Kohl and Ranking Member Smith for calling this hearing today.

Madam Chairman, as the baby boom generation ages, we will see an enormous growth in the number of Medicare beneficiaries with multiple chronic conditions. By some estimates, this relatively small population of patients consumes nearly 2/3 of all our Medicare expenditures. Candidly Madam Chairman, that statistic is too startling to ignore.

This hearing will allow us to focus on this important aspect of Medicare. We all agree that Medicare is in need of reform. Medicare's inability to properly handle the needs of seniors with chronic illnesses is only one of the problems with the program. The current system is unsustainable—both financially and its ability to maintain quality care.

In the testimony they provided, our witnesses have highlighted a variety of problems that the current structure of Medicare presents to beneficiaries with chronic

conditions. While it is important to identify the problems, I also appreciate hearing about solutions.

America's heavy reliance on third party payers to finance health care presents a number of challenges. One of those—all of the experts on the first panel recognize—is that better coordination of care suffers because providers have little financial incentive to change care delivery based on the needs and wants of their patients. Put simply, their patients aren't paying much of the bill. The federal government is.

Still, ideas are beginning to surface in this important area. I was pleased to see that in his testimony Dr. Semla points out that the delivery of health care to chronically ill patients is focused more on the way physicians are paid, not on what is in the best interest of a patient.

Every year I meet with more physicians from Idaho than I can count. I'm sure that Senator Lincoln and other members of the House and Senate meet with physicians from the States and Districts as often as I do. When these various physician groups are all put together, it is clear that they are a well-represented profession.

While I enjoy learning about the new innovations in health care or the issues important to a particular specialty, I can't help but notice that there are always a few common themes when any doctor visits my office on Capitol Hill.

First, most of them recognize that the current Medicare system is not ideal for the needs of their patients. Then, that recognition is followed by a request that Congress increase Medicare payments for their particular specialty or cover some additional treatment service they would like to provide. In short, most of them identify the problem and then request something that will exacerbate the problem.

I would like to hear more physicians come in with ideas for a new business model for how they practice medicine and then offer some suggestions as to how we could change Medicare to meet the new business model. I am pleased, Madam Chairman, that this distinguished group of witnesses seems to be heading down that road.

When doctors begin to say they have a new business model that will better serve the health care needs of their patients, I think we in Congress will get at the business of reforming Medicare. But, when all we hear is that physicians believe Medicare payments need to increase, it is natural that we in Congress focus on that as the problem.

Madam Chairman, I am pleased that we will have the opportunity to discuss one important facet of the challenge of the future of Medicare today. Individuals with chronic conditions stand to significantly benefit from a re-examination of Medicare's payment structure. I hope we move on some of these innovative ideas and more importantly that we begin to change Medicare into a more patients focused system.

Again, I want to thank you Senator Lincoln as well as Chairman Kohl for calling today's hearing on this important issue and I look forward to hearing from our witnesses.

Senator CRAIG. Obviously, to our panelists, with two-thirds of our Medicare expenditures being into the area that you are focusing on, this is a bit of a statistic too big to ignore. Now, we have moved over to one of the tools, and that is as important.

Let me suggest to all of you, there is a model out there that the Federal Government owns today that is working phenomenally well. In fact, Dr. Anderson, when Katrina hit, we didn't lose a record. We didn't lose a patient. We didn't lose the pharmaceuticals. We didn't lose a staff person or the staff person's families or the staff person's pets. It was called the VA system.

We got them all out on time, on schedule, deployed them to other VA facilities around the country. The moment they walked through the door and their ID number was put into the system, their record was there.

It is by far, by almost every public and private estimation today, the best records system in this country. It was federally funded. It is uniform. We are now moving the DOD into a similar system, so there is connectivity.

I don't disagree with anything you are saying. The sporadic efforts out in the private sector to build a system is not working, not working the way it ought to work. There is no question, when I

look at the quality of health care delivery that the VA system now brings to us.

Harvard, Michigan, their surveys, consumer satisfaction is higher than almost any private or other public system, and so on and so forth. Why? It is the records system. It is the uniformity of it. It is a phenomenally good system.

Madam Chairman, we have spent a few billion dollars getting there. It is available. It is a publicly owned system. Anybody can replicate it if we were to choose to do that. But there is no single force causing that to happen, or allowing it to happen.

Privacy becomes a frustrating issue, as it relates to that kind of connectivity. I voice my concern about smart cards, and the need for uniformity even for a smart card to work, while that card houses all of the information current.

In fact, I saw a demonstration of it today where in the card was also the X-rays, and so if you have got a hip that is metal, and you are going through a detector at the security at the airport, well, that system could have a system that accepts a smart card, and boom, up comes your X-ray to prove if you needed to.

So all of that is doable, but there is no national coordinated effort. With a smart card, there would need to be a uniformity, though, of at least software to accept it at individual providers' locations. Would that not be true?

Dr. ANDERSON. That would definitely be true. But I think that is something that AHRQ and other Federal agencies have worked on. There is a fair amount of work that has been done. So I think we are close to that.

I think it is the Medicare program that should take the lead, because the people who would benefit most from the smart card are the people with multiple chronic conditions, and that tends to be the Medicare program.

Senator CRAIG. What about that chronic condition that says, "When I get to my provider, I forgot my smart card"? How do we deal with that?

Dr. ANDERSON. That is clearly a problem, that we do lose information. We might have to have a backup—

Senator CRAIG. "Oh, it is back home, laying on my dresser. I forgot to bring it."

Dr. ANDERSON. Right, and that happens. I sometimes forget my Blue Cross card when I go to the doctor as well. They give me a little bit of information.

You could have a backup system there that is available as well, where you just put the smart card in at the doctor's office and it connects to some very large server, if you chose to do that. I was just trying to make sure that we didn't really intrude too much on the privacy thing.

But personally, I think the VA system works incredibly well. I think the smart card would be in addition to that. But the VA system works incredibly well.

Senator CRAIG. Well, I thank you. I have no questions.

But I do believe, Madam Chairman, we have something that we may not necessarily want to replicate, but we have a model that is working. It is right in front of us every day. The taxpayers of America paid for it.

We spent many years investing it, and in it, and improving it, and we continually do work on it today. It is without question a very effective system. It has brought savings. It has brought quality of delivery, and all kinds of things that are something that we are striving for.

Thank you very much for this hearing.

Senator LINCOLN. Thank you, Senator Craig.

It brings consistency, as you have mentioned with the victims of Katrina, to be able to have portability.

Senator CRAIG. In fact, Madam Chairman, it was fascinating, in talking with the managers of those hospitals, as I have. They didn't worry about the records, because the records were in the main-frame, outside of Katrina. They just knew that when they got the patient, they worried about the patient.

In fact, the great tragedy is that the public sector performed very well in that instance, and the private sector, in some instances, failed, even to the point of losing patients. Therein lies a great tragedy. But beyond that, they didn't worry about the records, because they knew when they got to wherever they were going, they would be there.

Dr. ANDERSON. I had an opportunity to go to see it, and almost all the doctors' offices lost all of their records. The hospitals lost all of their records. It was only the VA that was able to maintain, because they had it on a remote site.

Senator CRAIG. That is right. Thank you.

Senator LINCOLN. Thank you.

Senator Casey.

Senator CASEY. Thank you, Senator Lincoln. I appreciate you getting us together today here.

Senator Kohl, thank you for your chairmanship and the great hearing you have provided and the great panels, today being one of those.

I want to say first that one of the things that I am proudest of in the last couple of days is to be a co-sponsor of the Geriatric Assessment and Chronic Care Coordination Act of 2007. Senator Lincoln has shown great leadership on that issue, and we are just beginning that process.

Your testimony today helps us to understand better the kind of coordination that we need, and the real urgency to do that when it comes to chronic conditions and in other challenges we have in our health care system, particularly with regard to Medicare.

I come from a State where we are right now second in the country in terms of the population over the age of 65, second only to Florida. Eighty-five and up is our fastest-growing population, and your heads are 90, and you know this well. I think these issues that you have given testimony about, we are exploring this particular bill that I mentioned, will bring some light too, I think.

All these issues come under the broad umbrella of how do we pay for Medicare in the future, and it is among the two or three most urgent domestic challenges we have for the next 50 or 100 years. We all know that. This is one of the few efforts in Washington, DC, today, I think, to really deal with it.

If we don't deal with the coordination of care in chronic disease or illness, we are not dealing with the cost of Medicare. So it is not

just about dollars and cents, it is about whether we can deal with those costs.

There are two data points or statistics that I want to read, and I think they are particularly compelling. One is, this comes from the summary that Senator Lincoln had for the bill, and it is just startling. The witnesses know this, but I think we can't say this enough.

Twenty percent of Medicare beneficiaries have five or more chronic conditions, and these individuals account for almost 70 percent of all Medicare spending. I mean, it is just staggering, the kind of money that is being expended. We have no strategy to deal with that at present, no strategy to take better advantage of the technology, and take better advantage of the care plans that we are talking about.

I think also, the other number, or the other data point that jumped out at me, was just the impacts of this on our entire population, that by the year 2020, a quarter of the American population—not the American elderly or older citizens, the entire population—will be living with multiple chronic conditions. Costs from managing these conditions will reach more than \$1.1 trillion, by one estimate.

So whether those numbers are exactly accurate or not, even if they are in the ballpark, we are in big trouble right now. Washington is not dealing with this. I think this bill and this hearing is a step in the right direction.

It seems that we have made a decision over many years in both parties, in lots of administrations and Congresses, to say that for someone who has a chronic condition or a long-term problem like diabetes, that we have made the decision we will pay for an amputation down the road decades later, but we won't pay for a care plan that leads to the prevention that is necessary, or a plan to prevent that amputation from taking place. It is real madness in terms of care, but it is fiscal madness in terms of the money. So that is my statement.

But let me get to some questions. I would ask, I did have a longer statement, which I will submit for the record, and I would ask consent to do that.

Senator LINCOLN. Without objection.

Senator CASEY. One of the concerns that I have with the direction we are taking is whether or not this coordination—and this is for any one of the three of you—this coordination and the kind of chronic care coordination that we are talking about can lead to the elimination or the reduction of the kind of independence that people want.

I know that is always a tension between helping someone and coordinating their care and a lot of the independence. I don't know if any of you have any opinions about that.

Doctor.

Dr. ANDERSON. What I think you want to do is to allow the patient to choose their own care coordinator. So, if I have cancer as my major concern, maybe it is my oncologist that is the care coordinator. If diabetes is my major concern, maybe it is my endocrinologist that is my care coordinator.

If I get to choose who my care coordinator is, I am going to feel very comfortable with that. If somebody else chooses it for me, then I am not going to be comfortable. So I think it is really just giving that person the choice.

Senator CASEY. Anyone else have, on that question?

Dr. DORR. Absolutely. The most patients in the country do seek care from a primary care physician, a geriatrician. That what makes sense, at least from our perspective, is that they are still able to choose any primary care team that they would like, but that unfortunately, that to learn how to do these models takes time and effort.

That somehow, if a way to understand the value of that and to document it more carefully through a series of standards that were implemented, that that would help as well. So patients could choose somebody who has by reputation had that opportunity.

Senator CASEY. I know I am out of time, but, Doctor?

Dr. SEMLA. Well, I would just say that choice is good, and letting the patients choose would be a goal. Most patients are probably going to choose a geriatrician or a primary care provider, particularly if they have multiple chronic illnesses.

Senator CASEY. Thank you.

Thank you, Mr. Chairman, Madam Chair, as well.

Senator LINCOLN. Thank you.

Senator CORKER.

Senator CORKER. Madam Chairman, thank you for this great hearing.

I think the testimony has been very, very good, along with the comments that other Senators have made. I know that the subject matter was selected for each of you, and we kind of honed in on Mr. Anderson a great deal, not to take away from the two of you. But I think the focus of the records and the smart card itself are dead-on.

I come from a State, Tennessee, that has a lot of entrepreneurs, a lot of people involved in health care. What I find—and I really appreciate the great work that they do, and they have done a lot to advance medical care in America—but it is like we have silos of people that are doing exceptional things, but not talking with each other.

I think that tying that together with technology truly is the only—we really do not have a health care system in America. We have a lot of people who are doing what they do well. I think that the technology has the ability to really cause us to have a system where people are actually communicating with each other.

I think your comments have been dead-on, along with others up here. I really want to work with our Madam Chairman and others to make sure that we do focus on the public sector taking the lead in making sure we have a technology platform.

I would like to move to another subject, and I think Senator Casey's comments about focusing on the end issue instead of prevention—obviously, all the money exists in the chronic conditions. That is where all of the prevention needs to even take place with younger populations.

But if you will, describe to me, if we went this route, sort of the upfront investment that might take place. Financially, again, I realize we are seeking bigger savings down the road.

But talk a little bit about how we would go about paying for this, through this Medicare program. Also if you would differentiate that from what now happens with Medicare Advantage and that type of thing. I would love to have an explanation from each of you that want to discuss it.

Dr. ANDERSON. What I propose is that the Medicare program pays \$5 for a physician, for a hospital, for whoever has the medical records to submit it. Then, that is the payment system, and that would cost about \$4 billion.

Senator CORKER. Yes, I am actually not talking about it. I had heard you say that, both in your testimony and I know someone else asked a question. I am actually talking more now about the general coordinated care effort that would take place, and having someone coordinate that through the fee-for-service program. I am focusing on the bigger picture of the bill itself.

Dr. ANDERSON. Basically, what you want to do is provide to a doctor, I think in most cases—whoever is the person who the patient chooses to be the care coordinator—approximately \$100 per member per month. That person would probably hire somebody to do most of the care coordination activities.

Then, where there is a difficult decision to be made clinically, it goes to those two, three, four doctors, and they have an actual conversation about whether or not the cardiology problem or the neurology problem is more significant. So, it would probably involve the geriatrician and others.

You need money for that person to gather all the information, to have it in order to make a decision. I propose one more number to keep in your heads these Medicare beneficiaries with five or more chronic conditions see 13 different doctors during the year and fill 50 prescriptions during the year. So a lot of information is flowing, and we need somebody paid to coordinate that.

Senator CORKER. Let me follow up on that, if I could. I know there are others that want to make comments.

I was commissioner of finance for the State of Tennessee about a year after we privatized Medicaid. I had nothing to do with privatizing it, but was there to sort of deal with some of the issues.

What we found was that, in a lot of the HMOs, we had clerks, in essence, that didn't know that much about medicine, that were paid like you are describing, to make major decisions, if you will, on behalf of patients.

So, it turned out to be a not-so-good thing, if you have, in essence, somebody on the end of the telephone that really—so if you could respond to that?

Dr. ANDERSON. Mine would be different in that it would be paid. The money would go to the doctor, and the doctor would be the one that would be supervising this nurse or this person. So the doctor would feel responsible for the activity, not some clerk on a telephone.

Senator CORKER. Can I ask one more question? I know I am out of time, but, through an HMO, there is obviously a financial incentive. This would, in essence, be a fee paid to someone.

Would there be additional incentives, if you will, to coordinate care and keep costs at a lower level? Or would it just be that per-member per-month payment to that person? It sounds like a strict administrative payment without other incentives in place.

Dr. ANDERSON. I would love to have pay for performance included in that. I think the key things that you would want to reduce are readmission rates, and you could monitor the readmission rates at the hospitals.

You can monitor what are called preventable hospitalizations, and these are things that have been in the literature for a while, like you should never be hospitalized for diabetes and other kinds of things. You can monitor how well this care coordinator is performing on all these types of indicators.

A third one would be drug-drug interactions. These are things that can be very expensive that can be relatively easily monitored if you have somebody who feels responsible for that activity. Right now, none of these 13 doctors really feel responsible. So paying for a care coordinator and monitoring his or her activities would make them feel responsible, and we can monitor their performance in this activity.

Dr. SEMLA. I would like to comment that many geriatricians are already providing these services without receiving payment for them, because that is what they do and what they are committed to doing as part of their service. I would include others in geriatrics, such as nurse practitioners and physicians' assistants, who can deliver some of these same services under the supervision of a physician.

With regard to pay for performance, I think we have to be very careful in terms of the quality indicators that we would choose, because we are dealing with a very vulnerable and at some times frail population but that does get sick. But just focusing on something like drug-drug interactions is a perfect example.

I am not sure the Committee is aware, but there is evidence that suggests that for every dollar that we spend in the United States on prescription medications, we are spending between 33 cents and another dollar to treat the adverse events from those medications. So it is not a really good bang for our buck. That would certainly improve with care coordination.

Senator LINCOLN. Well, I want to thank the panel very much. You all have been a tremendous help, and we look forward to continuing this discussion and work, because I think there are so many things that we can agree will benefit all of us, all of our families, and certainly the Medicare beneficiaries in this country. So we look forward to working with you. Thank you so much for your time and for being here.

We would like to call our second panel, if we can.

I would like to welcome our second panel.

We will first hear from Stuart Guterman, who is the senior program director of the Program on Medicare's Future at the Commonwealth Fund. Mr. Guterman was also the former director of the Office of Research, Development, and Information at the Centers for Medicaid Services.

He will be followed by Dr. Stephen McConnell, who is the vice president of advocacy and public policy at the Alzheimer's Association.

Our final witness will be Ann Bowers, who will share with us what it is like to be a caregiver to an individual who suffers from multiple chronic-care conditions. I am certainly especially pleased with Ann being here today, because she is from Arkansas.

As a caregiver to a parent with Alzheimer's disease myself, along with my sisters, brother, and my mother, I think it is especially important that we hear from family members who face the day-to-day struggles of caring for a person with multiple illnesses and in that chronic disease.

So thank you all for being here.

Mr. Guterman.

STATEMENT OF STUART GUTERMAN, SENIOR PROGRAM DIRECTOR, PROGRAM ON MEDICARE'S FUTURE, THE COMMONWEALTH FUND; FORMER DIRECTOR OF THE OFFICE OF RESEARCH, DEVELOPMENT AND INFORMATION, CENTERS FOR MEDICARE AND MEDICAID SERVICES, WASHINGTON, DC

Mr. GUTERMAN. I want to thank you, Chairman Kohl, and Ranking Member Smith, Senator Lincoln, and the other Members of the Committee for this invitation to testify on chronic care initiatives in Medicare.

I am Stuart Guterman, senior program director for the Program on Medicare's Future at the Commonwealth Fund. The Commonwealth Fund is a private foundation that aims to promote a high-performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable populations, including the elderly and disabled. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy.

Now, the Medicare program, as you have heard, was designed to ensure access and needed health care for first the elderly and then the disabled population. It has served that purpose well for more than 40 years. But the population it serves has grown and changed, and Medicare must adjust to meet the needs of its beneficiaries.

One problem faced by Medicare, as well as the rest of the health care system in this country and in other countries, is that while the health care delivery and financing system was originally designed to address acute care needs, the population they serve is characterized increasingly by multiple chronic conditions.

We have already heard from the Chairman and others, 20 percent of Medicare beneficiaries have five or more chronic conditions, and these beneficiaries account for two-thirds of Medicare spending each year. That accounts for about \$300 billion next year that will be spent on people with multiple chronic conditions.

The astounding fact to me in all this is that this group of 20 percent of Medicare beneficiaries sees 13 different physicians—actually not see, is treated by, sometimes they actually don't see them—13 different physicians, and fills 50 prescriptions each year.

So there is not only a lot of money on the table for this group of people, there is also a lot of care being provided. Currently, there is no incentive in Medicare or most other systems to coordinate that care. Within Medicare, I would assert that neither traditional fee-for-service Medicare nor necessarily the Medicare Advantage program currently is configured to ensure that these beneficiaries get the kind of coordinated care that they need.

Fee-for-service payment emphasizes provision of individual services in the context of a single encounter for a single condition. Capitation provides incentives that may be more consistent with better coordination, but that doesn't mean that plans respond to those incentives in that way.

Capitation also provides a strong incentive to avoid chronically ill enrollees, even under the current risk adjustment mechanism. Moreover, the lucrative payment rate that plans currently receive under Medicare Advantage may actually diminish the power of any incentives, both positive and negative, that capitation otherwise would provide.

CMS, though, has begun to respond to these changes in their population and their needs by developing a variety of initiatives aimed at improving the coordination of care provided to Medicare beneficiaries with chronic conditions. In my written testimony, I describe these initiatives in some detail, but I would like to mention a few of the projects that are currently underway.

Under traditional Medicare, one of the early attempts to coordinate care was the Medicare Coordinated Care Demonstration. This was an attempt to see whether providing coordinated care services to Medicare fee-for-service beneficiaries with complex chronic conditions could yield better patient outcomes without increasing program costs.

There were 15 sites, both in urban and rural areas, that focused on various complex chronic conditions. Enrollment in these programs began in April 2002, and at its maximum reached about 21,000 patients. However, that number was concentrated; about 60 percent of the total enrollment was in the five largest sites.

There are initial findings from the first 2 years of that demonstration. They found that beneficiary recruitment in the fee-for-service market can be a challenge, that the most successful programs had close ties to physicians and other providers, and through the first 2 years of the demonstration, few effects were found on beneficiaries' overall satisfaction with care, patient adherence or self-care and Medicare program expenditures. So the results are sort of mixed at best.

Currently, there is a major project that is not a demonstration, but a pilot program called Medicare Health Support, which was expected to involve about 160,000 beneficiaries at eight participating sites.

Unfortunately, two sites are in the process of dropping out of that program, LifeMasters in Oklahoma and McKesson in Mississippi. But we don't have any good results on what the bottom line is going to be from that demonstration.

I am glad to say that apparently, another demonstration project that was in the Medicare Modernization Act is about to be implemented, the Medicare Care Management Performance Demonstration.

tion, which is a 3-year project that is scheduled to start July 1 in Arkansas, California, Massachusetts and Utah, to promote adoption of health care information technology to improve quality of care for chronically ill Medicare patients.

Focused on the physicians, about 800 practices with one to 10 physicians are going to be involved in that, a total of 2,800 physicians focusing on patients with diabetes, heart failure, coronary artery disease, and preventive care. The special needs plans, which I won't go into, are intended to help, in the Medicare Advantage environment, improve coordinated care.

So what do these initiatives tell us? They tell us, No. 1, that engaging Medicare beneficiaries in these kinds of initiatives can be challenging, that the more successful initiatives work more closely with physicians to help identify patients who can be helped most and to establish credibility with those patients.

They tell us that designing approaches to reach different populations and in different circumstances and environments and successfully integrating those approaches can be complicated, and that improvements in health care for groups of individuals seem to be achievable, but the jury is still out on whether savings can be reliably achieved.

Still, given the current lack of coordination in our health system, it would be hard to believe that a way can't be found to improve on both quality and efficiency. The current system basically is the example of the worst case, and any attempt to coordinate care, I think, would be a move in the right direction to use this \$300 billion a year that is on the table more effectively for the beneficiaries in the program.

[The prepared statement of Mr. Guterman follows:]

Change in Medicare: Chronic Care Initiatives to Improve the Program

Stuart Guterman

Senior Program Director, Program on Medicare's Future
The Commonwealth Fund

Invited testimony

Special Committee on Aging

United States Senate

Hearing on "The Future of Medicare:
Recognizing the Need for Chronic Care Coordination"

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**Enhancing Value in Medicare:
Chronic Care Initiatives to Improve the Program**

Thank you, Chairman Kohl, Senator Lincoln, and Members of the Committee, for this invitation to testify on chronic care initiatives in Medicare. I am Stuart Guterman, senior program director for the Program on Medicare's Future at the Commonwealth Fund. The Commonwealth Fund is a private foundation that aims to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable populations, including low-income people, the uninsured, minority Americans, young children, and elderly adults. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy.

Introduction

The Medicare Program, created in 1965, was designed to ensure access to needed health care for the elderly population—half of whom lacked insurance to protect them against the potentially catastrophic costs of major illness.¹ It has served that purpose well for more than 40 years. Over that time, Medicare has become one of the most popular government programs, generating consistently high satisfaction levels among its now 43 million elderly and disabled beneficiaries.

Medicare was designed to deal primarily with the effects of acute illness, which was seen at the time of its implementation as the major threat to the health and financial security of the aged. While the health care delivery and financing system in the United States remains largely oriented toward acute care, demographic and other trends are putting pressure on that system—and on Medicare particularly—to change. Health care spending overall is growing more rapidly than our economy can sustain, and Medicare faces the additional pressure of a wave of post-World War II baby boomers set to begin retiring within the next few years.²

At the same time, for all we spend on health care, there are significant issues with the safety, quality, and efficiency of care, and that care is poorly coordinated across providers.³ This problem is especially important for Medicare, whose aged and disabled beneficiaries need and use more health care and are more likely to have chronic conditions than the rest of the population.⁴ Consequently, Medicare must play a more proactive role in making sure that appropriate, high-quality, and efficient health care is available for the elderly and disabled.

In response to these imperatives, the Centers for Medicare and Medicaid Services (CMS) is implementing an array of initiatives to address the evolving needs of the Medicare program and its beneficiaries. Many of these initiatives have been developed under CMS's demonstration authority, which allows the agency to waive certain Medicare payment rules that determine what services are covered and how they are paid in order to test potential improvements; others have been specifically mandated by Congress.

This testimony will describe Medicare's initiatives to improve care for beneficiaries with chronic conditions. I will then discuss what these initiatives may tell us about how to accomplish that goal.

The Need for Enhanced Value

Like many other countries, the United States population is aging. In 2000, the proportion of individuals age 65 and older in the U.S. was 12.5 percent; this share is projected to grow to 16.6 percent by 2020, an increase of one-third.⁵ Older individuals are more likely to have one or more chronic conditions. A 2004 Commonwealth Fund survey of older adults asked respondents if a physician had told them they had any of six conditions—hypertension or high blood pressure, heart disease or heart attack, cancer, diabetes, arthritis, or high cholesterol—and the rate of reported conditions increased significantly with age: 67 percent of respondents aged 50 to 64 cited at least one chronic condition, versus 84 percent of those aged 65 to 70 (Figure 1).⁶ Other studies have shown that the 20 percent of Medicare beneficiaries with five or more chronic conditions account for 66 percent of Medicare spending (Figure 2)—and they receive services from an average of almost 14 physicians in a given year.⁷

The health care delivery and financing system, however, is not set up to serve individuals with multiple chronic conditions. Studies have shown that Medicare beneficiaries with these conditions are more likely to have preventable hospitalizations, experience adverse drug interactions, undergo duplicate tests, and receive contradictory information from doctors.⁸ Moreover, the high Medicare costs they incur appear to be consistent over time: a 2005 Congressional Budget Office report found that nearly half of the beneficiaries in the top 25 percent of the Medicare population with respect to cost in 1997 (a group that accounted for approximately 85 percent of total Medicare spending) were again in the top 25 percent the following year.⁹ That report also determined that of the high-cost beneficiaries in 2001, more than 75 percent had been diagnosed with one or more of seven major chronic conditions.

Neither traditional fee-for-service Medicare nor Medicare Advantage (MA) is currently configured to provide adequate care for these beneficiaries. The fee-for-service payment model still dominates in the United States—particularly in Medicare. Although the proportion of Medicare beneficiaries enrolled in managed care arrangements has grown recently, more than 80 percent of them remain in the traditional fee-for-service program, which provides no incentive for the coordinated care needed by the chronically ill.¹⁰ Additionally, fee-for-service payment encourages specific, condition-oriented care, by which an individual with multiple conditions is treated by multiple providers.¹¹ Moreover, the fee-for-service model allots more generous payments for procedures and specialists' services, thereby discouraging physicians from entering the primary care fields that are more compatible with the role of care coordination.

Although managed care would appear to be better suited to providing the kind of coordinated care needed by chronically ill Medicare beneficiaries, the MA program and its predecessors historically also have been flawed in this respect. The incentives provided under capitated payment are more consistent with better coordination, but that does not mean that plans respond to those incentives in that way; moreover, the lucrative payment provided under current MA rules may actually diminish the power of those incentives.¹² Capitation also can provide a strong incentive to avoid chronically ill enrollees if the payment system fails to adjust properly for the costliness of the individual enrollee and, although MA plan payment rates will be fully risk-adjusted in 2007, recent analyses indicate that the incentive to avoid sicker enrollees may persist.¹³

Meanwhile, Medicare is likely to face increased fiscal pressure over the next few years: as baby boomers approach retirement, the country's ratio of workers to beneficiaries is declining. As a result of the aging population and the new drug benefit, the Medicare Trustees estimate that program expenditures will grow from \$336 billion in 2005 to \$799 billion in 2015 (Figure 3).¹⁴ Medicare spending as a share of gross domestic product (GDP)—at 2.7 percent in 2005—is expected to rise to 4.6 percent by 2020.¹⁵ In addition, the Medicare Hospital Insurance Trust Fund is projected to be insolvent by 2019. These projections will soon be pushed to the forefront of the political debate, as the 2007 Medicare Trustees' Report triggered a "Medicare funding warning," which by law requires that the president submit a proposal to Congress to address Medicare spending growth.¹⁶

In addition to an aging population, the increased prevalence of chronic conditions, and rapid spending growth, the Medicare program and the health care system as a whole must also deal with sub-par performance on many cost and quality indicators. The

National Scorecard on U.S. Health System Performance compiled by the Commonwealth Fund's Commission on a High Performance Health System indicates that there is much room for improvement.¹⁷ The 16 percent of the United States' GDP attributable to health spending is double the proportion of most industrialized countries; after a pause in the late 1990s, this percentage has been growing more rapidly in recent years.¹⁸ Yet these greater expenditures do not appear to translate into better care, with the United States lagging behind other countries on indicators such as mortality and healthy life expectancy.

Moreover, both the quality of care and efficiency with which it is provided are highly variable across the United States.¹⁹ Multiple quality indicators demonstrate large variation between top and bottom groups of hospitals, states, and health plans. For example, although top-performing hospitals reach 100 percent adherence to basic clinical guidelines for treating patients with heart attacks, congestive heart failure, and pneumonia, the national average is only 84 percent.²⁰ Variations also exist in mortality rates: an analysis of Medicare beneficiaries' mortality rates over the years 2000-2002 indicates a spread of 33 percentage points between the risk-adjusted mortality ratios in the 10 percent of hospitals with the lowest rates and the 10 percent of hospitals with the highest rates.²¹

This highly variable quality of care is delivered by a system that is too often poorly coordinated, which puts patients at risk and raises costs. Care coordination is necessary at the time of hospital discharge and during transitions following discharge. Yet, according to a 2005 Commonwealth Fund survey, only 67 percent of hospitalized patients in the United States reported having their medications reviewed at the time of discharge, compared to as much as 86 percent in Germany.²² Additionally, a lack of discharge planning occurs all too frequently. On average, U.S. patients with congestive heart failure receive hospital discharge instructions only 50 percent of the time.²³

Medicare's role in addressing these issues is unique: comprising one-fifth of all personal health care spending, it is both highly vulnerable to the forces affecting the broader health system and potentially an important driver of change.²⁴ The fact that Medicare is financed by a near-universal payroll tax and also by general tax revenues, together with the fact that almost everyone who turns 65 will become a Medicare beneficiary, make it particularly visible, important, and accountable to the American people. It is readily apparent that changes are needed, and Medicare can and must serve as a springboard for policies that improve health care, not only for its beneficiaries but also for the entire population.

CMS has already begun to respond by developing a variety of initiatives aimed at improving the quality and coordination of services provided to Medicare beneficiaries. This testimony considers demonstrations, pilots, and other initiatives that focus on improving the availability and coordination of care for beneficiaries with chronic conditions.

Chronic Care Initiatives²⁵

Patients with chronic conditions typically receive fragmented health care from multiple providers and multiple sites of care; this problem is amplified for beneficiaries with multiple chronic conditions. Not only is such disjointed care confusing and ultimately ineffective, it can present difficulties for patients, including an increased risk of medical errors. Additionally, the repeated hospitalizations that frequently accompany such care are extremely costly to both patients and Medicare. As the nation's population ages, the number of chronically ill Medicare beneficiaries is expected to grow dramatically, with serious implications for access, quality, and Medicare spending.²⁶

In the private sector, managed care entities such as health maintenance organizations, as well as private insurers, disease management organizations, and academic medical centers, have developed a wide array of programs that combine adherence to evidence-based medical practices with better coordination of care across providers. These initiatives are based on the belief that disease management programs can improve medical treatment plans, reduce avoidable hospital admissions, and promote other desirable outcomes without increasing costs.²⁷ In a study reviewing the literature on disease management programs, though, the Congressional Budget Office (CBO) concluded that: "while there is evidence that disease management programs could be designed to reduce overall health costs for selected groups of patients, little research exists that directly addresses the issues that would arise in applying disease management to the older and sicker Medicare population."²⁸

Two features, however, make the case for effective disease management particularly strong in the Medicare context. First, the greater prevalence of chronic illnesses among the Medicare population provides more opportunity for improving the appropriateness, effectiveness, and efficiency of care. Second, unlike private insurers, the Medicare program keeps its enrollees for life. This means that efforts to improve the coordination of care for chronic conditions can be consistently and continuously applied over a long period; it also means that the benefits of such efforts will accrue to the program rather than to some other payer.

The demonstration projects conducted by CMS in this area are intended to test the value of alternate approaches to improving care for beneficiaries with chronic conditions, while also making Medicare a more aggressive and effective purchaser of this care.²⁹ The majority of Medicare's chronic care initiatives have focused on the coordination of care for chronically ill beneficiaries in the traditional Medicare fee-for-service program, but several of them have addressed the structural impediments that managed care plans have faced in attempting to provide appropriate care to this population. These initiatives are summarized in Table 1, and in the following discussion.

Table 1. Chronic Care Initiatives

<i>Initiative</i>	<i>Description</i>
Medicare Case Management Demonstration	The first of the Medicare chronic care initiatives, designed to test case management for beneficiaries with catastrophic illnesses and high medical costs.
Medicare Coordinated Care Demonstration	To examine whether coordinated care programs can improve medical treatment plans, decrease avoidable hospital admissions, and further benefit chronically ill beneficiaries without increasing program costs.
Medicare Disease Management Demonstration	To evaluate the effect of disease management services, coupled with a prescription drug benefit, on the health outcomes of Medicare beneficiaries diagnosed with advanced-stage congestive heart failure, diabetes, or coronary disease.
Medicare Health Support	Pilot program to test population-based chronic care programs that provide self-care support, education, and coordination of care to beneficiaries.
Care Management for High-Cost Beneficiaries Demonstration	To study a variety of provider-centered care management models—including intensive-care management, increased provider availability, structured chronic care programs, restructured physician practices, and greater flexibility in care settings—for high-cost beneficiaries.
Special Needs Plans (SNPs)	Authorized by the Medicare Modernization Act to focus on individuals with special needs, including beneficiaries who are institutionalized, dually eligible for Medicare and Medicaid, or suffering from severe or disabling chronic conditions.
End-Stage Renal Disease (ESRD) Managed Care Demonstration	To test the feasibility of year-round open enrollment in managed care for beneficiaries with ESRD. Each site provides service integration, case management, and extra benefits, and is paid a higher rate to reflect the additional costliness of enrollees with ESRD.

ESRD Disease Management Demonstration	To test the effectiveness of disease management models for increasing quality of care for ESRD patients while ensuring that this care is provided more effectively and efficiently.
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Source: CMS Web site, <http://www.cms.hhs.gov>.

Improving Chronic Care in Fee-for-Service Medicare

The first of the Medicare chronic care initiatives was the **Medicare Case Management Demonstration**, which studied the appropriateness of providing case management services to beneficiaries with catastrophic illnesses and high medical costs. This demonstration was implemented at three sites beginning in October 1993 and continued through November 1995.³⁰ The target conditions and case management protocols differed across the sites, but all three generally focused on increased education regarding proper patient monitoring and management of the target condition.³¹ The project evaluation found that, while the projects successfully identified and enrolled populations of Medicare beneficiaries likely to have much higher than average Medicare costs, there was an unexpectedly low level of enthusiasm for the project from beneficiaries. This was attributed to the lack of physician involvement or sufficiently focused interventions, and to the lack of a financial incentive to reduce Medicare spending.

The **Medicare Coordinated Care Demonstration** was mandated by Congress in the Balanced Budget Act of 1997. This project was designed to test whether providing coordinated care services to Medicare fee-for-service beneficiaries with complex chronic conditions could yield better patient outcomes without increasing program costs. The demonstration (and a similar parallel project) originally involved a total of 15 sites, both in urban and rural areas, that focused on complex chronic conditions, including: congestive heart failure; heart, liver, and lung diseases; diabetes; psychiatric disorders; Alzheimer's disease or other dementias; and cancer.³² Enrollment in these programs began in April 2002, and at its maximum reached about 21,000 patients in the intervention and control groups combined. However, the five largest programs accounted for almost 60 percent of the total enrollment, while three of them enrolled fewer than 100 beneficiaries in their intervention groups.

Among the initial findings from the demonstration was that beneficiary recruitment in the fee-for-service market can be a challenge. The most successful of the programs had close ties to physicians and other providers, which helped reach the appropriate beneficiaries and overcome skepticism about enrolling. Through the first two years of the demonstration, however, few effects were found on beneficiaries' overall

satisfaction with care, patients' adherence or self-care, and Medicare program expenditures.³³

The **Medicare Disease Management Demonstration**, mandated in the Benefits Improvement and Protection Act of 2000, was intended to provide disease management, as well as a comprehensive drug benefit, for up to 30,000 eligible beneficiaries. This project, which began in Spring 2004, was of particular interest because it was designed to provide the first indication of how well prescription drugs can be used to help chronically ill beneficiaries in the context of the Medicare program. The three sites selected were fully at risk for any increase in Medicare spending among their enrollees.³⁴ The sites encountered greater-than-anticipated difficulties in identifying and enrolling beneficiaries, however; and, given the magnitude of the risk they faced, the demonstration was unable to continue to conclusion.

A major initiative mandated in the Medicare Modernization Act of 2003 (MMA) was the Medicare Voluntary Chronic Care Improvement Program, now known as **Medicare Health Support**. This pilot program, which was implemented in August 2005 and will run for three years, was expected to involve about 160,000 beneficiaries at eight participating sites around the United States (Figure 4) with high prevalence of diabetes and congestive heart failure.³⁵ The participating organizations are responsible for increasing adherence to evidence-based care and reducing unnecessary hospital stays and emergency room visits in an entire geographic area.³⁶ They each receive a per-beneficiary-per-month fee for their care coordination services, and in return are responsible for meeting quality, outcome, and patient satisfaction objectives while reducing total spending for their populations by at least 5 percent. If they fail to meet these requirements, they are responsible for reimbursing Medicare up to the total amount of their fees.

One unique aspect of this project is that, unlike the other initiatives described here—in which beneficiaries were recruited to participate by explicitly indicating a willingness to “opt in”—eligible beneficiaries in Medicare Health Support areas were assumed to be participating in the demonstration unless they explicitly indicated that they wanted to “opt out” of it. The evaluation of the success of each site in meeting goals related to clinical quality outcomes, beneficiary satisfaction, and impact on program spending will be based on comparisons of beneficiaries who participated in the pilot programs with similar groups of beneficiaries who had indicated they were willing to participate but were instead randomly assigned to a control group. Based on these results,

the Secretary of Health and Human Services has the authority to expand the breadth and scope of this program.

Another project developed by CMS is the **Care Management for High-Cost Beneficiaries Demonstration**. This project, which began enrollment in Fall 2005 and is operating in six sites, aims to study various care management models for high-cost/high-risk beneficiaries.³⁷ It is explicitly designed to use provider-directed, rather than third-party, models of chronic care management; and to test the ability of these sites to coordinate care for participating beneficiaries by providing them with clinical support beyond traditional settings to manage their conditions. As in Medicare Health Support, each of the sites in this demonstration receives a monthly fee for each beneficiary participating in the program and must achieve program savings while meeting established performance standards; otherwise, they must return all or part of their fee. The sites are employing a variety of features, including support programs for health care coordination, physician and nurse home visits, use of in-home monitoring devices, provider office medical records, self-care and caregiver support, education and outreach, tracking and reminders of individuals' preventive care needs, 24-hour nurse telephone lines, behavioral health care management, and transportation services.

Improving Chronic Care in Medicare Managed Care

As mentioned earlier, several aspects of the financing mechanism that became an integral part of the managed care model—particularly in Medicare—are incompatible with the original vision of coordinated care as it applies to chronically ill enrollees. Although capitation should provide a strong incentive to help chronically ill enrollees manage their conditions and avoid expensive hospital stays, it also provides an even stronger incentive for plans to avoid chronically ill enrollees in the first place: they are much more costly than the average enrollee, and—although Medicare adjusts the payment rates that managed care plans receive for the higher anticipated costliness of some types of individual enrollees—that risk adjustment—which has been gradually phased in over 10 years (finally taking full effect in 2007) still tends to adjust too little for the most expensive patients.³⁸ Consequently, plans still face potentially severe financial penalties for making themselves attractive to chronically ill populations. Medicare managed care plans, moreover, were prohibited (until 2006) from specializing in subsets of the population. Consequently, a plan that was designed to be particularly well suited to treating beneficiaries with a particular condition or cluster of conditions (such as congestive heart failure, asthma, or other chronic respiratory diseases) also had to be prepared to offer the full range of services to the entire beneficiary population, which it might not have been prepared to do.

One initiative intended to address this shortcoming is the inclusion in the MMA of a provision (Section 231) authorizing **Special Needs Plans (SNPs)**. This provision allows for the creation of MA plans that focus on individuals with special needs, including beneficiaries who are: institutionalized, dually eligible for Medicare and Medicaid, or suffering from severe or disabling chronic conditions. SNPs are not paid differently from other MA plans (so their payment will not be fully risk-adjusted until 2007), but—unlike other MA plans—they are permitted to target individuals in the specified groups, and CMS has been flexible in certain other MA administrative requirements as well. In 2007, there are 470 SNPs, with more than 800,000 enrollees: 311 SNPs, with more than 600,000 enrollees, were approved for dual eligibles (a population that itself includes a high proportion of beneficiaries with chronic conditions); 85 SNPs, with more than 135,000 enrollees, were focused on institutionalized beneficiaries (many of whom are both dually eligible and suffering from chronic conditions); and 74 SNPs, with more than 80,000 enrollees, were focused specifically on beneficiaries with chronic conditions.³⁹

A population that is particularly in need of better coordinated care is Medicare beneficiaries with End-Stage Renal Disease (ESRD); people with ESRD not only require dialysis but also have other chronic conditions. In 2003, there were 351,000 Medicare beneficiaries with ESRD, with Medicare spending an average of \$46,330 per person for their health care.⁴⁰ Despite their need for coordinated care, beneficiaries with ESRD are not permitted to enroll in MA plans unless they were enrolled prior to the onset of the condition, because of the extreme risk that this population presents. In an attempt to develop an approach that would permit these beneficiaries to participate in Medicare Advantage (then called the Medicare Risk Program), an **ESRD Managed Care Demonstration** was launched in 1996, with enrollment beginning in 1998. This demonstration was conducted at sites in California and Florida (with a third site in Tennessee discontinuing operations after enrolling just 50 beneficiaries).⁴¹ Each site provided service integration, case management, and extra benefits in exchange for being paid a higher payment rate (with adjustments to reflect the additional costliness of enrollees with ESRD).

The evaluation concluded that enrollees in the demonstration fared as well as, or in some cases better than, a representative sample of fee-for-service comparison beneficiaries. However, government expenditures were found to be higher than if the same enrollees had remained in fee-for-service Medicare; this was because the demonstration enrollees were, on average, younger and healthier than the general ESRD

population. Moreover, despite the increased payment by the government, the demonstration sites experienced financial losses in one case and only small gains in the other.

With an extensively reworked risk adjustment mechanism that was thought to reflect better the costliness of ESRD enrollees, CMS in 2005 announced an **ESRD Disease Management Demonstration** to test the capability of disease management models to increase quality of care while ensuring that this care is provided more effectively and efficiently.⁴² Enrollment in this new demonstration began at three sites in the fall of 2005, with coverage beginning in January 2006.⁴³ Under this demonstration, 5 percent of the plans' fees are reserved for incentive payments related to quality improvement.

What Can These Initiatives Tell Us?

As we have discussed, the application of disease management approaches to the Medicare program—both in traditional fee-for-service Medicare and in Medicare Advantage—is a very promising proposition, given the increasing prevalence of chronic conditions among beneficiaries and the large proportion of spending accounted for by those beneficiaries. Although many of the initiatives described above are ongoing, there are several conclusions that one can infer from the currently available evidence:

- Engaging Medicare beneficiaries in these kinds of initiatives can be challenging; the more successful initiatives work more closely with physicians to help identify patients who can be helped most and to establish credibility with those patients.
- Designing approaches to reach different populations in different circumstances and environments, and successfully implementing those approaches, can be complicated.
- Improvements in health care for groups of individuals seems to be achievable, but the jury is still out on whether savings can be reliably achieved.

Still, given the current lack of coordination throughout our health system, it is hard to believe that a way can't be found to improve on both quality and efficiency. And given both the amount of care needed by Medicare beneficiaries with multiple chronic conditions and the amount of resources spent on that care, it is imperative that we continue to try to find ways to provide better coordination and higher quality care for this population.

Conclusions

Medicare has undertaken an array of initiatives to address chronic care issues. However, it is still much in need of good ideas for policies that address the evolving needs of its beneficiaries and the health system overall, and should continue to pursue other initiatives in the future.

In this testimony, we review some of those activities and describe their objectives and outcomes. Two things are clear: the potential for improving both the coordination of care for Medicare beneficiaries and the efficiency with which that care is provided are tremendous; and there is much that needs to be done to accomplish that improvement. Figuring out exactly what will work in that regard is a much more difficult proposition.

We need a more explicit and transparent mechanism for both identifying the directions of new initiatives at one end and moving from pilot to policy at the other. Such transparency would make the process more effective and timely, as well as increasing the level of accountability—among CMS staff and leadership, as well as the Congress—for developing initiatives that have real potential to improve Medicare's policies. The results we seek are greater quality and effectiveness of health care for Medicare's beneficiaries while controlling the precipitous increases in cost that threaten the program's fiscal viability.

Figures

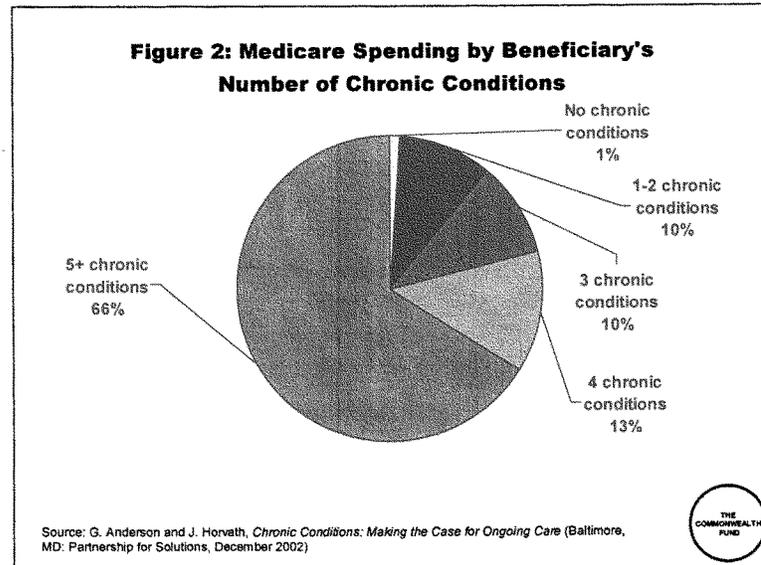
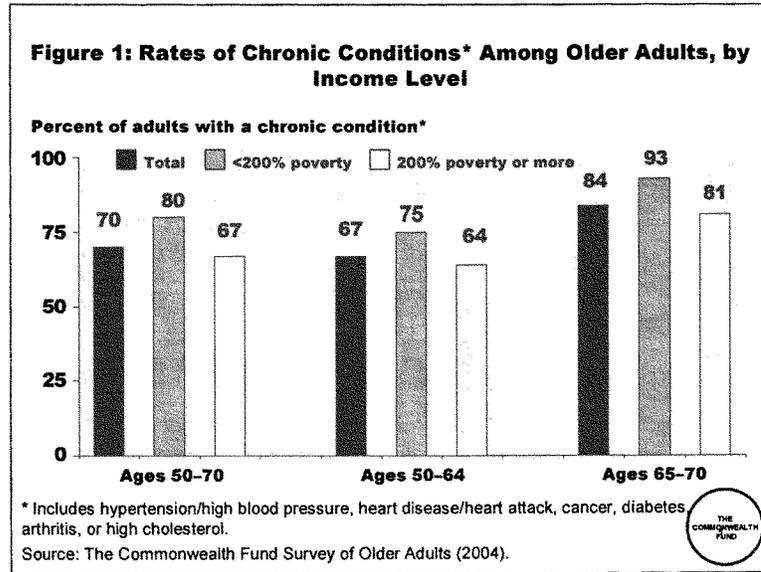
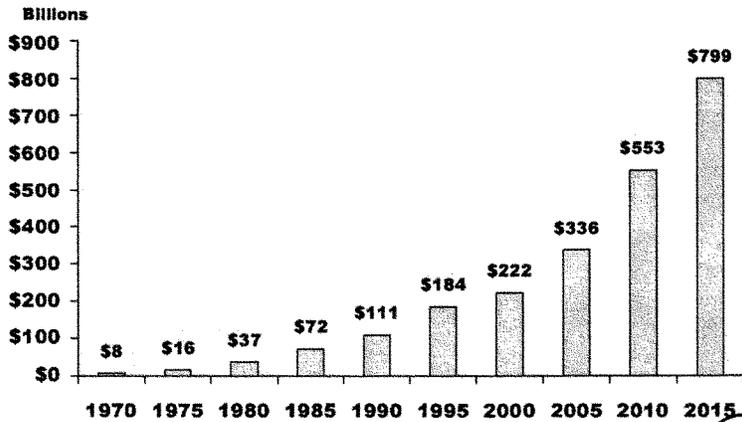


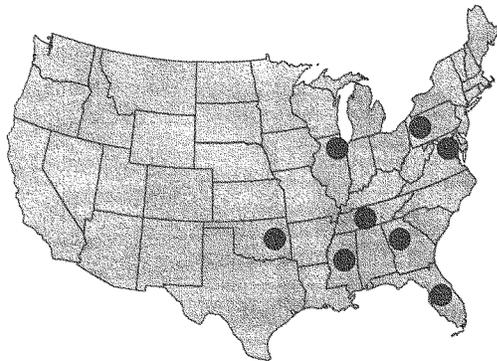
Figure 3: Medicare Expenditures, 1970-2015



Note: Figures for 2010 and 2015 are projected.
 Source: 2007 Medicare Trustees' Report.



Figure 4: Medicare Health Support Organizations and Locations



- LifeMasters Supported SelfCare, Inc (OK)
- Health Dialogue Services Corp., (Western PA)
- American Healthways, Inc. (Washington, DC and MD)
- McKesson Health Solutions, LLC (MS)
- CIGNA Health Support, LLC (Northwest GA)
- Aetna Health Management, LLC (Chicago, IL)
- Green Ribbon Health (Central FL)
- XLHealth Corp. (Select counties, TN)

Source: "Medicare Health Support." www.cms.hhs.gov (Accessed November 20, 2006).



Notes

- ¹ K. Davis and S. R. Collins. "Medicare at Forty," *Health Care Financing Review*. 27(2). (Winter 2005-2006): 53-62.
- ² The Commonwealth Fund Commission on a High Performance Health System, "Why Not the Best? Results from a National Scorecard on U.S. Health System Performance" (The Commonwealth Fund, September 2006).
- ³ Boards of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, *2006 Annual Report* (Washington, DC: U.S. Government Printing Office, May 1, 2006).
- ⁴ G. F. Anderson, "Medicare and Chronic Conditions," *New England Journal of Medicine*, July 21, 2005 353(3):305-09.
- ⁵ G. F. Anderson and P. S. Hussey, "Population Aging: A Comparison Among Industrialized Countries," *Health Affairs*, May/June 2000 19(3): 191-203.
- ⁶ S. R. Collins, K. Davis, C. Schoen, M. M. Doty, S. K. H. How, and A. L. Holmgren, "Will You Still Need Me? The Health and Financial Security of Older Americans," (New York: The Commonwealth Fund, June 2005).
- ⁷ Partnership for Solutions, "Medicare: Cost and Prevalence of Chronic Conditions," Fact Sheet (Baltimore: Johns Hopkins University and the Robert Wood Johnson Foundation, July 2002).
- ⁸ J. L. Wolff, B. Starfield, and G. F. Anderson, "Prevalence, Expenditure, and Complications of Multiple Chronic Conditions and the Elderly," *Archives of Internal Medicine*, November 11, 2002 162(20):2269-76.
- ⁹ U.S. Congressional Budget Office, "High-Cost Medicare Beneficiaries," (Washington, DC: CBO, May 2005).
- ¹⁰ U.S. Congressional Budget Office, "Fact Sheet for CBO's March 2007 Baseline: Medicare" (Washington, DC: CBO, March 7, 2007).
- ¹¹ S. Guterman, "U.S. and German Case Studies in Chronic Care Management: An Overview," *Health Care Financing Review*, Fall 2005 27(1): 1-8.
- ¹² B. Biles, L. Hersch Nicholas, B.S. Cooper, E. Adrion, and S. Guterman, "The Cost of Privatization: Extra Payments to Medicare Advantage Plans—Updated and Revised" (New York: The Commonwealth Fund, November 2006).
- ¹³ B. Biles, L. H. Nicholas, and S. Guterman, "Medicare Beneficiary Out-of-Pocket Costs: Are Medicare Advantage Plans a Better Deal?" (New York: The Commonwealth Fund, May 2006).
- ¹⁴ Centers for Medicare and Medicaid Services, *2007 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (Washington, DC: CMS, 2007), p. 30, <http://www.cms.hhs.gov/ReportsTrustFunds/downloads/tr2007.pdf>, accessed April 2007.
- ¹⁵ *Ibid.*, p. 33.
- ¹⁶ As specified in the Medicare Modernization Act of 2003, the "Medicare funding warning" is generated when the Medicare Trustees' Reports in two consecutive years indicate that the proportion of Medicare spending from general revenues will exceed 45 percent within seven years.
- ¹⁷ Commonwealth Fund Commission, *Why Not the Best?* 2006.

¹⁸ G. F. Anderson, B. K. Frogner, R. A. Johns, and U. E. Reinhardt, "Health Care Spending and Use of Information Technology in OECD Countries," *Health Affairs*, May/June 2006 25(3): 819-31.

¹⁹ Commonwealth Fund Commission, *Why Not the Best?* 2006.

²⁰ C. Schoen, K. Davis, S. K. H. How, and S. C. Schoenbaum, "U.S. Health System Performance: A National Scorecard," *Health Affairs* Web Exclusive (September 20, 2006): w457-w475.

²¹ Ibid.

²² Commonwealth Fund Commission, *Why Not the Best?* 2006.

²³ Ibid.

²⁴ Medicare Payment Advisory Commission, "National Health Care and Medicare Spending," In *A Data Book: Health Care Spending and the Medicare Program* (Washington, DC: MedPAC, June 2006). <http://www.medpac.gov>

²⁵ The descriptions of the projects in this section are based on information at the Centers for Medicare and Medicaid Services Web site, <http://www.cms.hhs.gov/DemoProjectsEvalRpts/MD/list.asp#>, accessed April 24, 2007.

²⁶ S. Guterman, "Eliminating Barriers to Chronic Care Management in Medicare," testimony before the U.S. House of Representatives, Committee on Ways and Means, Subcommittee on Health, February 25, 2006.

²⁷ By "disease management" we mean programs that are aimed at improving the quality and coordination of care for patients with single or multiple chronic conditions, in an effort to provide more effective care, eliminate avoidable acute care episodes, and improve outcomes.

²⁸ Congressional Budget Office, "An Analysis of the Literature on Disease Management Programs." Report to Don Nickles, Chairman, Senate Budget Committee, October 13, 2004.

²⁹ S. Guterman, "Disease Management in Traditional Medicare: A Square Peg in a Round Hole?" testimony before a Special Forum of the U.S. Senate, Special Committee on Aging, November 4, 2003.

³⁰ Participating sites included AdminiStar Solutions, Iowa Foundation for Medical Care (IFMC), and Providence Hospital. AdminiStar Solutions recruited Medicare CHF patients throughout the state of Indiana; IFMC recruited Medicare CHF and COPD patients seen at any of 10 participating hospitals in Des Moines, western Iowa, and eastern Nebraska; and Providence Hospital (in Southfield, Mich.) took Medicare beneficiaries with CHF, COPD, or a range of other chronic problems who were patients of the hospital's staff and resided in the Detroit metropolitan area.

³¹ J. L. Schore, R. S. Brown, and V.A. Cheh, "Case Management for High-Cost Beneficiaries," *Health Care Financing Review*, Summer 1999 20(4) 87-101.

³² The organizations originally participating in this demonstration were: Avera McKennan Hospital of Sioux Falls, S.D.; Carle Foundation Hospital of Urbana, Ill.; CenVaNet of Richmond, Va.; CorSolutions Medical, Inc. of Buffalo Grove, Ill. (site in Texas); Erickson Retirement Communities of Baltimore, Md.; Georgetown University Medical Center of Washington, D.C.; Hospice of the Valley of Phoenix, Ariz.; Jewish Home and Hospital of New York, NY; Mercy Medical Center of Mason City, Iowa; Medical Care Developments of Augusta, Maine; PennCARE of Allentown, Pa.; Quality Oncology, Inc., of McLean, Va. (site in Broward County, Fla.); QMED, Inc., of Laurence Harbor, N.J. (site in Northern Calif.); University of Maryland at Baltimore; and Washington University of St. Louis, Mo., with StatusOne Health of Hopkinton, Mass. (site in St. Louis, Mo.).

³³ R. Brown, D. Peikes, A. Chen, J. Ng, J. Schore, and C. Soh. *The Evaluation of the Medicare Coordinated Care Demonstration: Findings for the First Two Years*. (Princeton, NJ: Mathematica Policy Research, March 21, 2007).

³⁴ The three participating sites were CorSolutions of Rosemont, Ill. (site in the Shreveport-New Orleans corridor of LA.); XLHealth of Baltimore, Md. (site in Texas); and HeartPartners of Santa Ana, Calif. (site in Calif. And Ariz).

³⁵ As of December 2006, the number of beneficiaries participating in the demonstration was about 120,000, but one site—LifeMasters Supported SelfCare, Inc. operating in Oklahoma—was scheduled to drop out at the end of the month.

³⁶ The organizations participating in Phase I of Medicare Health Support are LifeMasters Supported SelfCare, Inc. (site in Okla.); Health Dialog Services Corp. (site in Western Pa.); American Healthways, Inc. (site in Washington, D.C., and Md.); McKesson Health Solutions, LLC (site in Miss.); CIGNA Health Support (site in Northwest Ga.); Aetna Health Management, LLC (site in Chicago, Ill.); Green Ribbon Health (site in Central Fla.); and XLHealth Corp. (site in Tenn.).

³⁷ The organizations participating in this demonstration are ACCENT (site in Ore. and Wash.); Care Level Management (sites in Calif., Texas, and Fla.); Massachusetts General Hospital and Massachusetts General Physicians Organization (site in Boston, Mass.); Montefiore Medical Center (site in the Bronx, N.Y.); RMS Disease Management, LLC (site in Nassau and Suffolk Counties in N.Y.), and Texas Senior Trails (site in Texas panhandle area).

³⁸ G.C. Pope, J. Kautter, R.P. Ellis, A.S. Ash, J.Z. Ayanian, L.I. Iezzoni, M.J. Ingber, J.M. Levy, and J. Robst, "Risk Adjustment of Medicare Capitation Payments Using the CMS-HCC Model," *Health Care Financing Review* Summer 2004 25(4):119-141.

³⁹ T. DeCaro, "Special Needs Plans: Strategies for Serving Special Populations,;" presentation to America's Health Insurance Plans, April 23, 2007.

⁴⁰ *Health Care Financing Review Medicare and Medicaid Statistical Supplement, 2005* (July 2006), p. 56.

⁴¹ Lewin Group and University Renal Research and Education Association, *Final Report on the Evaluation of CMS's ESRD Managed Care Demonstration* (Falls Church, Va.: Lewin Group, June 2002).

⁴² Centers for Medicare and Medicaid Services, "CMS Announces Demonstration Sites for Beneficiaries with End-Stage Renal Disease," press release (Washington, DC: CMS, Oct. 31, 2005).

⁴³ The organizations participating in this demonstration are DaVita, with SCAN Health Plan (which is offering an MA SNP in parts of San Bernardino and Riverside Counties, Calif.); Fresenius Medical Care North America, with Sterling Life Insurance Co. (which is offering an MA private fee-for-service plan in Philadelphia and Pittsburgh, Pa., and Dallas, Houston, and San Antonio, Texas); and Fresenius Medical Care North America, with American Progressive Life and Health Insurance Co. (which is offering an MA private fee-for-service plan in Boston and Springfield, Mass.).

Senator LINCOLN. Dr. McConnell.

STATEMENT OF STEPHEN MCCONNELL, PH.D., VICE PRESIDENT OF ADVOCACY AND PUBLIC POLICY, ALZHEIMER'S ASSOCIATION, WASHINGTON, DC

Dr. MCCONNELL. Madam Chair, thank you for holding this hearing and for your consistent leadership in improving care for the Nation's older population, especially for your leadership on behalf of people with Alzheimer's disease.

I would also like to acknowledge the terrific staff work of your Brenda Sulick, who is a fellow in the program named after Senator Heinz, who was the Chair of this great Committee in the past.

Assessment in coordinating care is especially important for people with Alzheimer's disease, because they have high use of Medicare services, and incur very high Medicare costs. This is not because of the problems of treating Alzheimer's disease, it is what Alzheimer's disease does to complicate the care and treatment of other conditions.

Let's take a look at some of the costs. Medicare now spends three times as much for beneficiaries with Alzheimer's disease as it does for those who do not have the disease. About half of that is on hospital care. By 2030, there will be more than 600,000 new cases of Alzheimer's disease every year, and the cost to Medicare for just treating those people will be \$394 billion a year, which is the cost of the entire Medicare program today.

What is behind the numbers? First of all, people with Alzheimer's disease have other chronic conditions. Twenty-nine percent have heart disease, 28 percent congestive heart failure, 23 percent diabetes, 17 percent had chronic lung disease. In fact, only 5 percent of Medicare beneficiaries aged 65 and over with Alzheimer's disease had no comorbid medical conditions. Many had more than one serious condition.

So what happens when those conditions come together? A couple of examples: Medicare beneficiaries with Alzheimer's disease plus congestive heart failure had 50 percent more hospital stays, and the cost of their care was 50 percent higher than those with congestive heart failure and no Alzheimer's disease.

Alzheimer's disease plus diabetes resulted in three times as many hospital stays, and average Medicare costs that were 150 percent higher than for beneficiaries with diabetes but no Alzheimer's or dementia.

The reason for the higher hospitalization and higher costs is simple. Memory and other cognitive impairments caused by Alzheimer's disease greatly complicate the management of comorbid medical conditions. The case of Ms. X was reported in the Journal of the American Medical Association and illustrates this point.

Ms. X had mild Alzheimer's disease and osteoporosis, and was prescribed a medication for her osteoporosis and told she had to take the medication with water and remain upright after taking it. Because of her dementia, Ms. X did not remember or follow her doctor's instructions.

Four weeks after starting the medication, she was taken to the local hospital emergency room with symptoms of an ulcerated esophagus because of taking the medication incorrectly. Despite

treatment, Ms. X ultimately died when the ulcer eroded into a major blood vessel. Ms. X and the data I have presented make clear why care management is essential for beneficiaries with Alzheimer's disease.

For this reason, we need congressional action to create a new Medicare benefit targeted to the most complex patients. Without the adoption of a new benefit, CMS is unlikely to develop a comprehensive pilot program that ensures complex patients—that is, those with dementia and one or more other medical condition—are treated appropriately with meaningful assessments.

We did a survey of 10 of the pilots that are being done now, and with the exception of one, none of the rest of them are even screening for dementia. They are managing diseases and not paying attention to the fact that many of the beneficiaries have dementia.

The Alzheimer's Association strongly supports the Geriatric Assessment and Chronic Care Coordination Act. This act is a very important step forward, and has the potential of substantially improving care and lowering costs for Medicare beneficiaries with Alzheimer's disease and other dementias.

The value of this legislation is not just the numbers. It is about the lives of real people. Without this legislation, people with Alzheimer's disease and other dementias in their families will continue to struggle with a fragmented health care system, and Government will continue to pay for preventable hospitalizations that could be avoided with better assessment and care coordination.

Do not forget the human faces behind all the statistics. You know that very well, and you have handled that incredibly well here in the Senate. There are real reasons to support this important legislation, and we appreciate your leadership on this issue.

[The prepared statement of Dr. McConnell follows:]

**STATEMENT OF STEPHEN MCCONNELL
VICE PRESIDENT FOR ADVOCACY & PUBLIC POLICY
ALZHEIMER'S ASSOCIATION**

**HEARING OF THE
SENATE SPECIAL COMMITTEE ON AGING
MAY 9, 2007**

Good afternoon Mr. Chairman and members of the Committee. Thank you for holding this hearing and for your ongoing leadership in improving chronic care for the nation's older population. On behalf of the more than 5 million people with Alzheimer's disease in the United States, it is an honor to appear before you today.

This hearing is especially important for people with Alzheimer's disease because they have high use of Medicare services and incur very high Medicare costs, in large part because our health care system does a poor job of coordinating the care they need for multiple chronic conditions. As my testimony makes clear, Medicare beneficiaries with Alzheimer's disease and other dementias desperately need the assessment and care coordination that would be covered by the Geriatric Assessment and Chronic Care Coordination Act.

Alzheimer Patients Incur High Medicare Costs

Data from Medicare claims document the high Medicare costs incurred by people age 65 and over with Alzheimer's disease and other dementias. Claims data for 2000 show that:

- Medicare beneficiaries age 65 and over with Alzheimer's disease and other dementias cost Medicare three times as much as other Medicare beneficiaries (\$13,207 vs. \$4,454).
- More than half of all Medicare costs for beneficiaries age 65 and over with Alzheimer's and other dementias went for hospital care (\$7,074 of the total \$13,207). Beneficiaries with Alzheimer's and other dementias were 3.4 times more likely than other beneficiaries to have a hospital stay, and Medicare costs for their hospital care were 3.2 times higher (\$7,074 vs. \$2,204).
- Medicare costs for skilled nursing facility (SNF) care were 10 times higher for beneficiaries age 65 and over with Alzheimer's and other dementias than for other beneficiaries. Medicare costs for home health care were 3.8 times higher than for other beneficiaries.

In 2005, total Medicare costs for beneficiaries age 65 and over with Alzheimer's disease and other dementias amounted to an estimated \$91 billion. These costs will increase dramatically as the number of people with Alzheimer's and other dementias grows in coming years.

Given our current elderly population, there are more than 400,000 new cases of Alzheimer's disease each year. Every 72 seconds, someone in America develops Alzheimer's. In the year 2030, there will be an estimated 615,000 new cases of Alzheimer's; 7.7 million people will be living with the disease, and their Medicare costs will amount to an estimated \$394 billion, which is the current cost of the entire Medicare program.

Alzheimer's Complicates Care and Increases Costs for Co-Morbid Conditions

Most people with Alzheimer's disease and other dementias are elderly, and like other elderly people, they also have one or more other serious medical conditions. The combination of Alzheimer's or other dementias and co-morbid medical conditions results in high use of Medicare services and very high Medicare costs.

In 2000, 29% of Medicare beneficiaries age 65 and over with Alzheimer's disease or other dementias also had heart disease; 28% also had congestive heart failure; 23% also had diabetes; and 17% also had chronic lung disease. Only 5% of Medicare beneficiaries age 65 and over with Alzheimer's and other dementias had no co-morbid medical conditions, and many had more than one serious co-morbid medical condition, for example, heart disease and diabetes, or congestive heart failure and osteoporosis, in addition to their dementia.

Medicare claims data show the results of combined dementia and co-morbid medical conditions. In 2000, for example:

- Medicare beneficiaries with Alzheimer's or another dementia plus congestive heart failure had about 50% more hospital stays than beneficiaries with congestive heart failure but no Alzheimer's or dementia, and their average Medicare costs per person were \$22,939, compared with \$15,441 for beneficiaries with congestive heart failure but no Alzheimer's or dementia.
- Medicare beneficiaries with Alzheimer's disease or another dementia plus diabetes had almost three times as many hospital stays as beneficiaries with diabetes but no Alzheimer's or dementia, and their average Medicare costs per person were \$19,994, compared with \$8,011 for beneficiaries with diabetes but no Alzheimer's or dementia.

Memory and other cognitive impairments caused by Alzheimer's disease and other dementias greatly complicate the management of co-morbid medical conditions. Individuals with Alzheimer's and other dementias generally are not able to understand, remember, or comply with treatment recommendations. Most cannot remember to take their medications as directed or follow medical instructions about diet and exercise. They often cannot recognize symptoms that their congestive heart failure, diabetes, or other medical conditions are getting out of control. Because of their cognitive impairments,

self-management – a key concept of care for people with chronic illness – usually cannot work for people with dementia.

The case of Ms. X, reported in the *Journal of the American Medical Association*, illustrates the devastating impact of dementia on management of co-morbid medical conditions. Ms. X had mild Alzheimer's disease and osteoporosis. She was managing well at home until a painful compression fracture in her spine sent her to the doctor. He prescribed a medication for her osteoporosis and told her that she had to take the drug with water and remain upright after taking it. Because of her dementia, Ms. X did not remember or follow her doctor's instructions. Four weeks after starting the medication, she was taken to the local hospital emergency room with symptoms of an ulcerated esophagus caused by taking the medication incorrectly. Despite treatment, Ms. X ultimately died when the ulcer eroded into a major blood vessel.

Hospitalizations and adverse events such as occurred for Ms. X may be preventable if a person receives a comprehensive assessment that identifies all his or her medical conditions, including dementia, and then receives ongoing treatment for his or her other medical conditions that is planned and coordinated with awareness of the likely impact of the dementia on that treatment. One study found that Medicare beneficiaries with Alzheimer's and other dementias are 2.4 times more likely than other beneficiaries to have a *potentially preventable hospitalization*; that is, a hospitalization for a condition that can be prevented altogether or whose course can be mitigated with optimal outpatient management. Avoiding such hospitalizations is an important objective, not only with respect to Medicare costs, but also because hospital stays are often very difficult for people with Alzheimer's and other dementias. They tend to become much more confused and agitated in the strange and rushed hospital setting. They are four times as likely as other elderly people to develop delirium, and they may lose functional abilities, such as the ability to feed themselves and get to the bathroom independently even in a short hospital stay.

Care Management Is Essential for Beneficiaries with Alzheimer's

The current Medicare program focuses primarily on treatment of acute episodes of illness and narrow concepts of prevention that do not meet the needs of beneficiaries with Alzheimer's and other dementias. Primary care physicians are not paid for the added length of time needed for assessment of dementia and co-morbid medical conditions. Nor are they paid for ongoing consultation with families or community agencies that share responsibility for the care of the patient or for coordination of care with other health care professionals who may be treating the patient for particular diseases or conditions.

Medicare benefits must be restructured to manage the high costs of chronic conditions and to improve the quality of care provided to patients. But this will not happen through disease management approaches that focus narrowly on one specific disease or condition at a time. Rather, the first target for a Medicare chronic care benefit should be beneficiaries with one or more complex medical conditions who cannot manage those conditions because of their cognitive impairment. This issue should be addressed now,

while there is still time to fix the program and before the numbers of beneficiaries with Alzheimer's disease and other dementias explode.

Significantly, the Centers for Medicare and Medicaid Services (CMS) is currently operating several chronic care demonstration programs, as well as the pilot Medicare Health Support program. None of these demonstrations, target complex patients with multiple chronic conditions, nor do they typically contain adequate provisions to care for patients with dementia. The demonstrations tend to follow a disease management model that focuses on one disease or condition, which fails Alzheimer patients. Furthermore, most of the demonstrations are conducted at either a health plan or group practice level, failing to take into account the majority of small and solo physician practices where most patients are treated.

Last year, the Alzheimer's Association conducted an environmental scan of the CMS chronic care demonstration projects and found them mostly lacking in appropriate provisions for Alzheimer's patients. The legislative language for the Care Management Performance Demonstration (Section 649 of the Medicare Modernization Act), requires physicians **"to assess each eligible beneficiary for conditions other than chronic conditions, such as impaired cognitive ability and co-morbidities..."** but this was not enforced in the program that was implemented by CMS. Likewise, the Medicare Health Support program (Section 721) had authorizing language requiring that dementia be identified **"for the purpose of developing an individualized, goal-oriented care management plan,"** but the program's guidance materials did not include specific requirements about dementia assessment or care. Of the more than ten programs surveyed, only one, the Care Management for High Cost Beneficiaries demonstration, included guidance requiring that participating sites screen patients for dementia and develop a plan of care for treatment, and most sites for this demonstration were following this guidance.

For this reason, we need Congressional action to create a new Medicare benefit targeted to the most complex patients, rather than narrow statutory authority within bills creating disease management programs targeted to a different population. Without the adoption of a new benefit, CMS is unlikely to develop a comprehensive pilot program that ensures complex patients, i.e. those with dementia and one or more other medical conditions, are treated appropriately with meaningful assessment and care coordination in the full range of physician practices.

The Alzheimer's Association Strongly Supports the Geriatric Assessment and Chronic Care Coordination Act.

The Geriatric Assessment and Chronic Care Coordination Act is a very important step forward and has the potential of substantially improving care and lowering costs for Medicare beneficiaries with Alzheimer's disease and other dementias. The Act would provide a targeted care coordination benefit for those with multiple chronic conditions or those with dementia and one chronic condition. The benefit would include two elements: a payment to the beneficiary's primary health care provider for an initial assessment and

development of a coordinated care plan and a monthly payment to the beneficiary's primary health care provider for care management activities that include medication management, ongoing consultation with the patient and family and referral to and coordination with community resources.

The value of this legislation is not just the numbers. It is about the lives of real people. Each of us lives with a realization that, unless we work together to enact policy solutions to provide needed assessment and care coordination, people with Alzheimer's disease and other dementias and their families will continue to struggle with a fragmented health care system, and government will continue to pay for preventable hospitalizations that could be avoided with better assessment and care coordination. We cannot forget the human faces behind all the statistics. They are the real reasons to support this important legislation. Thank you for allowing me to testify on their behalf.

Senator LINCOLN. Thank you, Dr. McConnell.

Now, I would like to welcome Ann Bowers from Arkansas. I won't need an interpreter here at all, having a fellow Arkansan.

Just to say thanks to Ann for sharing your story. I think our stories really do make all the difference in the world, because it does put a face, as Dr. McConnell said, on each of our families, on how we can do better, and hopefully we will.

Thank you.

STATEMENT OF ANN BOWERS, CAREGIVER, FORT SMITH, AR

Ms. BOWERS. Yes, it does. You can provide printed versions for those that do need accent assistance. [Laughter.]

Thank you first, Senator Lincoln, for inviting me and for everything you do for those of us struggling with the problems of an aging population—sometimes they are not even that aged—as well as everything you do for those of us in the great State of Arkansas. Thank you.

My name is Ann Bowers, and I represent one of the millions of Americans caring for loved ones with Alzheimer's.

Seven years ago, my ex-husband Jay Sweatman, a 50-year-old divorced man with an MBA, two loving preteen daughters, and no family history of Alzheimer's, became ill. At the time, he maintained joint custody of our girls, owned his own company, and served on State and National boards throughout the country.

Fourteen months later, everything came crashing down. Repeated financial mistakes, misplaced money, overlooked details, drove his business into the ground, and our marriage ended. He then took and lost a succession of jobs, with the last one being a position as a stock boy at Sam's Club Warehouse.

When I realized this college graduate with an advanced degree couldn't hold a job at Sam's, I moved him from Albuquerque to Denver so he could be with his daughters and with me. At this point, he frequently struggled to find words while speaking and was having difficulty carrying on a coherent conversation.

After 4 months of exhaustive neurological testing, a diagnosis of probable Alzheimer's was made in March 2002. Neurologists gave me the phone number of the local Alzheimer's Association chapter and suggested I get in touch with them to find out what help might be available for Jay, for our daughters and for me.

I will always be grateful for that single gesture. The Alzheimer's Association made sure I knew about day care and referred me to 24-hour phone help and online bulletin boards where I could always find someone who had a clue what I was going through on any day.

Finding help for Jay and a way to pay for services was overwhelming. Unemployment and financial mismanagement left him with absolutely no resources. He was admitted in April 2002 to the Colorado Indigent Care Program to help cover his medical expenses.

In May, he applied for Social Security Disability Income, but was denied, because he didn't appear to need help and he was under age 60. The following month, his lack of income and resources qualified him for Colorado's Adult Needy Disabled Program, pro-

viding \$250 a month against any future Social Security benefits, as well as food stamps.

During this time, Jay remained in an apartment across the street from our home, with the children spending several nights a week with him. He felt that independence and contact with the girls was critical to his well-being. However, by the winter of 2002, he could no longer reliably keep house, cook, or even groom himself regularly.

In early 2003, Jay was finally approved for Social Security Disability benefits. He was also at long last approved for in-home personal assistance, but it came too late. By the time the services were authorized, he could no longer live independently. We moved him into a personal-care boarding home.

In the midst of trying to help Jay get the help he needed, it never occurred to me to closely monitor his medication. We had been married for 20 years, and he was totally self-sufficient. I had no idea, due to his impaired judgment, he was hoarding the medication that kept his other health problems, glaucoma and depression, under control.

It wasn't until he tried to explain that something was wrong with his eyes that I realized he was losing vision from the sides, a classic exacerbation of his glaucoma symptoms. A thorough search of his apartment confirmed the worst. I found the pills I thought he was faithfully taking organized into neat piles in a dresser drawer, where he placed one each day.

From that point on, every health problem quickly became a crisis. Jay's untreated glaucoma required extensive testing, and we briefly considered surgery. He lost most of the sight in one eye. Frustration coupled with lack of medication for his depression led to thoughts of suicide.

He had to be hospitalized just so we could get him on an adequate drug regimen and determine his true needs. We didn't know it then, but we needed one person providing ongoing support and a plan of care in coordination with all of his doctors. Instead, I tried to hold down a full-time job, raise two preteenage girls, and solve all the problems myself, guessing what specialist he might need next and what condition we should manage on any given day.

There has to be a better system. The Geriatric and Chronic Care Coordination Act will prevent other caregivers from facing the challenges that I did with my daughters.

Maintaining Jay's health was only part of the struggle. Multiple wandering incidents landed Jay in the hospital yet again for medical re-evaluation. He was then moved to assisted living, but had to be discharged after only 3 months because he became aggressive and physical, a common progression for Alzheimer's disease.

The next stop was a full-service nursing facility specializing in Alzheimer's. Each of these moves required weeks of full-time searching by me to find available beds. First choice was never a consideration. Just finding an open bed for a male patient was the biggest hurdle.

Each move also, I will add, required a minimum of 2 to 3 weeks of hospitalization, for reasons that we will see later. Moving from setting to setting was extremely hard on Jay, on myself and on the girls.

Access to a care coordination benefit would have provided us with critical nonmedical care, including managing these transitions between care settings and offering guidance on how to find the right facility.

Comprehensive geriatric assessment would have properly evaluated his needs and functional status and made changes to his care on an ongoing basis to preserve his independence and his ability to remain in the community.

Jay is now 57. He lives in a nursing home in Denver, where he no longer recognizes me or his daughters or any of his caregivers. I am managing his care long-distance, having moved back to Arkansas in 2005 so my daughters could be closer to our extended family.

I work full-time and serve as Jay's guardian. I am in charge of all medical decisions related to his care. He doesn't have any other family members who are ready or able to take on this responsibility. I speak weekly with the doctors and nurses at his nursing home and visit as often as possible. It is not an ideal situation, but it is the best we can do for now.

I urge Congress to pass the Geriatric Assessment and Chronic Care Coordination Act, so that families living across the country, including those taking care of the 56,000 Arkansans living with Alzheimer's, cannot wait any longer for this kind of help.

Thank you.

[The prepared statement of Ms. Bowers follows:]

STATEMENT OF ANN BOWERS
FORT SMITH, ARKANSAS
to

SENATE SPECIAL COMMITTEE ON AGING
“The Future of Medicare: Recognizing the Need for Chronic Care Coordination:

MAY 9, 2007

Good afternoon Senator Lincoln and distinguished members of the Committee. It is an honor to be here. My name is Ann Bowers and I represent one of the millions of family caregivers who struggle daily to confront the challenges of Alzheimer’s disease. I thank you Senator Lincoln for introducing the *Geriatric Assessment and Chronic Care Coordination Act of 2007*. I urge Congress to pass this bill as quickly as possible.

My ex-husband Jay Sweatman ushered in the new millennium as a 50 year-old divorced man with an MBA, two loving, preteen daughters and no family history of Alzheimer’s. He maintained active joint custody of his girls, owned a mortgage and escrow company and traveled frequently in volunteer positions on state and national boards in his industry. Within fourteen months of that milestone birthday, everything came crashing down. Repeated financial mistakes, misplaced money and overlooked details drove his business into the ground. After his business failed, he took and lost a succession of jobs – the last of which was as a stock boy at Sam’s Club Warehouse. In the middle of this we decided to end our marriage.

When I realized that this college graduate with an advanced degree in finance could not hold a job at Sam’s Club, I became concerned enough to move him from Albuquerque to Denver so he could be with me and the girls. We had been close since the divorce and I was growing increasingly concerned about his abilities. By this point, he frequently struggled to find words while speaking and was having difficulty carrying on a coherent conversation. It was apparent that he had a medical problem and help was sought. After four months of exhaustive neurological testing, a diagnosis of probable Alzheimer’s disease was made in March 2002. The neurologist handed me the phone number of the local Alzheimer’s Association chapter before we left his office that day and suggested that we get in touch with them to find out what services were available and where I could find help for Jay, me and our daughters.

That single gesture remains to this day one of the best things that has happened to our family throughout this journey. The Alzheimer’s Association in Denver was extremely proactive. They made sure I knew about day care and had an idea of what services might be available. They referred me to 24-hour telephone help and online bulletin boards where I could always find someone to talk to who understood what I was going through that day.

Finding help for Jay and a way to pay for services was an all-consuming task. Unemployment and financial mismanagement had left Jay with no resources or income. He was admitted in April 2002 to the Colorado Indigent Care Program to help cover his medical expenses. In May 2002 he applied for Social Security Disability Income but was told he did not qualify because he did not appear to need help and he was under age 60. The following month his lack of income

and resources qualified him for Colorado's Adult Needy Disabled program, which gave him \$250 month against any future Social Security benefits, as well as food stamps.

During this time Jay remained in an apartment across the street from our home. The children spent two or three nights a week with him and Jay felt this independence and contact with his daughters was critical to his well being. However by the winter of 2002 it was increasingly apparent that he could no longer reliably keep house, cook or groom himself regularly. In early 2003 Jay was finally approved for Social Security Disability benefits. He was also approved for in-home personal assistance. Unfortunately, by the time services were authorized, he was no longer able to live independently. Late that winter he moved to a personal care boarding home.

In the midst of trying to keep our heads above water and get Jay the help he needed, it never occurred to me to closely monitor his medication. After all, he had always been totally self sufficient. I had no idea that due to his impaired judgment, he was hoarding the medication that kept his other health problems – glaucoma and depression – under control. It was not until he tried to explain that something was wrong with his eyes that I learned he had stopped taking his regular medications. I realized he was losing vision from the sides – classic exacerbation of his glaucoma symptoms but ones I had never thought to monitor because I thought he was taking his medications as usual. A thorough search of his apartment confirmed that the pills I thought he was taking faithfully had been organized into neat piles in a dresser drawer. From that point on, every health problem quickly became a crisis. Jay's untreated glaucoma required extensive testing and we briefly considered surgery. He lost most of his sight in one eye. Frustration coupled with lack of medication for chronic depression led to threats of suicide. He had to be hospitalized just so we could get him on an adequate drug regimen and determine what he truly could and could not do on his own.

Hindsight is 20/20. We didn't know it at the time but we needed one person advocating for us and providing ongoing support regarding a plan of care for Jay, in coordination with all of his doctors and agencies that were providing care. Instead I tried to solve all of the problems myself, guessing what specialist he might need next and which condition to manage on any given day. There has to be a better system. The *Chronic Care Coordination Act* will prevent other caregivers from having to face the challenges my family did.

Maintaining Jay's health was only part of the struggle. Multiple wandering incidents landed Jay in the hospital again for medical re-evaluation. The assessment from the doctors at that point was that it was time to move him to an assisted living facility. After three months in assisted living, he became aggressive and physical and we were told to move him to a full service nursing facility specializing in Alzheimer's disease. Each of these moves required two to three weeks of full time searching by me to find available beds in appropriate facilities. "First choice" was never a consideration – simply finding an open bed available for a male patient was the biggest hurdle. We were thrilled to eventually secure a bed in an older facility that could provide the care he needed.

All of the moving from setting to setting was extremely hard on Jay, not to mention stressful for me and the girls. Having access to a care coordination benefit would have provided us with critical non-medical care, including managing transitions between care settings and offering

guidance on whether particular environments would work for Jay. Had a comprehensive geriatric assessment been completed, we could have properly evaluated Jay's cognition, needs and functional status on an ongoing basis to preserve his independence and ability to remain in the personal care boarding home.

Jay is now 57. He lives in a nursing home in Denver where he no longer recognizes me, his daughters or friends. I have taken on the added challenge of managing his care long distance, having moved to Arkansas in 2005 so that my daughters could be closer to my extended family. I work full time as a mortgage broker and serve as Jay's guardian. I'm in charge of all medical decisions related to his care because Jay does not have any other family members who are able to take on this responsibility. I speak weekly with the doctors and nurses at Jay's nursing home and visit as often as possible. It's not an ideal situation but it is the best we can do for now. I chose to tell my story in the hope that Congress will improve Medicare to bring down the costs of care for individuals with chronic conditions and increase the quality of healthcare provided. A critical first step is passing the *Geriatric Assessment and Chronic Care Coordination Act*. Families across the country, including those taking care of the 56,000 Arkansans living with Alzheimer's, cannot wait any longer for this kind of help. Thank you.

Senator LINCOLN. Thank you, Ms. Bowers, for sharing your story. I think that so many of us feel incredibly blessed to have grown up in communities and certainly surroundings—I know I did—where I lived within walking distance of both sets of my grandparents and aunts and uncles close by. One of my grandmothers lived with us for the last two years of her life, and those were certainly times and experiences that I cherish and am enormously grateful for.

Yet, we also find, in today's world, that is not necessarily the case anymore. We don't live next-door to family members—natural caregivers. Oftentimes we are miles and miles apart.

I know that through our own experience as well, if it weren't for my mother's diligence and my sister's unbelievable ferocious appetite of going to the Internet to find out more and more about the progression of Alzheimer's and what my dad might be going through, it was hard for us to make those decisions as well.

Later on, hospice came through for us in an incredible way, but we didn't even know to call hospice until the very last minute. So, it is so important that with coordination of care we are able to get some of those answers and directives, and to have someone there who can help to make those decisions. I think you bring that to a great realization in your testimony, and we are grateful to you for sharing your story with us.

Just a couple of questions for you all, if I may. The last panel mentioned once something that I thought was important, and I didn't get to mention it before, and that was the issue of utilizing Medicare and our graduate medical education dollars.

I know my own husband is a physician, and I never will forget, about four or five years ago, when I really started focusing on this issue, I asked him which year of medical school of residency did he spend a specific amount of time better understanding the coordination of care for his patients. He just looked at me and said, "That doesn't happen."

So I hope that we will begin to see some focus on that. I know our former panel mentioned it some. It is something that I wanted to make sure that we were aware of.

The other was the technology platforms, and that is the ability to make sure that the information and the exchange of information in our IT efforts to bring about greater coordination are things that are compatible.

I just recently visited one of my physicians at home, and they had gone to electronic records. It only frustrated the practice, because everybody that came to see them did not have electronic records, and they were not compatible with the records systems they had. So they were running dual systems, which were extremely costly and unbelievably frustrating. So we have mountains of problems to solve.

But without a doubt, I think today's hearing has brought before us that there are some good solutions to be had. We have to have the will to make them happen, and certainly, make the choices of the investments that need to be there to see that happen.

Mr. Guterman, even if the chronic care coordination is effective, which I believe it is—and I believe it can be more effective as we

walk through the motions of improving it—we may not see any of those benefits or the cost savings for several years.

Considering the prevalence of chronic care disease in America and its impact on health care utilization, it seems that at some point we are going to need some kind of dynamic scoring that takes future savings into account. I know myself and Senator Clinton were talking about this last week in our weekly policy meeting, about how critically important it is.

But based on your research, do you have any recommendations for us on how we can best measure the results of a chronic care coordination program if it is applied to the Medicare FSS program?

I know it is difficult to measure, but you may have some recommendations for us on how to demonstrate those overall savings to Medicare as a result of that chronic care program, so we can convince CBO to score us some of those savings.

Mr. GUTERMAN. Well, Senator, I think one thing that all of the chronic care initiatives that Medicare is doing are teaching us is more about how to do these things, and more about the kinds of things that may work in different circumstances. There is a tendency, when people look at these various initiatives, to ask only one question, does it work or doesn't it work, or sometimes even more narrowly, does it save money or doesn't it save money?

I think we are at a point now where we are really early on in the process. We need to move in a direction that we all feel is right. It is similar to the interstate highway system analogy, was brought up in the earlier panel.

But when people talk about evaluations, I think evaluations are really crucial in any kind of public or private initiative, but I think we need to understand what we are evaluating and the circumstances in which we are evaluating it.

It is similar to the interstate highway system analogy: before the system was built, if you were trying to estimate what the savings, what the benefit would be from a system like that, it would be difficult to come up with hard evidence of what that savings would have been.

Similarly, to go back even further, if you were trying to estimate what the savings, what the benefit to this country would have been of the automobile in the era around 1900 or 1910, to look at the potential benefits of the automobile. You had an automobile that was running on rutted dirt roads, and you really had no ability to generate hard evidence on what the benefit would be.

Sometimes you just have to do things, because you feel like they're the right thing to do. Under the current circumstances, we couldn't possibly do worse than we are doing. However, along the way, you need to be careful. You also need to have a transparent process.

I mean, part of the thing that we need is accountability for these initiatives, so that the public can know what works and what doesn't work and when it works and doesn't work, so that we can keep building as we move along with more care.

Senator LINCOLN. Well, certainly your point of greater evidence being needed is well taken. The problem, obviously, that without it, it takes us longer here to get consensus to bring about that will, to make those investments, and to reach out to those new tech-

nologies and the new ideas, and if nothing else, force the consistency that needs to be there if they are going to be effective.

So it takes longer, and the longer it takes us, the less effective we are, because we are wasting so many of those dollars and efforts in that timeframe. So my hope is that we can bring about a consensus, and I am pleased that this Committee is very interested, and I know the Finance Committee has been as well in terms of the investments in IT.

You did allude to, in your statement there, the report that has reported on the initial findings of the chronic care demos. I would just say that maybe perhaps the information there may not be astounding as we would have liked to have been, because it was such a short period of time. It is hard to—I don't know, maybe you disagree with that—but 2 years is not a very adequate amount time to demonstrate, I think, the true savings or the true benefits of what we might see.

Mr. GUTERMAN. Well, I think, Senator, that that early demo was an example of a pretty light—there wasn't very strong financial incentive involved in that system. It was really a sort of early attempt to see whether systems of coordinated care could be put together.

I think the answer there is, yes, they could, and I think that we need to be careful when we look at those things to be able to determine what we expected to see in the first place, and how we can learn from what actually happened. One thing we learned was that it can be done.

One thing we learned, most of these were very small attempts at doing this, and we need to pick out what we can use in the next step, rather than focus on whether, in the grand scheme of things, whether this was a success or a failure. I mean, the fact that it existed, and that the programs ran, I think, could be called a success.

Then we need to draw out of that all the information we can to make the next attempts better. I believe that was done. The Medicare Health Support Pilot will provide more information.

But as was mentioned earlier most of the systems that are being tested now are based on third-party disease management organizations. I think those organizations really do have a role, but I think they have a role in working with the physician in providing this care.

That is actually one way to answer the question about rural areas in this context, is that these disease management organizations can work with doctors in rural areas on a sort of contract basis or itinerant basis, to be able to provide the services to their patient under the physician's coordination for physicians who have practices that are too small to be able to afford a full-time person in the practice to be able to do this.

Senator LINCOLN. Kind of contracting it out. Well, that is interesting, and I do think that it is important for us to give the time that we need to see the effects of some of the good things that we are seeing happen. I do think it is important. Thank you.

Dr. McConnell, your written testimony, you mention the need for assessments as part of chronic care coordination and how important that is. I do see that as an important part of the Chronic Care Coordination bill that we introduced today.

Maybe you might talk a little bit more about particularly ways that assessments would benefit individuals with dementia and their caregivers. I think Ann's story really alluded to a lot of that. But there may be some specifics here you would like to mention.

Dr. MCCONNELL. Well, the assessment is the foundation. You can't develop a plan, you can't implement a plan unless you know what it is you are addressing. I mentioned that. One of the biggest problems we have in the health care system is that frequently, we don't know that a person has dementia, just as an example—

Senator LINCOLN. Right. A lot of people won't even diagnose it.

Dr. MCCONNELL. Exactly. If you don't know that a person has a condition, you can't do anything about it. So the assessment is essential to define what the problem is, and then you develop a care plan. I think is an example is a perfect example of that, the example I gave. Somebody wasn't paying attention to the whole person.

You mentioned hospice. I think it is a very good example of coordinating somebody's care. Hospice works so well because it is looking at not only the whole patient, but the whole family, and dealing with that whole complex unit and making sure that they get what they need. So it is in some ways a good model.

I worry about some of these demonstrations and pilots, because there are a couple of tendencies. One, I think, the disease management approach has problems, and as I said, they are not screening for dementia as far as we know. We are hoping that that will happen eventually. But as far as we know, we are not doing that.

So, in the case of trying to manage someone's diabetes, you don't have dementia, you get the doctor prescribes drugs, prescribes the exercise regimen and diet, and you go home and you follow it. You have dementia, you go home, and you don't follow, you end up in the hospital.

So some of these things may fail, because they are not really paying attention to the complex problems, particularly where dementia is involved. We have seen that in some previous demonstrations, where they haven't focused on that. Or they have focused not on having the physician coordinate it. So I think the physician role is critical.

The other problem is that there is a tendency in these research projects to define the issue so narrowly, so you can really determine, did an intervention here produce a certain kind of an outcome?

By definition, what we are talking about here is much more complex. If we try to narrow it down to get a good solid research project out of it, we are in some ways taking the heart out of what it is your bill would do and what is needed in the welfare system.

Senator LINCOLN. Well, it is interesting, because there is a lot of talk up here about pay for performance, and being able to manage care like that is going to be a critical component of the pay for performance.

Because as you said, if there are instructions that patients don't follow, it is hard to be able to recognize what the end performance is of that medical provider if, in fact the patient is not participating, or the actual instructions or prescription or prescriptive plan that has been given isn't followed.

So with that, a manager, looking at that overall plan, it is going to be really critical if we want to see that pay for performance, or bait outcome as a part of the tools of creating greater quality and efficiency in our health care delivery.

Dr. McCONNELL. When you mentioned the importance of family caregivers in this whole system, and how, even in your experience, and previous generations where people lived closely together, families can only do so much.

If there isn't a good care plan, and the physicians aren't providing the kind of information and monitoring, no matter how closely the family is paying attention—and I think Ann was doing the best she should, but the families simply can't do it without the assistance.

The physicians won't do it, in part, because you mentioned the need for geriatric training. We have really got to pay attention to that. Because they just don't have the time. They aren't incented.

Senator LINCOLN. Well, the incentivizing, as you said, for the amount of time that a physician is going to spend with an aging parent or somebody with chronic conditions, there is no doubt they are going to spend more time with it.

But the other is, in terms of rural areas and the physicians that you have there, that there is not more training about where we are going with an aging population for geriatrics and geriatricians.

Particularly academic geriatricians, because we are not training those, which means as med school goes, 10 years from now, we are going to have less in the academic world training the geriatricians, and we will be at a tremendous deficit in terms of the caregivers that we need out there to be managing the managers, in this opportunity.

Just one more opportunity. You have talked about how you have handled coordinating your ex-husband's care. Maybe you, in having looked at that and continuing to do that, could reflect on how care coordination services would have helped your family, or would help your family when your husband was first diagnosed with Alzheimer's disease.

Ms. BOWERS. First of all, it is such a huge thing to me to sit here and look at this and hear people talk about budgeting and things like that, because to me, this is such a clear-cut cost-cutting measure. This is—

Senator LINCOLN. We need you at CBO. [Laughter.]

Ms. BOWERS. When I look at the times my husband had three hospitalizations between 14 and 21 days, those hospitalizations were far and away primarily for simply evaluation and placement needs. Those needs could have been taken care of 100 percent by a care coordinator, a well-trained medical background care coordinator, not a clerk at the end of a phone.

It would have made a huge difference, not only in cost-cutting—which he was Medicare by that point—how many tens of thousands of dollars were spent hospitalizing him simply because the right hand didn't know what the left was doing?

We didn't know the progression of the disease. His depression got out of control. His glaucoma had gone bad. There were so many things that went wrong that, you know, hindsight is the perfect 20–20 situation. I went back, and can beat myself up, "I should

have seen this, I should have seen this.” But the reality is, every caregiver has other responsibilities, and those of us in the Sandwich Generation invariably have lots of other responsibilities. I did the best I could.

Earlier today, I was speaking with someone, and it occurred to me, how would someone have handled this if they were less well-educated than I was? I have been blessed with a good education and have the ability to understand the systems, simply getting through the Web sites on Social Security or Medicare. I am fairly technologically savvy. I have a lot of time doing that kind of stuff.

I can’t imagine how somebody without the support of a care coordinator could even begin to find the services, much less access and complete the paperwork and the regimen that is required and demanded to achieve the services. A care coordinator would have made not only a phenomenal financial savings, but it would have kept him in the community longer in the early stages, when he still had pride.

That kind of thing is gone now. But when he still knew what was happening to him, and he had to try to cover, he had coping mechanisms that he would use to cover up things, like he forgot to take a shower. I mean, this strictly GQ man, who all of a sudden, you will see when it dawns on him, all of a sudden he realizes he is not well-groomed, or he is not putting his best foot forward.

Those kind of things, if we could have had the in-home help that a care coordinator could have helped us obtain, instead of being turned down because the person that came to interview him happened to hit him on a good day. “Well, he doesn’t need in-home help.”

Well, if a physician recommended that through a care coordinator, those obstacles would be gone. It would save money, it would enable the patient to maintain his dignity far longer, and it would leave some quality of life for the hundreds of thousands of young children that are going to be affected by this.

This is not a disease simply of our parents, Senator Lincoln. It is a disease of our peers, and our children are affected by it. I just feel so strongly about it, that it is not just the financial citings, which to me is so clear-cut, that that alone, the bill should be able to stand on. But in terms of dignity, ability to remain in the community, and the personal quality of life for both patients and caregivers.

Senator LINCOLN. Well, one of the other things that comes to mind as you discuss those things, is that as we mentioned, many of us, not all of us, represent predominantly rural States, but a lot of us do. Me, and certainly all of us, have rural areas in our States. But when you think about, too, where you go in rural communities, that was our concern.

We lived in a small town, my mother was there in a small town. Finding somebody to help her navigate the system of services that exists, my sisters, my brother, we were there for her. Like you, we have got relatively decent educations. Just learning to navigate those systems is unbelievable too.

But with a care coordinator, you have somebody who is in the medical field and in those services fields, who can better understand where you go for those services. As you said, you access them

quicker, and in that fashion, you provide, again, greater savings, because you don't do those hospitalizations, but you also provide that kind of dignity for your loved one. That is so critically important.

Ms. BOWERS. It is. I would like to just point out, one point. It really touched me when you mentioned about hospice. By the time you needed it, you didn't even realize it was there until the very last minute, and available.

That is an exact parallel to the fact that we had supposedly had access to some in-home help for him, an in-home health care manager that would come in once or twice a day to supervise his medications. I believe you had to lose a certain percentage of your ADLs in order to qualify.

Of course, in his initial screening, he didn't qualify, because he happened to be on top of his game for 30 minutes while she was there. The simple ability to access those type of services, and know that they are available through a program like this, would just in the quality of life, would be unbelievable.

Dr. MCCONNELL. Senator, I think that is one provision in your legislation that is really important. It is about the importance of linking the individuals to community-based services.

You think about just the Alzheimer's Association chapters. There was a clinical study in Cleveland, where the people that were the caregivers were linked to an Alzheimer's Association chapter and given some basic training on how to help care for somebody who had a medical problem.

It resulted in significant reductions in unnecessary hospitalizations and emergency room use, just that small little intervention. So not only is it a comfort to caregivers, but it is a very important intervention that is part of your legislation.

Senator LINCOLN. Well, without a doubt, being able to have someone that you can talk to and have recommendations from is critical.

Mr. GUTERMAN, just one last thing on those demonstrations. Of all the chronic care demonstrations that you have analyzed, which one do you think provides us the most promise for helping the chronically ill beneficiaries in the Medicare program? Would you pick one over the other?

Mr. GUTERMAN. Well, I think since these are sort of a sequence, and since all the results aren't in, I don't know that there is a definitive model that I could say was the right model.

I have my reservations about models that don't involve physicians directly, at least coordinating. I do think there is a role for third-party organizations to help physicians provide the services. The demonstration that is starting up in your State and three others, with small practice physicians, I think is a promising one for two reasons.

Senator LINCOLN. We wanted the physician oversight as well when we did this.

Mr. GUTERMAN. One is that it is physician-oriented, and the other is that it is small-practice-oriented, which is really where the majority of physicians practice. There is another demonstration going on now called the Physician Group Practice Demonstration, that focuses on large multi-specialty group practices, and that has

some promise too. But most physicians aren't in large organizations like that.

Again, I think what we need to do is take what we can learn out of all of these examples, and then decide as we go along, not necessarily one model, but different models. The Medicare Health Support Pilot is going to offer some good information on what works in different circumstances and what doesn't work in different circumstances.

I think we have a lot of development to go, and we can develop as we go along. But as I said before, it is hard for me to believe that we can't do better than we are doing now.

Senator LINCOLN. Well, thank you so much.

Dr. McConnell, just one more thing. You mentioned in your written testimony that disease management may not be the best way to go, because it focuses on specific diseases. Can you just help me understand your comments there?

Dr. MCCONNELL. Well, I think, again, taking the case of Alzheimer's disease, there is more than an additive effect here. When you add dementia to another condition, it really creates a whole new care problem. Disease—

Senator LINCOLN. You are saying that one single disease is managed, not multiple diseases—

Dr. MCCONNELL. Right. If they are doing multiple disease management, that is fine. But typically, it is focusing on one disease at a time, and as I said, and again, we want to work with CMS. We want to work with these demonstrations and pilots.

The concern is that in the legislation, in the Medicare Modernization Act, it specifically requires physicians to assess each eligible beneficiary for conditions other than chronic conditions, such as impaired cognitive ability and comorbidities. It doesn't appear, and we have looked at several of these, that that is happening.

Again, it may be just that it is complicated. What the disease management organizations know about is how to deal with managing diabetes. The notion of dealing with someone's cognitive impairment is not something perhaps that they are familiar with. Yet, it is very difficult to imagine that it will succeed without paying attention to that.

Senator LINCOLN. Well, I just want to thank all of you.

I appreciate this panel as well as our first panel, and I certainly do want to say to you, please don't go far. This is an issue that I think we really owe to ourselves, to our children, and to our parents and grandparents to work hard to get it right.

As I said, I just go back to the blessing of being able to grow up in a neighborhood with my grandparents and aunts and uncles, and my grandmother right there beside me. I know as much as I may want that for my children, today's society may not fit in that way. But without a doubt, I want to know that my parents—let's face it, we want to be cared for too. Those twin boys of mine, who knows where they will be when I need them, when I need that care?

So I am grateful to you all for your input.

I am also enormously grateful to my staff. I don't remember who, I guess it was Dr. McConnell, who mentioned Brenda Sulick and Ashley Ridlon on my staff, who have been enormously immersed in

this issue. I am grateful for their hard work in helping us put this hearing together.

A special thanks to the Chairman and the Ranking Member.

So, thank you all. We will look forward to working with you in the future.

With that, the Committee is adjourned.

[Whereupon, at 5:02 p.m., the Committee was adjourned.]

APPENDIX

PREPARED STATEMENT OF SENATOR BLANCHE LINCOLN

I want to thank Chairman Kohl and Ranking Member Smith for the opportunity to chair today's hearing on the Future of Medicare: Recognizing the Need for Chronic Care Coordination. As a member of the so-called "Sandwich Generation" who cares for their children and aging parents simultaneously, I am keenly aware of many issues affecting older Americans and have been an advocate for geriatric chronic care coordination for several years. Studies indicate that when patients are linked with a physician or other qualified health professionals to coordinate care the results are improved quality of care, increased efficiency, and greater cost-effectiveness.

That is why I am pleased to chair today's hearing; to raise awareness of the need for chronic care coordination services for Medicare beneficiaries and to discuss how these services can be provided in a cost-effective way. This hearing will specifically focus on chronic care coordination in the traditional Medicare fee-for-service (FFS) program. While some chronic care coordination occurs in other programs such as Medicare Advantage and the Program for All Inclusive Care for the Elderly (PACE), nearly 85 percent of Medicare beneficiaries continue to receive healthcare from the traditional fee-for-service program, which lacks a chronic care coordination component.

Why focus on chronic care coordination? Well, there are several reasons.

First, the needs of Medicare beneficiaries have changed over time. When Medicare was first established in 1965, it was based on a health insurance model, which focused on acute care, not chronic conditions. But today, many older Americans suffer from multiple chronic conditions and would benefit from care coordination. We know that about 78 percent of the Medicare population have at least 1 chronic condition, and 63 percent have two or more chronic conditions.

Second, as our population ages, the number of older individuals with chronic illnesses is also expected to rise. A recent article in the Washington Post noted that Baby Boomers are more likely to be in worse health condition than their parents in retirement (April 20, 2007), which may result in a greater need for medical services. A RAND Corporation study estimates that half of the population will have a chronic condition in 2020—a total of 157 million Americans.

Third, Medicare beneficiaries with multiple chronic care conditions are expensive to treat. According to the Congressional Budget Office, 43 percent of Medicare costs can be attributed to 5 percent of Medicare's most costly beneficiaries. Medicare beneficiaries with four or more chronic conditions are 99 times more likely to experience one or more potentially preventable hospitalizations than those without chronic conditions. If an individual has Alzheimer's disease or dementia, medical costs increase even more dramatically.

Finally, multiple chronic conditions not only affect the individuals suffering from them, but also their caregivers. About 5 years ago, I watched my mother devote herself to the care of the man she had loved for more than 52 years. She had pledged to attend to him and honor his life until he departed this world, even if he no longer remembered her name or could recognize her face. My dear father suffered from Alzheimer's disease.

My mother's strength and commitment to my father during his long illness remains a great source of inspiration to me. Unfortunately, my family's experience with the ravages of Alzheimer's is not unique. Millions of Medicare beneficiaries with chronic conditions who remain at home do so with the help of family and friends. Research shows that family care for an older adult with chronic illness or disabilities, especially dementia, can have negative health effects (both physical and mental) on family members.

To address these issues, I am pleased to announce that today Senator Collins and I introduced the Geriatric Assessment and Chronic Care Coordination Act of 2007,

along with Senators Kohl, Kerry, Mukulski, Clinton, Boxer, and Casey. I am also pleased that Representatives Gene Green and Fred Upton are sponsoring a companion bill in the House and that 30 national organizations have endorsed the bill. This bill realigns Medicare to provide high-quality, cost-effective care to elderly individuals with multiple chronic conditions. It is an important step forward in recognizing and remedying the impact that multiple chronic conditions have on individuals, their caregivers, and the Medicare program.

PREPARED STATEMENT OF SENATOR HILLARY RODHAM CLINTON

I would like to thank Chairman Kohl and Ranking Member Smith for convening today's hearing on the importance of chronic care coordination for older Americans who rely on Medicare to pay for treatment for multiple illnesses. And I applaud Senator Lincoln for organizing today's hearing and for her leadership on the *Geriatric Assessment and Chronic Care Coordination Act*, of which I am a proud original co-sponsor.

In less than ten years, the first wave of baby boomers will turn 65. In light of the growing longevity of Americans, we must consider how we will meet the increasing needs of this elder boom and the growing demands placed on our local, state, and federal health and social service systems in the years ahead.

To ensure that we are prepared, we must reevaluate whether our health care system is helping or hindering those who are struggling with the burdens of age.

Medicare has long been a vital source of health insurance for our nation's seniors, providing them with access to medical treatment at a time of life when care is needed most. However, a critical weakness of Medicare that Senator Lincoln's bill addresses is the lack of incentives to provide coordinated healthcare. It is crucial that we provide care coordination and geriatric assessments for older Americans who suffer from one or more chronic conditions.

We spend more and use more services to treat catastrophic, complex, chronic care cases. Our lack of a system to manage the multiple, complex health care needs of people with chronic illness leads to higher costs and often poor quality. Chronic diseases, such as cardiovascular disease and diabetes, account for 75 percent of our total national health expenditures and are the leading cause of death in the U.S. Further, the number of Americans with at least one chronic illness is expected to rise 25 percent by 2020.

Under Medicare, at least 83 percent of Medicare beneficiaries suffer from one chronic illness and the 23 percent of beneficiaries who suffer from five or more chronic illnesses account for 68 percent of costs to the program. Further, the combination of a chronic condition and Alzheimer's disease causes Medicare costs to soar. According to the Alzheimer's Association, the combination of Alzheimer's and another chronic condition, such as heart disease or diabetes, approximately doubles the Medicare cost. All of us here realize that as the Baby Boomer generation ages, there will be a dramatic increase in the number of Alzheimer's cases. By the year 2050, if we do not make headway, up to 16 million Americans are expected to suffer from this devastating disease.

For the people that will confront this disease in their own lives, this is about more than statistics: it represents an emotional struggle, a tremendous financial burden, a new strain on our already stressed healthcare system, particularly for Medicaid and Medicare costs.

As co-chair of the Senate Task Force on Alzheimer's Disease with my colleague Senator Collins, I have worked to address issues faced by Alzheimer's patients and their caregivers. I'm pleased that Dr. Steve McConnell is here today. The Alzheimer's Association has been a wonderful partner in raising awareness and support for people living with Alzheimer's and their families.

We know that it's crucial to make caregiver health and well-being a priority, which is why I am fighting for full funding of the *Lifespan Respite Care Act*, which was signed into law last December.

But today's hearing is not just about improving Medicare programs for older Americans. It's also about improving management conditions for all ages, including education on how individuals can better manage their own health in order to avoid further complications.

That's why I am a strong supporter of chronic disease management programs. The money we invest in prevention, early diagnosis and management programs today can reduce treatment costs down the road.

Let's take, for example, diabetes—over 20 million Americans are currently living with this disease. Six million of them have not yet been diagnosed. Another 54 million are classified as “pre-diabetic,” with a high risk of developing this condition. Di-

abetes accounts for over \$92 billion in direct medical costs every year, and these numbers are only likely to increase.

Last year, a *New York Times* series focusing on diabetes spelled it out the problem. The healthcare system will pay tens of thousands of dollars for an amputation, but won't pay for a low-cost visit to the podiatrist that could have saved the foot.

The incentives inside our health care system are backwards, and the payment system is upside-down: too often paying for costly and debilitating treatment but not for low-cost prevention.

Today, Senator Collins and I are introducing the *Diabetes Treatment and Prevention Act of 2007*, legislation that will strengthen our support for chronic disease management programs of the CDC and state and local health departments.

Our bill would allow the Diabetes Prevention Program to be brought into clinical practice where it can be replicated at the state, local and provider level, along with other interventions to control diabetes. This program has shown that diet and exercise interventions were successful at preventing diabetes.

Our bill would also establish a demonstration grant program that would help state and local health departments to establish disease management programs for individuals with diabetes and other co-occurring chronic conditions like heart disease, mental illness and HIV. In some cases, the medications for these other conditions can cause diabetes and aggravate its management.

I believe we must do more to help people who are dealing with multiple chronic conditions manage them in a coordinated manner and our bill will help accomplish this goal.

Again, I thank Chairman Kohl and Ranking Member Smith for convening today's hearing, and Senator Lincoln for her leadership on this issue. I look forward to continuing to working with my colleagues to make progress for our seniors and families on these important issues.

RESPONSES TO SENATOR SMITH QUESTIONS FROM DR. TODD P. SEMLA

Question. How would you rank the importance of better training for doctors, implementation of electronic-records keeping and utilization of chronic care coordination through case managers?

Answer. All three of these are critically important for providing care to chronically ill patients and it is hard to rank them in terms of priority. However, chronic care coordination is the lynchpin of the system. Without care coordination, better training and better electronic records systems would have very limited effect and the cost savings might be limited. Thus, we would rank chronic care coordination through case managers first, better training (in geriatrics) for doctors and health care professionals second, and implementation of electronic records third.

Question. For all of our panelists, though your focus has been to institute systems of care management for persons with multiple chronic conditions to prevent these situations, aren't many of these examples prevalent even among those who only enter the health care system because of an acute health need?

Answer. America's health care needs are changing dramatically with the aging of its population—from a system focusing on acute care to one that must address chronic care either after an acute event, such as stroke, or for ongoing conditions that may take years to culminate in an acute event (e.g., Type II diabetes). With the aging of the population, conditions that were not that prevalent 50 years ago are quite prevalent today; osteoporosis and all its complications is one example.

Patients who enter the health care system because of an acute health need, such as a heart attack, are indeed at risk for many of negative outcomes that the chronic care coordination model could prevent. It is less complicated to coordinate care for a single condition during a specific acute care event, which is what the current health care system (under Medicare) is designed to do—it's modeled for acute care. Many of the patients that fit your example may derive benefits from existing single disease management programs. The patient, however, with multiple and complex chronic conditions would typically benefit from a comprehensive and coordinated regimen of care that holistically addresses his or her health care needs. The recent MedPAC Commission report of June 2007 has reached many of these same conclusions.

Question. Can you talk a bit more about this and explain how a more formal case manager or group of doctors working closely together can relieve some of the pressure on family caregivers and how this could reduce errors since most family caregivers are not trained for this type of work?

Answer. The burden currently being placed on family caregivers is huge and frequently detracts from their ability to care for loved ones. Care managers should col-

lect and maintain all health related information for the chronically ill, such as a list of current diagnoses, medications and treatment goals so that it is not only the family doing the task of conveying sometimes complex information. A care manager can much more effectively and efficiently communicate with other caregivers and can, for example, make sure that patients are getting the right medications in the right dose at the right time. A care manager would also see that changes in the patient's care plan are communicated in a timely manner to all health care providers caring for the patient. This legislation introduced by Senator Lincoln (S. 1340) will allow family members to do what they do best—provide day to day care and not force them to be responsible for communicating to an array of health professionals.

Question. Can you talk a little more on this culture of specialties working in silos and its impact on patient care? What steps can be taken to break down these outdated practices?

Answer. Historically, specialists have taken care of patients with acute illnesses, or single illnesses affecting one organ system, and have not provided ongoing or coordinated care. Only recently have specialists begun to take care of chronic illness, but even then those illnesses tend to consist of a single disease or a few diseases that affect a single organ system. Their practices are not set up to provide care for patients with multiple diseases that affect many organ systems. Neither the specialist nor their staff has the expertise to do that. It is critical to have a care coordinator, such as a physician or nurse practitioner, who can collect and coordinate care from multiple specialists.

AGS believes in inculcating principles of geriatric care across all disciplines—the coordinated care approach. The geriatrics based whole patient approach looks at the different functions of each member of the team treating the whole patient. A care coordinator can bring in specialists to consider their areas of expertise in the context of the big picture. Many presently do this well and, in other cases, a care manager is critical, in all cases, a care manager will make it more likely that the whole patient is cared for.

S. 1340 would be strong first step in changing the culture of medical practice silos. To change practice habits, changes would need to be made in medical education and residency programs for specialists. Additionally, the mere existence of care coordinators is likely to induce specialists to make sure their patients participate in care coordination because it will allow them to continue doing what they do best—take care of acute illnesses affecting a single organ system.

RESPONSES TO SENATOR SMITH QUESTIONS FROM GERARD ANDERSON

Question. How would you rank the importance of better training for doctors, implementation of electronic-records keeping and utilization of chronic care coordination through case managers?

Answer. All three are critically important and they are synergistic. Better training for doctors is needed because most doctors currently are not being told how to coordinate care and perform other activities that would benefit people with multiple chronic conditions. Electronic medical records are the only feasible methods to have the multiple clinicians caring for the complex patient interact with one another. Currently most payment systems do not pay for care coordination and with payment many clinicians will not perform the service. Unless the clinician is trained in care coordination, has the information to perform care coordination, and is paid to do care coordination, care coordination is unlikely to happen. All three are needed.

Question. For all of our panelists, though your focus has been to institute systems of care management for persons with multiple chronic conditions to prevent these situations, aren't many of these examples prevalent even among those who only enter the health care system because of an acute health need?

Answer. The problems are also important for people with just an acute illness. There is, however, one important distinction. An acute illness typically is treated in one location with all the clinicians able to share information and perhaps to meet and discuss the case. For people with multiple chronic conditions it is often that the clinicians are miles apart, never see each other, are unable to coordinate their care and as a result costs increase and quality suffers. The problems compound for people with multiple chronic diseases because the problems are ongoing instead of happening at one time.

Question. You mention in your testimony that half of Medicare beneficiaries with multiple chronic conditions will be told by their pharmacist at least once a year not to fill a prescription because of possible interactions with other drugs that they take. This number strikes me as shockingly high. I assume that there could be a variety

of reasons for this happening, including the patient not being able to remember their list of medications, incomplete medical records or medical error.

Do you think that physicians are resistant to changes in their training and why do you think physicians are resistant to moving to more advanced approaches such as electronic medical records keeping?

Answer. I agree the number is high. I was shocked when we got the numbers from the Gallup Organization. I think the main reason why half of all people with multiple chronic conditions go to fill a prescription and are told of a potential drug drug interaction is that the physicians do not always know the drugs that other doctors have prescribed. An electronic medical record would make the information available.

I do not think physicians are resistant to changing their training programs. I teach the importance of care coordination to all 1st year medical students at the Johns Hopkins School of Medicine. Medical students and the teaching physicians understand the importance of care coordination. However, until it is reimbursed, they are unlikely to emphasize it in the training programs.

I think most physicians are resistant to electronic medical record keeping because we are asking them to pay for it when it does not benefit them financially and may actually be very expensive for them to install. Purchasing the software and the computers necessary to have an electronic medical record is only a small portion of the cost. The major cost is in redesigning the office's entire information system from paper to electronic medical records. During the conversion the physician's office must maintain two parallel information systems and this could go on for years. Once the electronic medical record system is implemented it is unlikely to save the physician much money and it could mean fewer visits. Nearly all of the benefits accrue the payors (reduced readmissions, fewer preventable hospitalizations, and fewer drug drug interactions). In other countries the payors are funding the diffusion and operation of electronic medical records.

Question. In your testimony, you also mention that many physicians are not trained to work cooperatively to treat a patient with multiple chronic conditions. It seems that a lack of care coordination also is due to some gaps in training or limited emphasis on the importance of coordination within the profession.

What do you think can be done to change this aspect of the culture of medicine and how do you think training programs can be enhanced to emphasize chronic care coordination?

Answer. Currently most medical schools and residency programs emphasize acute care medicine and emphasize training in a particular disease. We need to emphasize that care coordination is important because patients often have multiple problems and all of the problems need to be considered not just one of the problems. Physicians are becoming increasingly aware of the need to coordinate care; however, the current system stifles care coordination. I propose three things:

Medicare use the \$10 billion it spends on graduate medical education each year to push medical schools and teaching hospitals to place greater emphasis on training physicians in care coordination.

Medicare pays \$5 each time a physician submits an electronic medical record. This will fund the creation of an integrated electronic medical record that will allow information to flow easily.

Medical pays \$100 per beneficiary per month for a clinician to perform care coordination activities on Medicare beneficiaries who want care coordination and who will benefit from care coordination. I would begin by focusing on Medicare beneficiaries with 5+ chronic conditions and/or dementia.

Question. In your testimony, you also mention that many persons with multiple chronic conditions are left out of clinical trials. You state that this leads to inadequate data on evidence-based methods to treat them.

Are patients with multiple chronic conditions being left out of these trials because it makes the research more difficult in that they have to account for more variables?

Answer. Patients with multiple chronic conditions are being left out of the clinical trials because it makes the research more difficult. Currently the research emphasizes efficacy. Efficacy measures what works in a controlled environment. However, in the real world the critical term is effectiveness. Effectiveness measures how well the drug, device or procedure works in actual practice. Effectiveness is more important in the long run.

Question. Given that such a large percentage of Americans have multiple conditions wouldn't it benefit medicine to see how treatments impact people with multiple diseases?

Answer. I totally agree that it would benefit medicine to know how treatments impact people with multiple diseases. There are two ways to obtain this information. One option is to expand the inclusion criterion in the initial clinical trial. In the 1980s we required that women and minorities be included in all clinical trials (if

clinically appropriate). Previously most clinical trials were restricted to white males. Women and minorities wondered if the drug, device, or procedure would work equally as well for them. Now we require their inclusion.

The second option is to require follow-up studies to include people with multiple chronic conditions. These studies would be performed only after the efficacy has been demonstrated.

RESPONSES TO SENATOR SMITH QUESTIONS FROM DAVID DORR

Question. In your testimony you mention the savings to clinics by implementing chronic care coordination plans, like Care Management Plus. You state that the savings can be more than a quarter of a million dollars annually at each clinic.

How do you see these potential savings playing out widely within Medicare and Medicaid?

Answer. The Care Management Plus process focuses on prevention and patient education, keeping chronically ill patients healthier and out of the hospital setting. We anticipate that savings would accrue to the clinic from an increase in clinician productivity, a shift in clinical practice, and a change in overall patient utilization patterns. In addition, public payers such as Medicaid and Medicare would see savings from the implementation of coordinated care programs that use clinical tools and processes that emphasize effective and efficient patient care. Incentive structures within the reimbursement system, both public and private, must be implemented to support this change in care delivery.

There are substantial benefits from the efficiency gains that arise from better information technology (IT) and care coordination. Many researchers have documented the enormous amount of waste in medical care services. Estimates vary substantially but generally suggest that 20 to 50 percent of medical care spending, including Medicare and Medicaid, could be eliminated without reductions in quality services.

Question. We know that rural hospitals, clinics, and practices have very different concerns than those located in more urban areas. For instance, there is more likelihood that a person will see a general practitioner in a rural area than the specialist more urban patients will see.

How do models of care coordination for patients with chronic illness differ in urban versus rural areas?

Answer. Care Management Plus is designed to be flexible for the variety of clinical settings that exist. The program tools and curriculum can be used to accommodate the varying size and structure of clinics/systems, the differing amount of resource capacity within each clinic/system, and the multiple and complex patient populations in need of coordinated care.

We will be implementing Care Management Plus in six rural clinic settings over the next two years in collaboration with the Oregon Rural Practice-based Research Network through a grant funded by the Agency for Healthcare Research and Quality (AHRQ). This project will provide important information about the gains and the limitations of a care management program in a rural setting. Implementing Care Management Plus in these rural clinics will require special attention not only to the information technology capacity. Its success will also depend on available specialty care in each clinic, available clinical staff to participate in the care management process, and the patient demographics served in each rural area.

Question. In your testimony, and in some of the testimony that we will hear during the second panel, there are some very troubling stories and statistics on the lack of important information being given to a person with a chronic disease and the dangers that can arise when patients can't or don't tell one specialist about care they are receiving from another. Many of these examples and statistics lead me to wonder about what can be done to better train doctors in working collaboratively and how to improve our records systems such as through electronic records-keeping.

How would you rank the importance of better training for doctors, implementation of electronic-records keeping and utilization of chronic care coordination through case managers?

For all of our panelists, though your focus has been to institute systems of care management for persons with multiple chronic conditions to prevent these situations, aren't many of these examples prevalent even among those who only enter the health care system because of an acute health need?

Answer. Care coordination can address all three areas of improvement required for high quality care. Care coordination programs like Care Management Plus use a team-driven workforce to provide high quality care with the most appropriate information technology (IT) and clinical tools available. Training for nurses, care coord-

dinators, clinic supervisors and administrators, and medical directors is necessary to successfully transform care for the chronically ill. IT tools and electronic-record keeping play an important role in helping the health care team track patient needs and follow the best evidence-based guidelines for a chronically ill population. Health care providers can also utilize appropriate IT tools to inform and educate patients about their conditions and teach self management strategies. Patient-centered care directly by a care/case manager has proven effects on disease improvement, patient satisfaction, physician productivity, and the resulting change in health care utilization.

Prevention and early recognition are key components in programs like Care Management Plus. The primary care team treats patients' chronic diseases early, trying to prevent problems rather than treating them after they occur. This can result in time and cost savings in managing care for not only the chronically ill population, but for those patients that have more acute/episodic health care needs.

Many patients do enter the health care system only for acute needs. Each contact with the health care system can still be used to help educate and motivate people to think about their chronic illnesses. Health Information Technology, especially where information is shared readily, can help connect these often fragmented acute visits by reminding about the need to educate and consider their chronic needs without overly burdening the acute care team and to facilitate contacts with the primary care system. Our care management program was borne of the fact that so many patients have no follow-up after their acute care episode; having the care manager whose goal is to understand the barriers and move patients towards more preventative and chronic illness care was a solution to just the problem posed by the follow-up question.

RESPONSES TO SENATOR SMITHS QUESTIONS FROM STUART GUTERMAN

Question. Mr. Guterman, in your testimony you mention research that shows that persons with multiple chronic conditions are more likely to have preventable hospitalizations, experience adverse drug interactions, undergo duplicate tests and receive contradictory information from doctors.

How much of this is due to the simple fact that these persons are sicker than other patients so they see doctors more often and are in more acute health situations and therefore there is more change of error?

Answer. Senator Smith, there may well be a relationship between the fact that persons with multiple chronic conditions are sicker than other patients and have more interactions with the health care system at a higher level of acuity and the fact that they experience more problems with their health care than other patients. But that relationship only emphasizes the fact that better coordination is needed for these patients to avoid those kinds of problems. Even if the same proportion of care provided results in problems for the patient who needs more care, it still means that the patient who receives more care is at greater risk for adverse events, and therefore that more needs to be done to reduce that risk. Also, it stands to reason that patients with multiple conditions require more coordination across those conditions, because they receive not only more care, but care from more different providers—each of whom may not be aware of what the other providers are doing to the patient.

Question. Do these studies control for the fact that these persons simply have more opportunity for error due to the sheer number of their interactions with medical professionals in a given year?

Answer. To my knowledge, the studies I refer to do not control for the number of each individual's interactions with medical professionals. But the focus of interest here is the individual and his or her risk of adverse events, rather than the medical encounter, so the point that patients with chronic conditions are a greater risk still holds, I believe.

Question. In your testimony you mention that only 67 percent of hospitalized patients in the U.S. reported having their medications reviewed at the time of a hospital discharge and that patients with congestive heart failure receive discharge instructions only 50 percent of the time.

Question. At what point is it a question of providing incentives for chronic care coordination or are we at a question of doctors doing their due diligence in treating the patient? It seems to me that these are questions that doctors should be asking all patients—not just those with multiple chronic diseases.

Answer. That is an important question. My answer would be that certainly, physicians should be providing appropriate care, not only to patients with multiple chronic conditions, but to all their patients. But part of the problem we have with the

quality of care across our health care system is that we have provided distorted incentives that emphasize providing more services and more complex services—sometimes to the detriment of the patient. We can blame physicians for responding to those very string incentives, or we can search for ways to try and fix the distorted incentives we've presented them with. Moreover, in many cases the problem that patients with multiple chronic conditions face is that multiple providers are responsible for their services, and many times those providers don't communicate with each other—not because they are bad providers, but because the way that medicine is practiced in our health system doesn't really allow for them to devote resources to those types of activities. My point is that if we want to see our health system provide coordinated, appropriate care, that is what we ought to pay for.

**STATEMENT FOR THE RECORD
OF THE
AMERICAN COLLEGE OF PHYSICIANS
TO THE
SPECIAL COMMITTEE ON AGING
HEARING ON THE FUTURE OF MEDICARE: RECOGNIZING THE NEED FOR
CHRONIC CARE COORDINATION
MAY 9, 2007**

The American College of Physicians (ACP) -- representing 120,000 physicians and medical students -- is the largest medical specialty society and the second largest medical organization in the United States. Internists provide care for more Medicare patients than any other medical specialty.

The College commends the Special Committee on Aging for holding this important hearing on ways to restructure Medicare payment policies and benefits to support coordination of care for patients with chronic illnesses.

ACP strongly believes that Medicare and other health plans should be reformed to advance the patient-centered medical home, a model of health-care delivery that has been proven to result in better quality, more efficient use of resources, reduced utilization, and higher patient satisfaction. Enactment of Senator Lincoln's "Geriatric Assessment and Chronic Care Coordination Act of 2007," S. 1340, which authorizes a new Medicare benefit for geriatric assessments of patients with multiple chronic diseases and/or dementia, and payment of a care coordination fee to physicians who accept responsibility for such patients, would represent a major and essential step forward to re-aligning Medicare benefits and payment policies to incorporate key elements of the patient-centered medical home.

The Patient-Centered Medical Home: A Model for Improving Care Coordination

In March, 2007, ACP, the American Academy of Family Physicians, American Academy of Pediatrics, and the American Osteopathic Association released a joint statement of principles that defines the characteristics of a patient-centered medical home. These four organizations represent 333,000 physicians and medical students. The joint principles are attached to this statement.

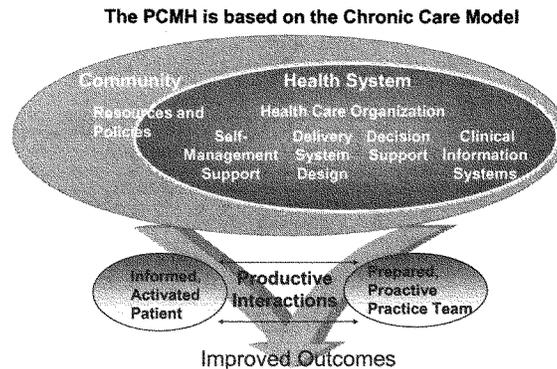
The patient-centered medical home incorporates the relationships and systems required to support more effective care coordination for patients with multiple chronic diseases. As defined by the joint principles:

Care is coordinated and/or integrated across all elements of the complex health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Quality and safety are hallmarks of the medical home:

- Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are defined by a care planning process driven by a compassionate, robust partnership between physicians, patients, and the patient's family.
- Evidence-based medicine and clinical decision-support tools guide decision making
- Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement.
- Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met
- Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication
- Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
- Patients and families participate in quality improvement activities at the practice level.

The patient-centered medical home can improve the quality of care provided to any Medicare beneficiary, but is particularly suited to providing continuous, longitudinal, integrated and coordinated care for patients with multiple chronic diseases and/or dementia. It is based on the Chronic Care Model developed by Ed Wagner, MD, FACP. The Chronic Care Model combines self-management support, delivery system design, clinical decision support, evidence-based clinical decision support, and clinical decision support and community resources to support a prepared, pro-active practice team and an informed, activated patient, resulting in productive interactions that result in better outcomes:



2007, Improving Chronic Illness Care, accessed 4/24/07 at http://improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2

The joint principles further describe a voluntary qualification process that is being established by the primary care organizations and the National Committee on Quality Assurance to assess the ability of practices to effectively manage and coordinate care through a patient-centered medical

home. This assessment would include review of the practice's capacity and systems to provide timely access to services, to share information among teams of health care professionals, to access evidence-based clinical decision support at the point of care, and provide self-management support to patients, to track patients on a population basis using patient registry systems, and to measure and report on the quality of care provided.

The patient-centered medical home has the support of a broad collaborative of physician organizations, employers and other stakeholders. The Patient-Centered Primary Care Collaborative, of which ACP is a founding member, will be releasing a statement tomorrow that endorses the patient-centered medical home. The Collaborative includes employers that collectively employ more than 50 million Americans, primary care organizations that represent the physicians that provide primary care to the vast majority of Americans, and the nation's network of federally-funded community health centers, which provides primary care to 16 million low income Americans. Representatives of consumer organizations have been participating in the Collaborative's ongoing discussions and are expected to endorse and join the Collaborative in the near future. The Collaborative's joint statement of support for the patient-centered medical will be submitted later to the Senate Aging Committee for inclusion in the record of this hearing.

Evidence that Care Coordinated by a Patient's Personal Physician in a Medical Home Can Improve Quality and Lower Costs

There is substantial and growing evidence that a health care system built upon a foundation of patient-centered medical home—incorporating care coordination by a patient's personal physician who accepts responsibility for the patient's complete health--will improve outcomes and result in more efficient use of resources. Although much of the data available relate to care that is managed by a primary care physician (typically, general internal medicine specialists, family physicians, or pediatricians), geriatricians and internist-subspecialists may also serve as a patient's personal physician in the patient-centered medical home—and for some patients they may be the most qualified to provide care to the whole person as part of a multi-disciplinary team.

According to an analysis by the Center for Evaluative Clinical Sciences at Dartmouth, within the U.S., states that relied more on primary care:

- have lower Medicare spending (inpatient reimbursements and Part B payments),
- lower resource inputs (hospital beds, ICU beds, total physician labor, primary care labor, and medical specialist labor)
- lower utilization rates (physician visits, days in ICUs, days in the hospital, and fewer patients seeing 10 or more physicians), and
- better quality of care (fewer ICU deaths and a higher composite quality score).¹

Starfield's review of dozens of studies on primary-care oriented health systems found that primary care is consistently associated with better health outcomes, lower costs, and greater equity in care.

- Primary care oriented countries, such as Australia, Canada, New Zealand, and the United Kingdom are rated higher than the United States on many aspects of care, including the public's view of the health care system not needing complete rebuilding, finding that the

¹ Dartmouth Atlas of Health Care, Variation among States in the Management of Severe Chronic Illness, 2006

regular physicians' advice is helpful, and coordination of care. "The United States rates the poorest on all aspects of experienced care, including access, person-focused care over time, unnecessary tests, polypharmacy, adverse effects, and rating of medical care received."

- An orientation to primary care reduces sociodemographic and socioeconomic disparities.
- Overall, primary care-oriented countries have better care at lower cost.
- Within the United States, adults with a primary care physician rather than a specialist had 33 percent lower cost of care and were 19 percent less likely to die, after adjusting for demographic and health characteristics.
- Primary care physician supply is consistently associated with improved health outcomes for conditions like cancer, heart disease, stroke, infant mortality, low birth weight, life expectancy, and self-rated care.
- In both England and the United States, each additional primary care physician per 10,000 population is associated with a decrease in mortality rates of 3 to 10 percent.
- In the United States, an increase of one primary care physician is associated with 1.44 fewer deaths per 10,000 population.
- The association of primary care with decreased mortality is greater in the African-American population than in the white population.²

Another analysis found that when care is managed effectively in the ambulatory setting by primary care physicians, patients with chronic diseases like diabetes, congestive heart failure, and adult asthma have fewer complications, leading to fewer avoidable hospitalizations.³

Patient-centered primary care will also accelerate the transformation of physician practices by making the business case for physicians, including those in small practice settings, to acquire and implement health information technologies and other systems-based improvements that contribute to better outcomes.

"Patient-centeredness, shared decision-making, teaming, group visits, open access, outcome responsibility, the chronic care model, and disease management are among the proposals intended to transform medical practice. The electronic health record's greatest promise arguably lies in the support of these initiatives..."⁴

Reform of Medicare Payment Policies to Support a Patient-Centered Medical Home

Many physicians would like to redesign their own practices to become a patient-centered medical home, but are discouraged by doing so by Medicare payment policies that reward physicians for the volume of services rendered on an episodic basis, rather than for comprehensive, longitudinal, preventive, multi-disciplinary and coordinated care for the whole person. The authors of a recent survey found that "a gap exists between knowledge and practice—between physicians' endorsement of patient-centered care and their adoption of practices to promote it. Physicians

² Starfield, presentation to The Commonwealth Fund, Primary Care Roundtable: Strengthening Adult Primary Care: Models and Policy Options, October 3, 2006

³ Commonwealth Fund, Chartbook on Medicare, 2006

⁴ Sidorov, Health Affairs, Volume 25, Number 4, 2006

reported several barriers to their adoption of patient-centered care practices, including lack of training and knowledge (63 percent) and costs (84 percent). Education, professional and technical assistance, and financial incentives might facilitate broader adoption of patient-centered care practices. With the right knowledge, tools, and practice environment, and in partnership with their patients, physicians should be well positioned to provide the services and care that their patients want and have the right to expect.”⁵

Congress should enact legislation that leads to a fundamental redesign of Medicare payment policies to support a patient-centered medical home. Such redesign should include the following five key elements:

1. Eliminate the SGR and provide stable, positive and predictable updates combined with performance-based additional payments for reporting on quality measures relating to care coordination and patient-centered care.

The sustainable growth rate (SGR) formula must be eliminated. Unless Congress acts, the SGR will cause a cut of almost 10 percent in physician services in 2008, and a cut of almost 40% over the next several years. Cuts of this magnitude will make it impossible for physicians to invest in the systems and technologies needed to become a patient-centered medical home, will accelerate the trend of physicians turning away from primary care medicine, and create access problems as primary care physicians leave medicine in increasing numbers and fewer young physicians go into primary care.

Specifically, Congress should *enact legislation that would lead to elimination of the SGR* and replace it with an alternative update framework that will:

- Assure stable, positive and predictable baseline updates for all physicians.
 - Set aside funds for a separate physicians’ quality improvement pool that would allocate dollars to support voluntary, physician-initiated programs that have the greatest potential impact on improving quality and reducing costs, and allow for a portion of savings in other parts of Medicare (such as reduced hospital expenses under Part A) that are attributable to programs funded out of this pool to be allocated back to the physicians’ quality improvement pool. Congress should direct that priority be given to those applications for funding under the quality pool that are most likely to improve care quality and efficiency by accelerating and supporting the ability of physicians to organize care processes to coordinate care through a patient-centered medical home. Priority would also be given to programs that address regional variations in quality and cost of care. Our specific recommendations for revamping Medicare’s Physician Quality Reporting Initiative are presented below.
- 2. Revamp the Physicians Quality Reporting Initiative to focus on clinical and structural measures related to coordination of chronic diseases and other “high impact” quality interventions.*

The PQRI pays physicians a “performance bonus” of up to 1.5% for reporting on measures of care that are applicable to their specialty and practice. Physicians will receive the same reporting bonus without regard to the impact of the measures on quality or cost of care, the costs to the practice associated with reporting on the measures, or the number of measures that apply to their specialty or practice. ACP believes that Congress should redesign the PQRI to:

⁵ Commonwealth Fund study, “Adoption of Patient-Centered Care Practices by Physicians: Results from a National Survey” (*Archives of Internal Medicine*, Apr. 10, 2006)

- Assure that funding for the program is sufficient to offset the costs to physicians for reporting on the measures.
 - Focus on structural (health information technologies) measures associated with coordination of care for patients with multiple chronic diseases and/or dementia.
 - Place priority on clinical measures for chronic diseases.
 - Pay physicians on a “weighted basis” for reporting on structural and clinical measures that will have the greatest potential impact on quality and cost, so that physicians who are reporting on measure that will have a greater impact, or that require a greater investment in health information technologies, will receive a proportionately higher payment than physicians who report on lower impact measures that do not require a substantial investment in HIT.
3. *Create incentives for physicians to acquire the health information technologies and systems to support care coordination.*

Medicare should create targeted payment incentives to encourage physicians to acquire specific structural enhancements and tools that are directly related to care management in the ambulatory setting, such as patient registry systems, secure email, and evidence based clinical decision support, which can be measured and reported on. (That is, paying doctors for acquiring the systems needed to become medical homes). Congress should enact legislation that is modeled on the Bridges to Excellence program, which uses a scoring system that provides higher payments for having a fully functional EMR system than having a very basic registry system, and a similar scoring model, with tiered payments, could be used for Medicare:

- Tier 1 – the reporting on evidence-based standards of care; the maintenance of patient registries for the purpose of identifying and following up with at-risk patients and provision of educational resources to patients;
- Tier 2 – the use of electronic systems to maintain patient records (EHRs); the use of clinical-decision support tools; the use of electronic orders for prescriptions and lab tests (e-prescribing), the use of patient reminders; use of e-consults (communication between patient/physician or other provider) when an identifiable medical service is provided; and managing patients with multiple chronic illnesses; [Practices can qualify that utilize three or more incentives].
- Tier 3 - whether a practice’s electronic systems interconnect and whether they are “interoperable” with other systems; whether it uses nationally accepted medical code sets and whether it can automatically send, receive and integrate data such as lab results and medical histories from other organizations’ systems.

Such tiered payments for systems improvements could either be in the form of an “add on” to the Medicare office visit payment that would increase as the practice achieves a higher tier, or in the form of a la carte coding and payment mechanisms to allow physicians to report when they use individual elements inherent to patient-centered care, such as use of a registry and use of clinical decision support. Congress should allocate funding to pay physicians when they appropriately use and report these tools and/or direct HHS to exempt the expenditures associated with these tools from the budget neutrality requirement pertaining to payments for Medicare Part B services.

4. *Provide oversight of the Medicare Demonstration Project on Patient Centered Medical Homes*

The Tax Relief and Health Care Act of 2006 mandates that CMS implement a demonstration project of a Medicare medical home in up to eight states nationwide. The demonstration project will allow practices that qualify as a medical home to receive a care coordination fee and to share in savings from reducing hospital admissions. ACP supports and appreciates Congress’s support

for the Medicare Medical Home demonstration project but urges this Subcommittee to exercise oversight to assure that CMS implements it in a timely manner and provides sufficient funding for physician practices that choose to participate.

5. Enact legislation to create a Medicare care coordination fee for clinicians who accept responsibility for coordinating the care of patients with multiple chronic diseases and/or dementia.

ACP has proposed that physicians in practices that qualify as a patient-centered medical home should be given the option (based on standards to be established in statute) of being paid under an alternative to traditional Medicare fee-for-service. This alternative model would consist of the following:

- Bundled, severity-adjusted care coordination fee paid on a monthly basis for the physician and non-physician clinical staff work required to manage care outside a face-to-face visit and the health information technology and system redesign incurred by the practice.
- This bundled payment would be combined with per visit FFS payment for office visits and performance based bonus payments based on evidence based measures of care

For physicians who are not practicing in a qualified patient-centered medical home, Medicare should be directed to pay separately for the following CPT/HCPCS codes that involve coordinating patient care for which Medicare currently does not make separate payment.

- Physician supervision of nurse-provided patient self-management education
- Physician review of data stored and transmitted electronically, e.g. data from remote monitoring devices
- Care plan oversight of patient outside the home health, hospice, and nursing facility setting.
- Anticoagulant therapy management
- New physician team conference codes
- New telephone service codes (scheduled to appear in CPT in 2008)

Geriatric Assessment and Chronic Care Coordination Act of 2007

Today, Senator Blanche Lincoln and Rep. Gene Green introduced the Geriatric Assessment and Chronic Care Coordination Act of 2007, S. 1340, which will create a new Medicare benefit for geriatric assessments of patients with multiple chronic disease and/or dementia and monthly care management fees to physicians who enter into an agreement with HHS to provide ongoing care coordination services to such patients. ACP strongly supports this bill.

Similar to ACP's proposed bundled payment for a patient-centered medical home, the Geriatric Assessment and Chronic Care Coordination Act will pay physicians who enter into an agreement with the Secretary to provide a defined package of care coordination services will receive a monthly, bundled prospective payment. This care coordination fee would move Medicare away from paying physicians solely based on the volume of services to one that aligns incentives with prevention, management, and coordination of diseases, especially for patients with multiple chronic illnesses and/or dementia. The care coordination fee will take into account the physician work that falls outside a face-to-face visit associated with care coordination and the costs of the health information technologies at the practice level that are needed to coordinate care effectively. It maintains the ability of physicians to bill on a fee-for-service basis for face-to-face visits.

The legislation also creates a new Geriatric assessment benefit, which will allow clinicians to perform a comprehensive assessment of patients with multiple chronic diseases and/or dementia.

This benefit is an essential step towards realigning Medicare benefits towards prevention, diagnosis, and coordination of disease instead of paying physicians solely on an episodic basis relating to acute illnesses. This new geriatric assessment, combined with the care coordination fee, has the potential of greatly improving the quality of care provided to Medicare beneficiaries with chronic illnesses while reducing overall costs associated with such patients.

Conclusion

The 110th Congress has an historic opportunity to join with ACP, other physician organizations, employers, and health plans to redesign the American health care system to deliver the care that patients need and want, to recognize the value of care that is coordinated by a patient's personal physician, to support the value of primary care medicine in improving outcomes, and to create the systems needed to help physicians deliver the best possible care to patients. The College's policy recommendations are offered today as a comprehensive plan for Medicare to realign payment policies to support comprehensive, coordinated, and longitudinal care for beneficiaries, especially those with multiple chronic diseases, through a physician-directed, patient-centered medical home. Enactment of the Geriatric Assessment and Chronic Care Coordination Act of 2007 would represent a marked departure from Medicare's practice of paying physicians only for episodic and acute care toward realigning benefits and payment incentives to support a comprehensive geriatric assessment and ongoing care coordination for patients with multiple chronic diseases and/or dementia, incorporating key elements of the patient-centered medical home.

American Academy of Family Physicians (AAFP)
American Academy of Pediatrics (AAP)
American College of Physicians (ACP)
American Osteopathic Association (AOA)

Joint Principles of the Patient-Centered Medical Home

March 2007

Introduction

The Patient-Centered Medical Home (PC-MH) is an approach to providing comprehensive primary care for children, youth and adults. The PC-MH is a health care setting that facilitates partnerships between individual patients, and their personal physicians, and when appropriate, the patient's family.

The AAP, AAFP, ACP, and AOA, representing approximately 333,000 physicians, have developed the following joint principles to describe the characteristics of the PC-MH.

Principles

Personal physician - each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.

Physician directed medical practice – the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

Whole person orientation – the personal physician is responsible for providing for all the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life; acute care; chronic care; preventive services; and end of life care.

Care is coordinated and/or integrated across all elements of the complex health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

Quality and safety are hallmarks of the medical home:

- Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are defined by a care

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planning process driven by a compassionate, robust partnership between physicians, patients, and the patient's family.

- Evidence-based medicine and clinical decision-support tools guide decision making
- Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement.
- Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met
- Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication
- Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
- Patients and families participate in quality improvement activities at the practice level.

Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication between patients, their personal physician, and practice staff.

Payment appropriately recognizes the added value provided to patients who have a patient-centered medical home. The payment structure should be based on the following framework:

- It should reflect the value of physician and non-physician staff patient-centered care management work that falls outside of the face-to-face visit.
- It should pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
- It should support adoption and use of health information technology for quality improvement;
- It should support provision of enhanced communication access such as secure e-mail and telephone consultation;
- It should recognize the value of physician work associated with remote monitoring of clinical data using technology.
- It should allow for separate fee-for-service payments for face-to-face visits. (Payments for care management services that fall outside of the face-to-face visit, as described above, should not result in a reduction in the payments for face-to-face visits).
- It should recognize case mix differences in the patient population being treated within the practice.
- It should allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting.

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- It should allow for additional payments for achieving measurable and continuous quality improvements.

Background of the Medical Home Concept

The American Academy of Pediatrics (AAP) introduced the medical home concept in 1967, initially referring to a central location for archiving a child's medical record. In its 2002 policy statement, the AAP expanded the medical home concept to include these operational characteristics: accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective care.

The American Academy of Family Physicians (AAFP) and the American College of Physicians (ACP) have since developed their own models for improving patient care called the "medical home" (AAFP, 2004) or "advanced medical home" (ACP, 2006).

For More Information:

American Academy of Family Physicians
<http://www.futurefamilymed.org>

American Academy of Pediatrics:
http://aappolicy.aappublications.org/policy_statement/index.dtl#M

American College of Physicians
<http://www.acponline.org/advocacy/?hp>

American Osteopathic Association
<http://www.osteopathic.org>



Statement
of
The Center for Medicare Advocacy, Inc.

on

The Future of Medicare:
Recognizing the Need for Chronic Care Coordination

for the
United States Senate Special Committee on Aging

May 9, 2007

The Center for Medicare Advocacy, Inc., (the Center) is pleased to supplement the record of the Senate Special Committee on Aging hearing on The Future of Medicare: Recognizing the Need for Chronic Care Coordination. Care coordination is critical to the Medicare population and to the overall health of the nation. Care coordination recognizes and supports planning, developing, and implementing necessary medical and medical social services across the many settings and circumstances in which care is received. It recognizes the movement of patients from hospitals to post-hospital settings such as nursing facilities, assisted living, care in the home, as well as the need for services for Medicare beneficiaries who have not had a recent hospitalization or nursing facility stay.

In March of 2002, with support from the Commonwealth Fund, the Kaiser Family Foundation, AARP, the Borchard Foundation, and others, the Center convened "A National Conference to Develop Consensus Recommendations for the Creation of a Coordinated Care Benefit in the Traditional Medicare Program." The conference achieved consensus on the need for a coordinated care benefit in the traditional Medicare program, including the importance of the role of physicians in care coordination. Forty experts in law, policy, economics, medicine, and care management attended.

The conference steering committee consisted of Marilyn Moon, PhD, Urban Institute, and former Medicare Trustee; Barbara Cooper, Deputy Director, Institute for Medicare Practice of Mt. Sinai Medical Center, and formerly Director, Office of Strategic Planning, Centers for Medicare & Medicaid Services (CMS); and Center staff members Alfred Chiplin, JD, M.Div., principal investigator for the project, Vicki Gottlich, JD, LLM, and Judith Stein, JD, the Center's Executive Director.

The conference focused on building a broader, more comprehensive definition and understanding of the function and funding of care coordination. The conferees reached consensus on the nature and scope of care coordination as a traditional Medicare benefit, access to the benefit, payment methodologies, and cost to beneficiaries. An important aspect of the process was developing consensus around the role of the physician in the care coordination process and the creation of appropriate incentives to assure broad physician buy-in and participation.

The work of the conference was aided by four commissioned resource papers. These papers address practical issues and concerns from the following disciplines: medical/clinical issues, written by Robert Berenson, MD - focused on scope of the medical services to be included for older persons and those for younger disabled beneficiaries, likely clinical criteria and rationale; economics and finance, written by Marilyn Moon, PhD - focused on likely costs and cost-savings from such a benefit, both long - and near- term, funding mechanisms and their impact on the public fisc and on beneficiaries; care management, written by Barbara Cooper - focused on the appropriate mix of non-medical and medical-social services to be included in the benefit, how they should be arranged and provided for, both in terms of care coordination and disease management, and the criteria for inclusion; and legal issues, written by Sally Hart, JD, MBT - focused on how to amend the Medicare statute, development of eligibility criteria, defining decision-makers, whether and to what extent services will be connected to a

need for skilled care, assuring access to services, and describing notice, appeal and grievance rights.

The authors presented their papers at an opening plenary session. Patricia Neuman, ScD, Vice President of the Kaiser Family Foundation, began the opening plenary session by speaking about the demographics and vulnerability of the population in need of a Medicare-covered coordinated care benefit. Bruce Vladeck, PhD, Director of the Institute for Medicare Practice at Mt. Sinai Hospital, and former Administrator of the Health Care Financing Administration (now CMS), addressed the conference on cost issues and program feasibility.

The conference proceedings, resource papers, and consensus recommendations are available as a compendium resource document for on-going discussion about the future of the Medicare program, for further policy development, and for use in legislative deliberations. These materials are available singly and as a compendium resource from the Center for Medicare Advocacy at www.medicareadvocacy.org.

Judith A Stein, Esq.
Alfred J. Chiplin, Jr., Esq.

May 9, 2007

**RECOMMENDATIONS FOR A COORDINATED CARE BENEFIT
IN THE TRADITIONAL MEDICARE PROGRAM
DEVELOPED AT NATIONAL CONFERENCE**

The Center for Medicare Advocacy's recent conference on adding a coordinated care benefit to the traditional Medicare program achieved a high level of agreement on the importance of changing attitudes as well as institutional factors to improve care coordination. Of particular note is that consensus was reached on the need to get physicians directly involved and to find both financial and other means for changing the delivery of care to meet the needs of the chronically ill.

Marilyn Moon, PhD, Senior Fellow, The Urban Institute, Health Policy Center

At a Washington, DC conference convened by the Center for Medicare Advocacy, Inc. and supported by The Commonwealth Fund, a group of fifty care-providers, policy-makers, researchers, and advocates came together to discuss and formulate recommendations for a Coordinated Care Benefit to be incorporated into the traditional Medicare program. The March 2002 Conference was designed and administered by staff of the Center for Medicare Advocacy - nationally recognized experts in Medicare beneficiary coverage and appeal issues.

The Conference included leading professionals from the fields of gerontology, health law, health policy, health economics and finance, medicine, and care management for older persons and persons with disabilities. Participants met over a two-day period to discuss, frame, and refine comprehensive recommendations for a Medicare Coordinated Care Benefit.

Conferees focused on building a broader, more comprehensive definition and understanding of the function and funding of care coordination, leading to a consensus on the nature and scope of care coordination as a traditional Medicare benefit, access to the benefit, payment methodologies, and costs to beneficiaries.

As David Sandman, Senior Program Officer of the Commonwealth Fund stated:

Elderly Medicare beneficiaries with complex medical needs often cannot navigate a system in which care is fragmented, doctors don't share information, and patients have to fend for themselves. Efforts to modernize Medicare should include a coordinated care benefit and these consensus recommendations are a sound basis for moving the policy debate forward.

The deliberations of the conferees were anchored by four background papers commissioned for the Conference. The papers discuss the issues raised by the four major disciplines represented at the Conference: the economic incentives for service provider

participation, and benefit financing; the medical/clinical needs to be addressed through care coordination; the scope and nature of care management services, including medical and non-medical services; and the manner in which the benefit should be framed in the Medicare Act, as well as the necessary legal protections to be provided to beneficiaries.

The need for a Coordinated Care Benefit in the traditional Medicare program is gaining increased attention. At that time, examples include the Medicare Reform Act of 2001 (S1135) which would have established a coordinated care program and a separate provision which would have allowed the Secretary of Health and Human Services to implement disease management services. Another bill, the Medicare Modernization and Solvency Act (H.R. 803) would have established similar services. In addition, the Secretary of HHS has funded a series of case management and disease management demonstration projects.

The Recommendations, commissioned papers, conference proceedings, and consensus statements were compiled for publication and distribution. This work continues to be an important resource and springboard for further discussions about the future of the Medicare program.

Nancy Coleman, Executive Director of the American Bar Association Commission on Legal Problems of the Elderly, and Facilitator of the Conference's Recommendation Session concurs:

Experts came together in Washington to formulate a series of recommendations that address growing concerns about our nation's need for coordinated care for those Medicare beneficiaries with multiple chronic conditions. The recommendations provide a road map for policy makers to make valuable changes.

The Conference Recommendations follow this document.

**ONE THIRD AT RISK:
CREATING A BLUEPRINT FOR A
COORDINATED CARE BENEFIT AND SERVICES
IN THE TRADITIONAL MEDICARE PROGRAM**

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RECOMMENDATIONS FOR A MEDICARE COORDINATED CARE BENEFIT

1. The primary, over-arching goal of a Medicare Coordinated Care Benefit is to improve care.
2. Savings should not be the goal of a Medicare Coordinated Care Benefit. If savings are to be considered they must be thought of more globally than, and recognized beyond, savings only to the Medicare program.
3. The Coordinated Care Benefit must develop and promote a holistic, person-centered approach to the care and treatment of persons who are eligible for the benefit.
4. The Benefit should recognize a focus of empowering the beneficiary.
5. The Benefit will assist beneficiaries with the greatest need who are not served well by the traditional Medicare program and who would benefit from a coordinated care benefit.
6. Eligibility shall be based on having five chronic conditions (to be determined taking into consideration multiple providers, high costs, and high use of services.), OR a combination of clinically complex chronic conditions which would be amenable to coordinated care, OR two or more chronic conditions and functional impairments which limit the ability of the individual to manage those chronic conditions.
7. Eligibility will be periodically re-determined. Individuals who initially meet the eligibility requirements based in part on functional impairments will not be denied continued eligibility if the services are necessary to maintain their current capabilities or to prevent further deterioration of their condition.
8. The Medicare Coordinated Care Benefit is a voluntary benefit.

9. There shall be no means testing for this Benefit.
10. Election of this Benefit shall not preclude eligibility for all other Medicare benefits.
11. There must be quality control in the system, which should include a maximum beneficiary to Care Coordinator ratio.
12. The Coordinated Care Benefit consists of two areas of coordination:
 - Coordination among the beneficiary's doctors about clinical/medical components of care, performed by medical personnel under the supervision of a physician;
 - Coordination of related health and social services, performed by a care coordinator.
13. Medical coordination of care and coordination of related health and social services must include monitoring, coordination among providers, and education of physicians, patients, and families.
14. The coordination of related health and social services should include physical, psycho-social, cognitive, family support needs, and risk assessment.
15. The Care Coordination Service must involve facilitating access to, and coordination of, all presently offered Medicare services and coordination of other needed and wanted services.
16. The tasks involved in coordination of such other needed and wanted services must include all necessary assessments, identification of the services, referral to the service provider, and remaining in contact with the provider of other such services.
 - These other needed and wanted services must be identified on the beneficiary's Plan of Care.
17. Care managers should meet education, certification, and licensing requirements, and/or other Conditions of Participation as applicable.
18. A hybrid payment system should be utilized for the Coordinated Care Benefit and should encompass three reimbursable functions:
 - Initial and periodic, comprehensive, multi-disciplinary assessments, reimbursed on a fee-for-service basis,
 - Coordination of services, reimbursed on a prospective payment basis,
 - Ongoing monitoring, reimbursed on a prospective payment basis.
19. There should be a prospectively determined, "per beneficiary/per month" payment for the Coordinated Benefit, paid to the Care Coordinator, with the possibility of having some sort of complexity or acuity adjustment in the future.

20. There should be no cost sharing to the beneficiary for a Medicare Coordinated Care Benefit.
21. Reimbursement should include financial incentives to doctors to participate in the Coordinated Care Benefit.
22. Current Medicare codes should be modified to reflect the needs of caring for these patients with complex problems.
23. Alternative capitated and bundled payment methodologies for Care Coordination Services should be tested through demonstration projects or other means.
24. Payments must be adequate regardless of the payment methodology.
25. Studies shall be performed to determine what incentives will effectively encourage eligible beneficiaries to participate in coordinated care.
26. Software and technology should be provided to care coordinators to facilitate data collection and care coordination.
27. There should be a monitoring and evaluation component of the new Benefit that would include data regarding access to services.
28. Legal safeguards shall include:
 - Individual appeal rights, including the right to an expedited appeal
 - Quality review
 - Voluntary/ involuntary disenrollment rules
 - Disclosure requirements



**Statement to the U.S. Senate Special Committee on Aging
Chronic Care Coordination in Medicare
Disease Management Association of America
May 9, 2007**

The Disease Management Association of America thanks Chairman Kohl, Ranking Member Smith and Members of the Special Committee on Aging for their leadership on issues central to the health and well-being of seniors. Our growing elderly population, especially those with chronic conditions, presents a significant challenge to the viability of Medicare and the larger health care system. The Committee's important work will help us meet those challenges and preserve Medicare for future generations.

The Disease Management Association of America (DMAA), a non-profit membership association, represents all stakeholders in disease management and care coordination. DMAA promotes the role of disease management in raising the quality of care, improving health outcomes and reducing health care costs for individuals with chronic conditions. DMAA has more than 200 corporate and individual members representing all aspects of disease management and care coordination—physicians, disease management organizations, employers, health plans, pharmaceutical manufacturers, pharmacy benefit managers and health information technology innovators, among others.

Care coordination, especially for Medicare beneficiaries with multiple chronic conditions, offers a valuable opportunity to improve quality of care and generate savings by reducing the need for hospitalizations and other costly acute interventions, increasing efficiency and lowering the risk of medication errors and other adverse events. We applaud Senator Lincoln for her commitment to improving health care with proactive measures, such as the Geriatric Assessment and Chronic Care Coordination Act of 2007. Her dedication and that of other congressional leaders will go far toward making care coordination the rule rather than the exception in federal health programs.

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In its 2003 report, "Priority Areas for National Action: Transforming Health Care Quality," the Institute of Medicine (IOM) discussed at length the importance of care coordination, ranking it among 20 priority areas for transforming health care and calling it a "cross-cutting" priority that touched all others. "Improved care coordination would, if applied broadly, have an especially important impact on improving health care processes and outcomes for children and adults with serious chronic illness and multiple chronic conditions," the IOM wrote. The Institute cited a growing body of evidence of improved outcomes through coordinated care for people with diabetes, congestive heart failure and other chronic conditions.

Earlier, in its landmark 2001 report, "Crossing the Quality Chasm: A New Health System for the 21st Century," the IOM wrote about the challenge of providers operating as "silos, often providing care without the benefit of complete information about the patient's condition, medical history, services provided in other settings, or medications prescribed by other clinicians." The institute went on to list "appropriate exchange of information and coordination of care" as a key element of its core recommendation for redesigned health care processes.

The Medicare Payment Advisory Commission also recognizes the potential for coordinated care to improve quality and beneficiary satisfaction, and achieve long-term cost containment. In fact, quality and outcomes improvements alone may warrant care coordination programs, regardless of savings, MedPAC said in its June 2006 Report to Congress.

DMAA strongly advocates a coordinated, integrated approach to chronic disease care for the elderly and other demographic groups. Central to our definition of disease management is that it constitutes a "system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant." At its most basic, disease management bridges gaps in care for the chronically ill and supports the practitioner-patient relationship outside traditional, episodic care.

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But now, even “disease management” doesn’t tell the full story. The past few years have marked an amazing period in the evolution of chronic disease care toward population-based health improvement. We’ve witnessed disease management’s remarkable expansion across the care continuum to include programs caring not only for the chronically ill, but also for those at-risk of developing disease, the well and other populations not traditionally the focus of disease management. Our members offer more today than ever before, both in terms of conditions managed and services provided. The stakeholder base has grown, too, with employers and other purchasers and payers showing strong and increasing interest in managing the health effects and cost of chronic disease.

We are greatly encouraged by federal movement toward population-based health improvement, including disease management and care coordination. DMAA commends the Centers for Medicare and Medicaid Services on its leadership in testing various models of coordinated population health improvement strategies, such as the Medicare Health Support pilot, the Medicare Coordinated Care and Senior Risk Reduction demonstrations, Special Needs Plans and others. The chronic care community believes these models and others offer crucial building blocks for long-term population health improvement in Medicare.

Broad-scale deployment of care coordination strategies is crucial to addressing the financial burdens created by the growing population of chronically ill beneficiaries. The recent Medicare Trustees report and its continuing bleak outlook for the Medicare Trust Fund highlight the need to help seniors bring costly chronic conditions under control. Medicare beneficiaries with chronic diseases—particularly those with multiple conditions—consume an overwhelming majority of program spending. This is where we should direct our efforts to lower costs. Programs such as Medicare Health Support and other population-based efforts can help us achieve program savings and extend the lives of both Medicare and its beneficiaries.

Little debate remains about the health benefits of a coordinated, integrated program of supported self-care for those with chronic conditions. Both documented and anecdotal evidence on patient

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and provider satisfaction clearly show seniors and other populations want, need and deserve population-based health services. Add to that frequent new research findings about the health benefits of coordinated care, particularly for diabetes, and you have a convincing case for bringing chronic disease care services to all Medicare beneficiaries and others served by federal health programs.

The growing prevalence of chronic illness in Medicare underscores the urgent need for new, population-based health, wellness, care coordination and disease management strategies to help chronically ill seniors stay healthier, productive and independent. We share with CMS a goal of finding ways to improve care and realize the value of population-based interventions for Medicare beneficiaries, who are older and sicker than other public and commercial populations. We stand ready to assist CMS in developing programs to support chronically ill beneficiaries and their physicians. Collaborative development of these pilots and demonstration projects represents a critical step toward empowering CMS, ultimately, to apply population-based care broadly to all beneficiaries through Medicare Health Support and other federal initiatives.

Likewise, the disease management community shares with CMS a goal of supporting physicians and other practitioners in providing high-quality care. The disease management community works closely with physicians to offer a wide variety of support services and innovative strategies to help ensure practitioners have the patient information they need to provide the best quality care possible.

DMAA offers the expertise and support of its members as Congress and the Administration search for answers to the terrible burden of chronic disease on the elderly. Care coordination, disease management and population-based health initiatives, we believe, represent our best hope in this battle.

Thank you.

