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AGING IN AMERICA: FUTURE CHALLENGES, PROMISES, AND POTENTIAL

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CONTENTS

	Page
Opening Statement of Senator Herb Kohl Statement of Senator Chuck Grassley	1 10
Statement of:	
Rob Hudson, Professor of Social Policy at Boston University	2 4
Kathy Greenlee, Assistant Secretary for The Administration on Aging	12 16 18
Jack Rowe, Director, MacArthur Foundation Research Network on Successful Aging and Professor at the Columbia University Mailman School of Public Health	20
Robyn Stone, Executive Director, LeadingAge Center for Applied Research Henry Aaron, Bruce and Virginia MacLaury Senior Fellow, The Brookings	22
Institution	26 32
APPENDIX	
PANELISTS STATEMENTS FOR THE RECORD	
Rob Hudson, Professor of Social Policy at Boston University, Boston, MA John Rother, President and CEO, National Coalition on Health Care and	38
NCHC Action Fund, Washington, DC	57
U.S. Department of Health and Human Services, Washington, DC	61
Richard J. Hodes, Director of the National Institute on Aging, National Insti- tutes of Health, U.S. Department of Health and Human Services	72
Aging and Professor at the Columbia University Mailman School of Public Health, New York, NY	76
Michael Harsh, Chief Technology Officer, GE Healthcare, Waukesha, WI	79
Washington, DC	87
Institution, Washington, DC Laura Carstensen, Professor of Psychology and the Fairleigh S. Dickinson	101
In Dwofaggow in Public Policy of Stanfowd University Stanfowd CA	106

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WEDNESDAY, DECEMBER 14, 2011

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

The committee met, pursuant to notice, at 2:35 p.m. in room SD–G50, Dirksen Senate Office Building, Hon. Herb Kohl (chairman of the committee) presiding.

Present: Senators Kohl and Grassley.

Also present: Debra Whitman, Staff Director.

OPENING STATEMENT OF SENATOR HERB KOHL

The CHAIRMAN. Good afternoon to everybody. We thank you all for being here, and we thank you for joining us at this event this afternoon.

Over the past 50 years, the Senate Special Committee on Aging has been in the thick of the debate on issues of concern to older Americans. With more than 10,000 baby boomers turning 65 every day, the issues affecting older Americans are only becoming more

Throughout its history, this committee has continuously called attention and offered concrete solutions to a wide variety of problems affecting older Americans. From the cost of health care to retirement security to long-term care coverage options to employment opportunities for older Americans, and very much more, this committee has debated some of our country's most difficult issues over the past half century.

We are also proud of the Aging Committee's long-standing tradition of bipartisanship. This kind of cooperation and the hard work of talented leaders, including Senator Grassley, who will be joining us today, has helped to further our country's commitment to caring for some of our most vulnerable citizens. But we cannot rest on what we have accomplished thus far. Much more needs to be done. And to get there, we need the help of experts, people like many of you who are here today.

We need to put Social Security back on a long-term path to solvency and strengthen our nation's pension systems so that Americans can plan for a secure retirement after a lifetime of work. We must reign in rising health care costs and grapple with how to finance long-term care so that seniors can live independently for as long as possible.

More than most, older adults are feeling the effects of the struggling economy and local service cuts. Now is not the time to let home- and community-based programs, such as those funded by the Older American Act, languish. As our nation ages, policies that improve the lives of older Americans will become even more critical to helping the entire economy.

By 2030, when the last of the baby boom generation reaches retirement age, nearly 20 percent of Americans will be over age 65

compared with 13 percent today.

I am hopeful that we will find the courage to craft an innovative and effective path forward for the greater good of our nation's sen-

iors and our country as a whole.

I have been chairman of this committee for nearly five years, and we are all proud of everything that we have accomplished. But today we are here to learn from you, the real experts, and we look forward to this discussion.

I also want to take a moment to recognize and thank the former staff of this committee, some of whom are with us here today. Please know that your hard work has made a difference in the lives of older Americans.

With that, I will turn things over to the Aging Committee's staff director, Deb Whitman, who has been with me for the entire five years that I have been chairman, and she will be moderating this forum. As all of you who know Deb are very much aware, I will be putting you in very capable hands. We thank you again, and we thank all of our distinguished panelists for being with us today. Deb.

Ms. WHITMAN. Thank you, Chairman Kohl. It has been an honor to serve under you for the last five years. We have done a lot together and looked at a lot of issues, but there is more that needs to be done. And the purpose of this forum today is both to look

back at our history and look forward to our future.

Our first panel is a distinguished group, who will be able to talk about the historical importance of the committee, as well as its impact on aging policy. I would like to introduce Rob Hudson, who is a professor and chair of the department of social policy at Boston University School of Social Work. He has written widely on the politics of aging, and he currently serves as editor of the "Public Policy and Aging Report." Then we will have John Rother, who is the president and CEO of the National Coalition on Healthcare. Prior to joining the coalition, John served as executive vice president for policy, strategy, and international affairs at AARP. Mr. Rother also served as staff director and chief counsel at the Senate Special Committee on Aging under Chairman John Heinz.

STATEMENT OF ROB HUDSON, PROFESSOR OF SOCIAL POLICY AT BOSTON UNIVERSITY

Dr. HUDSON. Thank you very much. Senator Kohl, Ms. Whitman, thank you for inviting me here. I feel like I am bringing gold to Newcastle in some ways. Many of the people in this room are closer to the events of the past 50 years or 20 years perhaps than I am. But I have been an observer of the committee and aging policy for several decades, and I am pleased to be able to, however briefly, share a couple of thoughts with you.

The first thing I would like to mention is that I also serve as editor of the "Public Policy and Aging Report," which is the quarterly publication of the Gerontological Society of America, and we have an issue that has just come out which is associated with this event honoring the celebration of the committee's 50 years. And we would be happy to make that issue available to anybody who would like to see it.

As you know, the committee began as a subcommittee back in 1959. It became a full committee in 1961. It was brought very much into existence by the issues around rising costs in health care of the early 1960s, and had a central role in the band wagon effect that led to be an advancement of Medicare in 1965. And, in the spirit of bipartisanship, it is always good to remember that Part A is Democratic Medicare, and Part B is Republican Medicare. And there is a whole history on how that took place in the early 1960s.

There have been a number of legislative successes that the committee has been associated with around the Older Americans Act and events that brought it into being, and the expansions in the 1970s, many associated with Arthur Fleming and the creation of the Aging Network. It also played a central role in the decades-long battle to try to elevate the Commission on Aging's office higher into the officialdom of HEW, and later as HHS. And, in fact, the first paper I wrote years ago had an assistant secretary of the Department of HEW testifying before this committee, saying, "Senator, I don't believe that the AOA should report to the Secretary's office. We are the Department of Health, Education, and Welfare. If we'd wanted to call it the Department of the Young, the Middle Aged, and the Elderly, we would have done that, but we chose not to." In any event, as we know, today there is an assistant secretary for aging, and the committee helped create that reality.

A number of additional successes in the 1980s, many associated with the late Senator John Heinz, were very important. There were also, in addition to legislative accomplishments, the committee has been actively involved in oversight activity, which has been extremely important over the years. Some of the early efforts associated with Senators Smathers, Chiles, and Moss involved investigation of nursing home fraud and abuse, with the developments in aging publication of the committee, putting out reports with titles like, "The Litany of Nursing Home Abuses," "Drugs in Nursing Homes: Misuse, High Costs, Kickbacks," "Doctors in Nursing Homes: The Shunned Responsibility," "Access to Nursing Homes By Poor Minorities." These were very, very powerful reports when they came out, and have had an enduring effect.

Senator Heinz and Chiles worked together in the 1980s around DRGs and eligibility recertification issues associated with the DI and SSI programs, and Senator Grassley has continued to be actively involved in oversight of issues, many associated with long-term care in nursing homes. And today under Senator Kohl's direction, the committee is very interested in issues around prescription drug costs and the idea of trying to indeed increase the availability of generic equivalents.

In conclusion, let me just say that in its early years, the committee brought the needs of the aged to the country's attention, and played a role in the passage of a major decade's worth of legislation

from the mid-60s to the mid-70s. Much attention turned to oversight in the following years, with the committee pressing to assure that benefits associated with those legislative enactments were accessible, affordable, and of high quality. And working with authorizing committees, both elected members and staff members of those committees, the Special Committee on Aging has been able to combine resources and efforts to keep a close watch on the workings of executive branch agencies.

Finally, the committee, especially under its most active chairmen, could pick its battles, devote its resources, mobilize its allies in a timely and needed way, what I would call sort of a SWAT team for elderly. Thank you very much.

[Applause.]

STATEMENT OF JOHN ROTHER, PRESIDENT AND CEO, NATIONAL COALITION ON HEALTH CARE AND NCHC ACTION FUND

Mr. ROTHER. Good afternoon, Mr. Chairman. Thank you for holding this event. It gave me a chance to look back a ways at the Committee's impact on older Americans, and I think it is a remarkable story what has happened to the life situation of older people. Truly, their lives have been transformed in part because of the work of this committee.

Fifty years ago, the situation of Americans 65 and older was very different than it is today. Economic security in retirement was limited to a relatively small part of the population. Health insurance was either unavailable or unaffordable for most. And there were few social services or housing alternatives to support those who became frail or disabled. Most seniors in the 1960s were dependent on family, neighbors, or charity when faced with adverse events, and many died prematurely due to poor social and physical living conditions or lack of good medical care.

The changes have been profound, and, of course, there are still issues that need to be addressed. But I think we should take a second just to recognize some of the impact of this committee's work on the lives of older Americans.

As Rob pointed out, I think the first thing you have to point to is the committee's work on health care, which certainly contributed to the enactment of Medicare. Medicare is just not a health insurance program; it has transformed our health insurance system. It has transformed health care in America, and it has certainly become a major pillar of economic security for seniors and the disabled. So, it is much more than just a health insurance program.

The committee investigated many problems associated with health care, including pharmaceutical pricing and marketing. It did a lot of work that eventually led to the enactment of the drug benefit in Medicare in 2003, and, more recently, to the expansion of that benefit as part of the Affordable Care Act. And, as a result, millions of seniors each year can now take advantage of the very important benefits that prescription drugs provide without having to choose between food or the medicine they need.

The committee's work also resulted in the adoption of a hospice benefit in Medicare. That's significant, because it supports the quality of life at the end of life. This is something that I know from personal experience, and I am sure others do, too. It is important not only to the person who is facing the end of life, but especially to the family who is there with them.

Perhaps no aspect of health care has received more attention from the committee over the years than problems in long-term care, and, as Rob mentioned, the Committee has undertaken a long series of investigations into problems in nursing homes. After DRGs were enacted, the phrase "quicker and sicker" was a way of focusing attention on the problems in post-acute care, which had not been looked at very seriously until then. And as a result, now I think there is a much greater commitment to the whole continuum of care. So health care policy is no longer about just what goes on in the hospital, but it includes community-based care, the follow-up care in the home, and ambulatory care.

Again, we still have work to do, but Medicare has been transformative in the way that health care today is organized. The benefit goes not just to people who are receiving that care, but to the family members as well, who are no longer faced with the total dis-

ruption in their lives when a parent or spouse becomes ill.

The committee led efforts to support research in aging that resulted in the establishment of the National Institute of Aging at NIH. It also, as Rob mentioned, was a leading advocate for a strong Administration on Aging within the executive branch, which has been key to support of the whole network of aging services now

vital in every county across the country.

Housing programs are now much more responsive to the needs of older people, whether it is the 202 Program or a wide range of other housing programs. The committee's theme was the integration of needed services, along with the bricks and mortar, and putting those together. As a result, we are seeing much more responsive housing programs and housing options for people as they get older.

A wide range of consumer protections are now in place through the committee's work, whether in financial products like reverse equity mortgages or living trusts and guardianship arrangements. I think the committee has had a leading role in giving life to consumer protections that really benefit all Americans, not just older Americans, but where the problems were easily dramatized with older people.

Today, we still have problems with elder abuse. The committee has had, throughout its tenure, a focus on elder abuse, and the public exposure, I think, has had a tremendous impact in the lessening of those problems. But, again, we have continuing needs

there.

The committee has long championed productive aging, promoting employment and volunteer service options for those who want or need to work. And we are starting to see a change in the behavior of people with regards to the retirement age, and we are seeing a big change in the role of women in the workforce, in part because of the committee's advocacy to eliminate the mandatory retirement provisions that were in place until the mid-1980s. Many low income seniors have also been helped by their special inclusion in various job programs, particularly Title V, that would not exist but for the committee's advocacy.

And, finally, I will just mention that income security today is much stronger, in part due to the committee's long focus on this area, whether it is the social security solvency amendments that were adopted in 1983, and the enactment of ERISA before that. The Committee also played a leading role in blocking what could have been very negative changes in social security in 1981 and again in 2004.

The committee has focused on disability insurance, a very important, often overlooked issue, and it has resulted in changes in disability that have benefitted many of our most vulnerable working-

age Americans.

In conclusion, I would say that the Senate Special Committee on Aging continues to play a vital role in improving the lives of older Americans. Its work over the past 50 years has had a major impact on the lives of most seniors and their families. The chairs and ranking members, in particular, have used their positions on legislative committees, such as Finance, HELP, Budget, and Appropriations, to achieve legislative changes that were developed in the context of the Aging Committee. The committee continues to be the only place in the legislative branch where the situation of the whole person can be reviewed, where in-depth investigations can be launched, and where the members and staff have the time to delve into issues that other committees simply cannot take the time to consider.

Looking forward, the committee faces the twin challenges of the retirement of the large boomer generation, and the ever-increasing costs of health care. The committee's success in addressing these future challenges will, therefore, be critical to the quality of life for all Americans in generations to come.

Thank you very much.

[Applause.]

Ms. Whitman. I would like to ask both John and Rob to think about the past and the future and how we can use the lessons that we have learned. And I want to remind everybody when they respond, to please turn on their microphones.

So, John, I have found that the Aging Committee's lack of specific jurisdiction legislatively is an advantage because of the range of issues that we can address. I think you just referred to it as the ability to review the situation of the whole person, but it also makes it harder to actually move legislation through Congress.

So, how has the design of a special committee then, having broad jurisdiction, but lack of legislative authority, been both a benefit

and a curse over the years?

Mr. Rother. Well, the benefit is that it's very broad mission allows it to be entrepreneurial—to package ideas and build support for those ideas that then the member, or the chairman, or the ranking member can take to the committee with legislative jurisdiction. And that is extremely powerful. Most of the accomplishments that I have reviewed today were developed in the committee. Political support was developed with the committee. And then, sometimes through cooperation with the legislative committee, but sometimes over the objections of the legislative committee, something was enacted into law.

Of course, the downside of not having direct jurisdiction is that other people have to be persuaded in order to move, and other people have other priorities. And today, I think we face a particular challenge because the needs of older people are not often seen as a top priority, and so there is real competition in the public debate. And that gets reflected in the ability to work with other committees.

Ms. WHITMAN. Rob, your testimony ended with a reference to the Aging Committee as being sort of a SWAT team for elders, and I kind of like that, especially because we have had Jack Mitchell, the Committee's Chief of Oversight and Investigations, as our private cop for several years.

I found the committee's investigative and oversight authorities to be a useful way to gather information and highlight abuses on a wide variety of issues, including conflicts of interest in medicine, medical device recalls, nursing home abuses, and products that are aimed to elderly consumers.

Can you reflect on the oversight work of the committee through the last 50 years, and how important has that oversight authority been to its mission?

Dr. Hudson. Okay. Indeed, the oversight function has been very interesting, because even in reviewing the history of the committee, but social policy more generally, is, in the wake of the Great Society programs, a whole subfield in policy studies emerged under the rubric of policy implementation and oversight. There had not been enough domestic policy, apart from checks coming out of the Social Security Administration, to really worry about implementation. And I think there has been sort of an evolution in the committee, not 100 percent of course, moving toward the oversight checking on the implementation of various policies, including heavy duty issues such as fraud and abuse, but also around efficiency, and effectiveness, and all sorts of things from the Aging Network through health and disability programs across the board.

So, I think this function is enormously important, because the heyday of new legislation, the new authorization, sort of petered out after the late 70s. And whether it is this committee or something else, there has been an enormous need to keep an eye on what providers have been doing and what agencies have been doing to follow up on their legal obligations to run programs in a compassionate and effective way.

So, I think, A, it is critically important, and, B, just emphasizing what John said, that I think the committee is extremely well suited, both in terms of the breadth of the things it can examine, but also in some ways being free from some of the more immediate authorization appropriation issues that would impede a broad oversight function.

Ms. WHITMAN. Anything to add?

Mr. Rother. Well, I think, as you well know, Deb, being staff director of this committee is a complete luxury and a very unusual role, because you have the ability to look across a very broad spectrum of the population, of the economy, of needs, and you can go where you want to go. You can help set the agenda, lift up problems or the public to see, and promote broad policy solutions. And

there are not too many other places in Congress where that ability exists.

And, as a result, I think that the Aging Committee can be much more responsive to some of the social and economic developments, not just within the older population, but more broadly, compared to the committees that have to be concerned with reauthorizations and meeting deadlines.

So, I really value that flexibility and breadth of vision for the

committee, and I hope that that continues.

Ms. Whitman. Whenever I get together with former staffers or former staff directors and tell them the issues that we are working on in the committee or thinking about working on, I am usually met with, oh, yeah, we did that back in 1972, or, we held a hearing almost exactly like that, you should see the report that I wrote. There are obviously perennial issues that both of you raised.

But what are the issues that maybe have not gotten enough attention over the years, or that were touched on in the early years that we should pick back up based on all of the reviews you have

done, and, John, your years of watching us work?

Dr. HUDSON. Is that directed to me?

Ms. Whitman. Both of you. Dr. HUDSON. Go ahead.

Mr. Rother. Well, there is no shortage of problems that still need to be addressed, despite whatever attention we gave them. Today, there are more and more older people who want to continue to be productive, and the economy is not supporting that. And there are more and more people who need to continue to be productive and continue to earn. So, that is an area that certainly requires more and more attention.

I also think that as we have put off for many people the age at which disability or frailty happens, we have this huge reservoir of productive capacity, if you will, that we still have not figured out how to tap in terms of our volunteer programs, in terms of helping to meet the community needs, in terms of how to meet the needs of younger generations. So, those are areas that all seem to be worthy of continuing.

Dr. HUDSON. I would just build on that. I have a concern about the future, having studied aging politics for a long time, that there has been sort of a bifurcation, and John alludes to it. We obviously have successful aging, productive aging, a lot of things that Jack Rowe has written to.

We also have obviously a whole series of issues associated with chronic illness and long-term care. And politically, much of the success older people have enjoyed over the years is based on a reality and partial stereotype of being in need, being frail, being poor, and all the conditions we know of.

Now, in the face of successful and productive aging, and volunteerism, and civic engagement, we are getting something of a split, which is sort of a good news/bad news situation. And, in short, the politics I worry about are we could end up sort of recreating sort of a residualized, very old population who gets benefits because they are just monsterably down and out and we feel sorry for the poor souls. And much more conflict and political concern about an able, productive, old population that basically if they do not need it, why are we giving it to them? And how do we address that? Do we simply raise retirement ages? Do we introduce new functional tests of one kind or another?

And there is an ethical issue of really is the aging population a single beneficiary group, or is it not? And I think people like us need to address that question because it is behind a lot of the

issues that we hear about today.

Ms. WHITMAN. Thank you. The two agencies that are fundamental to the Federal government's work on aging, the National Institute of Aging and the Administration on Aging, exist today in large part to the Aging Committee's advocacy and drive to establish. We are fortunate to have the two heads of these agencies with us here today, who you will hear from shortly.

But how do we get the rest of government, including the Labor Department, the Environmental Protection Agency, the Justice Department, and others to look at their own work through an age-

friendly lens and champion the cause of older Americans?

Dr. HUDSON. That has been the central challenge of the Older Americans Act and aging policy for 40 years. It is the central challenge of the Aging Network, whether it should be a vertically integrated series of community and social services largely within its own purview, or should it do advocacy and what my late colleague, Bob Mitsock, and I call leadership planning in order to get mental health departments, transportation departments to do better by older people in the larger population.

It is a very serious discussion to have about resource allocation. Can you do better sort of staying within the parameters of your world, however defined, or do you have the resources and the will and the ability to move and shake outside that relatively narrow structure and make bigger things happen? And I am certainly in

favor of the latter, but getting it done is a very, very tall order.

Mr. ROTHER. If I could just add to Rob's answer, one of the things that we used to do was to require every executive agency to write an annual report as to what it was doing with regard to the challenges facing the older part of the population. And that can then become the basis for follow-up, for investigations. And it a report seems innocuous, when actually it is just the opening wedge to get more responsive behavior out of the executive branch.

Ms. WHITMAN. Thank you both. I am going to move to our next panel, who we will hear from the country's leading experts in health, research, retirement security, technology, long-term care,

and aging services.

We have asked these speakers to not only describe how far we have come over the last several decades, but also to play the role of fortune tellers and predict where we are headed as a society

with a rapidly aging population.

I also gave them the ability to wave a magic wand and create a new future by changing the trajectory of the path that we are currently traveling. And to make the challenge truly difficult, I have only given them each five minutes to speak. [Laughter.]

Ms. WHITMAN. So, before they bring out their crystal balls and

magic wands, let me briefly introduce each speaker.

Kathy Greenlee is the Assistant Secretary for Aging at the U.S. Department of Health and Human Services, where she works to advance the health and independence of older Americans and their families. Previously, she served as the Secretary of Aging for the State of Kansas, as well as the Kansas State long-term care ombudsman.

Dr. Richard Hodes is the director of the National Institute of Aging at the National Institute of Health. A leading immunologist, Dr. Hodes was named director of the NIA in 1993, and oversees research into the clinical, epidemiological, and social aspects of aging.

Michael Harsh is vice president and chief technology officer of General Electric Health Care. In his role, Mr. Harsh oversees the diverse businesses, including medical imaging and information technologies, medical diagnostics, patient monitoring systems, and drug discovery.

I have just been informed we have Senator Grassley here, so I am going to break the introductions and give him a chance to say a few words.

STATEMENT OF SENATOR CHUCK GRASSLEY

Senator GRASSLEY. I had to look over to see who is up here, distinguished people performing already. I am sorry I missed everything you have said so far, and I will probably miss everything else you say. [Laughter.]

First of all, let me thank Chairman Kohl for his work as chairman of the committee. It seems like he and I have worked together on many issues, and he has been an extremely good chairman of this committee. And thank you for your hard work.

Since Senator Kohl is going to retire, I am going to miss him in his retirement. But like I tell a lot of former senators, any time you want to come to my office, you are welcome to come to my office. [Laughter.]

Senator GRASSLEY. And, of course, with the 50th anniversary of this committee, and particularly since I was one of the charter members, in 1975 with the beginning of the House Committee on Aging, and serving there the six years I served there, obviously I wanted to serve on this Committee when I come to the United States. And I had the privilege of being on this committee probably for, I believe, about 23 or 24 years, I believe.

Anyway, it is a tremendous opportunity to serve as chairman of the Special Committee on Aging, and I did that from 1997 until 2001. I had the good fortune of following another good chairman, Senator Bill Cohen of Maine. And my successor was John Breaux, who was my partner on the committee as ranking member then. And I know I am biased, but the Aging Committee offers one of the greatest opportunities for service on Capitol Hill, and serving on the Aging Committee got me very much working very closely with a loyal staff member for so many years, both prior to my being chairman and after being chairman. And that is one of the people that is here in the audience by the name of Ted Totman. There is Ted Totman there.

And, yeah, as I think Senator Kohl will tell you, it takes a pretty darn good staff for any senator to be effective, either as an individual senator or as chairman of a committee, and probably more important, chairman of the committee. And I think if I had anything to do with any progress on this committee, I would give Ted Totman the credit for that.

This is, as I said, a great opportunity to serve as chairman, and even to serve on the committee. The committee has such a broad mandate to improve the quality of life of older Americans. Within that framework, there are endless opportunities. The Aging Committee is part consumer advocate, part policy work, part gumshoe detective, as I like to think most of my work was, and part bully pulpit. No other committee in the Senate can claim such broad platforms. Each chairman appreciates the possibilities of the committee.

During my tenure, we had a former employee of a predatory lender testify with his identity hidden about how the lender preyed on older Americans. Katie Couric testified about the importance of colon cancer screening. The family members of victims of nursing home abuse testified about their experience during a two-day hearing. Their testimonies came after whistleblowers presented serious concerns to the committee about nursing home abuse and neglect in one of the biggest States and most progressive States of our country.

At the committee's request, the General Accounting Office did a hard-hitting analysis that has been the benchmark for improving the quality of care ever since in our nursing homes. And a lot of our time covered the impending baby boom retirement that is now upon us and how to prepare Medicare, social security, and the workforce for that sea change, of which none of those changes sug-

gested by our committee has obviously been adopted.

Aging Committee hearings then and now convey that certain issues are fundamental to everyone, regardless of age. What kind of a society we choose to be and what role our government plays in shaping that society are the Aging Committee's bread and butter. How do we increase the prospect of a safe, comfortable experience in a nursing home? How is Medicare waste, fraud, and abuse putting beneficiaries at risk? How should everyone begin saving money for retirement, and how much savings is necessary?

As the Aging Committee explores these questions, the committee offers watch over the executive branch to ensure that priorities do not get lost through inertia. Federal agencies can move slowly. Initiatives like changing the predictability of nursing home inspections require a lot of people doing a lot of work to shake up the

status quo.

There are always dozens of topics that require attention. Even now, Chairman Kohl and I are rattling the cages at the Center for Medicare and Medicaid Services to implement our new law on sunshine for drug company payments to doctors. Our partnership on this and other issues raises another positive point about the Aging Committee, and that is bipartisanship, or maybe it would be more accurately called nonpartisanship; the fact that this committee is not responsible for legislation—in other words, it does not initiate bills. It then frees the committee from a lot of partisanship that might otherwise happen. In fact, I do not remember any partisanship, and all the years that I was on the committee, and particularly those years that I worked with John Breaux.

Aging Committee work might translate into legislation on some other committee, as it did for me as I followed on as being chairman of the Finance Committee. But the Aging Committee itself is able to devote the full resources to educating, to exposing, and to illuminating the issues of the day. It is a unique creation. It does valuable work for our entire society. Whether we are 92 years of age or even 22 years of age, we are all aging. Is it not that simple?

The Senate Special Committee on Aging cannot reverse the aging process, but it helps to make parts of the process better for most everybody in America. So, I want this committee, even though I do not serve on it, to continue and, most importantly, to continue the successes going forward, so that the next 50 years do just as good of a job for a better society as the last 50 years.

Thank you all very much.

[Applause.]

Ms. Whitman. Thank you, Senator Grassley, you were one of the

great chairmen of the committee, as many people know.

Next, I would like to take the opportunity to introduce Dr. Robyn Stone, who is the executive director of the LeadingAge Center for Applied Research. Dr. Stone is a noted researcher and authority on aging and long-term care policy. Formerly, she served as executive director of the International Longevity Center in New York, and served as the Assistant Secretary of Aging during the Clinton Administration.

Next, we have Dr. Henry Aaron, who is the Bruce and Virginia MacLaury Senior Fellow at the Brookings Institution. Dr. Aaron's research has explored reforms to health systems, such as Medicare and Medicaid, as well as income support programs, including social security. He was recently nominated to serve as a member of the Social Security Advisory Board.

And, finally, we have Dr. Jonathan Rowe, who is a professor at the Department of Health Policy and Management at Columbia University School of Public Health. Dr. Rowe has held many leadership positions in top health care organizations and academic institutions, including the CEO of Mount Sinai, New York Health System, and is founding director of the division of aging at Harvard Medical School.

We are going to start with Kathy.

STATEMENT OF KATHY GREENLEE, ASSISTANT SECRETARY FOR THE ADMINISTRATION ON AGING

Ms. Greenlee. Thank you, Senator Kohl, Senator Grassley, and the rest of the committee. I am pleased to join you today to celebrate the 50th anniversary of this particular committee. 1961 was an important year for seniors, and it is just fabulous to be able to join you and really recognize the value of this committee. And as both Senators Kohl and Grassley mentioned, that aging is a non-partisan issue. It is quite appropriate, I believe, that this committee has always operated in a nonpartisan fashion or bipartisan fashion, to help advance issues that sometimes have never been looked at before, but can be surfaced here in this committee.

There was another key event in 1961, and that was the first year that there was a White House Conference on Aging. At that time, Dr. Arthur Fleming was the secretary of the Department of HEW, Health, Education, and Welfare. I wanted to share with you a quote from Dr. Fleming from 1961 since we are celebrating that very important year. So, I quote: "We have not yet adjusted our sense of values, our social and cultural ways of life, our public and private programs, to accommodate the concerns of this vast legion of old and aging people. For far too many people, old age means inadequate income, poor or marginal health, improper housing, isolation from family and friends, the discouragement of being shunted aside from the mainstream of life." That is the end of the quote.

One of my greatest professional regrets is that I never had the opportunity to meet Dr. Fleming, and I know many of you have and worked with him as a colleague. There are many times I wish we could talk to him still and say, now what, Dr. Fleming? I mean, he was such a visionary, both through his service as Secretary and as the Commissioner at the Administration on Aging. We have done many things in 50 years; that is the reason we are here to celebrate the accomplishments. But I wanted to share the quote to also point out that we still have work to do to achieve the vision and the issues he raised back in 1961, that the work will continue. And our mission is critically important.

As Deb said, she asked us three questions and gave us 5 minutes. I have probably used a great deal of that already. Each of these questions could be the subject of an entire course in college. The first question is, how far have we come over the five past decades, and where are we today?

You could look at the past five decades, and I have had the opportunity to do this in some sense, and I believe that there are four large social movements that have informed each other in the past 50 years—the movement of people with intellectual and developmental disabilities and their families, the movement of people with physical disabilities, the movement of people with mental illness and mental health issues and their advocates, as well as aging. Those four social movements have been propelling us forward to support dignity, and independence, and community living. I wanted to frame those four as I list the key milestones that I see when I look at the past 50 years.

For me, most importantly, would be 1965, with the passage of Medicare, providing acute care services for seniors and people with disabilities, and Medicaid, which now, as you know, supports long-term care funding for people in institutions and in the community, and, of course, the passage of the Older Americans Act, which has always had the role of providing preventative services to help people remain independent and in their community for as long as possible.

I would also call out 1987. OBRA 87 and the Federal Nursing Home Reform Act was critical to changing the lives, the experience and the quality of care of individuals living in nursing homes. I first read over OBRA 87 when I was the long-term care ombudsman in Kansas. If you have not read OBRA 87, you should because as soon as you put it down, you will pick up the IOM study from the year before, because when you read the law that was passed, you will ask, why were these laws needed? What was happening that caused a Federal response to this magnitude? OBRA 87 was

visionary and impactful, and leads much of the culture change

work we are doing still in nursing homes.

This was followed in 1990 by the Americans with Disabilities Act, which has had a significant impact on the lives of people with disabilities and seniors as we integrate into community settings of all types. Following the ADA, of course, was the 1999 decision of the Supreme Court in the Olmstead case, the Georgia case, brought to us primarily from the field of developmental and intellectual disabilities. This is why these issues have informed each other, which, of course, gave us the requirement that States provide communitybased services as a placement, if appropriate, and something that they are able to fund.

And then, of course, 2010. I believe the Affordable Care Act is another huge leap forward for seniors in this country. As we have expanded coverage, we have provided additional benefits for seniors, preventative benefits, wellness benefits, and worked to protect

the life of the program by tackling fraud.

That is my list. Any of us could look back at the last 50 years, and pull out things that have all kept moving us forward toward community care. Those issues, along with Social Security, have done much to address the poverty issues and the health issues that

Dr. Fleming recognized in 1961.

Deb's second question, where will we be in the next two decades? That is a little smaller than the first question. I think it is a time of demographic challenge, and I know we all have the information about the number of baby boomers turning 65-9,000 or 10,000 a day in this country, and that will continue; that one of the fastest growing segments is the group that is 85 years old and older.

I believe that this is an opportunity as well as a challenge for this country, and John mentioned that earlier. Talking about what I call social capital, which is the number of healthy, long lives we have and we have coming that can build additional assets and resources as people continue to stay in the workforce, or older adults who move out of the workforce into second careers, encore careers, and volunteership. This will be something we so much need as we continue to provide community supports and livelihood in the community for seniors. This, I think will change the future.

There are also other advances that we will take advantage of in the next 50 years—technologies, exciting innovations with regard to how to support individuals and families with technologies.

I think another issue that we have to recognize as a huge opportunity for us is this incredibly diverse nation that we live in, and the incredible diversity of the seniors that we have, and what a rich blend they bring to us as a community and as a country. We need to support all individuals as they age and embrace them and the richness of their lives, and also support person-centered approaches—respect, dignity, independence, and valuing self-determination.

If I could change two or three things—I think it was the final thing on my list of two or three things, which is hard to narrow down. But to me, they seem to be, I think, obvious. I am completely committed to the issue of prevention across the lifespan. I believe it is imperative as we move forward to talk about health and wellness, that we frame prevention from this particular angle, that we talk about prevention as a life span approach. Investing in children, investing in middle-aged individuals, and investing in seniors is all worth the investment. For those of us who work in the field of aging, sometimes it is hard to get attention to people who are older, but it is worth the investment. It is never too late to be healthy. And for a senior, falls prevention, medication management, chronic disease management, is the type of prevention that we need to continue to support to help them with good quality of life, and long life, and less expensive care. So, prevention is one of the three things that I would change or continue to push.

The second thing on my list would be what I call a more holistic approach to integrating the three huge systems of acute care delivery, long-term care delivery, and community services; that these three systems create both the barriers and impediments as people try to navigate through and receive care. They must continue to be integrated. I believe the Affordable Care Act brought us tremen-

dous opportunity with this integration.

What we are doing at the Administration on Aging right now is focusing specifically on care transitions and training the Aging Network to take advantage of their 45 years of experience, to partner with acute care providers and long-term care providers to help people return to the community in a successful way, and live there longer. I believe integration of these three systems has to continue, and we have all kinds of opportunities to deliver better quality care

at less cost. So, I would put that on my list as second.

And the third is I believe we need to continue to focus on the community and the family as the focal point for our delivery of services, and this is where the Older Americans Act was visionary. The Older Americans Act was the original home- and community-based service program in this country for older adults. We need to continue to support it, and we need to continue to help family caregivers and the other partners—the questions you were asking. It is not just about working within HHS, or even at AOA, but working with the Department of Transportation, and HUD, and the other Federal agencies to tackle all of the issues that are there and present. If we will be successful in community tenure for older adults, we must tackle transportation. It, to me, is one of the hardest issues in front of us as we help people stay independent.

I think there is much we have done, much we can do still to achieve Dr. Fleming's vision. We can continue to fight to reduce poverty and isolation, maintain dignity, and increased choices for

older persons and people with disabilities.

I am pleased to be serving as the Assistant Secretary for Aging. I am pleased to be able to participate with the work of this committee, with all of the advocates, both here and across the country. This is fabulous work, it is meaningful work, and things that we can do so that in 50 years when they come back, what we do will be on this list because there is so much more ahead of us and so many more opportunities with such a vibrant and positive aging America.

Thank you.
[Applause.]

Ms. Whitman. Thank you, Secretary Greenlee.

Dr. Hodes.

STATEMENT OF RICHARD J. HODES, DIRECTOR OF THE NATIONAL INSTITUTE ON AGING

Dr. Hodes. Chairman Kohl, thank you again for the opportunity to be here and participate in the celebration of the 50 years of this Special Committee on Aging. The National Institute on Aging was established in 1974, very much through the offices of this committee. And since that time, we have worked very closely through our joint goal in improving the quality, as well as length of life for older Americans.

It is a very different world now than it was 50 years ago. Some of this is illustrated in statistics. The Census' most recent estimate in 2010 is that there are approximately Americans over age 65; that is, 40 million more than there were 50 years ago, more than double that number. The trends are going to continue as we see the demographics progress, so that there were estimates again this past year of about 1.9 million Americans aged 90 and older. That is expected to increase by 2050 to nine million—truly enormous changes.

The changes are not just national but international and world-wide. Sometime in this decade, the number of individuals in the world over 65 will exceed that of children under five for the first time in human history, with enormous implications reflecting on the successes we have had in prolonging life and health, but also the challenges to a society that is very different than the species ever enjoyed in the past.

We have, in addition to extending life, seen great evidence that it is possible to improve the quality of years. And over the closing decades, the 20th century, for example, studies showed a very gratifying decrease in the rates of disability in older men and women, demonstrating that by prolonging life, we are not by any means committing people to life with disability, but a life with hope of avoiding that disability.

As we tried to juxtapose what has happened in the past, the present, and the future, the studies that continue to monitor these trends give us pause and real warning as we look at the generations that are going to be the next generations of the elderly, the baby boomers, emerging, whether the trend is in part due to lifestyle issues, such as obesity, inactivity, that really threaten to compromise, if not reverse, some of the enormous changes that we have made. And this, again, translates to some of the needs and hopes for the future.

We have made progress in understanding how to treat and prevent some of the very important causes of disability and death in the elderly. So, for example, the identification of effectiveness of treating hypertension in older men and women with relatively inexpensive and well-tolerated treatments has shown really to very dramatically reduce the risks of coronary vascular disease, of heart attacks, of strokes, congestive heart failure. More recently, it has been shown that it is possible to reduce the risks of diabetes mellitus in older men and women, contrary to the expectations of some, showing that individuals over age 60 through a lifestyle intervention, that show the ability to change diet and exercise and activity that was remarkable. Seventy-one percent reduction in the rates of disability in that age group, which if translated to the pub-

lic would be an enormous advance in quality of life, as well as the burden on society for medical care, and, most importantly, to im-

prove the quality of life.

There are other areas in which we have made progress. For example, understanding the nature of cognition in aging has been translated in some very practical ways to understanding what it is about cognitive changes that can interfere with important life tasks, such as driving, or the important markers of independence, but also as viewed by some of risk in older men and women behind the wheel. It has been possible to understand the cognitive characteristics which predict who is at risk for driving accidents. More importantly still, it has been possible to show that cognitive training can alter performance on these laboratory computer-driven tests. And, of course, most importantly, the recent demonstration, in at least one report, that this kind of training can reduce by more than 50 percent the risk of accidents by older drivers.

Not only has this been a laboratory finding, but it has been one embraced by various aspects of private and public sector, so that several motor vehicle bureaus in the country are now using this test in evaluating driving abilities, and that now most recently some of the insurance companies are actually giving discounts to individuals who go through this training, reflecting the way that

very real consequences come from research endeavors.

There are other areas—threats to well-being, individual and public, are not yet met. One of the more prominent and evident is in Alzheimer's disease, one of the more frightening diseases to all of

us, to the community, to individuals, to the public.

This year, the passage of the National Alzheimer's Plan Act, an enormous rededication to a concerted effort to try to ultimately decrease the progression, prevent disease, is the hallmark of the new iteration of national/international public/private partnerships to that end.

We have learned an enormous amount about genetics and genetic risk factors, about brain imaging, and biochemical testing that can identify the very early stage of disease, even before there are symptoms. We now have the challenge before us, the very real challenge,

of translating that into interventions.

So, in terms of the present and where we stand, we have a society which has seen an extension of the life expectancy over the 20th century from some 47 years in this country at the beginning of the country to 77 at the end. We have challenges before us, which threaten to compromise or reverse that through the trends we see in disability, related lifestyle changes, and a commitment to the need to go further.

In terms of the magic wand, the things that we need to the future to make the trajectory of life and health of older Americans as successful as can be, they really fall into several categories. There are things we know how to do—preventing heart disease, preventing diabetes—where the translation into practice is not what it needs to be. And there the challenge is to find ways to disseminate best practices into practices that transfer to individuals and their life expectancy and their health expectancy.

There are other areas, such as those represented by research ongoing in conditions such as cancer and Alzheimer's disease where we need to learn a lot more about translating the dramatic high tech basic findings that we have now into ultimate interventions.

And, in addition to these disease-specific areas, the research of the National Institute on Aging, facilitated by this committee into the very basic process of aging itself, offers a new set of opportunities that have become all the more relevant in recent years. So, for example, it has been found that changes in chromosome structures called telomeres, or in oxidative damage, or in the senescence of individual cells are very much related to dysfunction in organs and tissues and the health and well-being of experimental systems and humans.

And most recently it has been shown, for example, that eliminating the very small number of cells that are senescent, that have a very specific phenotype when one looks under the microscope or analyzes their gene expressions. Eliminating a very small number of cells in experimental animal systems can in fact reverse the manifestations of aging in multiple tissues, and providing an opportunity to execute what many in the field of aging research would argue that, in addition to disease-specific interventions, better understanding the basic processes that accompany aging may allow interventions that will, in fact, have global impacts, not on a single disease, but on many of the undesirable consequences of aging, so that it becomes less of an age, less of a time of life when disease threatens, and more of a time when the enormous potential and productivity of older men and women are able to execute themselves.

And we at the NIA and NIH in general are committed to this kind of research and the support provided, and are grateful again to the support over this past 50 years by you and by this committee. Thank you.

[Applause.]

Ms. Whitman. Next, we have Michael Harsh.

STATEMENT OF MICHAEL HARSH, CHIEF TECHNOLOGY OFFICER, GE HEALTHCARE

Mr. HARSH. Boy, as I am up here today, I realize that now I need glasses, so I guess it has changed.

I am Mike Harsh. I am the vice president and chief technology officer for GE Healthcare. We are a \$17 billion diagnostic health care IT and life science division of General Electric.

It is a pleasure to be here. I want to thank Senator Kohl for the opportunity, Senator Grassley for hosting this program, and for

your leadership in advancing American health care.

You know, I have led R&D at GE Healthcare in Milwaukee, Wisconsin, Senator Herb Kohl's home State, for quite a while. I have had a chance to work at our GE global research labs in upstate New York just outside of Albany. Additionally, I am a member of the College of Fellows of the American Institute for Medical and Biological Engineers. My 34 years of seeing health care innovation up close and its impact on patients, health care providers, and society as a whole provides the foundation for my comments today in this important forum on the challenges, promise, and potential of aging in America.

Medical technology has come a long way in the last 100 years. Developments in IT, imaging, biology, have really changed the medical paradigm from a see and treat it—and I just want to say again, see it and treat it way of treating disease—to where we are moving towards a predict and prevent. That will dramatically change how physicians are able to address the increasingly complex

needs in a global aging population.

You know, there has been an explosive growth in medical technology in the last century, you know, with the development of x-rays. As the 21st century dawns, you know, governments have put pressure on health care systems to be more productive. Technology must now align with the new realities of health care, providing patient and diagnostic economic value. Specifically, society is demanding that technology reduce the overall cost burden of delivering care. Technology must help deliver higher-quality and efficient health care to an increased number of individuals, thus, in-

creasing access while lowering overall costs.

As diagnostics and therapy shift to the molecular level, molecular diagnostics will enable earlier, more precise disease detection and allow physicians to understand more about the individual patient. Life sciences will enable the next generation of biotherapies, which increasingly will be delivered in tandem with diagnostics. Now, let me give an example. In neurodegenerative disease, molecular agents and biomarkers for in vivo or in body and in vitro testing will help determine the pathology behind early cognitive impairment, leading to earlier diagnosis and treatments. Bio signatures are what we call these. With the advent of disease-modifying drugs, this brings the opportunity to improve people's quality of life as they age, and this is particularly significant for our seniors who could experience memory loss and impairment through a neurological condition, such as Alzheimer's and dementia.

Now, looking forward, here are some concepts representing how technology may change the future of medicine. Health monitoring will be a part of everyone's existence. Again, looking at the bio signatures that we can monitor, we will have early warning systems that alert people when very early changes in their bodies, at a stage when disease is typically easier to treat, but before we see symptoms. You can look at reversing the course of the disease. Manufacturing artificial blood, repairing tissues, and reconstructing organs with these cell-based therapies and tissue engi-

neering is just another possibility that we see.

Now, two or three things that have changed could put us on a better path to the future. I think, number one, and I want to say this, is effective regulation of medical devices is necessary for ensuring patient safety and protecting public health. And, number two, we need to move the system from a sick care system over to a truly preventative health care system. And this is really key for everyone in this room. Aging starts the day we are born. Prevention, combined with prediction in early diagnosis, enabled by the convergence that we see today between the biosciences, the diagnostic tests that we have and the equipment, the IT systems, mean that it is already possible to diagnose diseases on that were undetectable in the 1980s. Again, this means better quality of life for our seniors and our aging population.

In conclusion, the future of health care technology holds tremendous promise for increasing patient access, earlier diagnosis and treatment of disease, improving health care quality and decreasing overall health care costs. All of us hopefully will experience this aging process, and health care innovation increasingly make possible an unprecedented quality of life for seniors in which living old can be living well.

We all know America was built on the premise of what might be possible, a notion that spurs great achievement. That same promise

holds true for health care.

I would like to thank you for allowing me the time to be here and celebrate this 50-year achievement of the Senate Special Committee on Aging. I am a technologist; I want to paraphrase one technology guy I always looked up to, and that is Albert Einstein. He had this great statement. It was, "Imagination is more important than knowledge. Knowledge is limited to all we know, while imagination embraces the entire world, all there ever will be to know."

I want to thank you for your time today.

[Applause.]

Ms. WHITMAN. Next to discuss healthy aging, Dr. Jack Rowe.

STATEMENT OF JACK ROWE, DIRECTOR, MACARTHUR FOUN-DATION RESEARCH NETWORK ON SUCCESSFUL AGING AND PROFESSOR AT THE COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH

Dr. Rowe. Thank you very much, Senator Kohl, and Ms. Montgomery, Ms. Whitman, for including me in this set of conversations. I would like to convey some of the thoughts that my colleagues at the MacArthur Foundation Research Network on an Aging Society and I have developed with respect to the agenda of the committee. We start with a clear view that if we continue our preoccupation with entitlements, and we really continue to view the entire problem as balancing the Medicare and social security trust funds, that we will be in very big trouble.

The fundamental observation is that the core institutions of our society, whether it be work, retirement, transportation, or education, were not designed to support a population that is going to have the age distribution of our future society. And so, unless we are able to find a way to hasten the adaptation of those core institutions, even if we balance the entitlement trust funds, we will not have a society which is productive or equitable or cohesive. We will have a society in which the tendencies to be torn apart and have generations pitted against generations, and have pitted against have-nots, will be aggravated even further than they are now.

Let me comment on two general areas. One is health care, which I am going to just comment on because Ms. Whitman said that, some of these problems are not new, that they have been around a long time. And why have you not solved these problems? Why did you not solve these problems ever? I certainly concur that these issues are heardy perennials with these issues, but, you know, it is not so much whether the problem is a new problem, but whether or not it is a problem whose time has come. And it seems to me

that with respect to health care, we may be in a situation where

we can solve one of the core problems.

One core problem is providing access to health care for people, but it is a hollow promise to provide access to health insurance to everyone and not have providers there who are capable of providing the care. We know we have a dramatic shortage of primary care providers, and we know, especially with respect to older persons that there are not enough geriatric specialists, and that the general health care workforce does not have enough expertise in the care of the elderly. The Institute of Medicine had a report a couple of years ago on this that I testified on to Senator Kohl and his committee at that time. And the Institute of Medicine has followed up with a more recent report on nursing as well that includes these issues.

I think the time has come for many of those well thought out and generally well-received recommendations be implemented. The window of opportunity is opening now. We are changing the way we pay for health care. Affordable care organizations focus on preventing admissions and readmissions and on paying for quality. All these changes are removing some of the barriers that we have had before to enhance geriatric care. I am very optimistic about that.

With respect to the issue of productivity and the workforce, there are two or three observations. One is that we need to understand what the future population is going to look like. And Richard Hodes pointed out that the decades-long, quite substantial, progressive reduction in disability we saw may have ended at the beginning of the last decade, and things have been going perhaps sideways since then. And that may result in our having a population of older people with greater demands for personal care services than we had been expecting or hoping. We were feeling that disability was going to progressively decline. It may not. And there are even studies now that suggest that disability is increasing in the near elderly.

We were also thinking that the older population was going to be able to participate in the workforce because they are all going to be fit, and it looks like perhaps that is not the case, since the disability rate may be increasing in the near elderly. And technology

may help there, but we need to understand that better.

We also need to understand how we can incent employers to keep people in the workforce. We need to work with employers to de-mythologize the well-known, and Mr. Aaron can talk to this better than I, lump of labor fallacy that you need to get older people out of the workforce in order to make room for younger workers. That is just not the case. I believe prevailing economic opinion would support that. But I think we have an opportunity to work with employers, now that evidence is available that productivity is retained in the older workforce well into the 60s, if we can get some of the right incentives in place.

Let me end with just two quick points. One is that I think our attitude, and this has been mentioned already, should be a life course attitude. We have got to get rid of this counterproductive children against the elderly approach with people writing articles about how much more money is spent on old people than children, when, of course, they are including health care, but they are not

including education, in the equation. We do not have time for that. We have to go to the next room, sort of, you know. And we have to start looking across the workforce and look in a way that is

intergenerational.

That last point that I would make, and this was suggested by Lisa Berkman, one of the colleagues in the Network, is maybe we can learn something from the environmental movement here. Whenever you want to do something in a community, you have to do an environmental impact assessment. What impact will this activity have on the environment, positive, negative, neutral? Fine. Maybe we need an aging society impact assessment. Maybe every time something gets done, somebody needs to stop and say, wait a minute, what is the impact of this on a society with a fundamentally different age distribution, or is this actually moving in the wrong direction, or the right direction, or is it neutral? And just having to do that, just like John Rother pointed out, just having to write a report at the end of the year is sometimes therapeutic, and so that I think that there may be some benefit.

Thank you again for including me here today.

[Applause.]

Ms. Whitman. Next, we have Robyn Stone to talk about the future of housing.

STATEMENT OF ROBYN STONE, EXECUTIVE DIRECTOR, LEADINGAGE CENTER FOR APPLIED RESEARCH

Dr. Stone. Thank you for this opportunity to talk about this issue. And I am actually in my brief five minutes, I am going to try to frame the issue of housing within the larger issue that I know so well, which is really long-term care policy. And the reason I speak to housing in terms of that is that really housing and services are co-equal. You cannot have a long-term care system, you cannot remain in the community for as long as possible, you do not have shelter, as well as the services to support you.

And I want to start by saying that long-term care and housing policy has really come a long way since this committee was established in the 60s. And I actually started in the mid-70s as a director of a Title VII nutrition program. This was actually before Title VII was folded into Title III of the Older Americans Act. So, I have

been around aging services for a very long time.

And I do want to highlight the fact that although families and other unpaid caregivers continue to provide the bulk of services in all settings today, a fragmented formal system has evolved over the past 50 years to meet the long-term care and housing needs of our

Nation's elderly population.

I want to commend the committee for a number of things. Certainly with the advent of Medicaid and, to a lesser extent, Medicare, we have a nursing home market today that was really started in the 1960s. And from that very start, the committee has been a vigilant advocate for resident rights and quality, including its advocacy for, first, the ombudsman program, which started in the 70s, Nursing Home Reform Act, which OBRA 87, continuing efforts to really have strong oversight and enforcement, and the recent culture change provisions that are in the ACA.

However, one of the major moves, and Kathy spoke to this, is the shift towards home- and community-based services. That can be attributed in large part to actually the Aging Network in the late 60s and early 70s, culminating in the Medicaid waiver programs in the

early 80s, albeit tremendously variable across States.

The Congregant Housing Services Act, supported by the committee early on in 1978, was actually the first national program to link affordable elderly housing with services. And, by the way, that program has been frozen for a number of years as we see the 202 program and a number of other housing programs really slipping away between our fingers. And I am going to return to that in a little bit.

The field has also experienced a great growth in primarily the private sector assisted living market, with some experimentation with residential alternatives through various State-based Medicaid waiver programs. Despite the fact that most individuals needing long-term care also suffer from multiple chronic conditions that often need medical intervention, care delivery has developed primarily in silos. But one of the first programs to actually integrate acute, primary, and long-term services, the OnLok program in San Francisco. And many of you may not know this, but it was initially developed through a Title IV AOA demonstration grant in the early 1970s, which was supported very strongly by this committee. So, integration really had its source through this committee and through the Older Americans Act.

Three decades later, the program of all-inclusive care for the elderly, known as PACE, is a permanent Medicare provider, and really has set the gold standard for service integration and care coordination. And over the years, the committee has supported experimentation with a range of integrated approaches, and was a strong advocate for the most recent ACA demonstrations designed

to improve quality and reduce costs.

Until 2000, the paid long-term care workforce was just an after-thought. The committee was instrumental in raising this issue as a priority, and the efforts have included hearings following the release of the seminal IOM report, "Retooling for an Aging America," which Jack was the chair of, and advocating for the inclusion of education and training opportunities for long-term care professional and direct care workers in the ACA. And the committee remains committed to this area, as is evidenced by its ongoing work

to get funding for these authorized programs.

So, where do we go from here? And this is where housing really comes in. The United States is still a relatively young country compared with most countries in the developed world. But the three issues that loom large over the next 20 years include how modes of service delivery might evolve in response to consumer preferences, ability to purchase care, and changes in public policy; whether and how a quality, competent workforce will be developed to meet the service demands; and how services and housing can be made affordable for the vast majority of older adults who are at risk for needing long-term care and for the Federal and State governments that currently foot much of the bill.

My vision for 2030, while it is not possible to predict the service system that will evolve, would include these elements. Family care-

givers will probably continue to play a pivotal role in the delivery of long-term care services. To the extent, however, that it is financially feasible and preferred, they will augment their hands-on care and oversight through the purchase of home- and community-based services and technology. Technological advances, including the development of web-based social networks, sensors, and electronic medication reminders, will support more long-distance caregiving, leading to an expansion of geriatric care managers and brokers to assist in these efforts.

The ability of technology, of course, to complement informal caregiving is contingent on the mitigation of the myriad barriers to

the development, adoption, and wide scale use.

The committee has a major role to play in ensuring that family caregivers continue to receive support, and that they are integrated into the long-term care decision-making process. The National Family Care Support Program, which was created in 2000, at least formulae acknowledged family caregivers as a specific target population, but to date that program has been really limited in its funding. Ongoing advocacy will be required to expand the magnitude and scope of that program, as well as other efforts to really help to alleviate caregiver burnout and burden.

The primary role of nursing homes in 2030, in my vision, will be to provide post-acute care to medically complex individuals being discharged from the hospital, or those who require significant rehab, such as the events following a stroke or opposed hip replacement. I do not believe that we will need nursing homes in 2030. This is, however, contingent on affordable options out in the community. These facilities could also provide a venue for the delivery of palliative care to individuals in the active stage of dying, who were not able to remain at home or in another residential setting.

By 2030, the demand for home- and community-based options will increase substantially, and home-based care will be provided by a combination of in person and electronic monitoring systems to facilitate the potential for a larger proportion of the elderly long-term care population to receive services in their own homes or apartments. In addition, the expansion of universal design features in building, construction, and modifications will help to create home environments that adapt to the needs of individuals as they age and become more disabled.

Now, many individuals will be living in NORCs, naturally occurring retirement communities. They can be vertical or they can be horizontal, across streets, blocks, or neighborhoods of single family homes. Regardless of this configuration, community members will take advantage of the economies of scale and joint purchasing power afforded by living in NORCs to organize packages of social, wellness, health, and long-term care services that are available in

the community.

Now, prior to the passage of Medicare and Medicaid, one-third of the elderly lived in poverty. During the following three decades, that percentage decreased precipitously. At the same time, the gap between the haves and the have nots within the older adult group has actually expanded, particularly for non-white elderly. And the latest recession, which disproportionately affected current and soon-to-be retirees, raises serious questions about how future cohorts of older adults, facing long-term care decisions, will be able to pay for services. Ironically, those who are currently at either financial extreme are more likely than modest and middle-income elderly individuals to have access to service options. Low-income elderly at least can qualify for Medicaid. They may also have access to publicly subsidized housing and community-based care. They may also qualify for publicly subsidized programs that will assist them to live in the community.

Financially secure elderly individuals have the resources to pay privately for home care, and when that is no longer viable, to move into an assisted living facility. Individuals who want the security of a continuum of services may sell their homes and move into a continuing care retirement community, or they may create their own village, a grassroots membership-based nonprofit organization that provides support and community to residents who wish to re-

main in their own homes or in apartments.

For the vast majority of the elderly and their families, however, affordability of long-term care service options is, and will remain, the ultimate concern. What we need to do, and one of the most thorny issues that must be addressed if affordable residential options are to be available in the future is we have got to figure out how to cover housing costs for individuals who can no longer remain in their own homes or rental apartments due to financial and/or health reasons. Currently, low- and modest-income, older adults who have spent down their assets and income to qualify for Medicaid will have their room and board covered if they enter a nursing home, but Medicaid reimbursement rates for other residential settings, such as assisted living or adult foster care, are generally not sufficient to cover the costs of room and board. And for those who do not qualify for Medicaid, there are no financial mechanisms.

Recognizing that Medicaid assisted living has not provided an affordable option, a number of States, including Vermont and Oregon, have brought together staff from Medicaid and State housing agencies to explore how they can more efficiently package their service and congregate housing dollars to better serve their dual eligible populations. At the national level, HUD and DHHS are finally exploring ways to better integrate low-income senior housing and services. These efforts reflect a growing recognition that affordable shelter and services are both essential to the development of a viable community-based system for moderate- and low-income older adults, groups that are largely likely to represent a large proportion of future cohorts of America's elderly population.

The nexus between housing and services, therefore, is, is a perfect place for the committee to focus its attention as we move into the future. Thank you very much for allowing me to speak to you today.

[Applause.]

Ms. WHITMAN. And batting clean up to talk about income issues, we have Dr. Henry Aaron.

STATEMENT OF HENRY AARON, BRUCE AND VIRGINIA MACLAURY SENIOR FELLOW, THE BROOKINGS INSTITUTION

Dr. AARON. Mr. Chairman, thank you very much for the honor and pleasure of being able to participate in this event. I have to comment that as a person whose last name begins with two A's, I am not accustomed to speaking last——[Laughter.]

Dr. AARON [continuing]. But I am sure it will be good for my

character.

I want to take an even broader look at the history of what it means to grow old in the United States than was the charge given to us, to look at the last five decades. I am going to look at four cohorts, starting with the Americans born in 1860 and moving forward through 1890, 1930, and 1960.

If we go back and look at that oldest age cohort, we will discover that the process of growing old was radically different from what it is today. Three-quarters of the men who were born in 1860, and who still managed to be alive at age 65, had to continue to work until they died, became disabled, or were put out of work by economic calamity. Precisely such a calamity did occur—the Great Depression—when the 1860 cohort was 69 years old.

By 1932, a quarter of the workforce was unemployed. The elderly were more likely than the young to lose their jobs and less likely to find new ones. Protracted unemployment, bank failures, plunging stock prices, and collapsing real estate values destroyed the savings of those in the middle and working classes who had scrimped and saved for retirement. That has a distressingly con-

temporary feel to it, actually.

Private charities were overwhelmed. Public charities dried up as State and local governments ran out of money as revenues plum-

The first social security check was not paid until those in the 1860 cohort had reached age 80, and few were eligible for benefits. For the one-third of the 1860 cohort, only one-third, who survived to their 69th birthday when the Depression hit, the final years

were actually pretty grim.

For those who were born in 1890, at the end of the 19th century, the cohort benefitted from steady, if unspectacular, growth in incomes. The improvements in health and education were substantial, but even so, more than a third of those who reached age 20, of women, were dead by the time they reached their 65th birthday, and 40 percent of men who reached age 20 were dead by the time they reached age 65.

This cohort reached age 65 in the mid-1950s. At that time, fewer than half of them had health insurance. Coverage was often uncertain because insurers could and did raise premiums sharply or refused to renew coverage for those whose health had begun to dete-

Congress had passed the Social Security Act in 1935, subsequently increased benefits, and extended coverage in 1939, and again in 1950. Because of those liberalizations, members of this cohort born in 1890 received benefits that were greater than the earmarked taxes that they and their employers had paid, but the benefits were not very large. Only about a third of taxable earnings was the benefit level until age 50.

Moving ahead yet again to those born in 1930, there were 2.6 million births in that year. That cohort enjoyed advantages that had been unavailable in previous generations. The educational achievements were striking, but the economic advances were absolutely breathtaking. Between the end of World War II and the mid-1970s, output per person more than doubled. At the start of their working lives, members of the 1930s cohort earned hourly wages three times higher than those that had been earned by those born in the 1890 cohort had earned in their first jobs. And by the time the 1930 cohort retired or turned age 65, average earnings in the Nation had risen by an additional third.

As they approached retirement age in the mid-1990s, members of this cohort had options and resources that few of their parents had enjoyed. Most had assets that provided substantial financial security, including social security. They also had better protection against medical costs than ever before. Medicare had been enacted in 1965 and provided basic health insurance coverage for the elderly and for the disabled, and eight out of 10 of those covered by Medicare also had supplementary coverage on top of that.

Now, whatever the future may hold for people born back in those years, the circumstances represented a revolutionary improvement

over the experiences of their predecessors.

The cohort born in 1960 was still better educated than any of their predecessors. As a striking fact, nearly 90 percent graduated from high school, and the fraction of the people who were born in that year who got education beyond college was as high as the proportion who had graduated from high school a century earlier. Furthermore, people born in 1960 told pollsters that they hoped to retire earlier than had their predecessors. To a significant extent, however, they discovered they were not able to do so, and continued to work a bit longer than people had previously.

My time is nearing its end, but I do want to say a few words

about the prospects for the future, which seem to be a bit more

The past record of more or less continued growth in income, and improvement in educational performance and, as we have heard, health results, are now in jeopardy. Average earnings of men have fallen for about four decades. High school completion rates nationally are falling. Male college attendance rates and completion rates are falling. The one encouraging bright spot is the continued increase in female college attendance and completion rates.

But for a variety of reasons, I think private calculations and shifts in public policy, workers are likely to continue to work to older ages in the future than they have done in the past. This is a good trend for reasons that Jack Rowe indicated in his remarks. It simultaneously provides resources to those affected, and lightens

the burden of support for the rest of the population.

I also want to endorse in my last comment something that Jack said in his. As I look around the room, I think I see far more people under the age of 40 than over the age of 60. And I consider that a very good sign for our prospects of avoiding the kind of intergenerational fratricide that he so correctly deplored in his concluding remarks.

Thank you.

[Applause.]

Ms. WHITMAN. So, we have had an incredible panel of speakers. I am going to take the opportunity to ask some questions before our last speaker. And we are going to have Laura Carstensen later

wrap some things up.

But I thought I would take the opportunity to pick your brains on some of the projections of the future, and the pathways in which we as a committee can grow as well. Specifically, several of you talked about the opportunities to transform our approach on health from one based on disease treatment to one based on prevention. I think Secretary Greenlee, Michael Harsh, and several others talked about this as being the future of health care, and having such a significant potential to improve both the health and the longevity of older Americans.

But what practical steps do we need to do to make that shift toward prevention, and what are the things that we can put in place now that will pay off in the future? Question for anyone who wants

to answer, but first Secretary Greenlee.

Ms. Greenlee. Well, you will be pleased to know that Dr. Hodes and I have met. I went over to talk to him fairly soon after starting this job because I believe that what we need to be focused on quite a lot is research, both research based from universities, and research based at the NIA that we can translate into our network. What the Aging Network is really called to do at this point that is different is gather a different kind of outcome data that we need to continue to focus on, building the case and showing the evidence and the outcomes for both health and medical savings, cost savings. That is the piece that is new.

If you think about the Older Americans Act nutrition program, which is 40 percent of our funding, we can demonstrate how many millions of meals we serve. We believe that that is a valuable output that we should be measuring. But we must add to that outcome a measurement of the long-term impact on health and the avoidance of other more chronic health conditions or acute episodes. With that research we will be able to continue to engage

with policymakers.

Ms. WHITMAN. Yes.

Dr. Rowe. I think we need to move beyond the view that the critical period for intervention and prevention is youth. There is an implicit feeling that people have that, if you are trying to prevent something in old age, well the horse is out of the barn, and older individuals, do not respond to change, et cetera. And with the exception of maybe flu shots, prevention just is not something that has to do with geriatric care.

My favorite example is the diabetes prevention program, which showed, as many of you probably know, that a fairly intensive lifestyle intervention, reduced the onset of diabetes in a high-risk population by 58 percent. People of all ages who were included—young adults, middle aged, and older persons. It turns out that the age group that had the greatest positive effect from the intervention were the older persons. A very, very significant finding.

So, I think as we develop policies, as we fund programs in Medicare and Medicaid, as we educate health care providers, whether they are nurses or physicians, we need to change the set of infor-

mation and beliefs that they have about prevention throughout the life course. That would be, I think, a very significant advance.

Ms. WHITMAN. Dr. Hodes, Mr. Harsh.

Mr. Harsh. Yeah. I guess one thing I would like to say is, you know, we have got research going on right on different aging studies, one with Mayo Clinic, where we are looking at essentially, you know, we call it bio signature, but there are a lot of signatures that you can pick off by looking at the combination of many different tests, very simple screening tests, before you wind up with a very expensive scan, before the symptoms really present themselves in a way that will find people kind of fumbling through the health care system, which, you know, really costs a lot of money and does not help. And there are ways that we can pull this information out much sooner so that we can actually look at bringing that care up much quicker, and really driving, you know, costs out of the health care, and increasing quality of life.

care, and increasing quality of life.

So, again, when I look at some of the big challenges I see right now where we are headed is things around just computational biology and being able to really get after how do I compare apples and oranges? You know, what are the signatures that I want to look at when I look at the genomics, all the omics levels? These are the things where I see where the research is going where we can start

to pull this diagnosis farther upstream.

Dr. Hodes. I think that I would enjoy commenting to the topics that Mike and Jack have mentioned. Just to elaborate on it is this, 71 percent decrease in incident cases of diabetes in the group 60

and older with a very reasonable lifestyle intervention.

In terms of how to now translate that, this is one of the categories where we know something works. How do we make it happen? An example, I think, within the Federal purview, at least, that is promising, are the conversations we have had between CMS and at NIH. So, Don Berwick, Francis Collins, and a group from each of our agencies, converging to look at cases in which perhaps at least innovative thought about how appropriate incentives and even compensation for effective prevention can occur.

So many of you will know that after this laboratory setting intervention, which prevented diabetes onset, there have been continuations of those, now looking at setting, such as the YMCA, so the diabetes prevention study in the Y to see whether it will be effective in such a setting, looking for practical ways to make this happen. So, this is the kind of collaboration across agencies and ultimately with public forces that can be enormously productive in

terms of government and other private sectors.

I would just note another partnership that has been particularly gratifying over these past years has been ADNI, the Alzheimer's Disease Neuroimaging Initiative. It is designed to look at, as I mentioned briefly in passing, early changes by neuro-imaging, by other molecular signatures, that precede clinical disease, the notion being that if one can find those early changes, one has a better opportunity to intervene early and prevent them, and you can also track the success or failure of interventions.

Government, imaging companies, bio tech, pharma,have all been collaborators in this very important initiative with the FDA and NIH and a number of private and public sector philanthropies as well, an enormous partnership because it reflects the fact that there is common conviction that in those so-called pre-competitive spaces, we can look for opportunities that will profit nobody preferentially in the short term, will profit everyone in the long term, aimed at prevention to echo that.

But the partnerships are there, and I think the room for optimism is in the fact that they are recognized and reflected in partnerships across this breadth of agencies, national and, in fact, international.

Ms. WHITMAN. Thank you.

John.

Mr. ROTHER. Just a quick comment, that we typically think of prevention in individual terms. I think the new frontier is going to be the social aspects of prevention, whether it is in the food supply, the environment, or even the level of stress in our societies. And I think that is going to raise some very tough questions about how we go about keeping people healthy when it is going to require magnitude order of changes throughout the economy and our cul-

Ms. WHITMAN. Good point. The reaction to large and growing budget deficits lately has been to look for ways to cut spending on a wide range of programs, benefits, and services. However, we are now facing increasing demands on these programs, both due to the economic downturn and the aging in the population. How will an era of prolonged fiscal restraint impact the futures each of you have predicted? And when is spending today truly an investment in the future? And I am opening that up to anyone who wants to answer it. As you know, we have all got a lot of scissors out here on Capitol Hill, and we are cutting as ruthlessly as we can. What things do we need to protect? What things are the most valuable?

Mr. Harsh. I can just start from a technology standpoint and instrumentation standpoint what our focus has been because would say, although it was there to some extent, you know, I was around when imaging just exploded. And it was, like, if you could image faster, see more, get greater coverage, more resolution, wow, that was great. When I look at it today, you know, we do not start a program unless we fully know up front what it is going to do in terms of increasing the access of that technology for health care, what it is going to do for the total cost, and is it going to deliver better quality of outcomes and quality to the patient? So, everything we do today has completely changed our head around making sure that we fully manage quality access and costs in every one of our development programs that we start on.

Dr. HUDSON. There is no magic answer to this, but I think it is important to keep in mind as one sector or the other worries about cutting costs, and all sectors worry about cutting costs. It could be the public sector. It could be the private sector. It could be the formal care giving sector. It could be the informal family sector. But costs are shifted; they are not eliminated. And public policy people need to keep that in mind, particularly in the area of aging and long-term care, that formal services that are not available and traditional kinds of things that Robyn has been talking about are

going to fall to the informal sector.

And that dissertation we had last year at the National Academy of Social Insurance investigated why 37 million caregivers have no real political presence, and they really cannot afford a lot more burden. So, I hope public policymakers keep that in mind as they try to escape the immediate dollar figures they are concerned with.

Ms. WHITMAN. Robyn.

Dr. Stone. Yeah, I guess I think there are some ways to think about some making lemonade out of lemons in times of fiscal constraints. And one of the things that really moved me to look at affordable senior housing and linkages with services is the potential for the economies of scale of large numbers of folks living together where you have the potential to actually redistribute dollars as opposed to needing new dollars.

And I say this with the caveat that this could pie in the sky if it is not operationalized well, and that is to say that I think there are a lot of efficiencies and economies to be gotten out of our current system, and that is really dependent on how those decisions

are made, who gets the resources, and how they are used.

And one of the things that you can do that other committees really cannot, because you are not wedded to the jurisdiction of a particular committee, is to look across jurisdictional issues. So, for example, you can look at services and housing, and think about how you redeploy resources in a different way that is going to be a win/win. And if we find, for example, that you are able to serve large groups of seniors living in properties that through prevention, service integration, and self-care management, and some of those savings can be accrued, they need to then be brought back and put into the housing site.

So, I think there needs to be a lot more experimentation around how we use current dollars because I think there is a lot of room for that in this system. Going forward is a different question, but going across jurisdictional lines, which is so hard in Congress, at least you have the potential to be able to do that, to look at these various pots of dollars that could be used in a different way, which is very, very difficult for agencies to do in the executive branch. I know because I have been there. And I think you can at least raise

the question of how these dollars could be used differently.

Ms. WHITMAN. Thank you.

Henry Aaron.

Dr. AARON. If there is one basic principle or law in economics, it is when the price goes up, you tend to buy less of it. As we live longer, the price of social insurance in general goes up, and, there-

fore, there are very strong pressures to buy less of it.

Now, the point here, I think, is that, and I am going to state what I think is a solution, but not how you get there. And that, it seems to me, is the core problem. The solution is for people to be able, for a larger share of their lives, to be able to support themselves, which mean working longer, if they are able to do so. This is an extremely controversial area. And finding ways to create incentives so that people choose to do so, and businesses choose to employ them, it seems to me is the key.

I say that because by any reasonable metric, current levels of benefits in the United States are, if anything, parsimonious. They are low compared to what past levels of benefits have been, and compared to those available in other countries. So, the challenge is, I believe, to sustain benefit levels within a system in which people have incentives and abilities to continue working until later ages.

Ms. Whitman. I am going to move forward to our last panelist because I want to save a little bit of time at the end for audience questions. I have several of my own that I will throw in if nobody else takes the microphone.

To close our forum, I have asked the wonderful Dr. Laura Carstensen to not only share her reflections on the last panel's presentations, but also to take an even broader view and discuss

how the culture of aging is transforming our society.

Laura Carstensen currently is a professor and the Farleigh Dickson, Jr., professor of public policy at Stanford University. She is also the founding director of the Stanford Center on Longevity, which explores innovative ways to solve the problems of people over 50, and improve the well-being of people of all ages.

Thank you so much, Laura.

STATEMENT OF LAURA CARSTENSEN, PROFESSOR OF PSY-CHOLOGY AND THE FAIRLEIGH S. DICKINSON, JR., PRO-FESSOR IN PUBLIC POLICY AT STANFORD UNIVERSITY

Dr. Carstensen. Thank you, Deb. It is a great privilege to be here with my distinguished colleagues today. Thank you very much

for including me.

The changes that we are living through today at this point in human history represent a remarkable cultural achievement. Rob Hudson and John Rother spoke about the history of the Senate Special Committee on Aging, and the role that that has played in culture and improving the welfare of aging individuals. And then, Henry Aaron brought it back even further in history to the 1800s, and made the point very eloquently that how you age really depends on the year you were born. So, history is important.

And it may be useful for me to just zoom out even farther and talk about just how remarkable and quickly this change, again,

that we are experiencing today came about.

More years were added to average life expectancy in the 20th century than all years added across all prior millennia of human evolution combined. In historical terms, in a blink of an eye, we

nearly doubled the length of the lives that we are living.

Now, during most of human evolution, life was short. It hovered somewhere around 18 or 19. We do not know for sure, but lots of people did not survive. And this length of life was really just barely long enough to ensure survival of the species. I mean, in humans you have to grow old enough to be able to reproduce, and then hang around long enough to make sure your offspring can grow old enough to reproduce. Touch and go.

Now, evolution did act on aging through natural selection. It acted in a way that evolution acts at a snail-like pace. And life expectancy inched up and inched up and inched up over hundreds

and thousands of years.

By 1800 in this country, life expectancy was somewhere in the mid-30s. By 1900, it was 47. And less than a century later, life expectancy was 77. Today, it is 78. And this increase is not finished

with us yet. In recent years, a month or so has been added to average life expectancy at 65 every year.

Now, across that very same period that life expectancy was going up so dramatically, fertility rates were falling and fell by half; in some parts of the world, even more. And it was these two phenomena together that created aging societies. If life expectancy had gone up, but fertility had remained high, we would not have aging societies; we would have more long-lived people. But those two forces together created and restructured the distribution of age in the population.

In the United States, which reflects trends found in most developed countries, the proportion of older people in the population went from 4 percent in 1900 to 13 percent today, and it will increase to about 20 percent by 2030. Now, of course, in other parts of the world, in Japan and much of Europe, this proportional change is even greater. In Germany, already 16 percent of the population is over 65. In Japan, it is 20 percent now, and will go to 28 percent by 2030. We are young kids on the block compared to most developed nations.

Now, keep in mind as we talk about these numbers and we talk about this increase in life expectancy that the innate capacity to live longer has not changed. We are no genetically heartier than our ancestors were 10,000 years ago. What has changed are the odds of making it to old age. And they have changed so much that that pyramid that has represented the distribution of age in the population with many, many at the bottom winnowed to a tiny peak at the top, those who survived to very old age, is being reshaped into a rectangle.

The story of how we somehow launched ourselves into this era of very long life does not actually begin with a story about old people at all; it begins with a story about babies. The kind of increase that we saw in life expectancy in the 20th century, the average length of life came about largely because fewer of the young ones dies. In 1900, 25 percent of babies born in the United States died before they reached five, and many more of them died before they reached 12. And of the survivors, a large percentage were orphaned before they reached 18. Death was common at all ages, but it was especially common in the very early lives. Life expectancy increased so much because we saved the lives of the youngest among us.

So, how did we do that? Well, the short answer is science and technology. The remarkable increase in life expectancy is really a product of culture, the crucible that holds science and technology and large-scale efforts to change behavior, to change the way we live, so that we improve the health and well-being of entire populations.

Our ancestors in the 20th century discovered the causes of diseases and the ways that they spread. They instituted grand public health programs that vaccinated people against diseases that they would never have to suffer. They did not stop there. They pasteurized milk, they purified the water ways. They implemented the systematic disposal of waste, and historians today write that you can thank your garbage collectors as much as your physicians for this

increase in life expectancy because that reduced the spread of disease.

But we did not stop there, or, I should say, they did not stop there. As fertility rates fell, we came to invest increasingly in the youngest among us. Laws were passed that kept children out of factories and mines. Public education became available in every State in this Nation. We came to understand the nutritional needs of young children through science, but then through culture we developed food fortification programs in the United States and Europe that built vitamins into the food supply, and virtually eliminated rickets and other nutritional disorders in just 20 years. In other words, we built a world that is exquisitely designed to support young life.

So, here we are at a point in history where four, five, and conceivably six generations may be alive at the same time. This is a game changer in human history, a dramatic change. By 2015, as you heard, there will be more Americans over the age of 60 than under 15, and by 2030, all nations around the world, all developed

nations, let me say, will be old nations.

Now, the fact that most children born in the developed world today are having the opportunity to live out their full lives, having the opportunity to grow old is a fantastic cultural achievement. But the dramatic increase in the numbers of people who are making it into their 60s and 70s and 80s and 90s is generating a profound mismatch between the cultural norms that guide us through life and the length of our lives. And we humans are creatures of culture. We look to culture to tell us when to get an education, when to marry, when to start families, when to work, when to retire. And life expectancy increased so quickly that we are immersed in cultures designed around lives half as long.

So, when we think about older society, it is no wonder that mostly there is concern. You know, we see a crisis on the horizon. We fear that aging societies are going to break the bank, force young people to bear undue burdens, and eventually force societies to make stark choices between whether to provide services and resources for our children or our parents and our aging selves.

I do not have to tell folks in this room that Medicare is in real financial trouble, and there are real vulnerabilities associated with age. As you heard from Robyn Stone and Secretary Greenlee, older populations mean populations with more chronic diseases and more people who require better care, better prevention, those people who are the very most vulnerable among us.

And societies today are enormously ill prepared for populations of older people, older people especially with chronic diseases. And if nothing changes, societies will be top heavy with frail, and dependent, and disengaged people with relatively few people to support them. And if that is the future of our Nation, then we will en-

dure many hardships.

But as you have heard from so many of my colleagues this afternoon, that future is not an inevitability. In fact, when you think about how quickly we doubled life expectancy, it is amazing that older people are doing as well as they are. I mean, today the physical and the social environments that we live in were quite literally built by and for young people. The tacit uses are staircasers of

automobiles, of parks, of telephones, of highways, of train stations, of housing, workplaces. These were all built around young populations, so we expect workers to be agile and fast. Medical science, a key part of culture, has focused more on cures for acute diseases than on prevention of chronic diseases. And many societal roles were also designed when life expectancy was 47. And so, they were designed without the knowledge of the unique capabilities that

older people, older citizens, may bring to this country.

So, even though agism is often invoked, and, to some degree, has to play a role in this, we live in a world that only recently came to have large numbers of older people. Now, even so, research has shown us in recent years that the aging process is not best characterized by a sweeping downward trajectory. There are many aspects of functioning that actually improve with age; knowledge, expertise, emotional stability go up. And we have also observed already at this point in human history that among the affluent and the well-educated, we are seeing people flourish into very advanced ages. People who exercise, who live particular lifestyles, fare better in old age than people who do not. So, we see lots and lots of variability, and to scientists, variability speaks against inevitability. Variability in aging means that it is not aging per se that is the culprit, but rather something about the way that we are aging.

It is time now for a profound change to culture. We have never needed to invest in science and technology more than we need to invest today. And the really good news, as you heard from Richard Hodes and from Michael Harsh, is that the potentials of science and technology are truly breathtaking. We need to rise to the challenges of aging populations. We need to find cures for diseases like Alzheimer's disease and arthritis. We need to find ways to make technology available to help people monitor their own quality of life and their own health state, and to allow people, even those with significant chronic diseases, to live independently.

If we invest in improving the lives of people 50 and older as much as our ancestors did 100 years ago to improving the lives of the youngest among us, then older societies can be better societies than we have ever known. In order to do so, we will need to do, as Jack Rowe argues so forcefully, shift our unis of analysis from only focusing on the elderly to focusing on society. Aging societies will fail or succeed largely based on the new meanings that we as-

cribe to both healthy and unhealthy lives.

As John Rother said this afternoon, we need to consider and really dwell on the possibilities for major lifelong social investments, ones as large as the concept of public education a century ago. And if we do, then we can transform societies in ways that will make aging societies better societies. And to fail to do so would represent a real tragic squandering of this truly remarkable gift of life.

Thank you. [Applause.]

Ms. Whitman. We chose to end with Laura because her predictions of a long, bright future ahead, and the challenges we face in a positive way, are really the lens at which I think the committee views our future.

I have appreciated all of the speakers today. You have given me a long agenda of items that the committee needs to address in our last year of Chairman Kohl's leadership, and also into the future.

I am going to take the option of not keeping you here for questions because many people are headed over to the Gerontological Society of America's reception that is being held in 325 Russell, and you will probably be able to ask questions of the individuals, if the audience does not mind, at that opportunity.

But, again, I thank you all, especially the audience members, former staffers whose shoes that we all hope to fill every day and aspire to contribute to the way that they have in the past. I thank you all to my speakers today; each and every one of you was terrific. And I thank you to the vision of the future that we are all hoping to create.

So, thank you very much.

[Applause.]

[Whereupon, at 4:45 p.m., the hearing was adjourned.]

APPENDIX

Standing for, Not Standing by:

The Senate Special Committee on Aging at 50

Robert B. Hudson

Professor of Social Policy

Boston University

Statement prepared for:

"Aging in America: Future Challenges, Promise, and Potential"

Forum Convened by the Senate Special Committee on Aging

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1

Standing for, Not Standing by:

The Senate Special Committee on Aging at 50

Robert B. Hudson

The Senate Special Committee on Aging celebrates its 50th anniversary this year. The Committee, first chaired by a towering figure in aging policy, Sen. Pat McNamara of Michigan, has had 14 chairmen and 12 staff directors, has held more than 2,000 national and regional hearings, and has had its hand in—if not officially on—numerous pieces of legislation that have proven critical to the well-being of older Americans. An examination of the Committee's standing and initiatives over the years yields three overlapping stages that may be said to have marked the Committee's existence to this point: Committee creation and maintenance, placing older Americans' needs on the nation's legislative agenda, and overseeing the workings of programs established in their interest.

Committee Origins and Maintenance

The current Senate Special Committee on Aging grew out of the Subcommittee on Problems of the Aged and Aging of the Senate Committee on Labor and Public Welfare, itself established in 1959. As recounted in former Special Committee staff director William Oriol's (1985) history of the Committee, pressures were building in Congress to address problems facing older people, especially the twin issues of low incomes and high health care costs. Initially, it was not clear how much such a nonlegislative committee might be able to accomplish given that it could not receive bills or report them to the Senate floor. Yet, turning potential weakness into strength, the Committee by design and in practice was able to address aging-related concerns that

crossed the jurisdictional boundaries of several standing committees. In McNamara's words, "[T]he problems of older persons are not contained within a narrow subject matter compass but cut across most areas of governmental and legislative responsibility (quoted in Oriol, 2009, p. 3).

The transformation of the Subcommittee of the Aged and Aging into the Special Committee on Aging was one result of a broad advocacy movement at the turn of the 1960s, revolving around the nomination and election of John F. Kennedy as president and the activities on the part of organized labor and other groups to press forward with the Medicare legislative agenda (J. Rother, personal communication, Nov. 9, 2011). Sydney Spector, who chaired the Subcommittee, later noted that there was no preconceived notion that health care would dominate its early agenda, but the issue generated enormous volumes of testimony from around the United States and transformed the Forand Bill (the initial Medicare proposal) into what the *Baltimore Sun* editorialized as the "foremost issue of the Presidential campaign" (quoted in Sundquist, 1968, p. 297). At one hearing in 1961, before the newly constituted Special Committee on Aging, an older couple, living on \$1,500 annually, asked what would happen if one of them became seriously ill. The husband testified, "I will have to seek some charity institution and . . . pronounce to the whole world that I am a pauper, a beggar" (Sundquist, p. 288).

The Committee under its early leadership set its sights broadly. It did so first by identifying problems and soliciting input both from members of the public and individuals expert on the issue in question. Testimony from vulnerable elders gave unequivocal voice to the straits in which many found themselves. Among other experts, Wilbur Cohen published a series of working papers for the Labor and Public Welfare Subcommittee on Health and Income Issues, and soon after comments and support for legislative action came in from experts and the public

alike. Spector understood that the Committee had no legislative power, but he realized the power of the printing press. He commissioned papers, such as those by Wilbur Cohen, and made a record of everything he could. With time, "government agencies would look on requests for testimony as a virtual command, and people from the field were eager to come forward" (E. Cohen, personal communication, Nov. 7, 2011).

The substantive concerns raised by hearings and publications, though far-ranging, had a common thread: They recognized that widespread and profound problems faced a growing older population and that the nation overall and the government in particular were not paying sufficient attention to them. From today's vantage point, it seems hard to believe that getting aging on the agenda was a tall order, but that was clearly the case. The Committee developed an especially propitious vehicle to make these needs known: its annual publication, *Developments in Aging*, first published in 1963 and put out until the mid-1980s. Beyond enumerating particular concerns, the title of the opening chapter in the early volumes (mostly written by Herman Brotman, and referring to the proportion of older Americans in the population) were "1-in-11," and then "1-in-10," and finally "1-in-9," by which time the point had been made that the United States was indeed growing older. These annual editions came to contain reams of information about the lack of well-being of older people across a range of dimensions, and they were widely distributed. By the late 1960s, *Developments in Aging* was being published in a two-volume format, with the second volume summarizing actions that a wide range of executive branch agencies had taken with regard to aging issues during the preceding year (Vinyard, n.d.).

At the same time as data and testimony were being marshaled about the growing needs of older Americans, a stark realization grew that little governmental action had been taken on their behalf in nearly 30 years. Medical Assistance for the Aged (MAA) emerged in 1950, but was

still a so-called welfare program; the provision of disability insurance became law in 1956 for workers over 50 but had limited effect in its early years. Yet as *Developments in Aging* summarized in its initial edition, a gamut of unattended needs existed: adequate income, access to medical care, decent housing, older worker opportunities, and research on aging. From their beginnings, both the Subcommittee and the Committee publicized these concerns through hearings—field hearings, in particular—and through expert testimony in which stakeholders presented proposals to be incorporated into legislative initiatives. By the mid-1960s, what Henry Pratt (1976) referred to as the dismal years of aging advocacy and policy (1946–1964) had ended, and older people were on the nation's agenda.

Legislative Successes

In the period that followed, with the Special Committee on Aging thoroughly involved, an unprecedented spate of legislation on behalf of older Americans became law. Medicare, of course, led the parade, with older people ultimately settled on as program beneficiaries in the wake of 30 years of Democratic efforts to enact a broader national health insurance proposal. The Aging Committee's hearings and publications provided a drumbeat of attention and support, helping to keep the original King-Anderson proposal on the legislative burner. In Oriol's (2009) estimation, "[T]he new Special Committee on Aging was critically important in the long struggle leading to enactment of Medicare" (p. 8). In particular, the Committee pointed out the shortcomings of the MAA (later expanded into the Kerr-Mills program), noting that (a) a few states received the lion's share of benefits (Marmor, 1970), (b) fewer than 1 percent of elders had received any assistance through Kerr-Mills by 1963 (Quadagno, 2005), (c) states were shifting associated costs to the federal government rather than enrolling medically indigent individuals,

and—as the previous quote makes clear—(d) the image of welfare medicine continued (Oriol, 1985). On a second front, the Committee parried contentions that the private health insurance market could provide for older Americans, arguing that half of older Americans had no such insurance, that "great strides" were not being made in the private sector to extend such benefits—commercial insurance benefits covered only roughly half of what hospitals were billing, and companies were able to reduce benefits through a complex array of deductibles, copayments, and lifetime benefit limits (Oriol, 1985, pp. 53–55).

The Special Committee weighed in on the remainder of major aging-related legislative enactments of the 1965–1974 decade. Medicaid's enactment in 1965 continued and broadened much of the Kerr-Mills program and, with the revelation of fraud and abuse within the nursing home industry, soon became an oversight target of the Committee. The Older Americans Act passed in the same year with, as Binstock (1972) observed, "considerable support from the members and staff of the Special Committee on Aging" (p. 272). The Act brought together the growing number of state commissions and boards, some of which had been providing social services to elders since the early 1950s. With the ongoing support of the Special Committee on Aging, the Act grew exponentially over its initial 15 years as more than 600 Area Agencies on Aging joined 57 State Units on Aging, and budgetary outlays increased from \$7 million in 1966 to nearly \$1 billion by 1980.

The Committee was also active in pressing for elevation of the Administration on Aging (AoA) within the Department of Health and Human Services (Health, Education, and Welfare until 1977). The battle between members of the Committee and a series of administrations went on literally for decades. The Johnson administration had placed the AoA in a new Social and Rehabilitation Service, which aging advocates essentially found as insulting the dignity of senior

citizens (Hudson, 1973). A classic exchange took place in 1972, when Assistant Secretary of Health, Education, and Welfare Steven Kurzman testified against placing the AoA within the HEW Secretary's Office:

I would oppose [creating an Assistant Secretary of HEW for Aging], and I would like to make sure that this Committee, when they came to the question, had fully in view the reasons why I would oppose it. These have to do with the way in which HEW is structured. As the name implies, it is organized along essentially functional lines, around health, education, and welfare. Now, the elderly have needs and problems under each of these functional headings, very obviously. So do children, and for that matter, so does everybody in between. We could have had a Federal Department of the Young, the Middle-Aged, and the Elderly. . . . Now, when you approach the question of who should be for what function as Assistant Secretary of HEW, you start with this basic subdivision along functional lines. . . . So, the creation of a position for an Assistant Secretary for the Elderly would represent a significant departure from the overall structure, and would lead as well to the question of what other group concerns should be made the subject of an office of Assistant Secretary.

The Aging Committee clearly thought that the executive branch should have a cross-cutting, multi-jurisdictional entity, in some ways a mirror image of itself. In 1973, the Committee succeeded in moving the Commissioner of Aging into the Secretary's Office, only to have the Secretary cleverly parry the move: He created the Office of Human Development Services within his Office that included five social welfare constituencies and bureaus, including the

AoA. In the early 1990s, aging advocates and the Special Committee finally prevailed, with creation of an Assistant Secretary for Aging located in the Secretary's Office.

Income security has been a central concern of the Committee since its beginning. These efforts came to a head in the late 1960s, with Committee Chairman Harrison Williams pronouncing in *Developments in Aging* in 1969, "Never before has such intensive congressional attention been paid to what might be called the personal economics of the elderly in the nation" (Oriol, 1985, p. 104). A major working paper authored principally by Professors Juanita Kreps from Duke and James Schulz from Brandeis served as the basis for further activity. The paper was notable for simultaneously addressing both savings and spending patterns and both public and private pensions. These efforts, featuring future Chairman Frank Church in addition to Chairman Williams, contributed to extraordinary advances in income maintenance for older adults during the ensuring years: a 20 percent increase in Social Security benefits, cost-of-living adjustments to address inflation, the federalization of adult public assistance titles dating to the New Deal in the form of the Supplemental Security Income program, and placing private pension protection centrally on the legislative agenda.

The Committee's ongoing concerns about the plight of older workers (including those then considered in late middle age—that is, 40 and older) saw it pressing Office of Economic Opportunity Director Sargent Shriver and other officials charged with implementing the Great Society's Economic Opportunity Act to incorporate older as well as younger workers into its mission. Operation Mainstream on behalf of older adults was developed in 1967 partially as a result of these efforts; soon thereafter, Chairman Williams and other members introduced the Middle-Aged and Older Workers Employment Act, only to see it vetoed by President Nixon. What has since emerged as the Senior Community Service Employment Program was later

enacted as part of the Older Americans Act, today designated as Title V and continuing to be administered through the Department of Labor (Gonyea & Hudson, 2011).

Committee members were also on board on the matter of age-based discrimination in employment, with Committee members McNamara, Clark, and Randolph introducing a bill in 1961 to outlaw such activity. Passage of the Age Discrimination in Employment Act finally occurred in 1967 and saw two major rounds of amendments in subsequent decades. Finally, and as happened repeatedly over the years, joint work between the Special Committee on Aging and the Finance Committee led to enactment of the Employee Retirement Income Security Act in 1974, with the legislation being introduced by Senators Jacob Javits and Harrison Williams. Through these and other efforts, the Special Committee drew both attention and resources to elder needs, and by the mid-1970s had established itself as a catalyst in moving aging-based legislative items forward.

In light of these successes, it seems remarkable to recall that a serious move was made during 1977 to eliminate the Senate Special Committee on Aging altogether. As happens periodically in both legislative and executive branches, a reorganization plan was introduced whereby, in the name of administrative efficiency, the Aging Committee and programs for older veterans—administered by the Committee on Veterans Affairs—would be placed in the new Committee on Human Resources, which would expand the scope of the existing Committee on Labor and Public Welfare. Advocates for the aging and a host of Senators bridled at this attempt, arguing that the needs of elders, being both broad and encompassing, required a venue where their multiple and interrelated concerns could be addressed. In formal response, Sen. Church offered an amendment whereby the Committee's membership would be reduced from 16 to nine

but, as well, the Committee would be given permanent status. The Church amendment passed by a vote of 90 in favor, four opposing, and four abstentions (Oriol, 1985).

Although its existence was secured, an economic contraction beginning in the mid-1970s and a new administration taking office in 1981 determined to consolidate and trim social programs created new challenges for the Committee. These developments did not eliminate Committee initiatives; they just lowered the odds of legislative success. Thus, in the late 1980s, Sen. John Heinz succeeded momentarily in adding a prescription drug benefit to the ill-fated Medicare Catastrophic Coverage Act, and Sen. John Breaux gave visibility to the idea of public long-term care insurance and to expanded adult protective services legislation. As was the case with other Committee initiatives, these proposals incubated over several years, with prescription drug legislation being added to Medicare through the Part D program in 2003, the CLASS Act at least briefly seeing the light of day in 2009 (though its implementation is currently suspended), and the Elder Justice Act becoming law in 2010. During his chairmanship in 1987–1988, Chairman John Melcher introduced language to the Older Americans Act to develop an experimental cost-of-living index to track inflation among the population ages 62 and older. This adjustment would have increased benefit levels for that population, in contrast to a proposal then (as now) under consideration that would have made a downward adjustment.

The present Committee under the chairmanship of Sen. Herb Kohl has pressed for new initiatives across a range of domains, notably patient protection provisions included in the Affordable Care Act (ACA): nursing home transparency, physician gift disclosure, Medicare quality incentives, and patient safety and abuse prevention for residents in long-term care settings. The Committee has also renewed a historical concern with promoting community-based care for elders, pressing for inclusion in the ACA innovative provisions promoting consumer

choice. Due to the efforts of the Committee, again working in conjunction with the Finance Committee, the ACA features new home and community-based care authorities, most notably, the State Balancing Incentive Payments Program. The recent suspension of CLASS Act implementation focuses on another Committee initiative in long-term care, the Confidence in Long-Term Care Insurance Act, introduced by Sen. Kohl in 2009, designed to expand and monitor the insurance market, in which more than 7 million policies are now in force. Other legislative initiatives center on providing employer incentives and training to hire and retain older workers and refinancing provisions for existing Section 202 housing developments.

Oversight Activities

Much as the field of policy studies came to realize in the late 1960s that policy implementation (i.e., what happens after a bill becomes a law) was critically important, so did the Special Committee on Aging. It began turning attention to monitoring and how the Executive Branch was administering various programs affecting older Americans, many of which the Committee had helped give life to.

One of the stellar chapters in the Committee's history is represented by the hearings, briefings, and media events undertaken beginning in the mid-1960s that centered on the quality of care and abuse in U.S. nursing homes and the larger question of the place of long-term care in the country's overall approach to health care. Hearings held during Chairman Smathers' years, "Conditions and Problems in the Nation's Nursing Homes," continued the Committee's ongoing concern with Medicaid (and its predecessor programs) but also expanded into long-term care and health care concerns more broadly. These efforts were renewed under Chairman Frank Church in

the 1970s, through a series of hearings and events that invited and attracted widespread media attention.

The Aging Committee's Subcommittee on Long-Term Care, under the chairmanship of Sen. Frank Moss, conducted 30 hearings on nursing home problems between 1969 and 1976.

The hearings were the basis of a twelve-volume report titled *Nursing Home Care in the United States: Failure in Public Policy*. The titles of the first nine papers of the series capture the range of the Subcommittee's concerns (U.S. Senate Special Committee on Aging, 1977, pp. 44–47):

- The Litany of Nursing Home Abuses
- Drugs in Nursing Homes: Misuse, High Costs, and Kickbacks
- · Doctors in Nursing Homes: The Shunned Responsibility
- Nurses in Nursing Homes: The Heavy Burden (The Reliance on Untrained and Unlicensed Personnel)
- The Continuing Chronicle of Nursing Home Fires
- What Can Be Done in Nursing Homes: Positive Aspects in Long-Term Care
- The Role of Nursing Homes in Caring for Discharged Mental Patients
- · Access to Nursing Homes by U.S. Minorities
- Profits and the Nursing Home: Incentives in Favor of Poor Care

In their later account of the workings of the Committee under Chairman Heinz in the 1980s, former staff directors Larry Atkins, Steve McConnell, and John Rother (2005) referred to the glory days of the Committee under Frank Church in exposing nursing home abuses.

The Committee also took great interest in the early workings of the Older Americans Act and of the AoA, which was charged with its implementation. Staffing and program development was so modest in the early years that the Committee commissioned a report by Harold Sheppard with the blunt title, *The Administration on Aging—Or a Successor?* (1971). Commenting on the Report, Chairman Church made equally blunt comments: "However, as long as AoA's mission continues to remain ill-fated and ill-defined, there is a danger of two perilous 'isms' in gerontology: 'standpatism' and 'do-nothingism' And make no mistake about it, more adequate funding levels—welcome as they may be—will not overcome these twin ills." (quoted in Hudson, 1973, p. 19).

This oversight role is one that the Committee has continued to play in the ensuing years. Chairman Lawton Chiles undertook investigations of the nascent assisted living industry, concerned that facilities were being developed as what he called nursing homes light, so as to bypass state nursing home regulations. Sen. Heinz assumed the chairmanship in 1981, and continued these investigations into quality of care in the long-term care sector (B. Lipscomb, personal communication, Nov. 11, 2011). The collaboration between Sen. Heinz and Sen. Chiles went beyond particular issues. As Atkins, Rother, and McConnell (2005) recounted, in assuming the chairmanship, Heinz

offered a fair split in the budget and staffing to the Democrats and gained an ally in former Chairman and now ranking member Lawton Chiles from Florida. At a time when Senate committees were being asked to cut at least 10% from the previous Democratic budgets, Heinz and Chiles went to the Rules Committee with a request for a 50% increased, and got it."

As John Rother (personal communication, Nov. 9, 2011) later indicated, an effective Chairman needs to be entrepreneurial in the issues he chooses to address and the staff he recruits to lead investigations into those issues; Sen. Heinz succeeded in both. With Republicans in the majority for the first time in the Committee's history, Heinz succeeded in reaching across the aisle, both in working with Democrats and in maintaining seasoned Democratic appointees on the professional staff.

During the early and mid-1980s, the Committee was actively involved in resisting efforts by President Reagan and Office of Management and Budget Director David Stockman to curtail Social Security benefits and eliminate the program's minimum benefit. The Senate's 1981 rejection of these proposals represented a major Committee success but was only one episode during a period where social program expansion was being supplanted by program cuts and consolidation (J. Rother, personal communication, Nov. 11, 2011). This new reality was seen during the following two years, when near-term and long-term financing issues faced the Social Security system and urgent action was required to address both the current and pending shortfalls. As a Republican Senator in the presence of a Republican president and as chair of the Special Committee, Heinz found himself in a pressured position. As such, he worked with members of the so-called Greenspan Commission to forge a compromise involving a mix of benefit cuts and tax increases, which comprised the major 1983 Social Security Amendments.

During this period, the Committee under Sen. Heinz was also actively involved in health care and disability issues. The Aging Committee worked closely with the Finance Committee in finalizing the methodology associated with the new DRG (diagnostic related groups) reimbursement protocol inserted into the Medicare Part A program in 1983. (Sen. Heinz is credited with coining the term *quicker and sicker* in reference to concerns that the new system might lead to inappropriate early hospital discharges of Medicare beneficiaries.) In yet another major initiative, the Committee addressed stringent new regulations the Social Security Administration was introducing into both the DI and the SSI programs. Recertification of individuals with disabilities was being denied on what often appeared to be specious grounds. To bring attention to the issue, the Committee teamed up with PBS's *Frontline* to publicize the new rules, with one Social Security Administration employee overheard to mumble "this is a setup" as the cameras rolled (Atkins, Rother, & McConnell, 2005, p. 9).

The Committee continued to emphasize oversight activities in the post-Heinz years. A compilation of hearings held by the Committee finds a broad array of both elders and experts speaking to questionable practices across a range of arenas. Brian Lindberg (2011), a former staffer and current contributor to GSA's *Gerontology News*, presents a long but nonetheless partial list of topics covered: Medicare, Medicaid, Older Americans Act, Social Security, medical research, geriatrics, pensions, budgetary issues, long-term care, nutrition, elder abuse, fraud and financial exploitation, and older-worker issues.

Under Chairman David Pryor, drug pricing and Medicare issues were prominently investigated. From 1989 through 1994, a series of hearings were held: "Prescription Drugs: Are We Getting Our Money's Worth?"; "Our Nation's Elderly: Hidden Victims of the Drug War?"; "The Effects of Escalating Drug Costs on the Elderly"; and "Pharmaceutical Marketplace

Reform: Is Competition the Right Prescription?" These hearings resonated to the point that the Committee was forced to add additional telephone lines to accommodate the volume of complaints that poured in about prescription drug pricing. In particular, the Committee pressed for Medicaid drug rebates from pharmaceutical companies. Medicare topics investigated during the period included Medigap premiums, quality assurance in Medicare HMOs, and fraud and abuse practices in the Medicare program.

Under a series of chairmen beginning in the mid-1990s, a renewed emphasis on fraud and abuse, especially in the world of long-term care, assumed center stage once again. Sen. William Cohen sought to bring long-term care concerns of older Americans to center stage, seeing it as having lived too long in the shadows of health policy. When he assumed the chairmanship in 1997, Sen. Charles Grassley made oversight of aging-related federal programs a major Committee concern. The Committee pressed the Health Care Financing Administration to more stringently investigate reported incidents of substandard nursing home care, and initiated requests to the Government Accountability Office to investigate quality of care in nursing homes, among home health care agencies, and within the newly emerging assisted living communities.

Sen. Grassley also cast a wide net around the widespread incidence of elder abuse, including predatory lending practices and the potential dangers inherent in living trusts. As was true with Sen. Heinz, Sen. Grassley's position on the Finance Committee afforded him an ability to move forward legislative items that were Aging Committee priorities (J. Rother, personal communication, Nov. 11, 2011). Sen. John Breaux, who worked closely with Sen. Grassley (both had the same chief investigator during their chairmanships,) actively took on the long-term care issue. The Committee generated a major report on long-term care and held 13 hearings on the

subject, many addressing the ongoing imbalance between institutionally based and community-based services. During his chairmanship, Sen. Larry Craig devoted considerable attention to guardianship issues and safeguards. Medicare and Medicaid issues were a major concern of Chairman Gordon Smith during his years as Committee chairman.

The oversight energies of the current Committee under Sen. Herb Kohl have been heavily directed toward the prescription drug industry, focusing on drug safety, effectiveness, and costs. Of a number of initiatives, much current attention is focused on the Prescription Drug Cost-Savings Act. The Act would promote faster introduction of generic drug equivalents, allow the Medicare program to negotiate directly with drug manufacturers, and require drug manufacturers to pay rebates to Medicare Part B drugs in a manner analogous to the longstanding drug rebate program under Medicaid, among other provisions.

Conclusion

The Senate Special Committee on Aging has lived through the tumultuous times that have marked a half-century of aging policy. From working initially to get aging issues on the political agenda, through helping usher in a decade's worth of major legislation, to riding herd on the programs, players, and dollars put into play—and to working to protect those hard-earned policy gains in today's contentious economic and political environment—the Committee has earned its keep. Today's older Americans and their parents owe a debt of gratitude to the Committee for what it has both accomplished and forestalled. Finally, and from a broader perspective, the Committee's successes belie the frequent criticisms made of supposed special interest or advocacy-based committees and agencies. In many ways, the Special Committee has served as something of a shadow committee to the legislative committees that would lend official

status to the Special Committee's work. The Committee, especially under its most active chairmen, could pick its battles, devote its resources, and mobilize its allies in timely and needed legislative directions . . . sort of a SWAT team for elders.

Robert B. Hudson, editor of Public Policy & Aging Report, is Professor of Social Policy, Boston University School of Social Work.

References

- Atkins, L., McConnell, S., & Rother, J. (2005). John Heinz: The Aging Committee years.

 Washington, DC: mimeo.
- Binstock, R. H. (1972). Interest-group liberalism and the politics of aging. *The Gerontologist, 12*, 265–280.
- Gonyea, J. G., & Hudson, R. B. (2011). Promoting employment and community service among low-income seniors: The successes and challenges of the Senior Community Service Employment program. *Public Policy & Aging Report*, 21(1), 40–47.
- Hudson, R. B. (1973, September). Client politics and federalism: The case of the Older Americans Act. Paper presented at the Annual Meeting of the American Political Science Association, New Orleans, LA.
- Kurzman, S. (1972, June 14). Testimony before the Senate Special Committee on Aging re S.3181, S. 3076, and S. 3391 to amend the Older Americans Act.
- Lindberg, B. (2011, April). Happy fiftieth to the Senate Special Committee on Aging. Gerontology News, pp. 4–5.
- Marmor, T. R. (1970). The politics of Medicare. Chicago: Aldine.

- Oriol, W. (1985). A history of the Senate Special Committee on Aging. Washington, DC: Mimeo.
- Oriol, W. (2009). Back to the future: Health reform and the birth of Medicare. Aging Today, 30(3), 3-4.
- Pratt, H. J. (1976). The gray lobby. Chicago: University of Chicago Press.
- Quadagno, J. (2005). One nation, uninsured. New York: Oxford University Press.
- Sundquist, J. L. (1968). *Politics and policy: The Eisenhower, Kennedy, and Johnson years*. Washington, DC: Brookings Institution.
- U.S. Senate Special Committee on Aging. (1977). Developments in aging. Washington, DC:United States Government Printing Office.
- Vinyard, D. (n.d.). The Senate Special Committee on Aging: The annual report. Detroit, MI: Mimeo.

Senate Special Committee on Aging 50th Anniversary
Statement by John Rother, President and CEO
National Coalition on Health Care
December 14, 2011

Mr. Chairman, I am John Rother, President and CEO of the National Coalition on Health Care. I was privileged to serve as staff director of this Committee from 1981 – 1984, so take special pride in its long history of accomplishments. I have been asked to speak briefly about the difference this Committee has made in the lives of older Americans over the past 50 years.

Fifty years ago the situation of Americans 65 and older was very different than today. Economic security in retirement was limited to a relatively small part of the population, health insurance was unavailable or unaffordable for most, and there were few social services or housing alternatives to support those who became frail or disabled. Most seniors in 1960 were dependent on family, neighbors, or charity when faced with adverse events. Many died prematurely due to poor social and physical living conditions or lack of good medical care.

The changes in these characteristics and more have been profound in 50 years – two generations – as the accompanying chart summarizes. The Committee's work has helped to brighten this picture substantially for most seniors today.

The Committee's early focus on healthcare and health insurance led to the enactment of Medicare, which has assured access to affordable care for seniors and the disabled, transformed the medical system, and made possible a more financially secure retirement for all Americans. The Committee's investigations into pharmaceutical pricing and marketing led to the adoption of a drug benefit in Medicare, Part D, in 2003, and to the recent expansion of the drug benefit in the Affordable Care Act. As a result, millions of seniors each year are able to benefit from costly prescription drugs without needing to make the financial choice

between medicine or other life necessities. The Committee's work also contributed to the adoption of hospice services within Medicare, which supports humane quality of life at the end of life.

More recently, the Committee contributed several consumer protection provisions to the Affordable Care Act, which will improve the functioning of healthcare and health insurance for the all Americans.

Perhaps no aspect of healthcare received more attention from the Committee over the years than problems in long-term care. The resulting measures to strengthen quality and protect residents in the growing nursing home industry have resulted in vast improvements for our most vulnerable seniors. The Committee's focus on post-DRG hospital "quicker and sicker" discharges led to improvements in post-acute care following a hospital stay. And the Committee's long campaign to strengthen home and community-based options for those needing help has resulting in much better and more satisfactory care arrangements for the majority of seniors no longer able to live completely independently. I might add that millions of family members benefitted from these arrangements as well because they no longer face total disruption when a parent or spouse becomes ill.

The Committee also led efforts to promote research in aging that resulted in the establishment of the National Institute on Aging at NIH, which is investing in development of cures for Alzheimer's and other diseases associated with the aging process.

The Committee also advocated for a strong Administration on Aging within the Executive branch, which has been key to leadership of the large network of senior services and supports administered under the Older Americans Act in communities throughout the country. These programs today support and make independent living possible for millions of seniors.

Housing programs have also benefited, particularly the section 202 Supportive Housing for the Elderly program that finances senior housing projects. The Committee has advocated for greater integration of services within public housing

and congregate housing facilities. Continuing Care retirement communities were the focus of important oversight, resulting in much fairer practices for this growing housing option. The Committee has been a major force in promoting "age friendly communities" and age and disability accommodating housing and transportation design.

A wide range of consumer protections are now in place thanks to the Committee's work. Consumer disclosure and prohibited practices have greatly improved such products as reverse equity mortgages, living trusts, and guardianship arrangements. The Committee has often focused on elder abuse issues, and through public exposure as well as legislation has greatly reduced these problems.

The Committee has long championed productive aging – promoting employment and volunteer service options for those who want or need to work beyond traditional retirement ages. Older workers today may still face some forms of age discrimination in employment, but on a much reduced scale. Legal remedies for discrimination have helped change employment practices, enabling millions to continue to live productive lives, and more older men and women now want to continue working beyond age 65. Many lower-income seniors have also been helped by inclusion in various jobs programs, particularly Title V, that would not exist but for the Committee's advocacy.

Finally, income security in retirement is much stronger today due to the Committee's long focus on this area. The Committee contributed directly to Social Security solvency provisions in the 1983 amendments, and to the enactment of ERISA before that. Just as importantly, the Committee helped defeat radical benefit cuts in Social Security proposed in 1981 and again in 2004. And the Committee's oversight of problems in disability insurance provoked improvements in the speed and fairness of benefit decisions.

The Senate Special Committee on Aging continues to play a vital role in improving the lives of older Americans. Its work over the past 50 years has had a major impact in the lives of most seniors and their families. The Chairs and Ranking Members, in particular, have used their positions on legislative committees such

as Finance, HELP, Budget and Appropriations to achieve legislative changes. While major improvements have been accomplished, there are still serious problems that need to be addressed.

The Committee continues to be the only place in the legislative branch where the situation of the "whole person" can be reviewed, where in-depth investigations can be launched, and where the Members and staff have the time to delve into issues that other committees don't have time to consider. Looking forward, the Committee faces the twin challenges of the retirement of the large "baby boom" generation and the ever increasing cost of healthcare. The Committee's success in addressing these challenges will therefore be critical to the quality of life for all Americans for generations to come.



Testimony of

Kathy Greenlee

Assistant Secretary for Aging

U.S. Department of Health and Human Services

Before the

Senate Special Committee on Aging

Forum on

Aging in America: Future Challenges, Promise and Potential

December 14, 2011

Thank you very much, Senator Kohl, Senator Grassley and members of the Special Committee on Aging. I am greatly honored to have been invited to participate in this forum which celebrates 50 years of accomplishments and contributions of the Special Committee on Aging. Throughout the Committee's existence, it has operated with strong bipartisan leadership. The Committee has consistently focused on major issues of importance to older Americans and their families – often shining a light for the first time on matters affecting the most vulnerable of our citizens and effectively gathering critical information, seeking effective strategies and proposing comprehensive solutions for addressing those concerns.

Fifty years ago, 1961 was a very important year in terms of beginning to set in motion a number of major events and milestones that have begun to reshape how our nation treats older Americans and persons with disabilities. That year not only saw the establishment of the Senate Special Committee on Aging, but also the convening of the first White House Conference on Aging. In talking about the significance of the White House Conference on Aging, Dr. Arthur S. Flemming, then-Secretary of Health, Education and Welfare said, "We have not yet adjusted our sense of values, our social and cultural ways of life, our public and private programs, to accommodate the concerns of this vast legion of old and aging people. For far too many people, old age means inadequate income, poor or marginal health, improper housing, isolation from family and friends, the discouragement of being shunted aside from the mainstream of life."

¹ U.S. Department of Health, Education and Welfare, "Special Report: The White House Conference on Aging," January 9-12, 1961, Washington, D.C.; U.S. Government Printing Office.

Though we have made significant progress, fifty years later we are still working to address the needs of seniors as articulated by Dr. Flemming. I have been asked to talk about three main questions:

- How far have we come from over the past five decades and where are we today?
- Where will we likely be in the next two decades?
- What two or three things, if changed, would put us onto a better path?

My remarks today will focus on those questions as they relate to Dr. Flemming's powerful words.

How far we have come from over the past five decades and where we are today?

Over the past fifty years there have been many efforts to reduce isolation, maintain dignity, and increase choices for older Americans and persons with intellectual and developmental disabilities, physical disabilities, and mental health needs. These efforts have all shared a common vision of providing alternatives to institutional care that are person-centered, consumer-driven and support individuals in their home. It has taken the shared responsibility and participation of advocates at the local, State and Federal levels, as well as the bipartisan support of members of Congress and State legislatures, including the visionary leadership of Senators from both sides of the aisle on the Special Committee on Aging, to take important steps that have led to greater choice, independence and dignity for older individuals and persons with disabilities. I would

like to summarize just a few of the many key milestones that document how far we have come over the past five decades:

- 1965 Social Security Amendments of 1965 resulted in two key provisions impacting older Americans:
 - o Medicare
 - Designed to help provide protection for the aged against the cost of health care.
 - o Medicaid
 - Health coverage program for individuals and families with low income and limited resources.
- A third, complementary piece of legislation was the Older Americans Act (OAA)
 - Enacted to remove the economic/social barriers to independence for older Americans.
- 1987 OBRA 1987 Federal Nursing Home Reform Act
 - First major revision of the Federal standards for nursing home care since creation of Medicare and Medicaid; creates a set of national minimum standards of care and rights for people living in nursing facilities.
- 1990 Americans with Disabilities Act (ADA)
 - Goal is to provide persons with disabilities (physical or mental impairment) the maximum opportunity for community integration.
 - Prohibits discrimination on the basis of disability in employment, Federal, State and local government, public accommodations, commercial facilities, transportation, and telecommunications.
- 1999 Olmstead Decision
 - For persons with disabilities who would otherwise be at risk of institutionalization, States are required to provide community-based services if the placement is appropriate, the person does not oppose community care, and the placement is not a fundamental alteration of the State's program.
 - States have a legal obligation under the ADA to affirmatively remedy any discriminatory practices.
- 2010 Affordable Care Act (ACA)
 - Provisions to expand healthcare coverage and reduce healthcare cost growth while increasing quality.
 - Gives nearly all Medicare beneficiaries access to free preventive services.
 - Offers relief to seniors who reach the prescription drug coverage gap known as the "donut hole."
 - Supports care transitions.
 - o Extends the solvency of the Medicare Trust Fund.

These historic steps, in conjunction with Social Security, have helped to form a framework for reducing poverty, as well as establishing, supporting and protecting the rights, dignity and independence of millions of older Americans, individuals with disabilities and their family caregivers. In 1961, around one-third of the U.S. population aged 65 and over was living in poverty²; by 2009, the percentage of the 65 and over population living in poverty was 9.0.³

The Older Americans Act, supported by its nationwide aging network of 56 State and territorial units on aging, 629 area agencies on aging, 244 tribal organizations, two Native Hawaiian organizations, nearly 20,000 direct service providers, and hundreds of thousands of volunteers, has established a flexible and comprehensive infrastructure for providing low-cost home and community-based services. These person-centered services are designed to coordinate with the health care and long-term services and support systems funded by Medicare and Medicaid. Each year, nearly 11 million older Americans and 800,000 of their family caregivers are supported through the Older Americans Act's wide-ranging home and community-based system. As a complement to medical and health care systems, these services help prevent hospital readmissions, provide transport to doctors' appointments, and support some of life's most basic functions, such as assistance to elders in their homes by delivering or preparing meals, or

² Federal Interagency Forum on Aging-Related Statistics. Older Americans 2010: Key Indicators of Well-Being. Federal Interagency Forum on Aging-Related Statistics. Washington, DC: U.S. Government Printing Office. July 2010.

³ DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith, U.S. Census Bureau, Current Population Reports, P60-239, Income, Poverty, and Health Insurance Coverage in the United States: 2010, U.S. Government Printing Office, Washington, DC, 2011.

help with bathing. Because of the programs and legislative accomplishments that I have previously outlined, millions of Americans have lived more secure, healthier and more independent lives.

Where will we likely be in the next two decades?

Over the past fifty years we have taken a number of important steps in advancing toward Dr. Flemming's vision. Over the next twenty years, with the aging of the baby boom generation, we face many challenges and opportunities. In 1960, there were 16.2 million persons aged 65 and over, including 900,000 aged 85 and over.⁴ Today there are 40.2 million persons aged 65 and over, 5.8 million of whom are aged 85 and over.⁵ By the year 2030, it is projected that there will be 72.1 million persons aged 65 and over; 8.7 million will be aged 85 and over.⁶.

One of the benefits of better health and longevity of the baby boom generation is that many older Americans lead active lives and are contributing members of their communities. More than 23 percent of seniors engage in some form of volunteer activities⁷. Volunteer programs funded by the Administration on Aging and the Corporation for National and Community Service (CNCS) sometimes provide the only

⁴ Federal Interagency Forum on Aging-Related Statistics. "Older Americans 2010: Key Indicators of Well-Being." Washington, D.C.: U.S. Government Printing Office, July 2010.

⁵ Federal Interagency Forum on Aging-Related Statistics. "Older Americans 2010: Key Indicators of Well-Being." Washington, D.C.: U.S. Government Printing Office, July 2010.

⁶ Federal Interagency Forum on Aging-Related Statistics. "Older Americans 2010: Key Indicators of Well-Being." Washington, D.C.: U.S. Government Printing Office, July 2010.

⁷ Derived from the Census Bureau's Current Population Survey supplement, as presented at http://www.volunteeringinamerica.gov/special/Older-Adults-(age-65-and-over). Accessed December 13, 2011.

67

human contact a homebound senior might have in a given day. For instance, many seniors volunteer to deliver meals to homebound seniors. Those volunteers do more than deliver nutritious meals. They also provide a crucial reprieve from isolation, as well as reassurance. In some cases, volunteers help to detect when abuse or self-neglect are present. Other CNCS volunteer programs provide opportunities for seniors to mentor children.

It is important to note that the older population is not only growing, but it is becoming more diverse, with the numbers of all racial and ethnic groups projected to increase significantly over the next twenty years. Our diverse elders will need a support system that is flexible, with person-centered assistance that is effective and respects a wide range of traditions, cultures, histories, and individual characteristics and frailties.

As I interact with components of the national aging services networks in communities throughout the country, I have seen firsthand the advancement of new technologies, exciting innovations and an entrepreneurial spirit in helping to support families, older adults and persons with disabilities of all ages. It will be our families and caregivers that will remain the cornerstone of our support systems. Though we are a diverse Nation, I believe we share the same values:

- Person-centered approaches
- Respect, dignity, empowerment, inclusion
- Valuing self-determination
- Independence

6

I see the next twenty years of our growing aging population not fraught with overly burdensome challenges, as some attempt to portray it, but as ripe with new opportunities. We need to continue to work together and build upon what we have learned and achieved over the past 50 years in helping frail older Americans, persons with disabilities, and their family caregivers receive lower-cost, non-medical services and supports. These supports are critical for providing the means by which these individuals can remain out of institutions and live independently in their communities for as long as possible.

What two or three things, if changed, would put us onto a better path?

This is a challenging question because, as I mentioned, there are a number of important opportunities before us that we can and should try to seize in putting us on a better path to fulfilling Dr. Flemming's vision.

One of these opportunities is prevention across the lifespan. The Older Americans Act, at its core, is about prevention - improving the social determinants of health. Additionally, thanks to the Affordable Care Act millions of Medicare beneficiaries are receiving free preventive services and getting cheaper prescription. Data show that 2.65 million people with Medicare have saved more than \$1.5 billion on their prescriptions – averaging about \$569 per person. And, as of the end of November, more than 24.2 million people with Medicare have taken advantage of at least one free preventive benefit – including the new Annual Wellness Visit – made possible by the Affordable Care Act. These important preventive services and wellness visits, which can help lower costs, prevent illness, and save lives. If we can continue to encourage, support and establish more evidence-based

prevention strategies that are applied to older adults and persons with disabilities, it will help address the epidemic of chronic diseases, and lower the health care costs associated with them. The Affordable Care Act is taking steps to implement a number of these strategies. We need to work to ensure that older adults and all adults with disabilities are actively engaged in disease prevention and health promotion efforts. Positive and effective collaborations between the aging, disability and public health networks are worth the investment and should continue to develop and expand.

Another important opportunity is to continue a holistic approach to health care through the integration of acute care, long-term care and community-based services. The beauty of the Older Americans Act lies in its holistic approach to care and services by focusing on the person's needs and preferences. As an example of this holistic approach, AoA and the national aging services network are working with the Centers for Medicare & Medicaid Services, hospitals, accountable care organizations, and a number of other partners to better manage the transition from when an individual leaves a hospital for home or another care setting. The approach is to ensure that Medicare patients have the information, discharge plan, and individualized community services necessary to support them at home or in their new setting. Nearly one in five Medicare patients discharged from the hospital is readmitted within 30 days – that is approximately 2.6 million seniors at a cost of over \$26 billion every year⁸. By investing in this strategy we can reduce health care expenditures, better address chronic diseases, improve medication management, and enhance the quality of life for millions of Americans.

⁸ Centers for Medicare & Medicaid Services. http://www.healthcare.gov/compare/partnership-for-patients/index.html

A third opportunity is that we need to continue to invest in community and personcentered services that can meet the needs of an increasingly diverse population. A key
component of this strategy is supporting the concept of aging in place so that older
persons and persons with disabilities of all ages can remain at home in the community
with the appropriate supports and services for as long as possible. Included in this
approach will be coordinating, with family caregivers and others, assistance that is
tailored to individual needs, such as transportation, affordable housing, and a range of
supportive services.

One example of building on this concept is a collaboration between the Department of Housing and Urban Development (HUD) and the Department of Health and Human Services to better connect aging and disability services networks with affordable housing communities. A goal with this effort is to implement a demonstration of promising models of coordinated health and long-term supports and services with HUD-assisted housing to explore the capacity of this combined approach to facilitate aging in place.

Another example of this approach is collaboration between the Department of Veterans Affairs, which has often provided assistance through institutional supports, and the national aging services network so that more person-centered community-based assistance can be provided to veterans of all ages who need long-term care in their homes, including recent veterans who have been wounded in battle, and aging veterans with chronic conditions.

And, as part of this effort, the Department of Health and Human Services' Office for Civil Rights and the Justice Department's Civil Rights Division are vigorously enforcing the Americans with Disabilities Act's integration mandate to ensure that State and local governments are fulfilling their legal responsibilities to provide adequate community supports.

In closing, over the past fifty years we have instituted a number of important legislative milestones that have brought us closer to reaching Dr. Flemming's vision, but we still have much to do to reduce poverty and isolation, maintain dignity, and increase choices for older Americans and persons with disabilities. I believe that most Americans share common values now and for the future — a future where we continue to increase alternatives to institutional care that are person-centered, consumer-driven and support individuals in their homes. A future where we continue to test innovative ideas and implement the best evidence-based practices. I commend the Senate Special Committee on Aging for your 50-year history of working towards this vision, and we look forward to working with you, Chairman Kohl, and the continued leadership of this Committee, as we move forward in our efforts to fully realize Dr. Flemming's vision for older Americans and persons of all ages with disabilities. Thank you.



Forum

Senate Special Committee on Aging

"Aging in America: Future Challenges, Promise and Potential"

Statement of Richard J. Hodes, M.D.

Director, National Institute on Aging National Institutes of Health Department of Health and Human Services



For Release on Delivery Expected at 2:30 p.m. December 14, 2011 Richard J. Hodes, M.D. Director, National Institute on Aging National Institutes of Health Department of Health and Human Services

Senator Kohl, Senator Grassley and members of the Special Committee on Aging, thank you for the invitation to participate in today's forum honoring the 50th anniversary of the Senate Special Committee on Aging. Since its establishment in 1974, the National Institute on Aging (NIA) has worked closely with the Committee to increase understanding of the aging process and improve the lives of older Americans. Together, we have marked many changes in the aging landscape of both the nation and the world.

Where are we today and how far have we come in the last five decades?

Newly-released data from the 2010 U.S. Census show that there are now over 40 million Americans ages 65 and older – an increase of over 5 million since 2000 and over 23 million since the founding of the Senate Special Committee on Aging. Looking ahead, these numbers will continue to increase even more dramatically as the post-World War II Baby Boom moves into retirement. This trend reflects similar changes occurring around the world; in fact, for the first time in world history, the number of people age 65 and older will surpass the global population of children under age five. The number of "oldest old" – those 85 and older – is growing dramatically. According to a report released last month from the U.S. Census Bureau, commissioned by the National Institute on Aging, in 2010, there were 1.9 million people aged 90 and older; by 2050, the ranks of people 90 and older may reach 9 million. Findings from the report suggest that, given the rapid growth of this segment of the population, the designation of oldest-old should be changed from 85 to 90 years. In the latter part of the last century, there were signs that we were not only living longer, but healthier. In the U.S., amid the aging of the population, disability rates for men and women ages 65 and older have actually declined significantly over the past several decades.²

These gains in longevity and health are threatened, however, by increasingly sedentary lifestyles and rising obesity, which could slow or even reverse the progress we have made. Today, NIH-supported researchers are working to identify interventions to continue the disability decline. For example, NIH-funded clinical trials have demonstrated that treating hypertension in older adults can significantly reduce the risk for stroke, heart attack, and congestive heart failure. And, in the groundbreaking Diabetes Prevention Program clinical trial, investigators found that dietary modification and exercise were actually more effective than a blood sugar lowering medication,

² Manton, KG, et al. Change in chronic disability from 1982 to 2004/2005 as measured by long-term changes in function and health in the U.S. elderly population. <u>PNAS</u> 103(48): 18374-18379, 2006.

¹He, W. and M.N. Muenchrath. U.S. Census Bureau, American Community Survey Reports, ACS-17, 90+ in the United States: 2006–2008, U.S. Government Printing Office, Washington, DC, 2011.

Metformin, in preventing type 2 diabetes in older – but not younger – individuals.³ Outcome studies are currently being conducted to determine if these lifestyle interventions will reduce the risk for diabetic neuropathy, retinopathy and other complications resulting from type 2 diabetes. If these relatively straightforward interventions are widely adopted and further benefits identified, the effect on the health of the older population could be profound.

Where do we project we will be in the next two decades?

During the 20th century, life expectancy at birth in the United States improved from 47 years in 1900 to 77 years in 2000 – 30 years in one century. Unfortunately, as noted previously, suboptimal lifestyle choices could threaten lifespan and the decline in disability rates we have seen among older people. Already, current research shows that American women don't live as long as women in other high-income nations. Since 1980, the pace of gains in life expectancy of older U.S. women has slowed markedly compared to other industrialized countries, suggested to be largely due to tobacco use. ⁵

Other NIH research findings have supported evidence-based interventions that reduce caregiver stress and delay institutionalization of individuals with dementia and Alzheimer's disease, prevent falls, and identify high risk older drivers and provide them with techniques to reduce automobile accidents. These effective interventions are already being implemented by Department of Veterans Affairs, Administration on Aging, state motor vehicle departments and insurance companies and will help in going forward to improve the health and well-being of older Americans.

A crucial concern is the predicted increase in the number of older people with Alzheimer's disease, the risk for which rises exponentially with advancing age. Currently, it is estimated in various studies that some 2.4 to 5.1 million Americans have dementia, primarily Alzheimer's disease. The National Institute on Aging and the Centers for Disease Control and Prevention co-lead a new Healthy People 2020 topic area on Dementias, Including Alzheimer's Disease. The goal is to develop and track measures on national efforts to reduce the morbidity and costs associated with, and maintain or enhance the quality of life for, persons with dementia, including Alzheimer's disease.

Over the past decades, we have discovered some of the genetic clues to Alzheimer's disease. A model public-private partnership, the Alzheimer's Disease Neuroimaging Initiative, has led us

Oeppen, J & Vaupel, JW Broken limits to life expectancy. Science 296(5570): 1029-1031, 2002

³ Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin N Engl J Med 346:393-403, 2002.

⁴Fried, LP. Epidemiology of aging. <u>Epidemiologic Reviews</u>, 22(1), 95–106, 2000 cited in Crimmins, E et al, editors; Panel on Understanding Divergent Trends in Longevity in High-Income Countries; National Research Council, 2011.

⁶ Nichols, LO et al, Translation of a dementia caregiver support program in a health care system-REACH VA. Archives of Internal Medicine, 171(4): 353-359, 2011; Burgio, LD et al. Translating the REACH caregiver intervention for use by Area Agency on Aging personnel: the REACH Out program. The Gerontologist, 49(1): 103-116, 2009.

Plassman, BL. et al., Neuroepidemiology 29:125–132, 2007; Hebert, LE et al., Alzheimer Disease in the US Population Prevalence Estimates Using the 2000 Census. <u>Arch Neurol</u> 60:1119-1122, 2003.

into a new era of bioimaging technology. This new imaging technology allows us for the first time to "see" Alzheimer's disease plaques or protein accumulations in the living brain. It also provides a way, in a research setting, to track disease progression and monitor the effect of interventions. As interventions to prevent and treat age-related diseases and conditions are developed, effective dissemination of these interventions will be of critical importance.

What two or three things, if changed, would put us into a better path and what would the future hold?

Evidence-based treatments or interventions to prevent or slow the progression of Alzheimer's disease would dramatically impact the lives of individuals, families, and the U.S. health care system. The care of an individual with AD is financially and emotionally draining. Prevention or successful treatment of this disease would restore family relationships, prevent financial loss, extend work productivity, and enhance general well-being among older individuals.

We are particularly excited about our ability to explore aging processes with increasing clarity and precision at the most basic levels, which will lead us to important insights about aging and the basic biological processes of aging which contribute to multiple functional changes and diseases. For example, an international team of scientists led by NIA intramural researchers found that human aging is associated with a small number of focused changes in gene expression, mainly in individual genes associated with immune cell function. Many of the changes appeared to be involved with processing messenger ribonucleic acid (RNA) – the molecule that carries information from the nucleus of the cell into the cytoplasm, where it is instrumental in developing proteins. These findings suggest that disruption to messenger RNA processing may be a key underpinning of human aging processes. Recent studies in animal models have indicated that telomere dysfunction and accumulation of senescent, aging and dying cells underlie multiple diseases and conditions of aging. Innovative technologies in imaging and genetics are allowing exploration in ways we never imagined before. These advances will help us to open the door to new interventions capable of preventing or slowing the onset of multiple disorders rather than a single disease.

Working together, we have achieved many successes in increasing longevity during the Committee's first 50 years. There is, however, much work that remains. As we move forward, we look forward to continuing to work with you to make those additional years gained through research advances as healthy and independent as possible for older Americans.

⁸ Harries LW et al. Human aging is characterized by focused changes in gene expression and deregulation of alternative splicing. Aging Cell, 10: 868-878, 2011.

Jaskelioff, M et al. Telomerase reactivation reverses tissue degenerationin aged telomerase-deficient mice, Nature, Vol. 469(6): 102-107, 2011
 Baker, DJ et al. Clearance of p16^{tak4a}-positive senescent cells delays aging-associated disorders. Nature, Vol. 479, 7372: 232-236, 2011.

Senate Special Committee on Aging Forum

Aging in America: Future Challenges, Promise and Potential

December 14, 2011

G-50 Dirksen Senate Office Building

A POLICY AGENDA FOR ADAPTING TO THE AGING OF AMERICAN SOCIETY

John W Rowe M.D.

Professor of Health Policy & Management, Mailman School of Public Health, Columbia University

Chairman, MacArthur Foundation Network on an Aging Society

Policymakers and pundits are increasingly preoccupied with the negative economic impacts of Population aging and longer lives on health and pension entitlements. There is a broad, and critically important, policy agenda beyond these entitlements. Neglected are other critically important issues, such as intergenerational relations, socioeconomic disparities and inequalities, racial tensions, family members' evolving roles, the impact of technology, and the critical importance of adaptation of core societal institutions—including education, work and retirement, housing, transportation, and even city design. More important, almost no acknowledgment of the substantial positive aspects and potential of an aging society are occurring. The MacArthur Foundation Network on an Aging Society has deliberated on these issues over the past several years and identified the following areas as especially important for the attention of policy makers.

High-Priority Domains for Policy Analysis

Societal cohesion and community.

'Cohesion' is an apt descriptor of the issues related to intergenerational relations (or tensions) because it focuses on age integration rather than age segregation and addresses intergenerational transfers, attitudes, and multigenerational strategies, and changes in family structure. Alternatively, this concept can be viewed as the debate regarding the traditional social compact between the generations. Substantial empirical evidence shows strong support by middle-aged and younger Americans for older Americans and highlights its benefits, but as many observers have noted, the future may hold substantial stress on social cohesion as entitlement costs increase.

Included in this domain are issues related to socioeconomic class, as well as those stemming from race or ethnicity and gender. U.S. society shows a widening gap between the haves and the have nots—a gap often mediated by differences in educational attainment—and concern is growing that this gap will tear at the cohesive fabric of the United States. Also included in this area is the concept of a caring community, which requires substantial intergenerational support.

Family (evolution, supports, changing roles).

While closely related to social cohesion, this issue deserves special attention. Families are on the front line in adapting to an aging society because they directly experience changes in their structure and function resulting from increased longevity. Moreover, these changes are amplified by the growing diversity that results from increased stratification (social class differences) and diversity (ethnic differences due to immigration). The transition to adulthood has become five or more years later than it used to be placing parents of young adults in the challenging circumstance of helping their parents and even grandparents while they are launching their own children into independence.

Families with resources can manage this balancing act relatively well, but a growing number of families will be overly burdened trying to contend with these competing demands without proven ways of managing the demands of more complex, intergenerational family systems. Issues such as intrafamilial supports, housing, financial transfers, caregiving, and new roles are also important and provide a plethora of critical policy decisions that will have an important impact on changing U.S. families going forward.

Productivity (work and retirement, functional status and disability, technology, roles of older individuals in society).

The future roles of older individuals in society will have a dramatic impact on the likelihood that the United States will be productive, cohesive, and equitable. This set of issues can be conveniently divided between the work and retirement matters and the civic engagement matters, although they are closely interrelated as the likelihood of a retiree volunteering is very much influenced by whether that person volunteered while still in the workforce.

Approaches to encouraging people to volunteer while they are still in the workforce—via modifications in time and place of work, provision of opportunities for engaging in what individuals consider meaningful activities, and development of paid volunteerism strategies—may have a substantial positive effect on postretirement engagement. Such engagement can be beneficial not only for the community in general but also for retirees

Substantial opportunity exists for policy changes, as well as technological and other worksite modifications and educational interventions, which will not only make retention of older workers more attractive to employers but also will take advantage of the many strengths older workers offer. In this regard, it is important for policymakers to be aware of the lump of labor fallacy and the growing body of empirical evidence indicating that older individuals need not be moved out of the workforce to make room for younger workers.

In addition, policy should be informed by the most recent findings regarding trends in disability in populations of elders and near-elders. Much of the most recent work suggests that the severe disability rates (as measured by activities of daily living and instrumental activities of daily living scales) are now stable in older individuals, having halted their decades-long decline and that functional mobility impairments may be rising, for unknown reasons, in 50- to 65-year-olds. It will be important for policymakers to understand the impact of these trends on the likely adequacy of the future workforce as well as on the probable future demand for personal care services.

Health and health care.

Although it might seem that the continuing vociferous national debate regarding health care reform—including insurance reform and a variety of approaches to controlling costs and correcting the misalignment of provider and patient incentives—may have exhausted this topic, there are some important and often neglected areas of focus that are directly related to the demographic transformation. These include the development of a more geriatrically sophisticated health care system in which most providers (physicians, nurses, dentists, social workers, psychologists, pharmacists, and others) are competent in diagnosing and treating medical diseases and syndromes that are common in old age, as well as a strong reliance on new interdisciplinary models of care that are more effective in managing the health care problems of frail older individuals with multiple impairments.

In addition, a reorientation to a life-course preventive health model is needed to strengthen education regarding healthy lifestyles and to implement interventions in at-risk groups so that future older individuals will enter the Medicare program healthier and higher functioning than their predecessors. Finally, this country needs sustainable policies that deal humanely with care at the end of life.

Human capital development (lifelong education, skills training).

Although this area is very closely related to the aforementioned issues of productivity and engagement, it is important to highlight the issue of lifelong education and skills training. Some of the same societal forces that led to longer lives have also shortened the half-life of knowledge in science and technology. How can human capital be expanded at different points along the life course? Can the misalignment between education and work that is aggravated by increasing longevity be improved through a closer relationship between educational institutions and the workplace?

This is a broad, deep and critically important agenda. But if all we do as a nation is "fix" the financial aspects of entitlements and we neglect these other agenda issues, we will fail in our effort to yield a productive and equitable aging U.S. society.

U.S. Senate Special Committee on Aging Forum

December 14, 2011

Written Testimony for Mike Harsh, Vice President and Chief Technology Officer, GE Healthcare

Good afternoon. I'm Mike Harsh and I'm Vice President and Chief Technology Officer for GE Healthcare, the \$17 billion diagnostics, healthcare IT, and life sciences division of the General Electric Company that touches billions of lives every day around the world through life saving technologies. It's a pleasure to be here. Thank you to Senator Kohl and Senator Grassley for hosting this program and for your leadership in advancing American healthcare.

I have led R&D efforts at GE Healthcare in Milwaukee, Wisconsin, Senator Kohl's home state, and at the GE Global Research Center, the world's first corporate R&D center that was established in 1900 near Albany, New York.

In addition, I'm a member of the College of Fellows of the American Institute for Medical and Biological Engineering.

My 34 years of seeing healthcare innovation up close and its impact on patients, healthcare providers and society as a whole, provides the foundation for my comments today in this important forum on the challenges, promise, and potential of aging in America.

Where are we today and how far have we come in the last five decades?

The medical technology that today helps clinicians diagnose aging-related conditions faster and earlier has come a long way since it first was invented more than 100 years ago. Developments in IT, imaging and biology mean that we are moving from a medical paradigm of "see-and-treat disease" to one of "predict-and-prevent" that will dramatically change how physicians are able to address the increasingly complex needs of a globally aging population.

Surprising himself and changing medicine forever, Willhelm Roentgen, experimenting with cathode-ray tubes, noticed light passing through solid objects. This was a yet-to-be-defined phenomena. Hence he called it "X-ray," which he named after the mathematical symbol X for the unknown quantity. The year was 1896. You may have seen that iconic image from what's called the "first X-ray" – the recognizable image of his wife's hand, bones and large ring included.

Only one year later, inventor and GE founder Thomas Edison — along with fellow GE engineer and collaborator Elihu Thomson — increased the X-ray tube's power and made the fluoroscope the world's first commercially-available X-ray. For the first time, physicians could identify bone fractures and locate foreign objects in the body, providing an unprecedented

window into the human body and impacting the course of treatment for patients. A new field of medicine was born: radiology.

Over the next seven decades, medical imaging continued to evolve, with more advanced technology and clearer images. In 1932 Irving Langmuir won the Nobel Prize in Chemistry, specifically for his work in surface chemistry, an invention that led to early coronary artery imaging, again revolutionizing physicians' ability to see inside the body.

Several technological breakthroughs followed, such as the introduction of sonar-based ultrasound imaging; contrast agents; and a new diagnostic approach in women's health: mammography. Emile Gabby — known around the world as the father of mammography — brought about revolutionary X-ray tube design that made it possible to image soft tissue with unprecedented resolution, which led to the creation and commercialization of the first mammography unit signaling a breakthrough in women's healthcare.

In the early 1960s, we saw a superconducting magnet built that paved the way for modern magnetic resonance imaging (MRI) scanners, and a decade after that, GE's Ivar Giaever won the Nobel Prize in Physics for his work in discovering the properties of electrons in superconductors, work that spearheaded discoveries in MR.

In 1975 and 1976, diagnostic imaging took yet another leap forward as the first concepts were developed for full body computed tomography (CT) system that captured X-ray images in less than five seconds, 60 times faster than previous technologies.

In the 1980s, MRI enabled physicians to see organs in real-time, helping diagnose abnormalities and guide and monitor therapies. Innovators took existing technology and incorporated new technology to push the limits of performance and capabilities to even greater heights.

Today, X-ray images are produced with incredible speed and accuracy, having transformed from the grainy view of Roentgen's wife's hand to startlingly clear images of blood flow in the brain.

Ultrasound technology provides detailed images for patients old and young. Today some models even fit in a physician's pocket and deliver ultrasound at 1/100th of all the cost. In this day and age of talking cell phones with GPS units, we can still marvel at this technology that even can allow physicians to guide needle placement in IV lines in elderly patients, preventing the need for unnecessary placement procedures and creating more cost efficiency. Ultrasound also holds great potential for primary care and home care in the not too distant future in developed markets such as the U.S., enabling physicians to understand more about their patients in the home or clinic setting.

As the 21st century has dawned, governments are urging healthcare systems to be more productive and technology must align with the new realities of healthcare, providing patient, diagnostic and economic value. Access, quality and outcomes must drive the purpose of healthcare innovation.

Specifically, clinicians are demanding that technology reduce the overall cost burden of delivering care. Technology must help deliver higher quality, portable and efficient healthcare to an increased number of individuals, thus increasing access while lowering costs. For example, the ability to monitor the effectiveness of the clot-busting drug TPA on strokes can not only help monitor treatment but do it cost-effectively.

In addition, the wealth of clinical and patient data now afforded through electronic health records, electronic medical records, and clinical databases that house treatment protocols from expert clinicians means solutions must be developed to efficiently document, store and share that data safely and broadly through flexible and portable healthcare IT.

As diagnostics and therapies shift to the molecular level, molecular diagnostics will enable earlier, more precise disease detection and allow physicians to understand more about each individual patient. Life sciences capabilities will enable the next generation of bio-therapies, which increasingly will be delivered in tandem with diagnostics.

A few examples illustrate this opportunity. By combining the incredible power of imaging with molecular biology and pathology, we can help move treatment forward, particularly in cancer, to custom-tailored, individualized approaches, critical to improving outcomes and cost containment. We are moving from a healthcare paradigm where we "see and treat" existing disease, to the ability to detect disease at the molecular level before physical symptoms emerge, and to treat that disease at a much earlier stage when it is much less costly to address and more advantageous to the patient's quality of life.

In neurodegenerative disease, molecular agents for in-vivo and in-vitro testing will help determine the pathology behind early cognitive impairment, leading to earlier diagnoses and treatments in Alzheimer's and Parkinson's disease. With the advent of disease modifying drugs, this brings the opportunity to improve people's quality of life as they age. This has particular significance for a population that is living longer and increasingly at risk of memory loss and impairment from neurological conditions such as Alzheimer's and dementia.

Additionally, it's now possible to use cells in the process of drug discovery to speed the time to market and do toxicity tests in vitro on cells in a petri dish rather than on animals or humans in trials. Moreover, the ability to image a cell as a virus attacks to determine vectors for disease treatment is fast coming on the horizon.

It has been 116 years since that first grainy X-ray. With continued advances in medical imaging, molecular diagnostics and health IT, it can be a bright future in which physicians predict, detect, treat and manage disease earlier and more precisely than ever. We at GE share the commitment of everyone in this room to helping increase quality of life for patients and their families.

Where do you project we will be in the next two decades?

Looking ahead, and taking into account how technology has evolved in the last century, here are some possible directions medicine may take:

- Health monitoring will be a part of everyone's life. Just like the oil light on our car warns
 that the oil is low, we will have more "early warning" systems to alert us to changes in our
 bodies, at a stage when disease is typically easier to treat, even through lifestyle
 changes.
- Health care delivery will be broadened with remote robotic surgeries, people will visit
 portals for both diagnosis and treatment rather than doctors' offices, pharmacies or
 hospitals of today, providing connection with medical professionals regardless of
 location
- Regenerative medicine will become a reality and allow for new organs and body parts to be created
- Wireless technology and interconnectability will become more ubiquitous: Personal user interfaces (future smartphones or personal communications devices) direct sensory connections (machine/brain interface), and image-guided surgery will proliferate
- Understanding of biological systems will present a daunting informatics and computational challenge. These will be the rate limiting factor in the biomedical technology advances of the next 50 years.
- Reversing the course of disease, repairing tissue and reconstructing organs with cellbased therapies, tissue engineering, and artificial blood
- Patient empowerment and cost pressures will lead to decentralization of healthcare delivery. Technologies that enable healthcare delivery at the point of care and in the primary care setting will become increasingly important.
- Specialized centers will evolve for the delivery of more routine diagnostics and treatment.
 Hospitals will be devoted to the diagnosis and treatment of complex disorders by teams
 of physicians focused on outcomes. Medical education will have to be drastically altered
 to allow these changes in medical practice to take place.
- Access to very large databases and decision support tools running on advanced computing platforms will play a major role in evidence-based medicine and comparative medicine in the next 50 years
- Diagnosis and treatment will no longer be distinct in most situations. Most diagnostic modalities will become portals for delivering therapy at the point of diagnosis.
- Technology improvements will enable better care for the elderly, and the very old.
 Centenarians are the fastest growing demographic segment in many countries, and this will extend to many more countries over the next 50 years.
 - What two or three things, if changed, would put us onto a better path and what would the future hold?
- 1) Improve medical device market authorization processes

Effective regulation of medical devices is necessary for ensuring patient safety and protecting public health.

GE Healthcare believes that improving certain aspects of the medical device market authorization processes will enable the U.S. Food & Drug Administration (FDA) to successfully maintain the delicate balance between upholding patient safety and fostering the development of innovative medical devices that can significantly improve the lives of countless American seniors as well as help set standards globally.

Improvements such as better training and consistency among reviewers could help the timeliness of device clearance/approval, and protect public health.

Effective reforms that lead to a stronger more consistent FDA will go a long way in ensuring that America's seniors, as well as all Americans, have earlier access to cutting edge technology and that America continues to be a leader in healthcare technology innovation.

2) Move from "sick care" to truly preventive healthcare

The challenge we face is to transform our approach to health from one of disease treatment to one based on prevention, prediction and pre-symptomatic detection, with a long-term care paradigm focused on keeping patients out of hospitals and clinics and in the home care setting. This change, which is now technologically within reach, would save lives and reduce healthcare costs and enable seniors to lead longer, healthier lives contributing to society and the economy.

The World Health Organization has stated that 80% of heart disease, stroke and diabetes are preventable; 40% of cancers could be avoided by lifestyle changes. It also states that focusing on the common underlying risk factors common to most cardiovascular disease averted 14 million cardiovascular disease deaths between 1970 and 2000 in the United States. Prevention works.

Prevention, combined with prediction and early diagnosis enabled by the convergence of bioscience, diagnostics and IT, means that it is already possible to diagnose diseases undetectable in the 1980s. Health professionals currently have access to an array of technological advances, which they could not even dream of 10 years ago.

We do not have to wait for technological advances over a 20-year period; we simply need to apply the technologies and information systems already available. Accelerated take up of innovations that enable patient stratification, earlier diagnosis and treatment and care in the home, would transform the way health and medicine are delivered and help realize the much-needed transition from curative medicine to a new, predictive medicine.

Stratified screening followed by disease management, whether medical, nutritional, pharmaceutical or behavioral, requires the early identification of disease or risk of disease. Early management of a suite of chronic conditions that affect seniors, like rheumatic and

musculoskeletal disease, dementia, obesity, osteoporosis, cardiovascular disease and diabetes, would lead to earlier interventions which would drive better outcomes, and longer, healthier more productive lives for seniors, as well as generate improvements in the health economy and extend people's working lives. Changing our approach to healthcare from reactive to preventive combined with a move from institutional to community or home based care for long-term chronic conditions, would reduce hospitalizations, be more sustainable and efficient, and benefit not just patients, but the healthcare system as a whole.

Here are some additional facts regarding the chronic disease burden and the need for early diagnosis and preventive healthcare:

The aging and chronically ill are key cost drivers for the American healthcare system. Hospital stays and readmissions are on the rise.

Technology will enable the move from costly acute care in the future to the clinic setting initially and to the home setting ultimately. Home health monitoring of the elderly will transform disease management.

Dementia/Neurological conditions

The impact on society by the growing population of patients with dementia cannot be underestimated. The worldwide prevalence of dementia will increase by 85% over the next 20 years and more than triple by the year 2050. The current dementia population of 35.6 million people will nearly double to 65.7 million by 2020 and to 115.4 million by 2050 (ADI World Alzheimer Report 2010: The Global Economic Impact of Dementia estimated).

In the United States in 2011, 5.4 million Americans are living with Alzheimer's disease – 5.2 million aged 65 and over; 200,000 with younger-onset Alzheimer's. By 2050, approximately 16 million Americans will have the disease.

Dementia-related costs, currently estimated at \$600 billion, will increase by 85% by 2030, a figure based solely on the predicted growth of the worldwide dementia population. In the United States in 2011, the cost of caring for those with Alzheimer's to American society will total an estimated \$183 billion. This is an \$11 billion increase over last year, a rate of increase more than four times inflation.

Diagnosis will undoubtedly shift from identification of signs and symptoms of neuronal failure to the non-invasive detection of specific biomarkers underlying the pathological process (Clark et al., 2008).

Cancer

The elderly are the most common group of patients in oncology practice today. With at least 60% of all cancers being diagnosed in patients older than 65 years, cancer in the aging patient and its treatment must be considered a first-line health problem.

According to data from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute, in the United States alone the estimated prevalence of people living with cancer as of January 2008 reached almost 12 million and of these, close to 8.5 million were aged 60 years or older. Although there is a paucity of trials on this population group, age should not be a barrier for adequate treatment in healthy elderly patients, especially in those with long life expectancy and good health status.

Furthermore, 60% of cancers are globally cured or become a chronic condition. This advanced prognosis has its toll not only in the expectancy of treatment but also in subsequent follow-up and post-treatment adverse effects that can be generated.

Chronic/cardiovascular disease

More than 130 million Americans – 45% of the population – have at least one chronic disease and this figure is expected to grow to about 165 million – or about 50% of the population – by 2025.

Chronic diseases are the leading cause of death and disability in the United States, responsible for 70% of all deaths, 81% of hospital admissions, 91% of all prescriptions filled and 76% of all physician visits.

The U.S. Centers for Disease Control estimates that eliminating three risk factors – poor diet, inactivity, and smoking – would prevent 80% of heart disease and stroke, 80% of type 2 diabetes and 40% of cancers.

Conclusion

The future of healthcare technology holds tremendous promise for increasing patient access to earlier diagnosis and treatment of disease, improving healthcare quality and decreasing healthcare cost.

All of us, hopefully, will experience the aging process, and healthcare innovation increasingly makes possible an unprecedented quality of life for seniors in which living old can be living well, and mean taking an active part in one's health.

We all know America was built on a premise of what might be possible – a notion that spurs great achievement. So it goes for healthcare technology and its role in helping people live healthier lives.

Thank you for allowing me to be a part of celebrating the 50-year achievements of the Senate Special Committee on Aging. If I may paraphrase Albert Einstein, "Imagination is more important than knowledge. For knowledge is limited to all we now know while imagination embraces the entire world, and all there ever will be to know."

Here's to long, healthy lives and the ability to dream of what might be possible.

Thank you for your time today.



Long-Term Care Policy: Yesterday, Today and Tomorrow

Testimony Prepared By

Robyn I. Stone, DrPH

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Long-Term Care Policy: Yesterday, Today and Tomorrow

Long-term care policy has come a long way since the creation of the Senate Special Committee on Aging in the 1960s and the beginning of my gerontological career working for a Title VII nutrition program in Baltimore in the mid 1970s. In those days, the triple knot of long-term care—financing, delivery and workforce—was primarily a family affair. And although families and other unpaid caregivers continue to provide the bulk of services today, a fragmented formal system has evolved over the past 50 years to help meet the long-term care needs of our nation's elderly population.

With the advent of Medicaid and, to a lesser extent, Medicare, a public market for nursing homes was established. From the very start, the Senate Special Committee on Aging has been vigilant in its support for resident rights and quality, including its advocacy for the development of the National Long-Term Care Ombudsman Program, Nursing Home Reform legislation in the 1987 Omnibus Budget Reconciliation Act, continuing efforts to ensure quality oversight and enforcement and the recent culture change provisions in the Affordable Care Act (ACA).

The shift towards home and community-based care can be attributed, in part, to the development of the aging network in the 1970s, culminating in the Medicaid waivers in 1981 which significantly expanded noninstitutional options, albeit tremendously variable by state. The Congregate Housing Services Act—supported by the Committee—was the first national effort to link affordable elderly housing with services. The field also experienced growth in a private assisted living market and experimentation with this residential alternative through various state-based Medicaid waiver programs. In the 1990s, elderly consumers followed the

lead of their younger disabled colleagues in advocating for more consumer-directed options, giving individuals and their families more autonomy and choice in how resources are used.

From 1997 to 2009, home and community-based care spending increased at a compound annual growth rate of 11.4 percent, rising from \$13.6 billion to \$49.7 billion. The proportion of Medicaid spending for these services grew from 24.2 percent in 1997 to 43.6 percent in 2009. In contrast, the proportion of Medicaid spending for institutional care declined from 75.8 percent to 56.4 percent.

Despite the fact that most individuals needing long-term care also suffer from multiple chronic conditions that often need medical intervention, care delivery has developed in silos. One of the first programs to integrate acute, primary and long-term care services—the OnLok program in San Francisco—was initially developed through a Title IV demonstration grant for the Administration on Aging. Three decades later, the Program of All Inclusive Care for the Elderly (PACE) is a permanent Medicare provider and has set the gold standard for service integration and care coordination. Over the years the Committee has supported experimentation with a range of integrated approaches and was a strong advocate for the most recent ACA demonstrations designed to improve quality and reduce costs.

How to finance long-term care has been a key question for policymakers since the founding of the Senate Special Committee on Aging. Over the years, Medicaid has become the major public payer—for poor individuals or those who "spend down" to qualify for benefits.

The Committee has participated in at least two failed long-term care financing reform efforts—the 1989 Pepper Commission proposal and a new national home and community-based care benefit proposed in the 1993 Clinton Health Care Reform proposal. A more modest legislative initiative passed in 2005—the Long Term Care Partnership—allows people who purchase

approved private long-term care insurance policies to qualify for Medicaid while retaining a higher level of assets than would otherwise be allowed. As of 2009, 36 states had adopted a program and more than 100,000 policies were in force, but a Congressional Budget Office estimate indicated that the program ultimately would cost rather than save Medicaid dollars. The Community Living Assistance Services and Supports (CLASS) program, included in the ACA, allows working people to purchase on a voluntary basis a federally administered, long-term care insurance policy providing home and community based care coverage. Recent concerns about CLASS's long-term viability have, however, put program implementation on hold and its future is uncertain.

Until 2000, the long-term care workforce was just an afterthought. The Committee was instrumental in raising this issue to a priority level. Efforts have included holding hearings following the release of the seminal IOM report—Retooling for an Aging America, and advocating for the inclusion of education and training opportunities for long-term care professional and direct care workers in the ACA. The Committee remains committed to this area as is evidenced by its ongoing work to get funding for the authorized programs.

Where Do We Go from Here?

The United States is still a relatively young country compared with most of the countries in the developed world. The aging of the baby boom generations, however, will place increasing demands on our currently fragmented system of long-term care but will also provide opportunities for growth and economic development. The three issues that loom large over the next 20 years include 1) how modes of service delivery might evolve in response to consumer preferences, ability to purchase care and changes in public policy; 2) whether and how a quality,

competent paid workforce will be developed to meet the service demand; and 3) how these services can be made affordable for the majority of older adults who are at risk for needing long-term care and for the federal and state governments that currently foot much of the bill.

While the future of long-term care policy remains uncertain, a number of demographic and service delivery trends suggest that the long-term care delivery system will look very different in 2030 from what it does today. A much larger proportion of the elderly population will be age 85 and over and likely to need long-term care (although the increase in that proportion does not reach its peak until 2040 to 2050 when all of the baby boomers have attained that age). These elderly individuals will be more highly educated than the current cohort of older adults, which will undoubtedly translate into consumer demand for a wider array of service options. The increased ethnic and cultural diversity among the future elderly population will influence further the types of services that will be required to meet the needs and preferences of diverse elderly and family caregiver subpopulations. Given the fact that baby boomers and, to a greater extent, their children--the future family caregivers--are currently much more facile with technology than their parents and grandparents, it is likely that information technology and technological devices will play a much larger role in the delivery of services and supports in 2030 than they do in today's market.

A Vision for Long-Term Care Service Delivery in 2030

It is not possible to predict how the service system will evolve. There are a number of factors at the macro and micro level that will influence the nature and scope of service delivery in the future. A change in policy, for example, could significantly affect the way services are delivered, although policy incentives do not guarantee that a new approach will be broadly

adopted and implemented. While there has been an increasing public policy emphasis on shifting resources from institutional care to home and community-based options for low-income elderly individuals, 25 years of effort has not produced the shift that might have been expected from the rhetoric on "rebalancing" the system. Similarly, demonstration activities and specific financial incentives have focused on better integration of acute, primary and long-term care services for many years, with relatively few successes in achieving this goal. Although long-term care policy and practice has come a long way since the creation of the Senate Special Committee on Aging, there are many opportunities for the Committee to influence the nature and scope of long-term care financing, delivery and workforce over the next several decades.

I am hopeful that by 2030, the Committee will have helped to make normative a more responsive and integrated long-term care system than currently exists in the United States. This system would include the following elements:

The Role of Family Caregivers

Family caregivers will probably continue to play the pivotal role in the delivery of long-term care services. To the extent, however, that it is financially feasible and preferred, they will augment their hands-on care and oversight through the purchase of home and community-based services and technology. Non-kin informal caregivers—including "significant others", neighbors and friends—may assume more responsibilities for those individuals who lack close relatives or do not live in close proximity to family members. Technological advances—including the development of web-based social networks, sensors and electronic medication reminders—will support more long-distance caregiving, leading to an expansion of geriatric care managers and brokers to assist in these efforts. The ability of technology to complement

informal caregiving, of course, is contingent on the mitigation of the myriad barriers to development, adoption and wide-scale use.

Family caregivers will have access to more formal training than exists today, provided through an array of community-based organizations and offered through multiple modalities, including on-line. Increased demand for respite services to allow relatives to have a break from caregiving will encourage the development of more adult day health centers that are open on weekends and evenings as well as during the five-day work week. The federal Family and Medical Leave Act, that currently requires employers of a certain size to grant unpaid leave to family caregivers, may also follow the lead of states such as California that require employers to make paid leave available to employees with significant caregiver responsibilities.

The Committee has a major role to play in ensuring that family caregivers continue to receive support and that they are integrated into the long-term care decision making process. The National Family Caregiver Support Program, created in 2000, formally acknowledged family caregivers as a specific target population for education, training and other resources. To date, however, program funding has been limited. Ongoing advocacy will be required to expand the magnitude and scope of the program as well as other efforts designed to alleviate caregiver burden and burnout.

The Role of the Nursing Home

The primary role of the nursing home in 2030 will be to provide post-acute care to medically complex individuals being discharged from the hospital or those who require significant rehabilitation following such events as a stroke or post-fall hip replacement. These facilities will also provide a venue for the delivery of palliative care to individuals in the active stage of dying who are not able to remain at home or in another residential setting. Given the

preference for individuals to receive services in their own homes and/or their communities, the more traditional long-term care services needed by individuals over an extended period of time will be made available through a variety of home and community-based settings.

Home and Community-based Services in 2030

By 2030, the demand for home and community-based options, coupled with continued policy shifts away from institutional care on the part of Medicare and Medicaid, will have contributed to the development of a more robust home and community-based service system than exists today. Home-based care will be provided by a combination of in-person and electronic monitoring systems (including electronic health and long-term care records) to facilitate the potential for a larger proportion of the elderly long-term care population to receive services in their own homes or apartments. In addition, the expansion of universal design features in building construction and modifications will help to create home environments that adapt to the needs of individuals as they age and become more disabled.

Many individuals will be living in NORCs—naturally-occurring retirement communities—where at least half of the residents living in the enclave have reached age 60 and have decided to remain in their homes or apartments rather than moving to some other living environment. NORCs may be vertical--existing in apartment or condominium building--or horizontal across streets, blocks or neighborhoods of single-family homes. Regardless of the configuration, community members will take advantage of the economies of scale and joint purchasing power afforded by living in the NORC to organize a package of social, wellness, health and long-term care services that are available the entire community.

For those who can no longer remain in their own homes, some will move in with family caregivers, perhaps into granny flats attached to their children's homes or a mobile pod located

in the backyard (as was most recently encouraged through a change in zoning laws in Virginia). Those with no family and individuals who either prefer to live alone or who need a higher level of service than can be provided by relatives or other informal caregivers, will need residential alternatives that provide room and board as well as long-term care services ranging from personal care to skilled nursing. To the extent possible, these residential alternatives will be designed to mirror the home environment that the elder lived in prior to the move—including small group houses (such as the Green House model) and apartments with services. Computergenerated social networks will keep even the most disabled older adults connected to family, friends and others by creating "senior centers without walls" in which individuals can communicate, socialize and share information.

The Integration of Services

Relatively few older adults in the United States today have access to an integrated system of care that is person-centered and that brings together the preventative, primary, chronic, acute and long-term care services that most elderly individuals will need as they become older and face greater risks of illness and disability. To date, integrated models and programs have had little penetration beyond small market areas and have not become normative in terms of health and long-term care practice.

Assuming that the ACA payment reforms, demonstration and pilots are implemented and sustained, by 2030, integrated systems of care could become the norm rather than the exception—particularly for older adults and younger people with disabilities. The evolution and wide scale adoption of electronic health and wellness records by multiple delivery settings could further escalate the development of integrated care. While targeted programs such as PACE and other Medicaid managed care initiatives have only served a small proportion of high-risk,

disabled older adults, the development of broader, more inclusive programs that offer early prevention and risk management for "well elders" as well as chronic care management and long-term care for more disabled older adults have the potential to be more financially viable as the costs are spread across a larger population.

Who Will Care for Us?

In order to achieve the vision of a community-based, integrated delivery system for 2030, a well-trained, competent, quality workforce is essential. There is widespread consensus that there are insufficient numbers of competent licensed and direct care staff to manage, supervise and deliver high-quality care to the elderly population. Without decisive action in the public and private sectors to strengthen and expand this workforce, the situation is expected to worsen as the health and long-term care needs of older adults butt up against population aging. Although technological advances can help to mitigate somewhat the need for hands-on staff, the development of the kind of delivery system described above will require significant attention to and investment in the future long-term care workforce.

Some characteristics of the long-term care workforce are a given in 2030. Despite attempts to attract males into this sector, long-term care will probably continue to be dominated by women, particularly the direct care workforce (90 percent female in 2008). The direct care workforce is already ethnically and racially diverse with only 49 percent being white non-Hispanic in 2008. This trend is likely to continue upward over the next 20 years. Although the racial and ethnic composition of the licensed professional staff in 2030 is less clear, there will be a need for a culturally competent staff to work with a very diverse direct care workforce and to ensure good quality interactions with a primarily white elderly clientele.

The Special Committee on Aging has a significant role to play in helping to develop sound workforce policies and ensuring that adequate investments in education and training are made to recruit and support the human capital that will be needed to address the long-term care needs of an aging America across the spectrum of settings. Growth will be greatest in the home and community-based care sector, with many opportunities to manage and provide direct care in residential settings and in individual homes and NORCs. Educational curricula in colleges and universities will address this evolution of home and community-based care options and will be preparing students to work in settings that increasingly rely on technology to assist in care delivery and coordination across providers. Retirees looking for a second career out of financial necessity or a desire to engage in a helping profession will be enrolled in educational programs to prepare them for employment in long-term care. Home care options will provide opportunities for flexible hours and job sharing to meet the needs of many older workers who do not want full-time jobs. Families and friends who are paid to deliver care through consumer-directed programs will be trained alongside other direct care workers in how to safely and effectively deliver personal care/attendant services.

Those choosing to work in nursing homes, assisted living and other residential care alternative settings will have embraced person-centered care and culture change. Managers and clinicians will come into organizations with the knowledge and competencies to create a living and work environment that places the resident and family at the center of decision making and that empowers frontline staff to play a key role in the self-managed work teams that will delivering care. Staff at all levels will receive in-service training on the latest developments in resident-centered care--particularly for people with dementia, how to use the latest iteration of information technology and devices and how to continuously engage in quality improvement. All

nursing homes will have nurse practitioners who will either serve as medical director or work with the physician in that role to ensure that the care delivered to the post-acute population with complex medical or rehabilitation needs are receiving high quality care and that they are returning to the community without the risk of rehospitalizations or other problems.

Long-term care staff will also be an integral part of integrated service teams that coordinate services with hospitals, primary care practices, clinics and other segments of the health care system. Administrators, clinical professionals and direct care staff will have the knowledge and competencies to ensure that elderly long-term care consumers with acute or chronic medical care needs receive their care in the community to the extent possible and that transitions between settings are smooth and do not result in preventable negative outcomes.

The Affordability Question

Prior to the passage of Medicare and Medicaid, one third of the elderly population lived below the poverty line. During the following three decades, that percentage decreased precipitously. At the same time, however, the gap between the "haves" and the "have nots" within the older adult group expanded, and the latest recession—which disproportionately affected current and "soon to be" retirees—raises serious concerns about how future cohorts of older adults facing long-term care decisions will be able to pay for services.

Ironically, those who are currently at either financial extreme are more likely than modest and middle income elderly individuals to have access to many service options. Low-income elderly individuals who qualify for Medicaid (either directly or by "spending down" their income and assets to become financially eligible) are entitled to nursing home coverage and—depending on the state in which they reside—may also have access to publicly subsidized home and

community-based care. They also may qualify for publicly subsidized senior housing, although the supply of this residential option is very limited. Financially secure elderly individuals have the resources to pay privately for home care, and when that no longer is a viable option, to move into an assisted living facility. Individuals who want the security of a continuum of services may sell their homes and buy into a continuing care retirement community that offers independent housing, assisted living and skilled nursing to its residents (Baldwin and Poor, 2009). Others may create their own Villages—a grassroots, membership-based, non-profit organization that provides support and community to residents who wish to remain in their own homes or apartments as they age. They are self-governing and self-supporting entities, financed by a combination of membership fees, fundraising dollars and in-kind support. Currently there are 48 fully operational Villages in the country and over 100 communities developing this model, with the first established in 2001 by the Beacon Hill Village in Boston.

For the vast majority of elderly individuals and their families, however, affordability of long-term care service options is, and will remain, the ultimate concern. There are a number of uncertainties which contribute to this concern and ambiguity about what type of system will be available and accessible in the future. First, recent state Medicaid budget cuts in response to the latest economic recession underscore the fragility of this program as a safety net for modest as well as low-income older adults who need services. Home and community-based services—the options most preferred by elderly individuals and their families—have been the most vulnerable in bad economic times.

Second, the fact that the private long-term care insurance market has not grown significantly, even among federal employees and retirees to whom a federally sponsored product has been made available suggests that this financing mechanism will not solve the affordability

dilemma for most baby boomers. The uncertain future of the CLASS provisions in the ACA—which would have provided moderate income individuals access to modest coverage for home and community-based services—underscores the role that the Committee will need to continue to play in exploring affordable financing options

One of the thorny issues that must be addressed if affordable residential options are to be available in the future is how to cover the housing costs for individuals who can no longer remain in their own homes or rental apartments due to financial and/or health reasons.

Currently, low and more modest income older adults who have spent down their assets and income to qualify for Medicaid will have their room and board costs covered if they enter a nursing home. Medicaid reimbursement rates for other residential settings such as assisted living or adult foster care, however, are generally not sufficient to cover the costs of room and board. And for those who do not qualify for Medicaid, there are no financial mechanisms to help defray the housing costs. Recognizing that Medicaid assisted living programs have not proven to be an affordable community-based option, a number of states (e.g., Vermont, Oregon) have brought together staff from their Medicaid and state housing agencies to explore how they can more efficiently package their service and congregate housing dollars to better serve their dual eligible populations. At the national level, HUD and DHHS are exploring ways to better integrate low income senior housing and services.

These efforts reflect a growing recognition that affordable shelter and services are both essential to the development of viable community-based long-term care options for moderate and low-income older adults—groups that are likely to represent a large proportion of future cohorts of America's elderly population. The nexus between housing and services, therefore, is a perfect place for the Committee to focus its attention as we move into the future.

COMMENTS ON THE 50TH ANNIVERSARY CELEBRATION OF THE SPECIAL COMMITTEE ON AGING

A TALE OF FOUR GENERATIONS

by Henry J. Aaron¹

Mr. Chairman, Ranking Member, Senator Corker, Members of the Committee:

It is a pleasure and an honor to be able to share in this celebration with you today. This committee has observed, influenced, and helped to shape a transformation in the whole meaning of growing old in the United States—a change for the better. A scrim of forgetfulness shields us from the rather ugly reality of growing old in the America of just a few generations past. Let us draw back that curtain to examine what growing old meant for the generations born in 1860, 1890, 1930, and 1960. And let us also consider what aging will hold for younger Americans.

The 1860 cohort was born in a nation that still treated slavery as a constitutional right. A quarter of those born in 1860 died before turning age 20, half before reaching age 65. Living conditions and public sanitation were appalling by today's standards: few houses had indoor plumbing, and few cities had municipal water and sewer systems. Surgery was uncommon and dangerous because surgical technique was primitive and anesthesia was dangerous. Inoculations were uncommon. Childhood diseases winnowed the young. Pneumonia was known as the 'widow's friend.'

By current standards, the 1860 cohort was a nation of educational dropouts, although the United States led the world in mass education. Out of every hundred students who started primary school, seventy finished, twelve completed high school, and three graduated from college. Economic growth was rapid but uneven. The U.S. economy underwent thirteen economic contractions between 1885 and 1925. Many were catastrophic by modern standards.

Women gave birth to an average of more than five children. The backbreaking job of caring for children, husbands, brothers, sisters, and parents in a world without washing machines, vacuum cleaners, refrigerators, or dishwashers was borne, typically by women, until death and lightened only as family members died or moved away. Once married, few white women worked outside the home. Those who worked for pay almost invariably performed menial tasks. Many women, especially African American women, were domestics. Old age was not a passage to a 'new mode of living,' but a continuation of what life had been when one was

Bruce and Virginia MacLaury Senior Fellow, The Brookings Institution. The ideas expressed here are my own and do not necessarily represent those of the trustees, officers, or other staff of the Brookings Institution. These comments are excerpted from "Longer Life Spans: Boon or Burden.," Daedalus, 2006

young.

Three-quarters of men born in 1860 and still alive at age 65 continued to work for pay until death, disability, or economic catastrophe intervened. Such a catastrophe—the Great Depression—did intervene when the 1860 cohort was sixty-nine years old. By 1932, a quarter of the work force was unemployed. The elderly were more likely than the young to lose their jobs and less likely to find new ones. Protracted unemployment, bank failures, plunging stock prices, and collapsing real-estate values destroyed the savings of those in the middle and working classes who had scrimped and saved for retirement. Private charities were overwhelmed. Public charity dried up as state and municipal tax collections plummeted. Only a few Civil War veterans and their widows received small pensions; otherwise, private pensions were rare.

The first Social Security check was not paid until the 1860 cohort reached age 80, and few were eligible for benefits. For the one-third of the 1860 cohort who survived to their sixtyninth birthdays, the final years were generally grim.

America's 1890 cohort also lived through boom and bust. World War I ended a recession. With peace came another recession. Unemployment reached 12 percent. The 1920s brought boom, except on the farm. The year 1929 ushered in twelve years that blighted what should have been this cohort's prime earning years. Too old to fight in World War II, the men of the 1890 cohort worked to support their sons at the front. Women left home for the paid labor force. Freed from traditional jobs as secretaries, teachers, social workers, and nurses, they become machinists and assembly-line operatives.

Like its forebears, the 1890 cohort suffered high rates of infant mortality. Although this cohort benefitted from steady, if undramatic, improvements in health and education, more than one-third of 20-year-old women and two-fifths of 20-year-old men did not live to see their sixty-fifth birthdays. Eighty percent of unmarried elderly women and half of unmarried elderly men had been widowed. Four-fifths of this cohort finished primary school. One-fourth graduated from high school, but only one in twenty earned a college degree.

When this cohort reached age sixty-five in the mid-1950s, fewer than half had health insurance. Coverage was often uncertain because insurers could raise premiums sharply or refuse to renew coverage of those whose health had begun to deteriorate. Because health expenses of the elderly were less than one-tenth of what they are today (even when adjusted for inflation), medical outlays were a threat only for the minority who became seriously ill. But in one of the most striking social changes of the late twentieth century, a spell in a nursing home became common. By the late 1970s, roughly a quarter of the 1890 cohort survivors were residing in nursing homes.

Congress passed the Social Security Act of 1935, subsequently increasing benefits and

extending coverage in 1939 and again in 1950. Because of these liberalizations, members of the 1890 cohort received benefits far greater than the earmarked payroll taxes they and their employers had paid. Still, benefits were modest—only about 32 percent of taxable earnings of full-time covered workers. And since roughly half of U.S. jobs were not covered until the 1950 legislation broadened coverage, many members of the 1890 cohort did not receive benefits at all. Furthermore, private pensions covered only about a quarter of members of the 1890 cohort. Even workers who were covered typically received meager benefits because most had not worked long enough under these plans to have earned meaningful benefits. With insufficient income to retire, two-thirds of surviving men from the 1890 cohort were still working at age 65, nearly half at age 70, and 30 percent at age 75. More than one-third had incomes below official poverty thresholds.

The 2.6 million American children born in 1930 enjoyed advantages unavailable to previous generations. Nearly all finished primary school. Seven in ten graduated from high school. Partly because of the G.I. Bill for Korean War veterans, one man in five and one woman in nine graduated from college. Women no longer automatically withdrew from the labor force after marriage. Those who did often reentered when still young. Just over one-third worked outside the home when they were age 30, but three-fifths did at age 50, and two-fifths still worked for pay at age 60.

If the educational achievements of the 1930 cohort were striking, the economic advances were breathtaking. Between the end of World War II and the mid-1970s, output per person more than doubled. At the start of their working lives, members of the 1930 cohort earned hourly wages three times higher than members of the 1890 cohort had earned in their first jobs. By the time the 1930 cohort turned age 65, their average earnings had risen by another one-third.

Post-World War II recessions, though numerous, were shallow during the 20th century compared with the economic paroxysms of earlier eras. Furthermore, unemployment compensation, also created by the Social Security Act of 1935, cushioned the shock for those who did lose jobs-for up to six months in normal times and even longer during recessions. Higher incomes, medical advances, and improved working conditions combined to boost life expectancy for the 1930 cohort. Two-thirds of men and over three-quarters of women born in 1930 lived to celebrate their sixty-½fth birthdays. Four-fifths of 65-year-old men and three-fifths of 65-year-old women still lived with a spouse.

As they approached retirement age in the mid-1990s, members of the 1930 cohort had options and resources few of their parents had enjoyed. Most had assets that provided substantial financial security. Social Security benefits, averaging \$8,500 a year for individuals

and \$12,000 for couples, were fully protected against erosion by inflation. One-third of the 1930 cohort received private pensions, although the amounts were modest—a median of less than \$7,000 a year. Further, more than four in five members of the 1930 cohort owned their own homes at retirement. Most had benefitted from the postwar real-estate boom that tripled the real value of owner-occupied housing between 1950 and 1995. The 1930 cohort also had better protection against medical costs than ever before. Medicare, enacted in 1965, provided basic health insurance coverage for the elderly and the disabled while eight in ten also had supplementary coverage. Increasingly workers retired years before they died. One-third of men in the 1930 cohort stopped working before age 62, two-thirds before age 65. Average living standards approximated those of younger adults. Averages, however, concealed large disparities: only 4.3 percent of elderly couples were poor in 1996, compared to 18 percent of elderly single men, 20 percent of elderly single women, and 36 percent of elderly single African-American women. Whatever the future holds for the final years of the 1930 cohort, its circumstances represent a revolutionary improvement over the experiences of their predecessors.

America's 1960 cohort was better educated than any of its forebears. Only one in eight dropped out of high school. Half attended college and nearly one-fourth earned a bachelor's degree. The fraction of the 1960 cohort with pos-baccalaureate education matched the share of the 1860 cohort who had completed high school. But not all advanced at the same pace. African Americans were only two-thirds as likely as whites to earn a college degree, and barely half of Hispanics completed high school. Even if the earnings of men with little education grew more slowly than their parents' pay had, the 1960 cohort earned more on their first jobs than their parents had three decades earlier. The jobs filled by members of the 1960 cohort also required less brawn and more brain than had jobs in the past. Three-fifths of men and 90 percent of women in the 1960 cohort worked in white-collar or service-sector jobs. Still, roughly onequarter of men and a small but growing fraction of women worked as craftsmen, mechanics, miners, machine operators, laborers, truck drivers, or in other physically strenuous jobs that become increasing difficult to perform as one ages. Women were better educated, worked more hours, stayed in the labor force with fewer interruptions, and earned much more than women had previously. As a result, more will be entitled to their own private pensions and to Social Security based on their earnings rather than their husbands'.

Members of the 1960 cohort told pollsters that they hoped to retire earlier than have past generations. Despite these stated intentions, however, men began to retire later, starting in the mid-1990s and this trend has continued. One reason may have been that they had not done enough to prepare economically for retirement. By 2000, only 31 percent of those born between 1954 and 1964 had nonhousing assets worth more than \$100,000, and 49 percent had

accumulated less than \$50,000, a sum that would support an annuity of less than \$4,000 a year. In their failure to save, the 1960 cohort differ little from their forebears, who began to save, if at all, only in their forties and fifties. For a long time, it looked like members of the 1960 cohort would have more sizeable pensions than previous generations. But that hope was undercut by the drop in stock-market values and the loss of equity in owner-occupied houses in the last decade. Furthermore, there is no way for anyone of any age to convert liquid assets into annuities fully protected against inflation and market risks, in the same way that Social Security benefits are protected. And Social Security benefits are in process of being lowered relative to earnings, a delayed effect of amendments enacted in 1983. For that reason, more than previous cohorts, members of the 1960 cohort will also confront the possibility that they will outlive their assets. One-fifth of men who reach age 65 are projected to be alive at age 90, and half of women alive at age 65 are expected to live past their eighty-seventh birthdays.

The prospects for younger age cohorts are more troubling. The past record of more-orless continuous growth of income and improvement in educational achievement is in jeopardy. Earnings of men have fallen for about four decades. High-school completion rates are falling. Male college attendance and completion rates are falling. An encouraging bright spot is the continued increase in female college attendance and completion rates. More women than men now hold college degrees and the gap is widening—in part because female attendance rates continue to rise, but also because male attendance rates are stagnant or falling.

An additional source of concern is the projected increase in the budgetary cost of Medicare. These rising costs have led to proposals to replace the defined benefits provided by those programs with cash vouchers tied to indexes that have grown less rapidly than health care costs. The combination of stagnant wages, reduced replacement rates under Social Security, increased financial market volatility, and the threat that health care costs will be shifted to the elderly raise serious concerns about the financial security of the elderly. For a variety of reasons—private calculations and shifts in public policy—workers are likely to elect to work until older ages in the future than in the past. This trend will simultaneously lighten the burden of supporting a growing elderly population and boost national output.

Furthermore, there is no sign that scientific advance is ending. Progress in medical science, in particular, holds out the promise that people will live to longer, function well until older ages, and die with less pain than in the past. Out side medicine, advances in technology hold the promise of higher incomes. In brief, we hold in our own hands the capacity to do for our children and grandchildren what our forbears did for us—promote improved education, prevent illness from becoming financial calamity, encourage hard work, and recognize that the improving living standards and security that each of us seeks requires not only individual effort but also collective cooperation and mutual support.

The meaning of old age

Laura L. Carstensen and Linda P. Fried

Even at the beginning of recorded history, a handful of people survived to old age. Many of those who did served important functions in societies. Elders featured in religious texts, mythology and lore have been portrayed as prophets, saints, tribal leaders, and healers, providing cultural continuity, wisdom and concern for the common good. Thus, there is a twist of irony in the fear and anxiety that characterizes contemporary national and international discussions about anticipated coming hardships imposed by aging societies. But a preparatory state aimed solely at bracing for a crisis presents more than irony. It ensures that the crisis will arrive. If we are to realize the potential opportunities older populations offer, we must appreciate how aging individuals construct meaning in their lives, the social context that surrounds specific cohorts' collective understanding of aging and actively begin to build, infrastructures, norms and policies that exploit the potential contributions older people can make to societies.¹

It is not the case that life has suddenly been extended beyond a point where people can live healthy, productive lives. Indeed, there is no reason to believe that human life *span*—the length of time the species *can* live - has changed much, if at all, throughout evolutionary history. Until the 20th century, on *average*, lives were short. Fewer than half of those born reached 50 years of age. What has changed is the sheer number and proportion of each birth cohort that now routinely lives into their 80s, 90s and 100s. In less developed regions of the world, life expectancies remain far shorter; however, these societies, too, are beginning to live longer and age rapidly - and within a decade will be on demographic trajectories that will reshape the distribution of age in every country in the world. The profound and global phenomenon driven by aging will transform all aspects of life.

Will these changes be for better or for worse? Will such demographic shifts inevitably burden economies, or will the gift of time we received from our ancestors in the 20th century present us with unprecedented opportunities? Will older people consume resources that would otherwise go to children? Or will older people become the resource children and societies in general so badly need? We maintain that if we play our cards right, elongated lives can allow us to redesign lives in ways that improve quality at all ages and across generations. The gift of time we received from our ancestors in the 20th century presents us with unprecedented opportunities. Just as sure, the opportunities will be missed if we do not begin to prepare for them. The real challenge, as we see it, is only partly about finding ways to care for dependent elderly. Aging societies will succeed or fail largely as a function of the new meanings we ascribe to both healthy and unhealthy longer lives.

Population aging presents a *cultural* problem.² The dramatic increase in the numbers of people who are making it to their 80s, 90s and beyond is generating a profound mismatch between the cultural norms that guide us through life and the length of our lives.³ Humans are creatures of culture. We look to culture to tell us when to get an education, marry, start families, work and retire. Because life expectancy has increased so quickly, we are still immersed in cultures designed for lives half as long as the ones we are living. The life course itself is a cultural construction. Two hundred years ago, human development did not include a distinct stage of life called, "adolescence." There was no more significance afforded to 65 than 55 or 45 years of age. We must ask the question: How can societies and individuals profit from old age?

To approach the topic of population aging with rose colored glasses, however, overlooking the real vulnerabilities associated with advanced ages, would be foolhardy. Societies today are enormously ill-prepared for populations in which there are more people over 60 than under 15. Not only are cultures youth-oriented in the popular sense of favoring the young, but the physical and social

environments and institutions were quite literally built by and for young populations. The tacit users of staircases, automobiles, telephones, furniture, parks, highways, train stations, airports and housing are young people. Workplaces and working lives — and even most hospitals - are tailored to those with considerable endurance. Medical science, a key part of culture, has focused on cures for acute diseases far more than prevention of the chronic diseases that unfold over years and decades. Expectations of workers include speed, agility, and facility with new learning. Further, many societal roles were designed when life expectancy was 47, and without knowledge of the unique capabilities that older adults could bring to the workplace and society. Though ageism is often invoked as the reason of the focus on youth, and though it may play a role, we live in a world that only recently included large numbers of older adults.

Worlds built for the young are often difficult for the old to navigate. Normal aging brings with it myriad changes, many of which are unwelcome. Slowing is a key hallmark of aging. The effects are ubiquitous. People move more slowly, metabolize toxins over longer time courses. Feeling stiff and sore when you wake in the mornings, recovering from injuries and illness more slowly, straining to hear a conversation, reflect "typical" age-related changes. Difficulty retrieving the name of a person you know well, forgetting why you walked downstairs as you find yourself at the bottom of a staircase, drifting off as you read the morning paper all represent real consequences of age-related changes in biological systems. Toward the end of life, disease and disability are prototypical. Thus, older societies have greater morbidity and more functional limitations than younger populations. There is a diminution of physical reserves, culminating for many, at the end of life, in the onset of frailty, a medical syndrome of decreased reserves and resilience^{4,5}, and – for some – disability and loss of independence. Even those who escape frailty experience diminished resilience and reserves as they get older.

The vulnerabilities of aging must not be overlooked when planning for aging societies.

Importantly, however, just as sure as there is loss, there are gains that come with age — and gains have been largely overlooked. Paul and Margaret Baltes⁶, professors of life-span development, wrote compellingly about the need to recognize the gains and losses inherent at all developmental stages.

Young people, for example, may be fast and agile but they lack experience and knowledge. Their futures demand that they focus on their own personal advancement more than the broader community. The impressive physical resilience in the young is not matched by emotional resilience, which comes much later in life. We do not populate the state and federal courts with 20 year olds despite their cognitive agility.

In fact, though historically most of the literature on cognitive aging has focused on deficiencies, there is a growing literature pointing to unique strengths of older adults. As noted above, normal aging is associated with slowed cognitive processing, memory impairments and difficulty concentrating.

Barring dementia, however, knowledge continues to grow. Especially in areas of expertise, practice compensates well for declines in processing efficiency. Experts—whether musicians, chess players or scientists—often reach their peaks in advanced years. Even in the general population, vocabularies are larger and knowledge about the world is greater in the old as compared to the young. Recent findings suggest that older people are more likely to change attitudes in light of new information and they appear better able to take the perspective of younger people than younger people are able to adopt perspectives of the old. Presented with cultural and economic disputes over resources, older people generate more even-handed and acceptable solutions than their younger counterparts. Indeed there is intriguing evidence that there may be potential upsides even to deficits, like distractibility: Lynn Hasher and her colleagues recently demonstrated that unsuppressed extraneous information in one situation often becomes relevant and is utilized by older adults when solving problems that later arise. In elegant experiments, she shows that older people are advantaged by access to extraneous

information downstream; younger people are not...¹² In everyday life, this can be associated with creative problem solving that emerges at older ages. Especially in emotionally charged situations, older people tend to generate more effective solutions.¹³ Emotional experience and emotional balance improve with age as well. Older people have lower rates of clinical depression, anxiety, and substance abuse.¹⁴ They regulate their emotions better, avoiding extreme highs and extreme lows.¹⁵ In other words, while aging is associated with declines in some aspects of cognitive processing, age-related gains also come with age. Greater understanding of the world coupled with emotional balance and improved perspective is, for many, the definition of wisdom.¹⁶

Importantly, aging trajectories also vary wildly across individuals. Scientists have documented considerable variability in older people in physical, social, emotional and cognitive capacity. This observation is important for at least two reasons. For one, variability speaks against inevitability. It suggests that aging per se is not the culprit when negative outcomes arise. Second, variability is far from a random process. It is important to emphasize that, in developed countries such as the US, only a fraction of adults 65 and older are frail (7-10% of those in community), disabled (20 percent or less with difficulty or dependency in managing households and/or basic self care, although half may have some difficulty walking, or in need of long term care (5-10%). ¹⁷ Individuals who are educated and affluent have less functional disability and live longer than those who are disadvantaged in society. Not surprisingly, individuals who exercise regularly are more physically fit than those who do not – into the oldest ages, and they are also show less cognitive decline. Although age is a powerful predictor of length of life, in adulthood, education predicts even better. ¹⁸

From a societal perspective, variability means that age-based policies, programs, beliefs, and communities are inherently problematic. People in their late 60s who are extremely sick, possibly facing the end of their lives, have more in common with 80 year olds in the same physical state than healthy

counterparts at either age. Discussions about older workers often draw on literatures about cognitive decline in the very old when they should be comparing 55 to 65 year olds with 65 to 75 year olds (where differences are far smaller and sometimes non-existent). Frailty is far more frequent among the very old than the young old. Again, social class and its correlates places people on very different aging trajectories. Thus, forward thinking societies should plan for older populations that are heterogeneous and develop plans to help those who need it while tapping the resources of those who can contribute. Indubitably, the category of "old age" will be parsed into multiple stages; just as adolescence was carved out as a special transitional stage into adulthood.

Because of the magnitude of the demographic shifts underway, aging will inevitably have profound implications for entire societies. Societies top heavy with frail, dependent, and disengaged people with relatively few younger people to support them will endure many hardships. We maintain, however, that societies top-heavy with experienced citizens will offer a resource never before available to our ancestors: large numbers of people with considerable knowledge, emotional evenness, practical talents, creative problem solving ability, commitment to future generations, and the motivation to use their abilities can improve societies in ways never before possible.

The meaning of age will continue to be a fluid concept and will be constructed through complex and iterative processes for decades, if not centuries, to come. As the odds of reaching advanced old age increase around the globe, people will gradually come extend their individual time horizons and engage in more philosophical thinking about the meaning of lives that last far longer than ever imagined by our ancestors. ¹⁹ In Europe and the United States, boomers, because of their numbers, will transform the culture of aging. Because boomers came of age during an historical era when considerable progress around gender and race equality advanced, they tend to view themselves as rebellious and "youthful" despite their advancing age. The birth cohorts comprising the boomers identify more

strongly with younger generations than older ones and blur long-standing lines that mark age.²⁰ Future generations will continue to write and rewrite the meaning and purpose of advanced stages of life.

Societies that find ways to collectively advance new meanings of life that utilize all of its citizens will prosper far more than ones in which social structures constrain contributions. To the extent that societies actively build cultural infrastructures that take advantage of new possibilities will realize many opportunities and benefits. To fail to do so would represent a tragic squandering of this gift of life. As we stand at the beginning of the 21st century, there is a tension between advocates for the elderly and others with concerns about the inability to provide seemingly limitless support. When more than half of the federal budget is allocated to care for older people it makes sense to worry about other societal needs.

We argue for a three-pronged approach. First, it is essential that we think programmatically about investments throughout life in health, education and social integration that pay off at all ages.

Just as early investments in health and early education paid off with huge reductions in premature death and early morbidity a century ago, we must now conceive of lifelong investments that will produce healthy and engaged populations at all ages, but especially among all future cohorts of older persons..

Second, we must improve the care and autonomy of disabled older adults; in part for their own quality of life and, in part, because only at its extremes do disabilities render people completely dependent. To the extent that those who have functional disabilities still have access to opportunities to contribute, we believe that there is reason to predict that contributions will continue. Last, but arguably most importantly, we must build infrastructures that tap the real talents and potential contributions that healthy older people can make to societies, rid mixed messages about working and replace them with calls for all able citizens to contribute to the welfare of societies.

Population aging will transform the global community. The question is whether such changes will better societies or extract net tolls. Either is possible. If we continue to view the life course as our ancestors did and simply tack added years on at the end, we face sure calamity. If instead we begin to modify the life course and build infrastructures that support long life, societies can begin to utilize the strengths of older people and support the real vulnerabilities advanced age brings.

References

- ¹ MacArthur Network on an Aging Society (2009). Facts and fictions about an aging America. *Contexts*, 8(4), 16–21.
- ² Carstensen, L. L. (2011). A long bright future: Happiness, health and financial security in an age of increased longevity. New York, NY US: Public Affairs.
- ³ Riley, M. W., Kahn, R. L., Foner, A., & Karin, A. (1994). Age and structural lag: Society's failure to provide meaningful opportunities in work, family, and leisure. Oxford England: John Wiley & Sons.
- ⁴ Fried, L.P., Tangen, C.M., Walston, J., (2001). Frailty in older adults: Evidence for a phenotype. *J Gerontol Med Sci* 56;M146-56.
- ⁵ Bandeen-Roche, K., Xue, Q.L., Ferrucci, L. 2006. Phenotype of frailty: characterization in the Women's Health and Aging Studies. *J Gerontol A Biol Sci Med Sci*. Mar;61(3):262-6.
- ⁶ Baltes, P. B. & Baltes, M. M. (1990). Successful aging: Perspectives from the behavioral sciences. New York, NY US: Cambridge University Press.
- ⁷ Salthouse, T. A. (2010). *Major issues in cognitive aging*. New York, NY US: Oxford University Press.
- ⁸ Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*, 49(8), 725-747. doi: 10.1037/0003-066X.49.8.725

- ⁹ Eaton, A. A., Visser, P. S., Krosnick, J. A., & Anand, S. (2009). Social power and attitude strength over the life course. *Personality and Social Psychology Bulletin*, 35(12), 1646-1660. doi: 10.1177/0146167209349114
- ¹⁰ Sullivan, S. J., Mikels, J. A., & Carstensen, L. L. (2010). You never lose the ages you've been: Affective perspective taking in older adults. *Psychology and Aging*, 25(1), 229-234. doi: 10.1037/a0018383
- ¹¹ Grossmann, I., Na, J., Varnuma, M. W., Park, D. C., Kitayama, S., & Nisbett, R. E. (2010). Reasoning about social conflicts improves into old age. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 107(16), 7246-7250. doi: 10.1073/pnas.1001715107
- ¹² Thomas, R. C., & Hasher, L. (2011, August 15). Reflections of distraction in memory: Transfer of previous distraction improves recall in younger and older adults. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. Advance online publication. doi: 10.1037/a0024882
- ¹³ Blanchard-Fields, F. (2007). Everyday problem solving and emotion: An adult developmental perspective. *Current Directions in Psychological Science*, 16(1), 26-31. doi: 10.1111/j.1467-8721.2007.00469.x
- ¹⁴ Charles, S. T., & Carstensen, L. L. (2010). Social and emotional aging. *Annual Review of Psychology*, 61(1), 383-409. doi: 10.1146/annurev.psych.093008.100448
- ¹⁵ Scheibe, S. & Carstensen, L.L. (2010). Emotional aging: Recent findings and future trends. *Journal of Gerontology: Psychological Sciences*, 65(2), 135-144. doi: 10.1093/geronb/gbp132
- ¹⁶ Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, 47(5), 257-285. doi: 10.1159/00079154

115

- ¹⁷ Fried, L.P., Ferrucci, L., Darer, J., Williamson, J.D., Anderson, G. (2004) Untangling the concepts of disability, frailty, and comorbidity: implications for improved targeting and care. *J Gerontol A Biol Sci Med Sci* 59: M255-M263.
- ¹⁸ Olshansky, J. (2011). Two Americas at the dawn of the aging society: The impact of race and education on survival. Manuscript submitted for publication.
- ¹⁹ Laslett, P. (1991). *A fresh map of life: The emergence of the third age*. Cambridge, MA US: Harvard University Press.
- ²⁰ Biggs, S., Phillipson, C., Leach, R., & Money, A. (2007). Baby boomers and adult ageing: Issues for social and public policy. *Quality in Ageing and Older Adults*, 8(3), 32-40.

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