The New Promise of Longevity: A Report on the “Aging Well” Framework of the Philips Think Tank on Aging Well
Introduction

One of the most remarkable achievements of modern history is the increase of human longevity. There are nearly 900 million people over the age of 60 today in a global population of 7 billion, and this number is expected to reach 2.4 billion by 2050.

Population aging is a trend that we are seeing in both developing and industrialized countries. The Philips Aging Well Think Tank was established two years ago as part of the Philips Center for Health and Well-being to debate and explore significant trends in relation to the area of aging well, with the overall aim of identifying barriers and developing meaningful solutions that will have a positive impact now and in the future.

Over the last two years, the Think Tank has been gathering insights into the topic of aging well and has developed an ‘Aging Well Model’ to explore the possibilities and prospects for successful aging. The model examines four primary pillars – Aging Society, Personal Aging, Capabilities and Public Private Policies, and offers perspectives on successful aging from both individual and societal standpoints. This whitepaper explores the dimensions of the Aging Well Model and provides recommendations in relation to each area designed to maintain quality of life through transitions as we age.

On behalf of Philips, I would like to thank the members of the Aging Well Think Tank for their work in producing the white paper, which we hope will stimulate discussion and debate around a range of topics that are fundamental to aging well in society. Particular thanks to Jeffrey L. Sturchio, Senior Partner at Rabin Martin and former President and CEO of the Global Health Council, who was responsible for drafting the final document.

For further information about the work of the Philips Aging Well Think Tank and the Aging Well Model, please visit www.philips-thecenter.org.

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Executive Summary

While today nearly 900 million people are over the age of 60 in a global population of 7 billion, this number will reach 2.4 billion by 2050. By 2025-2030, the population over 60 will be growing 3.5 times faster than the total. WHO Director-General Margaret Chan noted recently that “being in the older age group is becoming the new normal for the world’s population.” This is an arresting idea, and demographic patterns certainly support Dr. Chan’s observation. But such changes have personal consequences for individual lives to which societies, communities and families have not yet adapted. To capitalize on the new promise of longevity, we need to re-envision our lives and what “aging well” means.

If being older is the “new normal,” as these trends confirm, the natural question to ask is whether societies, communities and families have accepted the new reality? Are social, cultural and economic norms adapting quickly enough to assist older persons through the new transitions of longer lives? These issues have been the focus of dialogue by the Think Tank on Aging Well convened by the Philips Center for Health and Well-being. Our conclusion is that the speed of change has outpaced the rate at which individuals, families, communities and global society have adapted to a world in which older populations are the norm. Given that circumstance, a strategic focus on learning how to manage life transitions well – individually and collectively – will yield important dividends in adding quality of life to years.

During the past two years, the Philips Think Tank has developed a model for “Aging Well” to explore the possibilities and prospects for successful aging. The model (Figure 1) examines four primary dimensions – Aging Society, Personal Aging, Capabilities and Public Private Policies – and offers perspectives on successful aging from both individual and societal standpoints. The Aging Well model considers the individual’s personal capabilities and experience within the larger context of aging societies and public/private policies, seeking to balance individual autonomy and social participation through successful management of the personal transitions associated with aging. The model begins from the premise that traditional perspectives on aging are now obsolete, and it provides a framework for asking new questions and developing more realistic, useful policies.

Our Think Tank team sees the Aging Well model as a useful framework for contemplating how solutions – such as technology, personal skills and human resilience – and the creators of solutions, including policy makers, employers and innovators, can together create positive change toward a new society focused on the health and well-being of an aging population. This essay explores each dimension of the “Aging Well” model in detail, concluding with observations on its policy implications.

It is critical to reflect not only upon how individuals can age successfully, but also how public policy, social institutions and private enterprise can respond appropriately and productively to dramatic growth in the segment of the global population over 60.

• We need to move away from viewing aging solely as a time of inevitable decline to one that can be rich with new innovations and possibilities. Governments should continue to encourage, through economic and policy incentives, an aging population that stays active and productive in the workforce, engaged in their communities and maintains their independence for as long as they are capable.

• The best way to optimize personal aging and capabilities is by limiting modifiable risk factors and
taking advantage of prevention and treatment interventions, either to obviate or manage the diseases – hypertension, stroke, diabetes, asthma, cancers, dementia, etc. – that cause most of the morbidity that affects the ability of people to add healthy years to their lives. As such, it is important for governments, NGOs and the private sector to develop innovative ways to address health inequity, to increase physical activity and healthy diets among older persons, to empower citizens and patients to make their own decisions about their health choices in collaboration with healthcare providers and other caregivers, and to enhance the provision and utilization of clinical preventive services and cost-effective treatments.

- Public policy should focus on enabling workforce and community engagement, creating age-friendly environments, and promoting technologies that facilitate greater independence and patient-centered care.
- While each society will respond uniquely to the challenges of an aging population, given its demographic profile, resources and needs, these findings apply in principle to lower- and middle-income countries as well as to industrialized nations. Over the coming decades, more than one billion people will reach the age of 60 – and most of them will be living in developing countries and emerging markets.

Taken together, these perspectives offer a new vision for “Aging Well.” In this model, governments, employers, communities and individuals themselves create the conditions for older persons around the world not merely to live longer, but to flourish and have the freedom and capacity to live the lives they value. Together, we have the opportunity to re-imagine aging, to find creative ways to apply the experience and knowledge of older people to build age-friendly societies that will enable everyone – of whatever age – to put his or her capabilities to best use.

Introduction

One of the most remarkable achievements of modern history is the increase in human longevity. Since 1900, life expectancy in industrialized countries has risen by 30 years, so that we can now expect to live for 80 years and more. The economist Gary Becker has called longevity “the 20th century’s greatest gift.” The United Nations note that both decreasing fertility rates and improvements in life expectancy are tipping the distribution of world population toward older persons. While today nearly 900 million people are over the age of 60 in a global population of 7 billion, this number will reach 2.4 billion by 2050. By 2025-2030, the population over 60 will be growing 3.5 times faster than the total. Indeed, WHO Director-General Margaret Chan noted recently that “being in the older age group is becoming the new normal for the world’s population.” This is an arresting idea, and demographic patterns certainly support Dr. Chan’s observation. But such changes have personal consequences for individual lives to which societies and communities and families have not yet adapted. To capitalize on the new promise of longevity, we need to re-envision our lives and what “aging well” means. Let’s explore this notion in more detail.

One notable aspect of population aging is the increase in the number of people who live to the age of 100. In 2009, there were an estimated 455,000 centenarians in the world. By 2050, their...
number is projected to rise to 4.1 million, a nine-fold increase. Yet this gift for many can become a problem—because we have not been able to imagine a new approach to a long life lived well. Aging well requires of each of us a series of transitions that change where we live, how we live, and what roles and responsibilities we have in our communities.

The gift of longevity also has global consequences: we need to imagine our societies differently. The shift to longer lives and the increasing percentage of older persons in national populations are not limited to developed countries. The World Health Organization reports not only that population aging is occurring most rapidly now in lower- and middle-income countries, but also that these countries are experiencing demographic transitions more quickly than industrialized countries did. In France, for example, it took a century for the percentage of the population aged 65 or older to double from 7% to 14%. In Brazil, China and Thailand by contrast, that shift in the age structure of the population took place in little more than twenty years. Indeed, by 2050, 80% of older people will live in lower- and middle-income countries. Even sooner—by 2017—the number of adults aged 65 and older will outnumber children under the age of fifteen for the first time in history.

So if being older is the “new normal,” as these trends confirm, the natural question to ask is whether societies, communities and families have accepted the new reality? Are social, cultural and economic norms adapting quickly enough to assist older persons through the new transitions of longer lives? These issues have been the focus of dialogue by the Think Tank on Aging Well convened by the Philips Center for Health and Well-being. Our conclusion is that the speed of change has outpaced the rate at which individuals, families, communities and global society have adapted to a world in which older populations are the norm. Given that circumstance, a strategic focus on learning how to manage life transitions well—individually and collectively—will yield important dividends in adding life to years.

To illustrate this point, think for a moment of the changes that have transformed global society over the past century. The twentieth century began with the introduction of the airplane and ended with Pioneer 11 leaving our solar system for interstellar space. During the same century, steam power was replaced by nuclear power and even newer technologies powered by wind, solar and geothermal energy. Telephony was supplanted by the Internet and the potential to form the first global community in history, freeing human communications of the limits of time and space. At each stage in these transformations, successful adaptation to the possibilities of new technologies required attention to managing the transitions between the old world and the new.

Our new world is the one in which people are living longer lives than ever before. By analogy, our challenge is to develop the means for individuals, families, communities and societies to adapt rapidly to ever-changing social, cultural, political and economic circumstances that structure the choices that individuals make about transitions throughout their lifespan. If people are to survive and prosper throughout their longer lives, we will need a clearer understanding of the transitions they experience.

As it stands, societies have not yet caught up with the demographic reality of longer lives, nor have the proper roles of business, government and social organizations been defined to meet the needs of older people. At the critical junctures - transitions – in an individual’s life, even a modest investment by companies, governments and social services organizations can significantly alter and improve the next stage in a person’s life. Making investments at these transition points will have maximum impact and ensure substantial returns for societies, communities, families, and individuals.

While marked improvements in life expectancy worldwide are important indicators of progress in human development, they also pose significant challenges to our social and economic institutions, which have been slow to respond. Aging populations are a worldwide phenomenon that will up-end established social policies and practices in many areas, without regard to national borders. In a letter to The Lancet, Peter Lloyd-Sherlock, Martin McKee and colleagues note that aging is “most often framed in negative terms, questioning whether health services, welfare provision, and economic growth are sustainable.” But “instead of being portrayed as a problem, increased human longevity should be a cause for celebration.” Population aging, they argue, “provides opportunities to rethink health policy for the benefit of all – old and young [...] We should see it as a welcome opportunity to challenge outdated public perceptions, political priorities, and policy models.”

We agree strongly with this insight. The “longevity dividend” offers a historic opportunity for societies throughout the world. It is essential to examine changing demographic trends critically and to reflect not only upon how individuals can age successfully, but also how public policy, social institutions and private enterprise can respond to these changes appropriately and productively. By re-envisioning aging in positive ways, we can realize and gain from the social capital inherent in the wisdom, experience, interests and contributions of older persons as family members, community members and active participants in the workforce.

The “Aging Well” model

During the past two years, the Philips Think Tank on Aging Well has developed a model for “Aging Well” to explore the possibilities and prospects for successful aging. The model (Figure 1) examines four primary dimensions - Aging Society, Personal Aging, Capabilities and Public Private Policies - and offers perspectives on successful aging from both individual and societal standpoints. The Aging Well model considers the individual’s personal capabilities and experience within the larger context of aging societies and public/private policies, seeking to balance individual autonomy and social participation through successful management of the personal transitions associated with aging. The model begins from the premise that traditional perspectives on aging are now obsolete, and it provides a framework for asking new questions and developing more realistic, useful policies.

Longevity is a fact, while aging is a process - there’s no true beginning, and each of us ages and passes through life stages in different ways and at different times. Above all, we define our own aging through.

7 Peter Lloyd-Sherlock, Martin McKee et al., “Population ageing and health,” The Lancet, published online April 4, 2012. DOI:10.1016/S0140-6736(12)60519-4
the meaningful transitions we experience through the life course, such as career changes, marriage, divorce, the birth of children and grandchildren, retirement, the death of a spouse or other loved ones. While the challenges of aging are unique and very personal to each individual and his or her circumstances, common threads exist in all societies. But perhaps the most salient fact about the transitions of aging in our rapidly changing world is that they cannot be captured by traditional notions of stages in life. We now live many different lives at different points in time – and often do things at later points in life that were done before only by younger people – that our options at different transitions in life have expanded greatly. Concomitantly, responsibilities and roles are also changing as older persons address new transitions in their lives – e.g., deciding to work longer, or saving for retirement (the concept of which is also changing). Each individual’s ability to address these transitions will vary and will be affected by his or her level of independence and engagement with the broader community.

What do we mean by “independence” and “engagement?” Why are these dimensions important? Independence is straightforward: the ability of older persons to remain healthy past age 60 by taking advantage of preventive care, health interventions, new technologies, opportunities for lifelong learning and social networks to continue to live independently. Engagement is social participation, through access to resources (communications, information, transportation, health care, support networks), volunteer and employment opportunities, and inclusion in the life of the communities in which older persons live. Individuals may, for example, wish to “age in place,” or enter a new phase of professional development as they pass the age of 60 – what is critical to understand is the diversity of choices and roles that older persons now have, and the importance of independence and engagement to exercising those choices fully.

The National Institute of Mental Health and the MacArthur Study of Successful Aging in America found that staying engaged in meaningful activities contributes to good health, satisfaction with life and longevity. A recent study of older persons in eleven European countries found that rates of social participation correlated strongly with


individuals reporting good or very good health on average. A greater social integration has been associated with protective effects against physical and mental illness and enhanced recovery. A review of earlier studies on social isolation concluded that those with adequate social relationships are 50% more likely to survive than those with insufficient social support, an effect comparable with quitting smoking and of greater benefit than avoiding obesity and lack of exercise. Researchers also found that approximately 90% of centenarians in a population-based study were functionally independent at an average age of 92. Thus, engagement and independence are essential elements that enable individuals to manage the transitions of aging successfully. These themes animate the “Aging Well” model.

Our Think Tank team sees the Aging Well model as a useful framework for contemplating how solutions – such as technology, personal skills and human resilience – and the creators of solutions, including policy makers, employers and innovators, can together create positive change toward a new society focused on the health and well-being of an aging population. This essay explores each dimension of the “Aging Well” model in detail, concluding with reflections on its policy implications.

Section 1.
Aging Societies

To jump-start a necessary change in outlook about the new potential of longevity, we need to replace traditionally negative, often false perceptions of aging with a more accurate, data-driven understanding of life past age 60. The most common misperception of aging is that the older one gets, the sicker and more disabled one becomes. In his study of centenarians, Dr. Thomas Perls argues instead for a more optimistic and enabling point of view, noting that “the older an individual gets, the healthier he or she has been.” There is evidence to support his observation. The Gallup-Healthways Well-Being Index – a large sample size, continuing poll – has demonstrated that individuals over 65 consistently report higher degrees of overall well-being than any other age group. The polling data indicate that better eating habits, greater access to healthcare, and improved emotional health each contribute to this group’s high score, despite declines in physical well-being. If we are to understand and capture the potential of such high personal satisfaction in the later years of life, we need to recognize aging as a time of innovation and new possibilities, rather than solely a time of inevitable decline.

Ageism is also a longstanding fixture in the psychology of management and hiring in the workplace. In one study, two individuals, one 57 years old and one 32 years old, applied for 102 entry-level sales or management positions. Despite comparable credentials, the older applicant received less favorable responses 41.2 percent of the time. The researchers argued that “this percentage represents the net rate at which older job applicants with qualifications equal to their younger counterparts were disadvantaged by their age.”16 Examples like this abound, but data do not support an inverse correlation between age and job performance. A review of the applied psychology literature demonstrates that the only jobs for which individual performance appeared to decline with age were jobs

that required manual labor. No correlation was found between age and work quality for supervisors and professionals—and job performance in sales actually improved with age. British economist Richard Disney argues that an older workforce has greater experience and maturity, is more dependable, and embodies greater productivity and less absenteeism than younger workers.

Aging is not merely about keeping up, but about flourishing, a trend historically supported by the large number of lifetime contributions to scholarship, arts and sciences made by individuals in their later years. The period of life after age 50 accounts for the greater portion of output in most scholarly and scientific fields. Ages 70–79 alone account for 20% of the output in the fields of scholarship, and 15% in the sciences. Another, perhaps more tangible, success story: in every year from 1996 to 2007, individuals aged 55–64 have eclipsed the rate of entrepreneurial activity among those aged 20–34. Post-50 year olds have launched twice the number of technology start-ups as those under 25.

Acknowledging these empirical realities in the larger society will catalyze changes in perspective and governance that will continue to provide new possibilities and employment opportunities for older persons. This has obvious economic benefits: working longer boosts gross domestic product and reduces the term of pension payouts. Some salient national examples include the following:

• Switzerland has legislation allowing individuals who continue to work for up to five years beyond the statutory retirement age to increase their state pension by up to $3,825 per year at the time of withdrawal.
• The Norwegian government has pursued a national lifelong learning initiative, known as Competence Reform. Employees who have worked at least three years, for the same employer during the last two years have the right to full- or part-time study leave for up to three years. This initiative aims to provide the country with a highly-skilled, flexible workforce. Competence Reform will also aid in the knowledge transfer of new technologies and help older workers remain competitive in the workplace.
• The Japanese government offers companies incentives to encourage older workers to remain in the workforce, including subsidies to businesses whose total workforce has more than 10% older workers and to employers who have eliminated mandatory retirement.

AARP International notes that the ratio of working-age persons to those aged 65 or older currently stands at 9:1. This so-called “old-age support ratio” is projected to fall to 4:1 by 2050—but only if the current social organization of aging and work remains the same, presupposing that the working capabilities of those over 65 are fixed and will remain so for decades. Increasing participation in the workforce by older persons suggests these assumptions should be re-examined. As Amy Kaslow, senior fellow of the Council on Competitiveness writes: “There are so many myths about older Americans. […] We need to see older Americans for what they are, and must continue to be: givers, not takers, in an economy increasingly dependent upon them.”
Re-envisioning work and work roles in an aging society will bring new opportunities throughout the life course, affording older persons new resources with which to manage important transitions in their lives. At the same time, greater participation in the workforce will have important implications for workforce planning and pension affordability.

There are other ways in which societies can support the engagement of older persons. An excellent example can be found in the “age-friendly cities” movement promoted by the World Health Organization and a network of cities around the world (see also Section 3 below). In New York City, for example, “we found that [social participation and inclusion] was the single most important dimension for older New Yorkers,” notes Ruth Finkelstein of the New York Academy of Medicine. “Being able to live in a neighborhood where you know people, people know you, and places outside of your home include you is the key characteristic of an age-friendly city.”

The design of outdoor spaces, buildings, transportation options and housing should all reflect age-friendly approaches and policies, while businesses, service providers, universities and other institutions can also support the engagement of older persons. Not only will such transformations in urban environments improve the prospects for the inclusion and continued independence of older persons, but, as David Phillips (Lingnan University, Hong Kong) observes, “an environment that’s good for older people is actually good for people of all ages.”

Section 2.
Personal aging

The “Aging Well” model suggests that to manage the transitions of personal aging more effectively, the focus of healthcare needs to shift from treating illness to promoting wellness. Individuals who remain healthy and active as they age can remain productive and engaged in society, which has profound implications both for their well-being and that of their families, communities and societies. Helping older persons to deal more effectively with personal transitions of aging begins with effective and targeted health care and preventive services.

Life expectancy varies widely throughout the world, from roughly 39 years in Angola to nearly 90 years in Monaco. Twin studies demonstrate that only 20 – 30% of life expectancy is genetic, whereas 70 – 80% of the variation is due to environment, behavior and circumstance. Thus a vast majority of the factors influencing life expectancy are modifiable.

Among these factors are certain structural drivers - poor social and economic policies – that lead to systemic differences in health between countries as well as within countries. The WHO’s Commission on the Social Determinants of Health concluded this health inequity can be addressed by reasonable and concerted governmental efforts to improve the conditions of daily life – the circumstances in which people are born, grow, live, work and age. The Commission’s report also highlights some best-case examples of health equity in the Nordic countries and suggests that “important features of the Nordic experience include commitment to

universalist policies based on equality of rights to benefits and services, full employment, gender equity, and low levels of social exclusion.”

In addition to social determinants of health, the remaining modifiable component to life expectancy is a function of our own personal decisions regarding diet, exercise and lifestyle. An essential concept of aging well is to optimize those factors influencing our health that are under our own control.

There are two key areas in which personal aging and capabilities can be strengthened: by limiting modifiable risk factors, such as diet and physical inactivity, and by increasing the use of clinical preventive services such as vaccinations, screening and counseling.

Limiting modifiable risk factors like diet, physical inactivity and other unhealthy behaviors is probably the most important personal step toward achieving wellness and maintaining independence – as we note below, these factors alone can account for differences of as much as 10 years of healthy life expectancy.

Limiting modifiable risk factors with respect to chronic disease is essential. Cardiovascular diseases (CVDs) are the world’s leading causes of death and disability, and modifiable risk factors account for the majority of CVD-related deaths. The recent World Health Organization global health risks report lists eight modifiable risk factors for improving health for life: unsafe use of alcohol, tobacco use, high blood pressure, high body mass index (BMI), low intake of fruits and vegetables, and physical inactivity. Together these account for 60% of all global cardiovascular deaths.

While some of these risk factors may appear to be solely matters of personal choice, the reality is more complicated. Physical inactivity is more difficult to fault, for instance, in areas where violent crime is pervasive, or where traffic is so dense that walking is unsafe. Meat and potatoes may make up a large part of the diet of some families in European countries, because they are inexpensive and widely available, while fresh vegetables are more expensive. Modifiable health risk factors should be considered within the context of given populations.

While the correlation between modifiable risk factors and CVD deaths is strong, the relationship may not be compelling enough to induce widespread behavioral change. To quantify the direct effects of behavior on longevity, researchers from the Center for Health Research at Loma Linda University studied the impact of behaviors on life expectancy among California Seventh-Day Adventists. The researchers found that choices regarding diet, exercise and cigarette smoking can account for differences of up to 10 years of life expectancy. This should be headline news, especially in the US, where only 25 percent of people aged 65 – 74 say they engage in regular physical activity.

There is also evidence that exercise can actually reverse age-related degenerative changes. In the 1966 Dallas Bed Rest and Training Study, five healthy men were asked to spend three weeks on complete bed rest. After three weeks, the men developed physiologic characteristics of men twice their age. The men were then re-evaluated 30 years later at age 50. Even at age 50 they were stronger than they


31 This section focuses specifically on health issues, not other personal factors that affect the capabilities of older persons.


were at 20 after three weeks of bed rest. After an initial baseline physiologic assessment at age 50, the subjects were then started on a six-month long exercise regimen of walking, jogging and cycling. The researchers re-evaluated the participants after the training program and found that the training reversed 100% of the 30 year age-related decline in aerobic power. This study powerfully illustrates both the degenerative effects of lack of exercise and the rejuvenating effects of exercise.\(^3\)

Exercise, while essential, is not a panacea. The use of clinical preventive services is its complement and also one of the best ways to promote successful aging. Because clinical preventive services are resource-limited, the onus is on health systems, both public and private, to provide these services universally and equitably. Research models suggest that an optimal adoption of preventive medical interventions (treatment of hypertension, treatment of hyperlipidemia and aspirin prophylaxis, etc.) could save 50,000 – 100,000 lives per year in those aged <80 and 25,000 – 40,000 deaths per year in those aged < 65 years in the US alone.\(^3\) For comparison, the researchers note that approximately 20,000 Americans die each year from lack of health insurance coverage. As a result, they conclude that the consistent use of proven preventive services has greater benefit than expanding insurance coverage. Another example of the potentially dramatic positive impact of preventive medicine is in the polyp ill – a daily pill containing a combination of a statin, antihypertensive medications and an aspirin – that would be taken to address cardiovascular disease. A study in the British Medical Journal noted that such a pill, if taken by everyone over the age of 55, could reduce ischemic heart disease by 88% and stroke by 80%. The drug is already available in India for $1 per dose and large-scale studies of its use are ongoing.\(^3\)

But clinical preventive services have come under increased scrutiny with respect to their precision, efficacy and cost-effectiveness. The prostate-specific antigen test (PSA) has now been challenged as saving few lives and putting significant numbers of men at risk of unnecessary, potentially debilitating treatments.\(^3\)

The recommended age at which Canadian women should begin undergoing routine mammography to screen for breast cancer has been raised from age 40 to age 50, according to new guidelines (2011) issued by the Canadian Task Force on Preventive Health Care.\(^3\) A recent initiative, “Choosing Wisely,” is a collaboration of nine U.S. medical societies with Consumer Reports to provide evidence-based guidance on questions people should ask their physicians about screening tests that may not be as useful as commonly thought.\(^3\)

Older persons and their physicians and caregivers should thus communicate regularly and openly about the benefits, risks and costs of specific clinical preventive services, but this doesn’t change the consensus that utilizing clinical preventive services and limiting modifiable risk factors offer important overall benefits in achieving healthy, Active Aging. More research is needed on the range of specific interventions (both biomedical and behavioral) that will have positive impact on the health of older persons.

Following are some examples of innovative ways the public and civic sectors globally are addressing physical activity and clinical preventive services.

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Public initiatives to increase physical activity
• In 2004, the municipal government of Guadalajara, Mexico, launched Via Recreativa, a car-free Sunday initiative during which city residents turn the cityscape into public park space for exercise and recreation for 245,000 city residents. The initiative was inspired by Bogota’s Ciclovia, or “open streets” movement, which has closed streets to cars on Sundays since 1976. This movement was also highlighted in the WHO’s “1000 cities -1000 lives” initiative in 2010, which called on 1000 cities globally to open their city streets for health-related activities for city residents.41
• The Chennai Corporation, the civic body that governs the city of Chennai, India, led by the city’s Mayor, launched an initiative to offer free morning yoga classes in 26 of its city parks for city residents.42
• The Leisure and Cultural Services Department of the Hong Kong Special Administrative Regional Government has installed “Elderly Fitness Centers” in public parks across Hong Kong.43

Public initiatives to increase provision of clinical preventive services
• Vote & Vax is a public health initiative directed by Sickness Prevention Achieved through Regional Collaboration (SPARC) and funded by the Robert Wood Johnson Foundation and AARP. This program helps public health agencies and licensed immunizers provide flu shots at polling places on Election Day in the US.44
• The Ministry of Health of the Bahamas recently established the National Healthy Lifestyle Initiative. Citizens receive a “passport” to have their health metrics, including screenings, tracked to provide caregivers and patients data to monitor individual health progress.45
• “Weqaya,” the Abu Dhabi Cardiovascular Program has delivered a Framingham Risk Score – a 10-year risk assessment for cardiovascular disease – for almost every adult in Abu Dhabi. From the Weqaya data, the Health Authority of Abu Dhabi has delivered personalized health reports and ratings to citizens who complete screenings as well as information and services directly related to their health status. Citizens are able to schedule appointments with doctors and clinics, and to opt-in to health-related programs tailored to their personal health needs.46

Section 3.
Capabilities
The examples given in the previous section focus on prevention of disease as a way of maximizing opportunities for people to live healthier lives as they age. There is growing evidence that people who age successfully have benefited from making healthier choices throughout their lives, as well as from lifetime access to primary care, including the early detection and management of such conditions as hypertension and diabetes.47 In fact, the growing incidence of non-communicable diseases (NCDs) like these poses one of the greatest new challenges to health systems and societies in both industrialized and emerging economies in coming decades. We

will need solutions that help people respond with resilience as they face life transitions affected by cardiovascular disease, diabetes, asthma, cancers and mental illnesses such as dementia, anxiety, depression and bipolar disorder. Sleep disorders are also common among older persons. Not one of these conditions is made easier to manage by social isolation, yet we live at a time when many Americans now live in single-person households. The physical and emotional well-being of older persons will depend upon reducing isolation and its adverse health consequences. Resilience alone is not sufficient for optimal health and well-being in the absence of effective emotional support and social inclusion.

How can we help people to become better equipped to cope with health changes as they grow older, and to make use of solutions available to them? On one level, we can accomplish this by encouraging people to take more initiative regarding their own health care. As noted above, older persons can practice engagement by taking an active role in managing their diets, becoming more physically active and taking control of chronic health conditions they may have. Patient mobilization is too often an untapped resource in health care. The impact of health on personal aging, a major factor in enabling older persons to remain independent as they age, can also be ameliorated through technologies that support independent living and enhance quality of life. Mobile devices, now ubiquitous around the world, can help to collect information and monitor chronic conditions by linking older persons with health professionals. Remote monitoring technologies can help manage a wide range of health conditions, and other technologies can help older persons to maintain medication, diet or exercise regimens. Efforts to increase both the health literacy and technological literacy of individuals with chronic conditions will be important enabling factors in improving the capabilities to help people age successfully.

Section 4.

Public-private policies

Previous sections have focused on changing public perceptions of aging, and how people can improve their prospects and capabilities to “add life to years” through exercise and preventive medicine. In addition to these areas, engagement and independence are essential elements in helping individuals to manage the transitions of aging successfully. Public policy should focus on enabling individuals to age well through maintaining workforce and community engagement, as well as through providing age-friendly environments and promoting technologies that facilitate greater independence.


Engagement through technology and social networks

Engagement with technology and social networks promotes happiness through human connection. Dr. Shelia Cotten, a sociologist at the University of Alabama, demonstrated that Internet use was associated with a 30 percent decrease in depressive symptoms among older adults who used it regularly. In this sense, social media can offer a tremendous opportunity to engage older persons with the larger world, primarily because of the accessibility of these new tools. According to the Pew Research Center's Internet & American Life Project, the 74+ demographic is the fastest growing demographic within social networks. Social networking among Internet users 65 and older grew 100% between April 2009 and May 2010 (from 13% to 26%). Still, only 34% of those over 75 use the Internet at all.

Social media also have potential as a medium of community engagement for the elderly. To capture these benefits, efforts should be directed toward knowledge and technology transfer to the older generation, those who've lived the majority of their lives in a non-digital world. For example, the Jewish Council for Aging, based in Washington D.C., offers a Senior Tech program geared toward teaching the technical skills needed for job searching and utilizing social media. There are similar examples globally. In Hong Kong, the Cyber Senior Network Development Association – a charity with the mission of making the older population a part of the “e-world” – enables seniors to use information technology. Other organizations drive technology adoption and knowledge transfer through competition. The Shanghai Internet Services Association hosted a web-page design contest exclusively for people 50+, attracting thousands of participants.

A recent survey of interest in and use of the new information technologies exploring stratification within older age cohorts finds that, while access to online information is becoming more and more critical for everyday living, access to and interest in the Internet shows a “digital dividing line” between those 74+ and younger cohorts. This gap is not surprising, given the complexity of gaining access to the Internet (in terms of the vast array of computers, smart phones and other digital devices, and the bewildering set of service options available).

As a consequence, the potential to improve older persons’ lives with Internet use and social networks has yet to be fully realized. This is illustrated by the comparative examples of two communities for older adults, at Ecumen in Shoreview, Minnesota, and Front Porch in Nuevo Vallarta, Mexico. Ecumen has said that a “handful of residents at each site is […] communicating with their online social networks.” At a Front Porch active adult living community in Mexico, by contrast, “heavy Internet use among residents caused (the facility) to exceed its Internet bandwidth capacity in one month.”

53 Zafar, “Facebook for Centenarians: Senior Citizens Learn Social Media.”
55 Ibid.
56 Laurie M. Orlov, “Linkage Technology Survey, Age 65 to 100: Extending Technology Past the Boomers;” A Study Sponsored by Linkage, Mason, Ohio, November 2011.
This seeming contradiction can be explained in part by how older persons are introduced to new technologies. Personal computers, smart phones and the Internet are transformative new technologies whose use among older persons is best encouraged by personal interaction, rather than assuming that computer literacy will just “happen.”

While participation in social media can foster a sense of inclusion and affirmation from a larger social community, it is no substitute for in-person relationships. Despite the ambivalent role of new communications tools, used wisely social media and the increased accessibility to others that new communications technology enables are potential enhancements to the life satisfaction of older persons.

As the relationship between engagement and well-being is documented, the policy discussion should focus on ways to promote and expand successful social avenues of engagement for the elderly. Simply put, workplace flexibility and community adaptability are the keys to promoting successful engagement.

**Engagement through workforce participation and flexibility**

The value of workforce engagement is simply that engaged older persons are happier than the unengaged. Examples of this abound in formal and informal employment as well as in technology. Older persons derive satisfaction from their work and volunteer contributions. A report by the Families and Work Institute and Boston College’s Sloan Center on Aging and Work found that retirement workers were happier than retired non-workers because they took satisfaction from their contributions to household expenses, to the family and to their workplaces. Seven out of 10 older volunteers claim to enjoy a better quality of life than the average non-volunteer, according to “Volunteering and Healthy Aging: What We Know,” a joint report by Volunteer Canada, Manulife Financial and Health Canada.

There are also early examples of private-sector initiatives directed toward engaging the elderly through a flexible workplace. In the automotive industry, Toyota has adapted its workstations to older workers and BMW recently set up a factory in Leipzig that set out expressly to employ people over the age of 45 in light of a skilled labor shortage in the automotive industry. In addition to modifying the physical environment, businesses are also introducing flexibility into their hiring processes and benefits packages. At Ernst & Young, 25% of its experienced new recruits are “boomerangs” (former employees who return after an absence) from their 30,000 registered alumni base. To attract older workers, Bon Secours Health System offers more flexible and part-time work and also facilitates transitions to less-physically demanding jobs. As an out-of-the-box benefit, the company’s child care center is available to grandchildren of...

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60 Sherisse Pham, “The Graying Work Force,” The New Old Age (blog), November 30, 2010,
62 “Turning boomers into boomerangs” (note 23).
63 Ibid.
employees in addition to children. Healthy former or retired employees over age 65 also represent a potential labor pool for care of those of the same age or older who are incapacitated or ill. In Japan, it is common for 70-year-olds to care for 90-year-olds. In Sri Lanka, members of 55 “elders’ clubs” of tea estate workers visit the sick and bereaved. In the US, the typical caregiver to the elderly is a 47-year-old working woman. Were something like the Japanese model to take hold in the US and in other developed economies, a paradigm shift of this type might also ameliorate the problem of growing disparities in Western economies, which are evident in the level of care received by chronic disease patients in the US, for example, which ranges from exceptional to non-existent.

These trends in workplaces friendly to older workers are not limited to the private sector. The public and civic sectors are also engaging the aging population in creative ways. Action for Welfare and Awakening in Rural Environment (AWAKE) in Hyderabad, India, is an NGO that promotes economic and social development of rural communities through outreach to disenfranchised communities. AWAKE has programs to enable older workers to purchase materials for individual work projects. Another NGO, Pro Vida, based in Colombia, has developed programs to redirect or retrain the skills of older people.

**Community engagement and leadership**

While NGOs are engaging the elderly through supportive services and skill development, the public sector’s positive role is in continuing and expanding the aging population’s involvement in democratic processes and in community leadership. Philadelphia’s Mayor Michael Nutter created the Deputy Manager for Aging, who is responsible for representing older people’s perspectives at city meetings. The Mayor also actively encourages other forms of community engagement through “Serve Philadelphia,” a program that keeps the elderly involved through volunteer initiatives such as tutoring of youth. The Sri Lankan National Action Plan on Aging, developed by the Ministry of Social Services, National Council of Elders and the Ministry of Health, encourages greater social participation activities by lower- and middle-income elders including religious rituals, outreach to peers, improved access to services and leadership skills development. Governments also promote community engagement of the elderly in non-traditional ways as well. In Venezuela, for example, the National Institute of Geriatrics and Gerontology and local companies partnered to create geriatric farms through which individuals aged 60 and above can engage in gardening, farming and raising cattle.

The European Innovation Partnership on Active and Healthy Aging takes planning for increased longevity through improved community engagement to the regional level. This Europe 2020 Initiative has the stated goal of increasing the “healthy European lifespan” by two years, through a combination of funded strategic plans, a gradually

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66 Butler, “Productive Aging”, 197
67 Greg Sebasky,”The Future of America’s Healthy Vibrant Cities” Global Trends and Philips Dialogues : 19-21
69 “Venezuela: Farms Help Cultivate Aging Well” (note 64).
expanding list of priorities and on-the-ground partnerships throughout the European Union. Its three identified priorities are Care & Cure; Prevention Screening & Early Diagnosis; and Active Aging/Independent Living. This effort is among the world’s most ambitious to date in addressing the new realities of longer, healthier lifespans. The Plan’s intent is to develop new and productive relationships among all sectors in the innovation value chain, including health care and related sectors such as housing, communication and transportation, and to bring together “researchers, businesses, policy makers and regulators, public and private organisations to end users,” including geriatricians and gerontologists as well as other health professionals, caregivers and older patients. The Plan contains specific deliverables with specific target dates. These include delivering tangible adherence approaches for various target diseases across thirty EU areas by 2014, and validated fall diagnosis and prevention programs in at least ten European countries by 2015.

Age-friendly cities

Any discussion about community engagement should naturally also include urban planning. The very design and purpose of the built environment is crucial to fostering community engagement of older persons. Half of the global population now lives in cities, and this proportion will continue to rise. By 2030, three of every five people in the world will live in cities. Anticipating this growth, the public health community is supporting the creation of livable and age-friendly cities to accommodate and support diverse inhabitants (see, for example, the work of the Philips Think Tank on Livable Cities, WHO’s Global Age-Friendly Cities initiative, and the New York Academy of Medicine’s Age-Friendly New York City). In one such example, the WHO commissioned the Global Age-Friendly Cities Guide, a project developed by Alexandre Kalache and Louise Plouffe. To develop recommendations for age-friendly cities, WHO surveyed focus groups in 33 cities globally on the advantages and barriers of city living. The report uses the voices of city dwellers to guide its recommendations for making cities age-friendly, which include installing adequate public seating and rest areas, as demonstrated by Melbourne and Shanghai.

Better ergonomic urban design can promote and encourage healthier behaviors in all age segments, helping to reduce, for example, some forms of diabetes and obesity by making walking and bicycling safer and easier. In this sense, planning for a healthy older population can be considered within a context of improving public health overall. One approach of this type is known as “8-80.” Proponents of this type of urban design argue that cities should be conceived and designed under the guidance of the 8-80 rule, which encourages urban planners when developing better cities to consider simultaneously loved ones who are 8 years of age – a child or grandchild - and 80 years of age – a parent, grandparent or friend. The 8-80 rule

70 The European commitment is in three areas: improving health and the quality of life, particularly for older people; supporting the long-term efficiency and sustainability of European social support systems; and “fostering the growth of EU industry in this field”: http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing
71 Ibid
74 Global Age-Friendly Cities: A Guide, (Geneva:WHO; 2007). The WHO framework analyzes eight domains needed to support healthy aging successfully: outdoor spaces and buildings; transportation; housing; social participation; respect and social inclusion; civic participation and employment; communication and information; and community support and health services.
anticipates cities where younger and older persons are equally comfortable, where grandparents and grandchildren, for example, can walk or bicycle together.\(^{75}\)

Age-conscious urban planning and technology transfer are as much about community engagement as they are about maintaining independence, an equally desirable goal for older persons. A 2010 AARP survey revealed that nine out of ten people aged 65 and over reported wanting to live at home as long as possible.\(^{76}\) This trend is not specific to Western cultures. Ninety-eight per cent of older persons remain in their homes in China, and “granny flats” – smaller living spaces with private entrances attached to family residences – are a popular way for older people to stay close to their families while maintaining their independence.\(^{77}\)

Perhaps the key reason why maintaining independence is desirable is because independence is correlated with positive health outcomes. The Katz Index of Independence – a rating scale of one’s ability to perform Activities of Daily Living – factors into risk assessments for a number of health outcomes including hospitalization, nursing home admission, health care costs, disability progression, and mortality.\(^{78}\)

**New technologies and opportunities for Aging Well**

Advances in medical technology (wireless, mhealth, health IT) can help facilitate independent living and also create models of informed decision-making.

Remote monitoring technology is already proven to improve care and reduce costs.\(^{82}\) Through use of remote monitoring technology for veterans living at home, the US Veterans Health Administration has already realized a 25 per cent reduction in health care in six countries found that home-medical technology is helping to transform the current provider-driven model of health care delivery into a more patient-centric model.\(^{79}\) For example, Dr. Rita Paradiso of Smartex in Italy is integrating smart sensors in fiber and yarn with advanced signal processing systems to create SFIT (smart fabrics / interactive textiles), which could serve as wearable monitors of vital signs for the elderly. This technology holds tremendous potential for extending independent living for older persons.\(^{79}\)

The eCAALYX Enhanced Complete Ambient Assisted Living Experiment of the Ambient Assisted Living (AAL) Project is designed to produce a comfortable, wearable garment embedded with enhanced fall, balance and mobility sensing and reporting and linked via smart phones to a scalable cloud-based system.\(^{80}\) The HELP Project Consortium, another AAL-funded project, is intended to monitor and calibrate the delivery of medication to Parkinson’s disease patients in real time, based on their physical activity requirements.\(^{81}\)


76 Laurie Orlov, “Will aging in place become aging in some other place?” Age in Place Technology Watch (blog). http://www.agenplaceotech.com/blog/will-aging-place-become-aging-some-other-place .


80 Ambient Assisted Living, August 2011 list of funded projects, Call 1, “Ecaalyx” (no page number) PDF file, Internet http://www.aal-europe.eu/projects/AALCatalogueV3.pdf

81 Ambient Assisted Living, August 2011 list of funded projects, Call 1, “HELP – Home Empowered Living For Parkinson’s Disease Patients” (no page number) PDF file, Internet http://www.aal-europe.eu/projects/AALCatalogueV3.pdf

inpatient utilization, a 19 per cent reduction in hospital admissions and an 86 per cent satisfaction rate of veterans being treated at home. During a pilot program, Jewish Home Lifecare of New York realized a two-thirds reduction (16% to 5%) in hospitalization rates among home care clients with congestive heart failure through a telehealth monitoring device. The organization was able to maintain this improved level of rehospitalization rates after the pilot program ended by making deployment of the units standard practice. At MJHS in New York City, a telehealth program reduced the mortality rate among waitlisted kidney failure patients from 7% to zero.

Laurie Orlov’s work highlights the diversity of products and services that can support aging in place, such as big button cell phones, personal emergency response systems, and electronic games that encourage physical activity. Universal features of technology promoting “aging in place” include a user-friendly design, software integration into networks that communicate with providers, and affordability. In Japan, NTT Docomo markets Fujitsu’s new Raku Raku Smartphone for seniors to a customer base of eight million individuals. Philips Lifeline provides 24-hour monitoring to 500,000 elderly and disabled customers across the US and Canada. Health information technology offers prospects greatly to improve informed medical decision-making, which is critical for all patients young and old. At Volunteers of America in Eden Prairie, Minnesota, for example, staff members reviewing sleep monitoring data were able to determine that a third of the residents on one skilled nursing unit were being awakened unnecessarily. Floyd Fowler and colleagues argue that “the most important reforms needed to improve medical care are those that would inform and amplify the voice of the patient when medical decisions are made.” One model of how health IT can improve informed decision-making is through “triggers” which are used at Massachusetts General Hospital’s (MGH) primary care division. At MGH, once providers enter a new medical condition into a patient’s record, a reminder icon is triggered to prompt the provider to mail medical decision-making support materials about the condition directly to the patient’s home.

The role of government in providing an enabling environment

Governments should support trends toward the empowerment of older persons and enlist the support of active and informed individuals as partners in health. To facilitate the trend toward individual autonomy among older persons with respect to their own health choices, governments need to encourage greater dissemination of shared decision-making models in the clinical setting, and the use of patient-centered disease management tools (such as home medical technology, health

83 Preparing For The Future, 45.
84 Ibid., 61.
88 Preparing for the Future (note 60), 77.
90 Sturchio, Jeffrey, Melinda Hanisch, “Ageing and the challenge of chronic disease: Do present policies have a future?” The WDA-HSG Letters on Demographic Issues. 2007. no. 2 (2007).
In addition to supporting trends toward shared decision-making for the health needs of older citizens, governments have an important role to play in facilitating the process of re-envisioning aging. Through appropriate legislation, governments can address pension and health system reforms that will ensure equitable, accessible and sustainable solutions for their aging populations. Equally important, governments should institute transparent, inclusive and accountable processes to create enabling environments to encourage innovations in technology and systems that will encourage new thinking and approaches to the challenges of Active Aging. Too often, the status quo in public policy and existing practices may have the unintended consequence of discouraging innovations that can help older persons maintain their independence and engagement in society. Decision makers may avoid new health technologies because initial costs are higher than the status quo, even though they can offer clear benefits in lowering the total costs of care in the long run. The health system may also have perverse incentives in place that mitigate against new home healthcare solutions, for example, because they may challenge existing payment and reimbursement structures and long-standing practices in caring for older persons. Exploring new solutions in a holistic way – focusing on system-wide impact, the need to align incentives among all stakeholders affected by innovations and incorporating the voices and needs of older persons themselves – is the best way to develop new policies and programs that will capture the possibilities of truly re-envisioning aging.

91 One recent, ambitious example in which the UK government took a lead in building a coalition to approach this kind of re-design is the Whole System Demonstrator Programme, a large clinical trial designed to test the clinical and economic benefits of telecare and telehealth technologies on chronic conditions like diabetes, heart failure and COPD for more than 6100 patients in more than 230 GP practices in the UK. The trial demonstrated significant benefits for using technology to make remote interventions with patients living with these conditions, yielding reductions in emergency room visits, elective admissions, days in hospital and costs – as well as a dramatic reduction in mortality rates. The UK Department of Health estimates that at least three million people with long-term conditions and/or social care needs could benefit from telecare and telehealth, and they are now organizing a multisectoral partnership to try to realize these health gains. See http://www.dh.gov.uk/health/2011/12/ wsd-headline-findings.
Conclusion

It is critical to reflect not only upon how individuals can age successfully, but also how public policy, social institutions and private enterprise can respond appropriately and productively to dramatic growth in the segment of the global population over 60.

• We need to move away from viewing aging solely as a time of inevitable decline to one that can be rich with new innovations and possibilities. Governments should continue to encourage, through economic and policy incentives, an aging population that stays active and productive in the workforce, engaged in their communities and maintains their independence for as long as they are capable.

• The best way to optimize personal aging and capabilities is by limiting modifiable risk factors and taking advantage of prevention and treatment interventions, either to obviate or manage the diseases – hypertension, stroke, diabetes, asthma, cancers, dementia, etc. – that cause most of the morbidity that affects the ability of people to add healthy years to their lives. As such, it is important for governments, NGOs and the private sector to develop innovative ways to address health inequity, to increase physical activity and healthy diets among older persons, to empower citizens and patients to make their own decisions about their health choices in collaboration with healthcare providers and other caregivers, and to enhance the provision and utilization of clinical preventive services and cost-effective treatments.

• Public policy should focus on enabling workforce and community engagement, creating age-friendly environments, and promoting technologies that facilitate greater independence and patient-centered care.

• While each society will respond uniquely to the challenges of an aging population, given its demographic profile, resources and needs, these findings apply in principle to lower- and middle-income countries as well as to industrialized nations. Over the coming decades, more than one billion people will reach the age of 60 – and most of them will be living in developing countries and emerging markets.

Taken together, these perspectives offer a new vision for “Aging Well.” In this model, governments, employers, communities and individuals themselves create the conditions for older persons around the world not merely to live longer, but to flourish and have the freedom and capacity to live the lives they value. Together, we have the opportunity to re-imagine aging, to find creative ways to apply the experience and knowledge of older people to build age-friendly societies that will enable everyone – of whatever age – to put his or her capabilities to best use.
Philips Aging Well Think Tank

**Nicola Bedlington**  
*Director of the European Patients Forum*

Nicola Bedlington was born in the UK in 1965. She studied business and human resource management in the UK and France. She was appointed the first Director of the European Patients’ Forum (EPF) in June 2006. Previously, Nicola led the European Disability Forum as its first director, worked as an external expert for the European Commission (Social Affairs and Employment), and led an OECD network on education for sustainable development. She has also worked as an independent consultant and evaluator on EU health, social policy and development issues.

The European Patients’ Forum (EPF), is the umbrella organization of EU patient organizations. Collectively, through its diverse membership of over 45 disease specific European patient organizations and national coalitions, EPF represents the interests of over 150 million European patients. Its vision is high quality, patient-centred, equitable healthcare for all patients across the European Union. Its role is to provide a strong and influential patients’ voice in EU health policy development. www.eu-patient.eu.

**Rod Falcon**  
*Program Director, Health Horizons*

Born in Oakland, California in a time and place of great social change, Rod Falcon attended nearby UC Berkeley to better understand what was happening. There he studied history and social change as an undergraduate and public policy as a graduate student. After working one summer enforcing the Voting Rights Act for the Justice Department, he realized that public policy was not as future oriented as it might be and was inspired to do something about it. He came to IFTF to forecast the future of the California health care safety net and has stayed on for more than a decade and counting.

As one of the leading ethnographic researchers at IFTF, Rod uses the stories of real people to get at larger trends. For his pioneering work on social networks, he has visited homes in China, India, Japan, the United Kingdom, Sweden, and the United States. Rod has also examined the information and technology ecology in the home and workplace and has led research in technology adoption, workspace and mobility patterns, and personal health technologies.

Rod leads IFTF’s Health Horizons team. He conducts research across a range of health and health care issues with an emphasis on the global health economy: evolving consumer health markets, do-it-yourself health care, the shifting of care outside clinical settings, and the growing number of people turning to technology to become better-than-well. Rod’s current work explores how social technologies are creating health-aware environments as well as personal systems for managing health. In the course of his work, Rod speaks to executive audiences in the health care and food industries and helps them find innovative strategies for participating in the global health economy.

Rod has a B.A. in American history and ethnic studies and an M.P.P. from the University of California, Berkeley.
Patricia Ford-Roegner  
RN, MSW, FAAN – Policy Advisor

Patricia Ford-Roegner is a prominent strategist and driver of healthcare policy reform, drawing on her 30-plus years of experience on both the policy-making and clinical sides of healthcare. After serving for five years as CEO of the American Academy of Nursing, Pat is committed to helping the healthcare community, elected officials and policy influencers to make the promise of a patient centered health system a reality. She is a senior policy advisor to Amplify Public Affairs, LLC, a woman owned full service firm. And Pat also started her own independent practice, PFR Strategic Affairs with a diverse client group from Ohio State University College of Nursing to the Agency for Health Care Quality (AHRQ) to AARP. After launching her career as oncology nurse in Philadelphia, Pat leveraged her clinical experiences and later community organizing training to advocate for common sense health care. She brought together nurses, physicians and other health professionals together as a unified voice before local, state and national policy makers. Pat continues her engagement on the Advisory Board for the Partnership to Fight Chronic Disease (PFCD). She is an advisor to CTAC, the Coalition on Advanced Care. One of the few nurses to hold a presidential appointment, Pat was Atlanta regional director for the U.S. Department of Health and Human Services from 1993–1999. Pat was inducted into the 2008 Sturzebecker Hall of Fame at West Chester State University for her nursing leadership. She holds a Master’s in Social Work and Public Policy from the University of Pennsylvania, a Bachelor’s in Public Policy from West Chester State University in Pennsylvania and an Associate’s Degree in Nursing Science from Gwynedd Mercy College in Pennsylvania.

Koen Joosse  
Director of Professional and Public Affairs, Philips

Koen Joosse coordinates the work of the Aging Well think tank of The Philips Center for Health and Well-being. As Director of Professional and Public Affairs at Philips he is responsible for the development of stakeholder relations and thought leadership programs and deploying these across Philips’ global markets and businesses. Previous to this role he was Director at Philips Corporate Communications, responsible for developing communication strategies, profiling and messaging, issues management and Board of Management speech writing, and before that he was a press officer; spokesman and chief editor at Philips Research. Koen holds a PhD in physics from University of Twente in the Netherlands. He spent 10 years in academic and institutional research and industrial engineering before making a switch to corporate communications.
Professor Ilona Kickbusch
Kickbusch Health Consult

Ilona Kickbusch is the Director of the Global Health Programme at the Graduate Institute of International and Development Studies, Geneva. She is the chair of Global Health Europe - a platform for European Commitment to Global Health and of the Consortium on Global Health Diplomacy. In Switzerland she serves on the executive board of the Careum Foundation and is the chairperson of the World Demography and Ageing Congress St. Gallen

She advises – also through kickbusch health consult - organisations, government agencies and the private sector on policies and strategies to promote health at the national, European and international level. She has published widely and is a member of a number of advisory boards in both the academic and the health policy arena. She has received many awards.

In 2007 she was appointed as the Adelaide Thinker in Residence for the subject area “Healthy Societies” at the invitation of the Premier of South Australia and continues to be involved in a range of projects in South Australia, in particular as regards Health in All Policies.

Her key areas of interest are health in all policies, the health society and its interface with demography, health literacy, global health governance and global health diplomacy. She has had a distinguished career with the World Health Organization, at both the regional and global level. She then joined Yale University as the head of the global health division, where she contributed to shaping the field of global health and headed a major Fulbright programme. She is a political scientist with a PhD from the University of Konstanz, Germany.

Dr. Leonard Marcus
Harvard School of Public Health

Dr. Marcus is founding Co-Director of the National Preparedness Leadership Initiative, a joint program of Harvard School of Public Health (HSPH) and Harvard’s Kennedy School of Government, developed in collaboration with leadership of the Centers for Disease Control and Prevention, the White House Homeland Security Council, the Department of Homeland Security, and the Department of Defense. In recent years, Dr. Marcus’ research, teaching, and consultation have played a key role in national and international terrorism and emergency preparedness and response. He has pioneered development of the conceptual and pragmatic basis for “meta-leadership”: “overarching leadership that strategically links the work of different agencies and levels of government;” and “connectivity” – the coordination of “people, organizations, resources, and information to best catch, contain, and control a terrorist or other threat to the public’s health and well-being.

Recent research activities have taken him to the center of emergency preparedness and response through direct observation and immediate interviews with leadership during the early H1N1 response, the 2009 Presidential Inauguration, the 2009 and 2006 wars in Israel, the 2010 BP oil spill, and in 2005, Hurricanes Katrina and Rita on the Gulf Coast.

Prior to being recruited by the federal government following 9/11, Dr. Marcus’ primary work was in health care negotiation and conflict resolution. Dr. Marcus is founding Director of the Program for Health Care Negotiation and Conflict Resolution at HSPH. He is lead author of the primary text in the field, Renegotiating Health Care: Resolving Conflict to Build Collaboration.

Dr. Marcus has developed a number of practical applications of mediation and conflict resolution. He has consulted to, trained, or provided executive coaching to leading health care organizations, including the American College of Physician Executives, Kaiser-Permanente Health Plan, and the American Medical Association.

Dr. Marcus completed his doctoral studies at The Heller School of Brandeis University. He was selected as a Fellow for the Kellogg National Leadership Program from 1986-1989.
**Bill Novelli**  
*Georgetown University*

Bill Novelli is a professor in the McDonough School of Business at Georgetown University. In addition to teaching in the MBA program, he is working to establish a center for social enterprise at the School. From 2001 to 2009, he was CEO of AARP, a membership organization of over 40 million people 50 and older. During his tenure, the organization achieved important policy successes at national and state levels in health, financial security, good government and other areas. It also doubled its budget, added five million new members and expanded internationally. Prior to joining AARP, Mr. Novelli was President of the Campaign for Tobacco-Free Kids and he currently serves as chairman of the board. Previously, he was Executive Vice President of CARE, the world’s largest private relief and development organization. Earlier, Mr. Novelli co-founded and was President of Porter Novelli, now one of the world’s largest public relations agencies and part of the Omnicom Group, an international marketing communications corporation. He retired from the firm in 1990 to pursue a second career in public service. Mr. Novelli is a recognized leader in social marketing and social change, and has managed programs in cancer control, diet and nutrition, cardiovascular health, reproductive health, infant survival, pay increases for educators, charitable giving and other programs in the U.S. and the developing world. He holds a B.A. from the University of Pennsylvania and an M.A. from Penn’s Annenberg School for Communication, and pursued doctoral studies at New York University. His book, 50+: Give Meaning and Purpose to the Best Time of Your Life, was updated in 2008. Mr. Novelli serves on a number of boards and advisory committees.

**Laurie Orlov**  
*Industry Analyst, Aging in Place Technology Watch*

Laurie Orlov is the Founder of Aging in Place Technology Watch, a market research firm that provides thought leadership, analysis, and guidance about technologies and related services that enable boomers and seniors to remain longer in their home of choice.

In her previous career, Laurie spent more than 30 years in the technology industry, including 24 years in IT and 9 years as a leading industry analyst at Forrester Research. While there, she was often the first in the industry to identify technology trends and management strategies which have survived the test of time. She has spoken regularly and delivered keynote speeches at forums, industry consortia, conferences, and symposia, most recently on the business of technology for boomers and seniors.

Laurie is a judge in the 2010 Silicon Valley Boomer Venture Summit. She is featured on Caring.com, SilverPlanet, Mobile Health News, and her blog entries are referenced on such sites like SmartSilvers, BoomerAuthority, RetirementHomes.com, and MaryFurlong.com. She advises large organizations as well as non-profits and entrepreneurs about trends and opportunities in the age-related technology market. In addition to being a long-term care ombudsman, in 2009 she received graduate certification in Geriatric Care Management from the University of Florida. She has a B.A. in Music from the University of Rochester.
Dr. Eric Silfen  
**Senior Vice-President and Chief Medical Officer for Philips Healthcare**

Eric Z. Silfen is Senior Vice-President and Chief Medical Officer for Philips Healthcare, located in Andover, Massachusetts. Prior to joining Philips Healthcare in 2008, Eric was Senior Director of the Department of Biomedical Informatics Research for Philips Research North America, where he has led the design, development, validation and evaluation of clinical decision support systems for biomedicine. Since joining Philips in 2006, Eric has focused on healthcare research work in the areas of clinical bioinformatics, molecular medicine, computer-aided imaging, clinical systems, and diagnostic evaluations. Eric’s clinical, academic, and hospital administration experience is extensive. He received his Doctor of Medicine from Georgetown University School of Medicine in Washington, DC, and completed residencies in Internal Medicine and Emergency Medicine at Georgetown University Hospital. He is Board certified in Internal Medicine and Emergency Medicine. Eric has held a broad range of medical posts, including Chief Medical Officer at St. Charles Hospital and Rehabilitation Center, Port Jefferson, NY, Chief Medical Officer for the Reston Hospital Center, Reston, Virginia, and as Medical Director for Emergency Medical Services, Metropolitan Washington Airport Authority, Dulles Airport, in Washington, DC.

Eric also holds a Master of Science in Healthcare Administration from Medical College of Virginia, and a Master of Arts in Biomedical Informatics from Columbia University in New York. He has worked with the Hospital Corporation of America (HCA), a leading provider of healthcare services for more than 280 hospitals and outpatient centers in the United States and England.

Eric has extensive experience in hospital and health plan clinical affairs, disease and care management programs, Joint Commission and National Committee for Quality Assurance standards and clinical quality/performance improvement. Eric is also a member of numerous professional societies, including the Society for Critical Care Medicine, the Society for Medical Decision Making, the Health Information Management Systems Society, and The New York Academy of Sciences.

Gérard van Spaendonck  
**General Manager of Home Monitoring, Philips Healthcare**

Gérard Corneille van Spaendonck is General Manager of Philips Home Monitoring. He joined Philips in 1995 as a financial Analyst at Philips Corporate. In 2001 he moved to Singapore to become the VP & CFO of the business video systems and since 2004 has taken on SVP & CFO roles in business Home Entertainment and business Magnetic Resonance in both Singapore and Latham (NY).

In parallel - at all stages of his career – he has had the opportunity to build new product-market combinations, lead businesses and satisfy his entrepreneurial drive. This has included executive lead of SuperPower in Schenectady NY; board member of Imaging Systems Greenfield in Suzhou, China; integrator of the Intermagnetics acquisition in Latham NY; assisting “first to market with DVD-Recording in the USA” and “launching Philips BabyCare in Europe,” as well as founding two companies during his years of study at University.”

He studied business economics with a specialization in Finance and Investments at the Erasmus University in Rotterdam as well as an international Controllers Program at the University of Amsterdam and Maastricht and holds a strong track record in finance and business management. He recently finished an Executive Marketing course at Kellog's and is known to be a very people-orientated, integer and result focused man with strong entrepreneurial skills.
Jeff Sturchio  
**Senior Partner, Rabin Martin**

Jeffrey L. Sturchio is Senior Partner at Rabin Martin. Before joining Rabin Martin, Dr. Sturchio was President and CEO of the Global Health Council, the world’s largest membership alliance of public health organizations and professionals (in more than 140 countries on six continents) dedicated to saving lives by improving health throughout the world.

Dr. Sturchio joined the GHC in August 2009, following nearly twenty years at Merck & Co., Inc., where he was Vice President, Corporate Responsibility, and managed a portfolio of activities. He also served as President of The Merck Company Foundation.

Dr. Sturchio is also currently a visiting scholar at the Institute for Applied Economics, Global Health and the Study of Business Enterprise at The Johns Hopkins University; a senior associate of the Global Health Policy Center at the Center for Strategic and International Studies; a member of the Global Agenda Council on Precision Medicine of the World Economic Forum and a principal of the Modernizing Foreign Assistance Network.

Dr. Sturchio received an A.B. in history (1973) from Princeton University and a Ph.D. in the history & sociology of science from the University of Pennsylvania (1981). His previous positions include the AT&T Archives, the Beckman Center for the History of Chemistry at the University of Pennsylvania, Rutgers University, and the New Jersey Institute of Technology. He has also been a Postdoctoral Fellow and Senior Fellow at the Smithsonian Institution’s National Museum of American History (NMAH) and a Visiting Fellow of LSE Health and Social Care at the London School of Economics.

In 2004 he was elected a Fellow of the American Association for the Advancement of Science. In 2010 he was elected a Member of the Council on Foreign Relations.

Susanna Palkonen  
**European Patients’ Forum (EPF)**

Susanna Palkonen works in Brussels as the Executive Officer of European Federation of Allergy and Airways Diseases Patients’ Associations (EFA), member of the European Patients’ Forum (EPF). She has studies social policy at the University of Helsinki. As patient representative, she is a Member of the EU Consultative Forum on Environment and Health of the European Commission Directorate General (DG) Environment, DG Health and Consumers (SANCO) Indoor Air Quality Expert Group, Allergic Rhinitis and Its’ Impact of Asthma (ARIA) Initiative Guidelines Advisory Committee, European Academy of Allergology and Clinical Immunology Taskforce Expert Group Member on Allergic Child at School and the Editorial Board of the Italian Journal of Primary Care among others. In her capacity as Vice President of EPF, she represented EPF 2007-2008 at the DG Enterprise and SANCO Pharmaceutical Forum Working Group on Information to patients and is now EPF representative in the European Medicines Agency (EMA) Working Group with Patient and Consumer organisations.

Being a patient with allergic rhinitis and atopic eczema herself, her special interests are prevention and environment and health from the patients’ perspective.
The Active Aging think tank has outlined a number of important factors that impact our ability to age well. This ability is affected by personal capacity to react to life’s transitions; individual behaviors and health status; societal factors (including public policy and cultural expectations of aging); and the individual’s ability to engage with their community and remain independent. The transitions of aging, such as changing work roles, altering health status or expanding family role, are addressed differently by each individual and will be impacted by their level of independent and engagement with the broader community.

Environmental Factors Determined by Society

The societal perception of aging will impact the individual aging process. This includes cultural factors such as the respect afforded to elders.

Challenge
Replace negative and false perceptions of aging with a data-driven understanding of aging to recognize aging as a time of new possibilities.

Example
Research shows that an older workforce has greater maturity and embodies greater productivity and less absenteeism than younger workers.

Public and Private Policies

Public and private policies can impact the options available to aging populations.

Challenge
To create policies that support inclusion of all citizens in changing health and pension systems.

Example
Some businesses are introducing flexibility in their hiring processes, benefits and packages. Offering day care to grandchildren of employees is an example.

Capabilities

Changing capabilities can have a significant impact on aging well, such as if health and not being able to drive a car.

Challenge
Find solutions to help people respond with resilience as they face transitions affected by age, such as the ability to perform daily life activities.

Example
Mobile devices can help collect information and monitor chronic conditions by linking older people with health professionals.

Personal Aging

Our individual responses to aging are determined by our genetics and specific behaviors, as well as personal circumstances.

Challenge
Shift the focus of healthcare from treating illness to promoting health and well-being by promoting patient empowerment.

Example
The initiative of Elderly Fitness Centers installed in Hong Kong is an example to promote patient empowerment.

Recommendations

Governments could create a more supportive, inclusive society with employment opportunities for older persons.

Public and private health systems should provide clinical preventive health services universally and equitably.

Enable and private health systems should provide clinical preventive health services universally and equitably.

Shift the policy discussion to promote and expand social avenues of engagement for the elderly and to increase workplace flexibility and community adaptability.

The Insight Series share the exciting work that is in progress in the think tanks of The Philips Center for Health and Well-being. Through snapshots of ongoing work, the Insights aim at providing inspiration and stimulating debate around critical challenges in improving health and well-being worldwide.