Original Article

Transforming pensions and health care in a rapidly ageing world: Opportunities and collaborative strategies

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ABSTRACT This article addresses the question of improving the financial sustainability of and access to pensions and health care in ageing societies. It focuses on the opportunities presented by ageing societies and identifies 11 strategic options (actions and programs) that offer the most promise for multi-stakeholder collaboration, often combining pensions and health-care solutions. The publication on which this article is based contains a longer list of more than 50 strategic options (actions and programs) that stakeholders can consider when developing policies and programs to improve the financial sustainability of and access to pensions and health care in ageing societies.

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SETTING THE SCENE

The ageing of society can be seen as a daunting challenge, as the implications for resource allocation are sobering, especially in the context

Figure 1: Projected increase in ageing-related public spending, 2000–2050. (Assuming unchanged policies as from the early or mid-2000s, in per cent of GDP.)

of the recent economic crisis. Public spending on pensions is expected to rise, often dramatically; the proportion of GDP devoted to health care will also increase, as older people generally require higher levels of long-term care and medical expenditure (Figure 1). These challenges do not affect only developed economies, as is often assumed. Although the degree and timing of demographic shifts will differ by country, emerging economies will see many of the biggest gains in elderly population by 2030, and all but a handful of countries will be affected by 2050.

However, the ageing of society could also present opportunities. There is potential to create a ‘new age of age’, in which growing old is no longer synonymous with declining health, experience is valued as much as youth, the ‘silver economy’ is vibrant, and the ‘welllderly’ are active and valued in society.

This requires a paradigm shift in thinking about ageing, and the current economic turmoil presents a once-in-a-generation opportunity to achieve such a change in mindset. There is a sense that the world is at a crossroads. Old certainties have been overturned, and new ways of thinking can emerge from the current state of flux.

Fundamentally reorienting from a ‘challenge mindset’ to an ‘opportunity mindset’ can prepare the ground for thinking more creatively about strategic options for managing demographic change (Figure 2).

THREE-STEP PROCESS FOR IDENTIFYING THE MOST PROMISING 11 STRATEGIC OPTIONS FOR SEIZING THE OPPORTUNITIES PRESENTED BY AGEING

The strategic options outlined in this article suggest ways of improving the financial sustainability of and access to pension and health-care systems in a rapidly ageing world. These options have been identified and developed through a three-step process summarized in Figure 3. The process started with a scenario-building exercise to chart diverse possible futures of the pension and health-care industries to 2030 (step 1 of Figure 3 and detailed in Figure 4), which resulted in an earlier World Economic Forum publication in collaboration with Mercer, *The Future of Pensions and Healthcare in a Rapidly Ageing World – Scenarios to 2030* (available on the World

Domain	Conventional mindset	Alternative mindset
Population ageing	<ul style="list-style-type: none"> • The ageing of our societies is a challenge • Older workers are less productive 	<ul style="list-style-type: none"> • The ageing of our societies is both a challenge and an opportunity • Older workers are productive and healthier than ever before
Time horizon	<ul style="list-style-type: none"> • There is still time to solve pension and healthcare financing challenges in a rapidly ageing world 	<ul style="list-style-type: none"> • The window of opportunity to solve pension and healthcare financing challenges is closing fast
Work	<ul style="list-style-type: none"> • Work in old age is burdensome • A person's career ends with a hard stop at retirement 	<ul style="list-style-type: none"> • Work in old age can be enjoyable and fulfilling • A person can have multiple careers and flexible working arrangements at an older age. • Work, rewards and career progression can be adjusted to life stages
Solutions	<ul style="list-style-type: none"> • Change must be incremental, and be bound by established concepts of roles and responsibilities • The pension and healthcare financing challenge can be addressed with siloed pension and healthcare solutions • Individual interests, single-stakeholder perspectives and risk shifting will predominate • Healthcare is curative and reactive • Higher-income countries rely on state care systems; lower-income countries rely on informal care 	<ul style="list-style-type: none"> • Change can and should be transformational, with a fundamental re-conception of roles and responsibilities • The pension and healthcare financing challenge can be simultaneously addressed with integrated solutions • Collective interests, multi-stakeholder perspectives and risk sharing will predominate • Healthcare is preventive and proactive • Hybrid models are tailored to stages of economic development and cultural norms

Source: World Economic Forum

Figure 2: Reorienting from a 'challenge mindset' to an 'opportunity mindset'.

Economic Forum's website)¹. This, in turn, served as the foundation to develop, through research, interviews and workshops, a long list of over 50 strategic options (step 2 of Figure 3 and detailed in Figure 9). They range across healthcare-focused, retirement-focused and hybrid (that is, combination of health care and retirement) solutions, and reflect six strategic dimensions for improving the financial sustainability of pension and health-care provision and consumers' access to these vital services:

1. control and transform demand;
2. stimulate consumer empowerment;
3. strengthen funding and savings;
4. optimize capital allocation;
5. improve efficiency and cost effectiveness and
6. enhance risk management and risk sharing

The short list of 11 strategic options selected from the long list and explored in this article was chosen by a process of selection and consolidation based on four central criteria: potential effectiveness, level of innovation or exploration, robustness and suitability for multi-stakeholder collaboration (step 3 of Figure 3 and detailed in

Figure 5). These second and third steps of the three-step process resulted in a second World Economic Forum publication in collaboration with Mercer and the Organisation for Economic Co-operation and Development (OECD), *Transforming Pensions and Healthcare in a Rapidly Ageing World: Opportunities and Collaborative Strategies* (available on the World Economic Forum's website)². This second publication with its 76 pages offers a detailed analysis of each of the 11 strategic options (see short description of each in Figure 5). The remainder of this article presents a brief analysis (extracted from the second publication) of three of the 11 strategic options: one hybrid-focused, one pension-focused and health-care-focused strategic option.

Example of a hybrid-focused strategic option

Strategic option 1: Promote work for older cohorts

Importance of this strategic option Living standards in many high-income countries are likely to decline unless the labour force can be made more productive or expanded. As a consequence of

Step 1: Based on the three global scenarios (see Figure 4), generate an initial list of more than 50 strategic options through extensive interviews and workshops with a broad cross section of stakeholders. Strategic options are programs or actions for improving sustainable financing of and access to healthcare and pensions in ageing societies. The comprehensive list of more than 50 strategic options is listed in Figure 9.

Step 2: Analyze, expand and refine the strategic options based on categorization (using six categories).

Step 3: Prioritize and create a short list of strategic options based on the criteria of effectiveness and degree of innovation and/or underexploration. The short list is further finetuned based on the criteria of robustness and suitability for multistakeholder collaboration. The most important consideration in selecting the final short list of 11 strategic options was synergies within the set of strategic options: While the 11 strategic options can each stand alone, part of their strength lies in their complementarity as a set of multiple 11 high impact options.

Figure 3: Key steps to develop and prioritize strategic options.
Source: World Economic Forum, 2009.

Figure 4: Three illustrations of the future of pensions and health care in a rapidly ageing world.
Source: World Economic Forum, 2009.

declining fertility rates, many high-income countries will see their working-age populations stop growing or shrink. In Japan, Germany and Russia this age group has already begun to shrink.³ Mature industries such as petroleum, chemicals, mining, and aerospace and defence, and the public sector are facing accelerated simultaneous ageing and shrinking of their workforces (Table 1). Maintaining existing pension and health-care provision models will thus place unprecedented pressures on public funds as more pensioners depend on the wealth produced by a shrinking workforce.

Challenges and innovation in implementing this strategic option The challenges in successfully promoting work for older cohorts are significant and well documented by many papers. In contrast, examples of success and innovation are less commonly documented. The main challenges include: In many countries there are financial

disincentives for employers to hire or retain older workers. In many countries there are financial incentives for workers to retire early. There is often a lack of suitable and fulfilling job opportunities for older workers. Ageism is a serious problem, along with a failure to appreciate the business case for employing older workers. AARP⁴ actively promotes this business case, indicating that, in addition to their work experience, the value of hiring mature workers includes lower turnover rates, higher levels of employee engagement and higher skill levels particularly basic skills like math, reading and writing.

Examples of innovation:

- Singapore People for Jobs Traineeship Programme subsidizes employers who hire workers aged 40 or older by covering 50 per cent of their salaries for the first six months, up to a maximum of US\$ 2000 a month.

	Retirement-focused	Hybrid	Healthcare-focused
Key Strategic Objectives	Selected High-impact Strategic Options		
Control and transform demand		1. Promote work for older cohorts For many people, better health in old age means productive employment is now possible and desirable well into their 70s. Coordinated action to change public policy, business practices and personal behaviour can promote lifetime employability and active aging.
	2. Shift delivery of healthcare to a patient-centred system Instead of a reactive focus on curing disease, patient-centred healthcare systems have a proactive focus on maintaining good health. Such a fundamental reorientation of healthcare systems can help reduce the incidence of preventable chronic diseases in old age.	
Stimulate consumer empowerment		3. Promote wellness and enable healthy behaviours Lifestyle factors and behavioural choices play a major role in determining the level of health in old age. Making people aware of the health consequences of their choices must, however, be accompanied by creating physical and social environments that are conducive to healthy behaviours.
	4. Provide financial education and planning advice Financially literate individuals are more likely to plan responsibly for their old age. Improving awareness and understanding of private pensions and retirement saving products enables people to make informed choices and take effective action to ensure an adequate retirement income.	
Strengthen funding and savings		5. Encourage higher levels of retirement savings As public pensions increasingly offer lower replacement rates, retirees' standards of living depend more on their level of complementary private benefits. Incentives and opportunities need to be provided to expand participation in, and increase contributions to, private pension systems.
	6. Facilitate the conversion of property into retirement income Reverse mortgages (or "lifetime mortgages") allow elderly individuals to release equity in their home without the need to sell the home and move to a smaller property. Borrowers can choose to receive the loan in the form of a lump sum, a series of payments or a lifetime annuity.
	7. Stimulate micro-insurance and micropensions for the poor As an extension of the microfinance movement, micropensions are a combination of micro-insurance and microsavings products which have retirement income as their primary objective. They target poorer households, and the amounts contributed may be very small.	
Optimize capital allocation		8. Enhance pension fund performance Pension fund performance is one of the key drivers of retirement benefits in capital-funded pension systems. It can be enhanced by measures to optimize the design of investment strategies and improve the quality of pension funds' governance and administrative efficiency.	
Improve efficiency and cost effectiveness		9. Realign incentives of healthcare suppliers Better health in old age is compromised by waste and inefficiency in healthcare systems that reward doctors and hospitals for services provided rather than health outcomes achieved. Pay-for-performance measures can improve efficiency by realigning incentives of healthcare providers.
	10. Ensure that cross-border healthcare delivery benefits all stakeholders Cross-border healthcare delivery includes patients travelling overseas for treatment and patients interacting electronically with a healthcare provider in another country. It has the potential to be developed in ways that can benefit patients and countries of all income levels.	
Enhance risk management and risk sharing		11. Promote annuities markets and instruments to hedge longevity risk Longevity risk is the uncertainty surrounding future improvements in mortality and life expectancy. Annuities protect individuals against this risk. The functioning of annuity markets can be improved by further developing longevity indexes and issuing longevity-indexed bonds.	

Source: World Economic Forum

Figure 5: Categorization of the strategic options.

- Subsidizing part-time employment of older workers in Germany increased workforce participation among the 55–64 cohorts from 37.5 per cent in 2000 to 45.4 per cent in 2005.
- Japan's health-care providers implement health screening to help individuals aged 55–74 remain active and healthy, categorizing them according to risk factors and providing counselling and care, such as health coaching and exercise trainers.

Table 1: High-growth industries with a large percentage of older workers: USA example

<i>Industry</i>	<i>Workers age 45 and older (%)</i>
Aerospace	55
Energy	52
Transportation	47
Advanced manufacturing	43
Healthcare	43
Automotive	39
Financial services	38
Construction	34
Retail	34
Information technology	33
Hospitality	21

Source: Report of the taskforce on the aging of the American Workforce, February 2008.

Case example – Borders Group, the parent company of Borders and Waldenbooks⁵:

By promoting the benefits of a diversified workforce with hiring managers and offering attractive benefits, Borders has been able to increase the proportion of its workforce aged 50+ from 6 per cent in the late 1990s to 18 per cent in 2008. As well as flexibility in scheduling working hours from as little as four hours per week, the company makes available health and dental care plans to all staff, including part-timers. Importantly, the work environment provides intellectual stimulation and community connection. The company values the stability that the older employees bring to the workplace, along with their life knowledge and experience. Stability has further value in lower turnover and consequent savings in training costs. Presently, turnover among Borders' over-50s workforce is six times lower than in its under-30s workforce. As half its book sales are to customers aged over 45, the correlation between its staff profile and its customer base has provided further benefits: Customers like to buy from people like themselves. Those stores where the staff profile was more similar to that of the customer base have been financially more successful.

Reflecting on the obvious success of this policy, Dan Smith, former senior vice president

of HR for Borders Group, described his greatest challenge:

We don't have to persuade older workers or those in partial retirement to come to work, for these individuals are motivated and engaged.

Rather, the challenge is in constantly reminding existing younger staff of the very significant and proven benefits that these older workers bring to the business.

Example of a retirement-focused strategic option

Strategic option 4: Provide financial education and planning advice

Importance of this strategic option Raising awareness and educating individuals on insurance and pensions issues are critical and challenging priorities for most countries. They are critical because individuals are increasingly expected to take responsibility for management of risks and determining their level of savings, and must bear the consequences of wrong or inappropriate decisions.

They are challenging because of the complexity and sophistication of insurance and private pension products, providers and markets.

However, policy-makers and pension plan sponsors and providers must also acknowledge that financial education alone may not be sufficient to overcome behavioural biases such as a tendency to procrastinate about retirement savings decisions. Moreover, the complexity of investment decisions is such that complementary regulations on investment choices and default options such as automatic enrolment are critical (Figure 6).

Challenges and innovation in implementing this strategic option The main challenges include: For many individuals, especially younger people, financial planning for retirement seems a complex and far-away concern. Even if they are aware and informed about the need to save more, people tend to remain passive. Individuals tend to underestimate the level of savings needed to

Figure 6: Financial education as a part of the system: An example from retirement.

provide future pension income. Seeking planning advice from independent, professional agents can be very costly, especially for middle and low-income earners. Even educated individuals can overestimate their ability to make wise and rational decisions. Employers may face risk of litigation from plan participants for ‘poor advice’.

Examples of innovation:

- The Hungarian government’s recent communication campaign about the need for pension reform used tools adapted from other sectors, such as breaking consumers down into groups and adjusting the complexity of the message for each.
- Citibank has developed a global programme on financial education that includes modules on retirement planning. The initiative has been extended to low- and medium-income countries.
- Prudential plc⁶ has worked with Citizens Advice, a non-profit group in the United Kingdom, over the last seven years to build their ‘Financial Skills for Life Programme’. In a further initiative, more than 18 000 women have participated in Prudential’s ‘Investing in

Your Future’ financial literacy seminars, which aim to enhance the financial literacy of women in Asia.

- In Canada, the NGO Skills for Change has developed the Learn\$ave programme, with government sponsorship and administrative assistance from the banking and credit union sectors. Learn\$ave helps low-income consumers establish saving accounts and matches their deposits. This is coupled with intensive financial management training, which, against a control group, has proven very effective for some individuals.

Example of a health-care-focused strategic option

Strategic option 3: Promote wellness and enable healthy behaviours

Importance of this strategic option Earlier in life, individuals make choices on health-related behaviours (such as smoking, diet and physical activity) that can accelerate the deterioration of functional capacity throughout a person’s life. The implications are great, not only for

Figure 7: Indirect costs because of chronic disease dwarf direct health-care costs.

Source: The Milken Institute (2007).

the quality of life but also for economic productivity and the financial sustainability of health-care systems. For example, the resultant chronic diseases – which are largely preventable – account for fully three-quarters of medical costs in the United States,⁷ and their indirect costs in terms of worker absenteeism and reduced productivity are estimated to be almost four times as great (Figure 7).⁸

Challenges and innovation in implementing this strategic option The main challenges include: Healthy lifestyles can be expensive. Health promotion programmes require action from an extremely wide, diverse and complex range of stakeholders if they are to significantly bring about behaviour change.

Employers can play a critical role in promoting preventive healthcare and healthy lifestyles. The Mercer 2009 *Employee Choice in Benefits Survey*, conducted in 47 countries with more than 1700 employers participating, results suggest that while the impact of the worldwide economic recession is a concern to employers, this will not significantly affect their commitment to providing employee benefits. While nearly half (49 per cent) of all surveyed employers said they would make at least some changes to their benefit strategies in 2009 or 2010 as a result of the economic downturn, just

7 per cent indicated that the changes would be significant. More than a third (38 per cent) of respondents said they will attempt to educate employees about their health risks and how to improve their health (Figure 8).

Examples of innovation:

- The World Health Organisation's Age-Friendly Cities initiative describes how planners should take the reduced mobility of older people into consideration when designing cities, as conventionally-designed cities are challenging for this age group.
- The United Kingdom offers a tax incentive for purchasing bicycles for commuting.
- GlaxoSmithKline and Royal Bank of Scotland are among companies in the United Kingdom which offer health club facilities integrated into their office space.

CONCLUSION

Three key requirements to maximize the opportunities presented by ageing

This process of defining the 11 strategic options explored in this article started with a scenario-building exercise to chart diverse possible futures of the pension and healthcare systems to 2030 (Figure 4), which in turn, served as the foundation to developing, through research, interviews and workshops, a long list of over 50 strategic options (Figure 9) and a short list of 11 most promising strategic options (Figure 5). From this process three key requirements for maximizing the opportunities became clear:

1. Effective collaboration among the key stakeholders – financial institutions, healthcare providers, employers, governments and citizens – is crucial to overcome challenges and seize opportunities.
2. Transformational change in thinking is required. The actions of individual stakeholders must be based on a shift in thinking towards incentive structures that reward long-term

Percentage of respondents rating priority "very important"

Figure 8: Employer priorities for benefit programs over the next two years.

Source: Mercer 2009 Employee Choice in Benefits Survey; sample size more than 1700 employers from 47 countries.

planning and societies that value and honour old age as a productive life phase. This shift in thinking entails significant changes in the way that work, health and retirement are conceived by societies, and can create new opportunities for growth as well as improving quality of life. It will impact on the lives of the young as well as the old, because early intervention is necessary to achieve long-lasting effects.

3. Integrated retirement and healthcare solutions are needed. The long list of 50 strategic options (Figure 9) looked at possible solutions from the perspective of retirement, healthcare and hybrid solutions. The findings indicate that hybrid solutions to address both the healthcare and retirement financing challenges are possible

and, in fact, essential to better cater to ageing societies.

The 11 strategic options described in detail in this report were arrived at by a process of selection and consolidation from the longer list of strategic options are presented in Figure 9.

REFERENCES AND NOTES

- 1 <http://www.weforum.org/en/initiatives/Scenarios/FuturePensionsHealthcare/index.htm>.
- 2 <http://www.weforum.org/en/initiatives/Scenarios/StrategicOptionsFDS/index.htm>.
- 3 How Population Aging Differs Across Countries: A Briefing on Global Demographics. Stanford Center on Longevity, March 2007.
- 4 AARP, formerly known as the American Association of Retired Persons, is a United States-based non-governmental

RETIREMENT-FOCUSED	
Control and transform demand	<ul style="list-style-type: none"> • Raise the official retirement age For example, by gradually adjusting it to the changes in life expectancy. • Implement phased retirement and flexible work arrangements Enables employees to retire gradually and work reduced hours over a period of time before full retirement. Flexible work examples: compressed work weeks, job-sharing, telecommuting, retiree job bank. • Gradually reduce the replacement ratio for current and/or future retirees For example, by making the retirement benefits dependent on average salary of whole career as opposed to final salary or by not correcting inflation fully.
Stimulate consumer empowerment	<ul style="list-style-type: none"> • Provide financial education and planning advice Financial education related to retirement products should help promote consumer understanding of the changing retirement environment and the need for long-term savings and investment products. Financial education helps consumers budget and manage their income, save and invest efficiently. • Provide transparent retirement benefits information and financing planning tools for consumers Integrated overview of current and projected benefits (pillar 1-3). Provide tools so people can project their financial future. • Stimulate cross-border pension schemes The portability of pensions across nations allows people to be far more mobile and thus work in various countries. A cross-border pension scheme makes the retirement benefits far more transparent.
Strengthen funding and savings	<ul style="list-style-type: none"> • Stimulate automatic enrolment to encourage retirement plan membership and savings Automation includes auto-enrolment (with or without opt-out option), auto-escalation of savings, automated asset allocation via default funds (e.g. life-cycle funds) and automated spend-down. Includes simplifying plan enrolment materials and choices. Members need to be informed of fees they are paying and choose low-cost options to maximize returns. • Stimulate micropensions schemes for the poor For example, the micropension scheme in India, managed by the government-run financial institution UTI, allows each worker to open a retirement account with a minimum contribution of Rs. 50 (US\$ 1.15) and withdraw money only at age 58. The idea is to pool accounts and invest in the stock market and other financial instruments much like any pension fund. • Make rich retirees contribute to the funding of the PAYG public pensions of less rich retirees In many PAYG pension systems, retirees (rich and less rich) do not pay pension-funding related taxes. There could be an argument that richer retirees do pay these pension-specific taxes to partly finance the PAYG public pensions of less rich retirees. This would also improve the intra- and intergenerational equity. • Promote flexible, long-term savings arrangements For example, develop pension plans which allow participants to draw from it in major life events (e.g. unexpected health expenditure, mortgage, education, etc.). This will address younger generations' aversion to save in pension vehicles because money is locked for too long, while as an individual gets older their concern would be centred on protection against longevity risks.
Optimize capital allocation	<ul style="list-style-type: none"> • Ensure that pension plans provide sufficient (international) investment possibilities This allows people to benefit from overseas investment opportunities and – potentially – realize higher returns on their pension investments. • Ensure that pension plans provide the opportunity to invest in low-cost funds Many private pension plans have relatively high fund management fees. By providing low-cost investment opportunities (like index funds), consumers have the opportunity to realize higher net returns from a long-term perspective.
Improve efficiency and cost effectiveness	<ul style="list-style-type: none"> • Strengthen the administrative efficiency of pension funds, e.g. via outsourcing Examples: total benefits outsourcing (including administration and delivery for all wealth, health and flexible benefits); total retirement outsourcing (including administration and delivery for all retirement benefits); and stand-alone outsourcing (e.g. of defined benefit administration only). • Outsource investment management activities Examples: outsourcing institutional investing and/or investment manager selection. • Facilitate retirement in low-cost countries Retirees from high-income countries migrate seasonally to or retire in a low-cost country.
Enhance risk management and risk sharing	<ul style="list-style-type: none"> • Issue government longevity-indexed bonds and inflation-linked bonds to hedge long-term risks Develop markets to hedge long-term risks, for example long-dated bonds beyond 30 years and index-linked bonds. According to an OECD analysis, through their national statistical institutes, governments could encourage or support the development of a private market in longevity hedging products by producing a reliable and widely accepted longevity index as a benchmark for pricing hedging products. Alternatively, the data and information could be made widely available to produce this index. • Promote annuities markets and instruments to hedge longevity risk One reason why annuity markets are underdeveloped despite potential demand is the information asymmetry in annuity market transactions – the buyer knows more than the seller about his or her life expectancy. Insurers are uncertain of the risks of systematic mortality improvements, so they have been reluctant to hold an extensive life annuity portfolio. • Promote risk sharing in pension arrangements Promote risk sharing between employers and employees through hybrid plans that combine defined benefits and defined contributions features. • Governments fundamentally rethink their role in ensuring old-age security For example, governments do not provide a universal pension plan for everybody, but for the neediest only. Governments focus on covering tail risks, e.g. extreme longevity risks

Figure 9: Comprehensive list of multistakeholder strategic options.
Source: World Economic Forum.

HYBRID

- **Promote work for older cohorts**

Shift government policies and corporate strategies towards "lifetime employability". Introduce a programme to help retirees find new work roles to remain active and healthy. Employers are a key in shaping the employment prospects of older workers and governments can introduce supporting regulations, e.g. review existing policies on mandatory retirement, age discrimination, part-time employment, gradual exit from work and government subsidies for employers hiring older workers.

- **Personalize underwriting of health insurance and life insurance based on health habits**

This would give customers a strong incentive to adopt healthy lifestyles. The focus is on healthy habits and not the overall health of the person, as the latter is not fully within the control of the customer (e.g. chronic diseases within the family).

- **Provide employee benefits tool to employees**

Providing flexible benefits to accommodate for personal preferences, lower costs and to encourage individual responsibility.

- **Provide transparent information to consumers regarding the costs and quality of pension and healthcare providers**

Based on this information, consumers are better equipped to choose their preferred provider of retirement and healthcare services. This is especially relevant when consumers have been given appropriate incentives, e.g. to manage their healthcare costs.

- **Stimulate integrated retirement and healthcare benefits schemes**

For example, an individual plan that covers both retirement and healthcare benefits. The plan provides a financial incentive in the form of higher pension benefits to individuals who accrue low healthcare claims over their lifetime.

- **Prefund public pension and healthcare systems through special government investment funds**

For example, Norway use the surplus wealth produced by Norwegian petroleum to finance future pension liabilities. Other countries such as the US and China also have special state pension funds. The same principle could be applied to prefund the expected rise in old-age healthcare expenditure.

- **Expand the labour force to strengthen the funding of the PAYG retirement and healthcare system**

In many high-income countries, the labour force is expected to peak in 2010 and then shrink significantly. Additional workers will be needed to fund the PAYG retirement and healthcare systems. Possibilities to increase the labour force are stimulating more women and older people to work, immigration of skilled, young workers from abroad or by implementing policies to increase the fertility rate, for example through tax deductions and child care benefits. This last option will – of course – take a long time to have an effect on the number of workers.

- **Further strengthen the funding of the PAYG retirement and healthcare systems by improving labour productivity**

Labour productivity could be increased through technological innovation and/or further improving educational levels

- **Stimulate and facilitate home equity release products, such as reverse mortgages**

A reverse mortgage (or lifetime mortgage) is a loan available to seniors, and is used to release the home equity – the difference between the market value of the house and the unpaid balance of the mortgage plus any outstanding debt over the house – in the property as one lump sum or multiple payments. The funds from a reverse mortgage can be used for anything: healthcare expenses, daily living expenses, home repairs or modifications, to pay off existing debt, and other needs.

- **Ensure that integrated retirement and healthcare plans provide a broad range of low-cost investment opportunities**

See column to the left. From an investment perspective – to optimize the return in the long-run – it is important to profit from overseas investment opportunities and to invest against low costs.

- **Stimulate community-based and informal care solutions**

Formally involve retirees and family members in care provisioning. For example, Norway has historically placed emphasis on a programme in which family members – usually daughters or daughters-in-law – are paid salaries by the government to provide home help services for an elderly and/or disabled relative or non-relative. This is also relevant for many less-developed countries, where the family traditionally played a strong role in old-age care and security.

- **Enhance the use of electronic records and a centralized database**

The transformation from paper-based to electronic medical records has resulted in notable cost savings where implemented, but there has been less comprehensive action than promises. In countries that are implementing the use of electronic records, standards for medical technology records and for associated consumer analyses on healthcare and retirement needs are essential but missing.

- **Combine information and payment systems**

Many countries and providers keep duplicate records of base information and make multiple payments to the same people. Combining information and payment systems will not only improve efficiencies, including by removing updating errors, but also bring data together from which further detailed analysis of joint retirement and healthcare cost issues might be analysed.

- **Introduce catastrophic post-retiree healthcare coverage into the retirement plan**

Public policy initiatives to alter the relative costs of healthcare pre- and post-retirement have implications for retirement behaviour. Post-retirement health insurance which includes catastrophic risks could be integrated into retirement plans.

- **Invest in and regulate macro swaps**

One form of macro swaps allows the retirement fund and healthcare industries to swap their complementary exposures to longevity. The swap allows retirement funds to reduce their exposure to unexpected increases in longevity by transferring the "increased" liabilities to healthcare companies, whose higher revenues from increased age-related healthcare expenses may allow them to meet these liabilities.

- **Align public healthcare and pension policies**

The government assumes the role of risk manager, has control over the budget, and streamlines the decision-making process among different ministries which are involved in providing social security pensions and healthcare and which approach it from a lifecycle perspective.

Figure 9: Continued.

HEALTHCARE-FOCUSED

- **Shift delivery of healthcare to a patient-centred system**
A patient-centred system fundamentally reorients healthcare from a reactive, curative and disease-focused approach to a preventive, lifespan and health-focused approach. Shifting delivery of healthcare to a patient-centred system should help reduce the financial pressures of an ageing society on healthcare systems by encouraging individuals to take ownership of their health across their lifespan, and ensuring a more holistic care for elderly patients with multiple ill health conditions.
- **Promote active ageing**
Promote active ageing and reduce morbidity through physical activity. Encourage the elderly to remain engaged cognitively and socially, occupationally and vocationally, emotionally and spiritually.
- **Give consumers a stake in managing and limiting their healthcare expenses, e.g. through co-payments**
Design health plans conducive to raising cost awareness and individual responsibility (e.g. out of pocket cost, tiered benefits), contribution levels and incentives.
- **Stronger focus on early detection and preventive healthcare**
Early screening, diagnosis and detection increase the chances of successful treatment and minimize treatment costs. Consolidating data helps address connections between interdependent risk factors.
- **Promote wellness and enable healthy behaviours**
For example, employer-based programmes focusing on building a healthy worksite culture.
- **Promote health literacy programmes and ageing education**
Ensure that individuals become health literate – learning about healthy living and nutrition and treatment options. This is currently a prerogative of doctors. A group of learned intermediaries and informed patients could act as check and balance to the system.
- **Promote public health campaigns and programmes**
For example, “Vamos Por Un Million de Kilos” (Let’s Lose a Million Kilos), a national campaign to get Mexicans to collectively trim one million kilos. The campaign reached its goal in just four months with 2 million people.
- **Stimulate health savings accounts**
(Pre-tax) health savings accounts give consumers a stake in managing their medical expenses and let them save for future ones.
- **Stimulate automatic enrolment to encourage healthcare plan membership and savings**
Automatic enrolment (with or without opt-out option) has proven to be an effective instrument to increase the participation rate.
- **Allocate health funding according to economic merits**
This approach aims to publicly agree on fair and consistent ways to set public healthcare funds according to merits, for example to decide which healthcare services to fund within available resources and to reduce government costs over the lifecycle. Explicit priority setting of health services is being debated in an increasing number of countries.
- **Improve effectiveness of healthcare supply chain by removing disincentives and misalignment of regulation**
An example of aligning incentives is pay-for-performance (P4P). P4P is a way of structuring incentives in the healthcare system to reward doctors and hospitals for meeting agreed-upon efficiency and quality targets that provide higher quality healthcare for a lower cost. P4P is a radical departure from traditional incentive methods in which doctors and hospitals are paid for the services they provide, regardless of the quality of care or the effectiveness of the clinical outcomes.
- **Ensure that cross-border healthcare delivery benefits all stakeholders**
Cross-border healthcare delivery takes two forms – medical travel, in which the patient travels to another country for treatment, and cross-border telemedicine or remote diagnostics, in which the patient interacts electronically with a healthcare provider in another country.
- **Introduce mini clinics in local communities**
Mini clinics bring basic routine medical and preventive care closer to the consumer’s neighbourhood.
- **Personalize/tailor healthcare using “genomics”**
By using “genomics”, or the identification of genes and how they relate to drug treatment, personalized healthcare will enable medicine to be tailored to each person’s needs. Personalized healthcare begins with health information technology (HIT) and an electronic health record.
- **Enhance value-based healthcare purchasing**
The concept behind this new approach, practised by the National Health Service of the United Kingdom, is that buyers should hold providers of healthcare accountable for both cost and quality of care. Value-based purchasing brings together information on the quality of healthcare, including patient outcomes and health status, with data on the financial outlays going towards health. It focuses on managing the use of the healthcare system to reduce inappropriate care and to identify and reward the best-performing providers.
- **Introduce regulations conducive to high-quality generic drugs and affordable branded drugs**
Engage governments, healthcare (pharmaceutical companies) and financial services in developing a way to secure higher-quality generic drugs or affordable branded drugs targeted for better access to medication. Although controversial, some means to realize this is open sourcing of R&D and reviewing the intellectual property system.
- **Promote reinsurance to manage healthcare risks**
Reinsurance is used to a limited extent to manage healthcare coverage and costs, and there is no capital market activity for healthcare-related risks.
- **Personalize underwriting of health insurance and life insurance based on health habits**
This would give customers a strong incentive to adopt healthy lifestyles. The focus is on healthy habits and not the overall health of the person, as the latter is not fully within the control of the customer (e.g. chronic diseases within the family).

Figure 9: Continued.

- organization, interest group and one of the most powerful lobbying groups in the United States.
- 5 Case example extracted from the Mercer May 2008 Retirement Perspective 'Gullible's Travels, Part III: Capturing the aging workforce to stay competitive' (<http://www.mercer.com/referencecontent.htm?idContent=1305010>).
- 6 Prudential plc is a company incorporated in the United Kingdom and is not affiliated in any manner with Prudential Financial, Inc, a company whose principal place of business is in the United States of America.
- 7 Wu, S. and Green, A. (2000) Projection of chronic illness prevalence and cost inflation. RAND Corporation, October 2000. Also, Centers for Disease Control and Prevention. Chronic Disease Overview page. <http://www.cdc.gov/nccdphp/overview.htm>. Also, Centers for Medicare and Medicaid services. Historical Overview of National Health Expenditures.
- 8 Devol, R. and Bedroussian, A. (2007) An unhealthy America: The economic burden of chronic disease. The Milken Institute. October 2007. <http://www.chronicdiseaseimpact.com>.