

Health care costs increase with age. There is therefore a case for providing for at least some of such costs by saving or long-term insurance policies. If we do otherwise, we risk creating huge difficulties as the population ages, warns KRISTIAN NIEMIETZ

ndividual healthcare costs are generally unpredictable. We cannot know whether we will need healthcare treatment next year, what kind of treatment that would be, and what its price is.

It is therefore sensible to hedge against health expenditure shocks through some kind of risk-pooling mechanism, whether that role is performed by private insurers (as in the US), social insurers (as in most of continental Europe) or a tax-funded system (as in Canada and the UK).

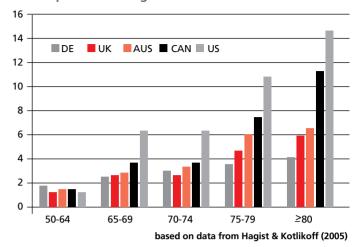
But while healthcare expenses may not be predictable on a year-toyear basis, their general trajectory over an individual's lifetime is predictable enough.

The details differ over time and across countries but a breakdown of healthcare expenditure by age can be described in the following way. Healthcare costs are at their lowest during the first four to five decades of life, and rise only gently during that period; at some point after that, though, they begin to rise exponentially.

in the UK, per capita health expenditure for people in their midto-late 70s is about five times as high as for people aged 20-49 years.

There is, of course, huge variation within cohorts, but the trend is broad-based, and at least for some

Healthcare expenditure per capita by age group, as a multiple of those aged 20-49



up in old-age.

A pension fund works in this way and, though it is less obvious, so does life insurance.

In the case of life insurance, people take out policies for several decades and pay the same premium. There is a surplus of premiums over claims in the early years and the insurance company invests this for healthcare spending will have more political power as the electorate ages and political parties pander to the 'grey vote'. Of course, the cost of those decisions is split among all taxpayers.

So there are good economic reasons for prefunding healthcare spending. And yet, perhaps surprisingly, there are virtually no examples of prefunded healthcare anywhere in the world.

There are a number of examples of prefunded pension schemes, but, despite the similarities, this approach is almost never applied to healthcare. There are, however, two examples of partially prefunded healthcare which are worth a closer look: Medical Savings Accounts (MSAs) in Singapore, and Private Health Insurance (PHI) in Germany.

In Singapore, all employees (and the self-employed) are required to build up savings for healthcare expenses via MSAs, with monthly contribution rates between 7 per cent and 9.5 per cent of salary.

Contributors are expected to accumulate at least £21,000 in their accounts by the age of 55 (but no more than £24,000). Those funds are the personal property of their account holders, but spending is ring-fenced: MSAs can only be used to purchase medical goods and services, and then only for officially approved ones, and subject to withdrawal limits. MSAs are coupled with catastrophic health insurance for high-cost treatments. This setup is not unique to Singapore, but

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aspects of healthcare consumption, it is almost a universal trend.

For example, Stabile and Greenblatt (2010) show that by the age of 70, 85 per cent of men and 95 per cent of women in Canada are taking at least one prescription drug.

Health insurance is therefore not like fire insurance or theft insurance, where a sudden outlay could be necessary at any time in your life. For those sorts of risks, it is very sensible to take out annual insurance policies and the premiums do not vary very much with people's ages.

Healthcare costs are heavily and systematically biased towards the later years of life, and it would therefore seem sensible to "prefund" them: to build up a pot of savings in younger years, and use it the years when there is an excess of claims over premiums.

In the absence of pre-funding, each generation's old-age healthcare bill will be picked up by the subsequent generation, a financing arrangement which is only stable as long as a relatively large number of working-age people support a relatively small number of elderly people.

Alternatively, people have to pay higher and higher insurance premiums as they get older. Such arrangements also create incentives for medical over-consumption.

If costs are mainly met by the government – and even in the US, healthcare spending for the old is paid for through a government scheme – the main beneficiaries of

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Singapore's 'Medisave' system is the only one of its kind that covers virtually the whole population.

When Medisave was created in 1984, the intention was not to prefund healthcare spending, but to limit demand, and encourage personal responsibility (Haseltine, 2013; von Eiff et al, 2002). But even if it was not the original purpose of the approach, MSAs automatically led to a degree of prefunding, as people built up a pot of savings during their working life and use it up in retirement.

Still, it would be an exaggeration to describe Singapore's health system as 'prefunded'. Out-of-pocket payments account for over half of healthcare spending in Singapore, but Medisave itself only accounts for a relatively small part.

However, Singapore has exceptionally high general savings rates so we could think of healthcare

IN SINGAPORE, PEOPLE ARE REQUIRED TO BUILD UP SAVINGS FOR HEALTHCARE

spending being prefunded from saving in a more general sense even if not from earmarked savings through Medisave.

PHI in Germany comes close to full pre-funding, but then, only about one tenth of the population are privately insured, with the remainder being covered by the pay-as-you-go financed social insurance system.

Private insurance premiums for younger people reflect expected current healthcare costs, based on individual health risks, plus a mark-up for expected increases in healthcare costs later in life.

Those mark-ups are invested in low-risk assets, and they are later used up to smooth premiums over a policy holder's lifetime. Taken together, the old-age reserves held by PHI providers amount to 170bn, and annual additions account for about 5 per cent of the country's net savings rate (Schönfelder & Wild, 2013, pp. 28-29).

This system does not work perfectly: PHI premiums are not supposed to increase with age at all, but, in practice, they do, as insurers have persistently under-estimated medical inflation.

But, at least, this private pre-

funded system is not vulnerable to demographic changes. It already offers a higher standard of medical care than the state system, and this gap is likely to widen in the future, when the private system will be able to fall back on its old-age reserves while the state system has a smaller and smaller tax base as the population ages.

In the Singaporean Medisave system, it is individual patients who prefund their future healthcare spending through their MSAs. In the German PHI subsystem, insurance companies perform that function on behalf of their clients. Either way, the result is a financial footing that is much more solid than in pay-as-you-go systems.

In order to see why prefunded healthcare is as rare as it is, it is instructive to look at two examples of countries with large private insurance industries, which should, in principle, be well placed for prefunding: the US and France.

In the US, the vast majority of the working-age population (and their dependants) are privately insured. Upon retirement, however, people switch to the public insurer Medicare, which is run on a pay-asyou-go basis.

For private insurers, this removes the need to build up funds when patients are young to pay for more expensive treatments as patients age. In other words, the need for a long-term insurance market with the building up of savings has been crowded out by the special government system for older people.

In France, private supplementary insurance is almost universal, but insurers do not accumulate old-age reserves. Their premiums therefore tend to go up with people's age, and become increasingly difficult to afford for the elderly.

The government's response to this problem is to subsidise the elderly's premiums, thus effectively extending the pay-as-you-go mechanism into



the private subsystem.

So, in the end, both the US and France end up with pay-as-you-go financed healthcare systems. The government, in one form or another, takes over the healthcare costs of the elderly.

In both countries, it would be far more sensible to have a system in which private insurers build up oldage reserves, and smooth premiums over a client's lifetime.

In principle, prefunding could be introduced into virtually any healthcare system, even into a system like the British NHS with the government building up the funds.

In practice, however, prefunded healthcare is still as rare as hen's teeth and it is only likely to work by harnessing private sector insurance and savings vehicles. Changing this requires a complete rethinking of healthcare financing

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