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1 Health systems

1.1.1 Four global basic concepts on health systems

In this section we explain four basic concepts of health systems. It is important to note that these are high level descriptions of archetypes of health systems and that many countries' health systems contain elements of multiple models.

1.1.1.1 The Beveridge model

The Beveridge health model is an healthcare system established in the United Kingdom in which the government provides healthcare through tax payments. The government is the single payer in this system, with predominantly public providers. (Adapted forms of) this National Health System (NHS) model have been widely 'exported' as health system to other (Western) countries. Over time various policy reforms have been pursued – obviously varying country by country - where for instance the national payer system is transformed into regional commissioning authorities (Clinical Commissioning Groups in England) and providers are being made more autonomous by making them accountable in separate entities (Foundation Trusts in England). The NHS model in England is often praised for its solidarity and free access, but also has been struggling with productivity and long waiting lists in recent years. Private providers do play a role in this system, mainly to create additional market dynamics, but are strongly regulated and seen as supplemental to the public providers and mainly covered through private insurers. The role of private insurers have increased over the last decade given that waiting times are rising and their main benefit is to provide quicker access to either public or private providers.[1,2]

1.1.1.2 The Bismarck model

The Bismarck health model originated in Germany and consists out of a premium funded mandatory insurance. These mandatory insurance plans (called 'sickness funds') cover all citizens and are working on a not for profit basis.[3] Alongside this mandatory insurance, optional packages can be offered. The premium funded insurance system operates in a mix of both private and public providers. This allows citizens more freedom of choice and creates slightly more competition in the provider landscape.[4] The Bismarck model has been adapted by other countries as well. For instance the Netherlands has long worked with sickness funds very similar to the German set up, until they embarked on a journey towards a health system of managed competition in 2006.

1.1.1.3 'Bismarck' versus 'Beveridge' models

While economists often talk of 'Bismarck versus Beveridge' health systems, the reality is that this is a false dichotomy – almost all developed countries now use a blend of the two approaches, and pure examples of either model are now very rare.

The classical features of the traditional Beveridge model are:

- Making health coverage a right for all citizens
- Revenues being raised by government through tax
- Spend controlled a publicly-owned health agency (payer) usually using an implicit benefit package.

Bismarck models, on the other hand:

- Used to link coverage to labour status, so that initially the employed are covered, with government then subsidizing certain groups who are deemed deserving but not able to pay.

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[1] Lameire et al. (1999) *Healthcare systems – an international review: an overview.* Nephrol Dial Transplant.

[2] Van der Zee J., Kroneman M. (2007) *Bismarck or Beveridge: a beauty contest between dinosaurs*. BMC Healthservices review.

[3] Physicians for a national health program (2010). *Healthcare systems – four basic models*. https://www.pnhp.org/

[4] Lameire et al. (1999) *Healthcare systems – an international review: an overview.* Nephrol Dial Transplant.

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- Raise health financing principally through legal contribution requirements on employers and employees
- Offer an explicit benefit package, administered by one or (more often) multiple regional social health insurance funds

The originating countries of the Bismarck and Beveridge models – Germany and the UK – are good examples of how the two have converged over time. The UK now uses much more explicit benefit packages through the National Institute of Health and Care Excellence (NICE), which uses Health Technology Assessment as a tool to decide what is and is not covered in its benefit package. Also it introduced a strong purchaser-provider split, and various financial contribution requirements for non-citizens (e.g. £400 annual Immigration Health Surcharge). Germany likewise no longer links coverage purely to employment since state-subsidized insurance now covers virtually all non-employed groups (population coverage stands at around 90 percent), and while over 100 independent sickness funds remain a huge amount of their activity is strictly regulated and directed by government: including who they accept, premiums, price setting, who they contract with and what their benefit packages need to contain. In many systems mixtures are seen and often been referred to as social health insurance schemes.

While the divisions between the two concepts have largely disappeared, some relevant differences do remain that are worth considering by countries currently shaping their future path to universal coverage, including:

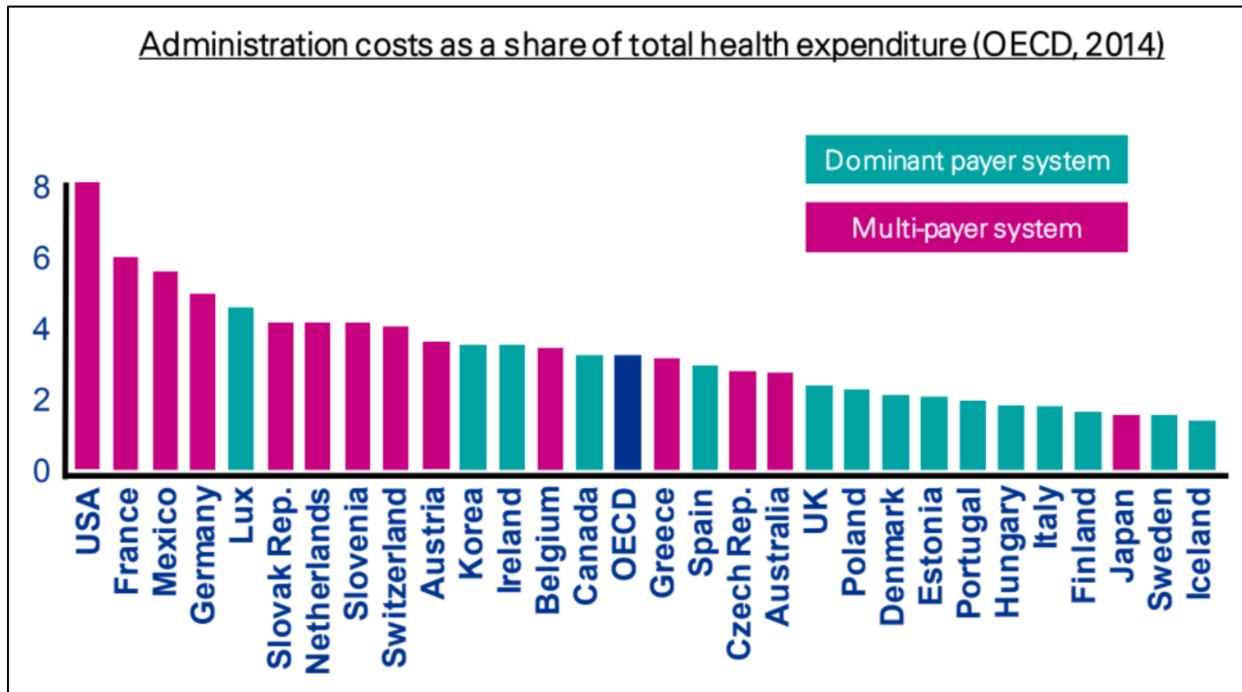
- Degree of autonomy from government: Government tends to be a more active player in Beveridge systems by more directly controlling the quantity of health spending and what it is used for (rather than just setting the rules). To some countries this offers much needed transparency and efficiency compared to having private actors perform key roles (e.g. as payer). In other societies government may be distrusted or may want to distance itself from future reforms that will be necessary but unpopular.
- Basis of entitlement: While most high-income Bismarck systems now have UHC, for countries with large numbers of informal workers, migrants, refugees and other undocumented persons, the decision to base entitlement on citizenship versus residence versus employment status may be more complex. A Beveridge system in these instances will be simpler, more universal, but probably more expensive. Social health insurance systems implemented in emerging markets often result in what is described as a 'missing middle' – whereby around 30 percent of the population is covered by their (formal) employer, 30 percent are poor enough to qualify for government subsidised insurance, and 30 percent (largely informal sector workers and their families) are legally meant to pay into the system but in practice do not.
- Labour market dynamics: Through more direct government control, Beveridge systems tend to cut health spending harder and faster when public finances are under pressure (e.g. in a recession) which can exacerbate the health impacts of these events. For example, in the five years following the Global Financial Crisis, annual health spending in Portugal, Spain, Italy and the UK (historically Beveridge systems) grew at -1.9, -1.4, -0.9 and +1.1 percent respectively, while in Bismarkian neighbours Germany, France and the Netherlands this was +2.1, +1.7 and +1.4 percent (OECD, 2019)[5]. This may be viewed as a strength or a weakness. Some argue that Beveridge models can be more effective at job creation, as they have more options to raise revenue from sources other than businesses – thus making labour appear cheaper to companies thinking of moving into these countries. Payment through other sources than the government does bear the risk of insurance revenue loss when beneficiaries are unable to pay their premiums, for instance when unemployment increases, as is seen following the COVID crisis.[6]

[5] https://www.oecd-ilibrary.org/sites/876d99c3-en/index.html?itemId=/content/component/876d99c3-en

[6] Gangopadhyaya A. and Garret B. (2020). *Unemployment, Health insurance and the COVID-19 recession.* Urban institute. April 2020

- Transaction costs: Bismarck-based health systems tend to have higher administration costs, as a greater number of transactions are required between the multiple payers that often exist, as well as the more insurance-based payment and budgeting methods.

Figure 1: Overview of administration cost as a share of total health expenditure



Source: OECD

1.1.1.4 Managed competition

Managed competition is a concept that tries to create a three-way market place in the health care system. Managed competition builds on the plurality of the Bismarck system and tries to 'perfect' the competition element of it. Countries that use (elements of) managed competition are for instance Germany, The Netherlands and Switzerland.[7] The consumer needs to choose their private insurer, the insurer on its turn procures health care from private providers and the patient has the freedom of choice to select its health provider. The concept of regulated managed competition is fairly new and proposed by Enthoven.[8] The crucial element of this system is that the premium – which is set by private payers - is the same for every consumer regardless of health status. To make this possible the government runs a risk-equalization fund that creates a level playing field between payers, compensating payers with a high risk load.[9] The equalization system is based on health risk profiles per insured person. Therefore the system of managed competition has a mixture of funding: ~50% is premium based and ~50% is government (raised through employer taxes in the Dutch case) based and paid out through the risk-equalization fund.[14]

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[7] Van den Broek-Altenburg, The relation between selective contracting and healthcare expenditures in private health insurance plans in the United States, Health Policy 124 (2020) 174–182

[8] Enthoven AC. (1993) *The history and principles of managed competition.* Health Aff (Millwood) 1993;12 Suppl:24-48.

[9] Ikkersheim D (2013), *The Dutch health system reform: creating value.* Thesis Vrije Universiteit Amsterdam.

Source: KPMG

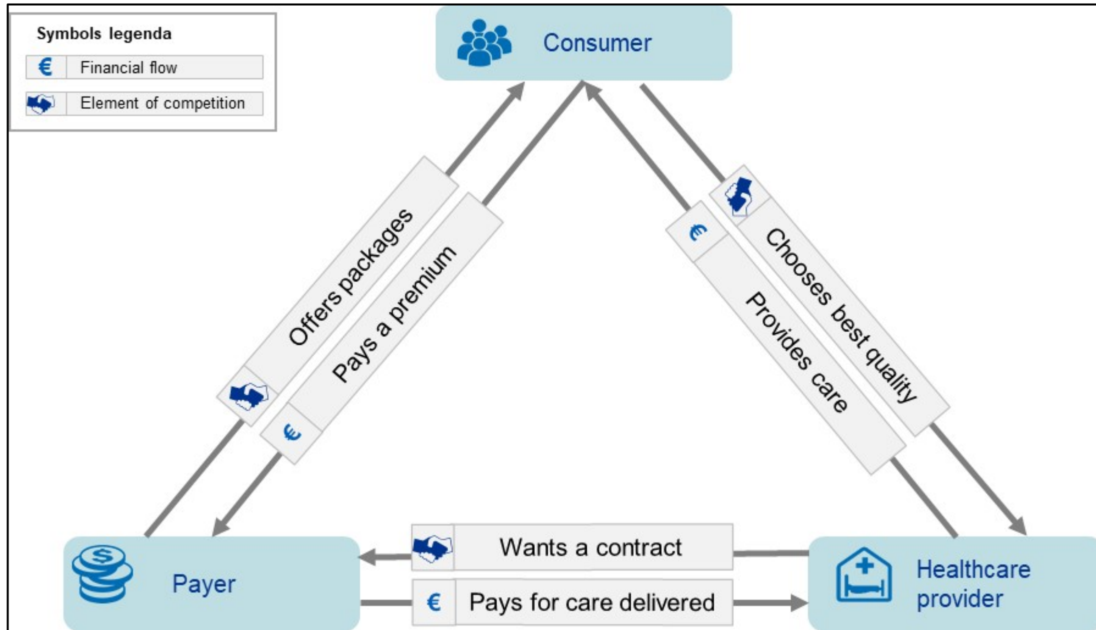


Figure 2: Conceptual model of financial flows and elements of competition in a managed competition system

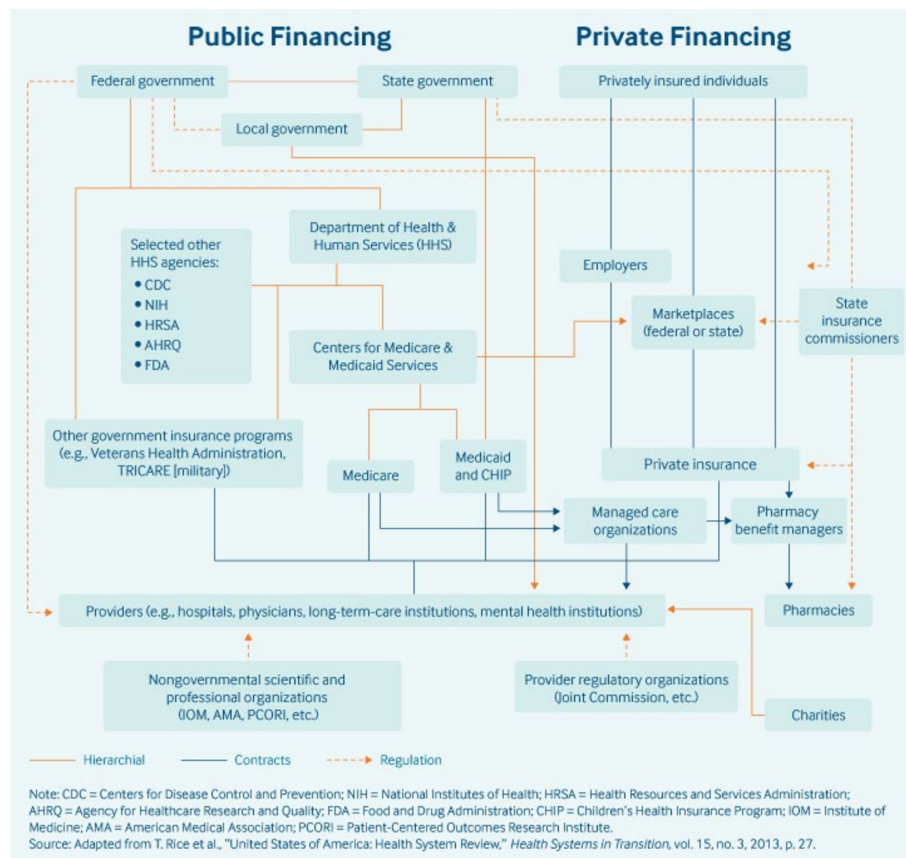
1.1.1.5 Market based health systems

The last category of health system are what are called ‘market based systems’. As all other systems they try to optimize access, quality and affordability of health care. The common denominator of these systems is that they choose for competition (as opposed to regulation) as the main driver for achieving these goals, albeit that also market based systems are usually heavily regulated and – as said in the previous paragraphs - also other health systems use (regulated) competition as tool to drive value of care. In that sense it is a nuanced difference.

The best known market based system is the United States’ health system where consumers are often insured via employers and/or have their own private insurance. This accounts for around 30% of healthcare expenditure. These insurers contract care providers, negotiating on volume, prices and possible quality indicators. Full coverage is often not provided and patients need to select providers within the selected network. As health insurers are not compensated for higher risk loads through a risk-equalization fund adverse selection is an serious issue in the US health care system. In some states (e.g. California with Kaiser Permanente) insurers and providers have vertically integrated into a Health Maintenance Organization (HMOs). HMOs are also present in other health systems like Israel.

Around 15% of healthcare expenditure is paid by out-of-pocket payment (deductibles) or co-payments. It is important to note that out-of-pocket or co-payments are not solely applied in the market based systems, as most health care systems have some form of private funding. Alongside these private payments, the system relies on around 45% of governmental funding, through the Medicaid (for the low income groups) and Medicare (for the elderly) programs. [10,11] With this in place, an estimated 92% of the United States population had coverage in 2018, whilst the US spends around 18% of GDP on health care, the highest in the world.[12] The picture on the next page depicts the organization of the US health care system. Whilst the US is the best known market based health system, the US health system is just one form of a market based health system and market based health systems come in many shapes and forms, yielding good and less favourable outcomes, varying country by country.

Figure 3: Organization of the United States health system – market based health system



Source: Tikkanen R, Osborn R, Mossialos E, Djordjevic A, Wharton GA. (2020) *International health care system profiles. United States.* https://www.commonwealthfund.org/international-health-policy-center/countries/united-states

Another market based systems is that of India. This system in evolution has an ambitious programme (ABPMJY), to cover half a billion people. Currently this covers the access to hospital services. Primary care is envisioned to be delivered by mostly public health and wellness centres, but PPPs in this area are also being considered. Health in India remains a state subject, so the central NHA is very much seen as the agency that sets standards for providers, decides benefit packages (including their pricing) and creates the agencies for HTA. Alongside, there is parallel system for about a billion people in which out of pocket spend remains high. Private insurance is still a fraction of the total healthcare spend, accounting for 4.4 percent of total spending, with only around 37 percent of the population covered by any form of health coverage in 2017–2018. How India will evolve with both these parallel

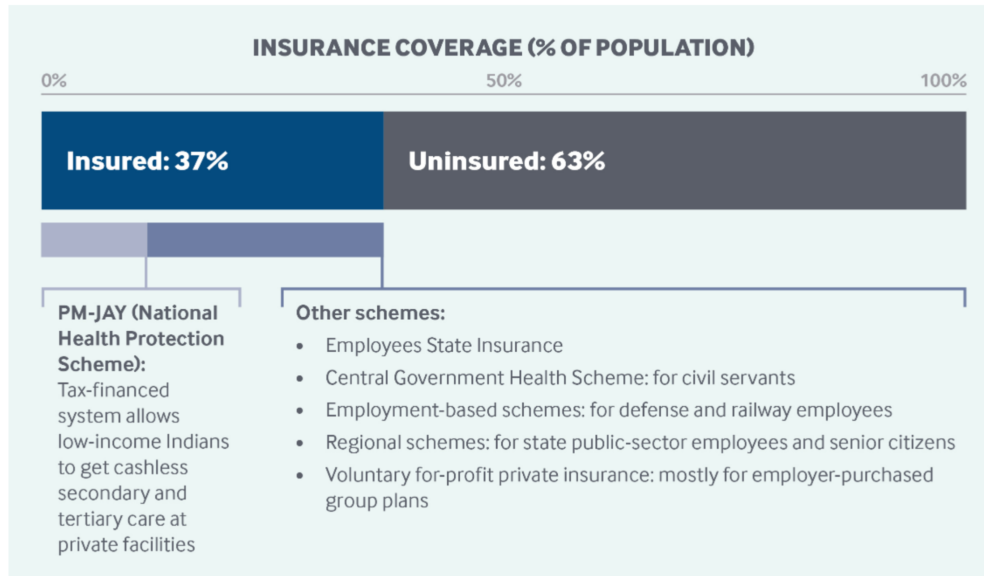
[10] McKinsey (2007). *Overhauling the US health care payment system.*

[11] Tikkanen R, Osborn R, Mossialos E, Djordjevic A, Wharton GA. (2020) *International health care system profiles. United States.* https://www.commonwealthfund.org/international-health-policy-center/countries/united-states

[12] E. R. Berchick et al., *Health Insurance Coverage in the United States: 2018—Current Population Reports* (U.S. Census Bureau, Nov. 2019),

systems remains to be seen, but a managed competition model seems to be involving with some elements of the regulatory systems we see in more the Bismarck and Beveridge models.

Figure 4: Organization of the Health system in India



1.1.2 Three waves of healthcare reform

Health care reform typically follows three waves.[13] Following increasing capabilities of the health care sector, typically in the first wave increasing equality is pursued, aiming for enhancement of access to care. Examples which illustrate this pursuit are Medicaid and Medicare in the US and the Sickness funds in Germany and the Netherlands. In many health systems, this enhanced access leads to higher health care costs triggering the second wave focusses on rationing, controls and expenditure caps. These rationing policies often lead to demand exceeding health services supply and inefficiencies due to limited incentives to work efficiently, which then results in the third wave: the wave of incentives and competition. Examples of these strategies are managed care in the US[14], the introduction of competition between sickness funds in Germany[15], incentives by payers for professionals to keep costs down e.g. by appropriate care initiatives trying to avoid overtreatment, gate keepers for health providers by assigning General Practitioners (GPs) as payers which was applied most profoundly in the UK.[16,17]

Although the waves are sequential in nature, a mixture of policy measures is often applied, for instance increasing competition between providers, but at the same time using cost control measures like caps on budgets. A common denominator in all health system reforms is an increasingly active role for payers, regardless of the system set up.

Most developed countries have gone through wave 1 and 2 and are now in wave 3, but for instance Obamacare in the US is a clear example of mixture of wave 1 and wave 3 measures as universal access

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[13] Cutler DM. (2002) *Equality, Efficiency, and Market Fundamentals: The Dynamics of International Medical-Care Reform.* Journal of Economic Literature 2002;40:881-906

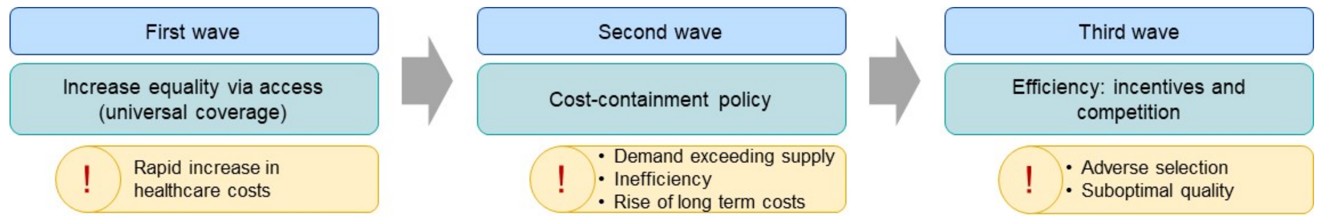
[14] Cutler DM, McClellan M, Newhouse JP. (2000) *How does managed care do it?* . RAND Journal of Economics 2000;21:526-48.

15 LeGrand J. (2003) *Methods of Cost Containment: Some Lessons from Europe.* In; 2003

16 LeGrand J. (2003) *Methods of Cost Containment: Some Lessons from Europe.* In; 2003

17 Cutler DM, McClellan M, Newhouse JP. (2000) H*ow does managed care do it?* . RAND Journal of Economics 2000;21:526-48.

in the US is not achieved yet. In many emerging and developing countries universal health coverage is still an aspirational goal and therefore wave 1 policies are still needed.



Source: KPMG

Figure 5: Conceptual model of three waves of healthcare reform

1.1.3 The perfect health system does not exist

Reflecting on his work across more than 70 national health systems over the past decade, KPMG Global Chairman for Health Mark Britnell concluded, in his book of the same name, that the 'Perfect Health System' did not exist.[18] Not only does every country have its own strengths and flaws, health systems are inextricably tied to their history, culture, politics and resources – meaning that what works in one place is unlikely to have the same effect if it is 'cut and pasted' elsewhere.

Nevertheless, there is an emerging consensus about the principles or qualities that underpin an effective and efficient system, and Britnell highlights 12 characteristics that – if they were combined – would give something approaching a 'perfect' way.

The world doesn't have a perfect health system, but if it did it might look like this:

1) Values and universal healthcare of the UK
2) Primary care of Israel
3) Community services of Brazil
4) Mental health and well-being of Australia
5) Health promotion of the Nordic countries
6) Patient and community empowerment in parts of Africa
7) Research and development of the US
8) Innovation, flair and speed of India
9) Information, communications and technology of Singapore
10) Choice of France
11) Funding of Switzerland
12) Aged care of Japan

As this pertains to payers, Britnell has much to say about their increasingly important role in shaping an efficient and effective health system, with key lessons including:

1. A dominant payer and central pricing system is more able to pursue the triple aim of better health, better care and better value for the population at large.
2. Fee-for-service payment models hamper integration and are poor at controlling costs – more sophisticated models that reward activities across clinical pathways and include other quality measures, while still imperfect, better reflect value and population needs.
3. Integrated care is a vital requirement that most major healthcare payers need to pursue, but which requires substantial will, skill and a lot of time and transitional funding.
4. Effective payers see themselves not just as passive administrators of funds, but activists for patient and public interests in the health system.

[18] Britnell M, In Search of the Perfect Health System, Palgrave MacMillan, 2015.