KPMG

Towards an effective healthcare payer

A guidebook for payer reform

Contents

Executive summary

Health is wealth

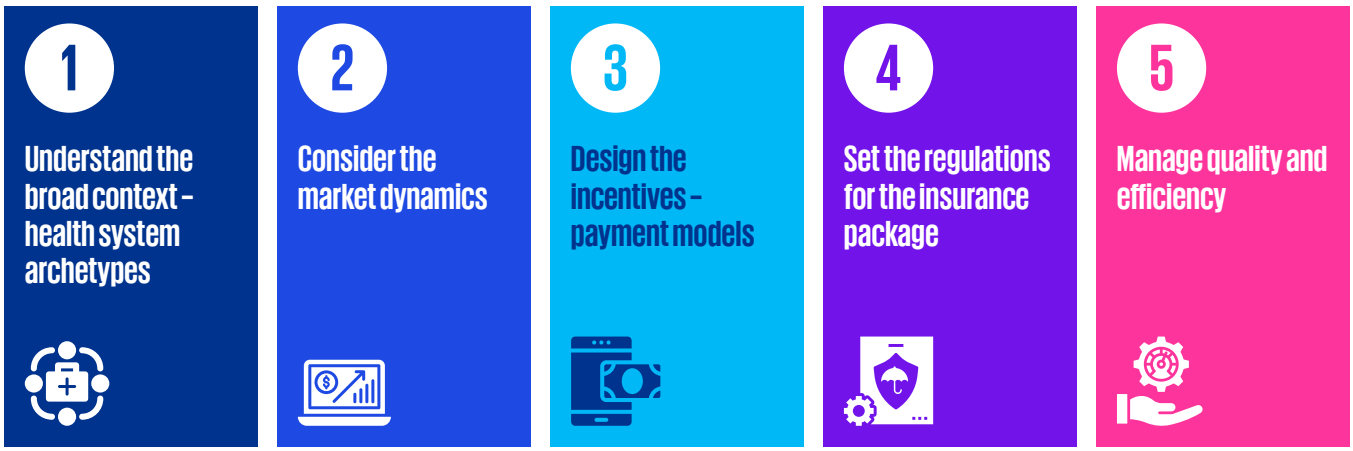
As countries are developing and become wealthier, healthcare systems tend to develop and mature in parallel. Investing in a health system is critical to the wealth of a nation: good quality, affordable healthcare generates value. Not just by increasing human capital, but also by increasing productivity and decreasing the long-term cost burden on society.

Healthcare reform in developed countries has typically evolved in three waves. The first wave focused on increasing access to care for everyone (equality in access). This resulted in increasing costs, which led to the second wave: regulation in order to contain cost. This was effective to a certain extent, but resulted in increasing waiting lists and pressures on quality, which led to the third wave: the introduction of incentives and competition to increase value (to optimize the balance between quality and efficiency). While most high-income countries are in the middle of the third wave, emerging economies – for instance in the Middle East, Asia, South America – are riding a combination of the three waves often at the same time: a tremendous technical and political challenge. Many countries are working on increasing access to care for everyone and facing challenges with quality, managing cost and trying to make their health care system more efficient by improving incentives at the same time.

Payer function reform - 5 building blocks

There is no silver bullet when it comes to healthcare system reform. A healthcare system comprises various functions of all different players: patient, provider, payer and the regulator. Each of these functions can be organized in various ways and are also inter-dependent, such that the optimal organization of one function is directly dependent on the way other functions are organized.

This article focuses on how to optimize the payer function, describing its five key building blocks, with case studies of real-world reforms and other examples of best practices throughout:



Building block #1

Healthcare system archetypes

Reforming the payer function starts with understanding the broader context of the healthcare system. Historically, there have been four archetypes of healthcare systems.

Beveridge model	Bismarck model	Managed competition	Market place
• Healthcare coverage is a right to everyone • Government (or party on behalf of government) acts as the single payer • Funded mainly through tax payments • Predominantly public providers, often owned by the government • Private providers play a small role, access to them often involves out-of-pocket payment or private insurance • Often an implicit benefit package	• 'Social insurance model' • Healthcare coverage linked to employment; with (in some cases) government paying the premiums of uncovered population groups • Funded mainly through employer and employee contributions • Administered through one or more private insurer(s) – either for-profit or not-for-profit • Mix of public and private providers • More freedom of choice for patients • Often an explicit benefit package	• Three-way marketplace model • Citizens mandated to buy insurance at insurer of choice • Insurers contract providers on behalf of their beneficiaries to provide care • Insurers obliged to accept everyone, with the same premium regardless of health status. In some countries: risk equalization fund to compensate insurers for higher risk • Mainly private providers who compete over beneficiaries and contracts with insurers • Funded through a mix of tax and premium contributions	• Uses competition to optimize quality and efficiency • Citizens are insured via their employer, or buy their own private insurance • Little regulation or consistency of what payers cover or how they contract with providers • Mainly private providers who compete with each other for patients • With coverage linked to employment and the possibility for one to buy private insurance, universal coverage is often a challenge

It is difficult to showcase a pure example of one of these archetypes, as most healthcare systems have evolved and have adapted elements of more than one of the archetypes. The Bismarck model was first introduced in Germany, but since its introduction it has taken up Beveridge-like elements by delinking healthcare coverage from employment status and introducing government-subsidized insurance for the unemployed. The Beveridge model originated in the UK with the government as the single payer. But since then it has adopted Bismarck-like elements with introducing a strong purchasing-provider split and by moving more towards an explicit benefit package with the support of the National Institute of Health and Care Excellence (NICE).

Building block #2

Market dynamics

The second key element to consider with payer function reform is the market dynamics in the healthcare system and especially the relative market power of the respective players. First of all, it is to be noted that payers and providers compete in different markets; payers compete over beneficiaries, providers compete over patients.

Payer-provider dynamics

The following dynamics are to be taken into account:

In a single-payer system the payer has more power, as providers do not have an alternative to contract with other parties.

Even in single-payer systems, some providers tend to have substantial market power and exercise it over the payer. Mostly larger, specialized providers (e.g., academic hospital or specialized hospital) are able to do so, as patients do not have the option to seek care elsewhere.

In health systems where prices are freely negotiable, providers with more market power tend to charge higher prices. In health systems where prices are fixed, providers with more market power may skim on quality of care and/or might not operate at full capacity or efficiency (thus creating waiting lists).

Guidelines

In order to influence or mitigate the negative effects of the market dynamics, the payer(s) or the government can introduce regulation that results in the following guidelines:

- Stringent competition policies (e.g., policy on mergers)
- Invite in new (specialized) providers to decrease waiting lists for low-price contracts
- Pursue transparency of outcomes of care, thereby fostering provider competition
- Change reimbursement models to increase incentives for providers to keep activity within budget
- Agree access targets upfront with providers to avoid unnecessary waiting lists
- In some multi-payer systems, centralization of price setting could be considered
- Bring providers 'in house' to create a so-called HMO model in which the payer also operates as part of the provider system (a payer provider integrated system)

Competition between payers

The level and the nature of competition between payers are dependent on the type of system in place. In a managed competition system with a risk equalization fund, the playing field for private insurers is created, as they all compete for providing a standardized package for the best price; they are not allowed to differ prices per customer. Providers are stimulated to provide cost-effective care, as insurers try to secure the best deal on purchasing for their customers. In a system with a single dominant payer like the EHIF in Estonia, the only choice available to beneficiaries is whether to purchase additional insurance from private insurers, who may compete on price, customer service and the range of benefits available.

Whilst competition between payers can yield beneficial outcomes in terms of the lowest price for consumers, it is critical that benefits are standardized and regulated by the government to ensure access to care. More competition between payers is not always better, as too many health insurance policies can create too much options for consumers and fragment the ability of any one insurer to drive change in the health system.

In order to influence or further improve the market dynamics between payers, the government can:

- reduce the barriers to entry for new entrants on the market;
- consider defining the optional benefit package (in addition to the basic benefit package). Standardizing the optional packages can help rationalize consumer behavior. For consumers to be effective shoppers, they need to be able to easily sort through health insurance options.

Building block #3

Payment models

The third building block is the payment model: the way the payer(s) pay(s) or reimburse(s) for the services of the care providers. There are four archetypes of payment models. Each has its pros and cons; it depends on the type of care, (e.g., primary care, inpatient care etc.) and the particular issues a payer wishes to solve which of these payment archetypes is the most effective. Increasingly, most healthcare systems use a blend of these payment models.

	 **Fee for Service**	 **Capitation**	 **Block / Budget**	 **Bundles**
Explanation	• Pay for each unit or service • Payments are based on a fixed price schedule and on intervention regardless of patient characteristics	• Fixed price per capita for provision of group of services for a defined period of time, regardless of activity • E.g., a lump sum based on the care of a predefined population	• Lump sum for provision of group of services for a defined period of time, regardless of the number of patients treated or the activity	• Fixed price to manage care of a particular patient or pathway of care • E.g.: one payment for all activities related to hip surgery: diagnostics, surgery and rehabilitation
Pros (summary)	• Stimulates productivity • Transparency around cost allocation and activity	• Caps costs • Predictability of costs	• Simplicity, low transaction costs • Caps costs • Predictability of costs	• Stimulates productivity • Stimulates efficiency within a bundle
Cons (summary)	• Risk of overtreatment • Escalating costs • Fragmentation between providers (no incentive to collaborate)	• May promote inefficiency or an incentive to under-treat • Risk of "rationalizing" care (waiting lists)	• Does not promote efficiency • Risk of 'rationalizing' care (waiting lists; avoid high-complex patients) • Lacks transparency	• Risk of overtreatment • Higher transaction costs (can be difficult to implement)
Who bears the most risk?	Payer	Provider	Provider	Shared
Common uses in practice	• Preventive screenings • Certain laboratory tests	• Payment of GP practices based on number of registered	• Hospital block budget	• Chronic disease bundles • DRGs

As each of the payment models have their advantages and disadvantages, a mix of these models – often changing over time depending on local circumstances - is to be used to set the right incentive for providers.

On top of that, **value-based payment models** offer a way to further optimize the payment model. Value-based payment models link payments to outcome parameters. Outcome parameters can include quality parameters, efficiency parameters and/or appropriateness parameters and can focus on more than one provider. Examples might include extra payments for having low rates of readmission or high rates of patient satisfaction.

When designing the payment model, the following four guidelines lead the way to more effective ones:

- Contract care at an integrated level (over the full cycle of care, rather than a single provider)
- Incentivize both cost and quality of care
- Distribute risk and savings between payer and provider
- Allow time for transition as it can years before benefits of payment reform become evident

Building block #4

Regulation of insurance packages

Regulation evolves around many facets, with three key considerations regarding regulation for effective payer reform:

1 Definition of the basic benefit package, cost controls (co payments) and provider network

The definition of the basic benefit package is one of the first steps towards universal healthcare coverage, but also to a well-functioning payer. This not only means defining what services are part of the basic benefit packages and defining the eligible population, but also includes determining if and to what extent cost controls are to be applied at an individual beneficiary level. Controls can be co payments for the patient, limits on what their care can cost (caps), and other requirements (e.g., getting a GP referral for specialist consults). These can differ for each of the services. They are effective tools for cost containment and efficiency within the basic benefit package. Next to controls, defining minimum standards for quality and comfort is to be considered, as well as allowing for optional upgrade packages (e.g., letting patients pay more for a private hospital room). Finally, the provider network has to be defined. The provider network consists of the providers that are allowed to offer the services of the basic benefit package. One of the considerations is if and to what extent private providers are included in the provider network. By regulating and standardizing these items, regulators avoid that payers (in multi-payer systems) enter a 'race to the bottom' by competing on what they offer towards citizens / patients, instead of optimizing the value (cost and quality) of the defined benefit package. In most markets it is otherwise all too easy to create a plethora of policies that makes it difficult for consumers to choose the right insurance.

2 Standardization of the optional benefit package

As stated earlier, standardization of the optional benefit package can be beneficial in improving the market dynamics between the payers. In systems with relatively limited basic packages, a wide variety of optional packages may emerge, such that customers are not able to see the forest for the trees. In such a situation, some form of standardization of the optional package may positively influence the market dynamics.

3 Preventing adverse selection

Adverse selection refers to the phenomenon in which the proportion of healthy and unhealthy patients in an insurer's customer base is unbalanced. This can happen when insurers practice 'cream skimming': selecting (or excluding) patients. This results in insurers having a more advantageous patient risk pool (at lower cost) than other insurers. This imbalance in the system creates problems for coverage of the less healthy individuals in the population, who end up facing ever-increasing premiums to cover the costs of their care.

Regulation in the marketplace helps to avoid this adverse selection risk. One option is the implementation of a risk equalization fund that compensates insurers for the high(er) risk profile of their pool and enforces the same prices per policy for all citizens, regardless of health status. Another option is to draft regulation that requires acceptance of all citizens and/or prohibitions to market to specific (sub)populations and/or arrange the basic package through tax payment by the government.

Building block #5

Quality and efficiency management

Payers and policymakers aim to innovate payment mechanisms to reward value: high-quality and efficient care. This requires more than a combination of different payment models and regulation. To further optimize the quality and efficiency provided, payers can use the following methods:

Contracting quality

Directly linking payment to achieving quality or value targets allows payers to overcome some obstacles that exist with traditional payment models. Many examples of innovative payment models using quality measures have emerged over the last decade. For example in the US, some providers receive bonus payments for achieving certain quality performance targets. In the Netherlands a bundle of care for Parkinson's patients has been developed across all involved care providers and payment linked to performance on a set of indicators.

Transparency of outcomes

Improving transparency of value offered by providers can be an effective tool to further incentivize quality and efficiency improvement. When done right, it provides patients with the information to make an informed-based choice for a provider. It provides payers with information on the performance of providers, which can be used for awarding high performers or even selective contracting. And it offers providers an incentive to improve and a clear direction for their efforts in doing so.

Population health management

Population health management aims to optimize the clinical and financial outcomes for specific population groups. It puts the focus on preventing patients from needing treatment or additional treatment rather than treating patients: from *sick* care to *health* care. Payers can incentivize population health management by designing payment models that reward providers for preventative activities rather than treatment activities. They can also offer advice and support directly to their beneficiaries to improve their health, and in some systems may also be in a position to make additional investments in public health.

Case studies

To show the impact of certain decisions in practice, this report includes five case studies that show how health systems apply these building blocks in practice. These case studies are merely an illustration of the mentioned building blocks, rather than providing 'best practices', as every country needs to find its own journey towards an optimal health system.

	 **Dubai**	 **Estonia**	 **Taiwan**	 **Netherlands**	 **South Africa**
Health system characteristics	• Multi-payer system • Both public and private providers	• Single-payer system • Both public and private providers	• Single-payer system • Both public and non-for-profit private providers	• Managed competition model • Private providers	• Multi-payer system • Private and public providers
Payment reform	Dubai aims to achieve universal healthcare coverage through a mix of government-funded and administered insurance and private insurance through employers. Dubai Nationals are covered through the government-funded insurance. Non-nationals (expats) are covered through their employers. Unemployed and low-income employees can avail for a low-cost insurance plan which is regulated by the government.	Estonia has moved to a single-payer system with EHIF acting as the payer and achieved almost full universal healthcare coverage (95%). Estonia has a frontrunner position when it comes to technology. It has a nation-wide platform connecting patient data, providing access to the relevant parties. This not only facilitates providers in cost-efficient care, it also provides EHIF with the information for care planning and budgeting, quality monitoring and price setting.	Taiwan has achieved universal healthcare coverage (99,9%) with a system with Beveridge and Bismarck-like characteristics. The government acts as the single-payer and contracts both public and private providers. Cost containment is a topic of debate and co pays, limits and deductibles for the benefit package have been introduced over the years to prevent budget overruns.	The Netherlands has moved to a managed competition model and achieved almost full universal healthcare coverage (99,8%). The Dutch model includes a risk equalization fund to compensate insurers for a higher-risk pool. The Dutch model is renowned for the accessibility, equality and affordability of its system.	South Africa is at the start of a major system reform with the aim of achieving universal healthcare coverage. The vision is to establish a single-payer system contracting both public and private providers. Details are still to be fleshed out. Questions related to the current insurance market, the funding of the envisioned system and the strong position of private providers have been raised.

As shown in the case studies, payer function reform is an extensive and complicated process. The value of investments made today may not yield tangible results for a number of years. Patience, monitoring and staying power are paramount to a successful reform. Combining the building blocks outlined in this paper will help payers and governments design a tailored reform program that suits the health system's needs. With an effective and well-designed reform, payers and governments can make great strides towards achieving universal access, attaining high quality and delivering cost-effective care.

Want to know more?

Get in touch with the KPMG Health team

Authors and contributors

David Ikkersheim
Partner KPMG Health
ikkersheim.david@kpmg.nl

Annemieke Draaisma
Senior Manager KPMG Health
draaisma.annemieke@kpmg.nl

Kemal Arslantas
Manager KPMG Health
arslantas.kemal@kpmg.nl

Contributor:
Rachel Brouwer

KPMG Health is a global network of healthcare professionals and >70 local practices

We are happy to connect you with our local contact

Anna van Poucke
Global Head of Healthcare
KPMG International
vanpoucke.anna@kpmg.nl

Edward Fitzgerald
Head of Healthcare & Life Sciences
Partner KPMG Islands Group
edwardfitzgerald@kpmg.bm

Burhaan Khan
Head of Healthcare
Partner KPMG Saudi Arabia
burhaankhan@kpmg.com

Kerry McGough
ASPAC Region Healthcare Lead
Partner KPMG Australia
kmcgough1@kpmg.com.au

Lalit Mistry
Co-Head of Healthcare
Partner KPMG India
lalitmistry@kpmg.com

Evan Rawstron
Head of Healthcare
Partner KPMG Australia
erawstron@kpmg.com.au

Samson Nyoike
Head of Healthcare & Human Services
Partner KPMG in Africa
snyoike@kpmg.co.ke

01

Introduction

Health is wealth

1. Introduction

Health is wealth

A state-of-the-art health system is critical for the wealth of a nation. Health gains can have a direct impact on a country's GDP, with estimates showing that an increase in life expectancy by one year can lead to a 4% increase in GDP[1]. Health gains realize value not just by increasing human capital, but also by increasing productivity and decreasing the cost burden. Productivity climbs as healthy citizens work more effectively and have fewer absences. Education levels improve: school attendance rates rise and the population as a whole is upskilled. The mindset of a healthy population is different; with a long healthy life to look forward to, individuals are more likely to plan long-term and make more investments. Fair and equal access to healthcare also support social solidarity and stability.

It is essential to address productivity, particularly among healthcare workers, by building a health system that supports a healthier nation. The World Health Organization projects a shortage in healthcare workers of over 20% by 2030[2]. Maintaining the health and improving the productivity of existing workers partially balances out the threat of future shortages. Strong health systems support a healthy, productive workforce and provide a foundation for the health gains that will strengthen the country's economy.

The COVID-19 pandemic highlighted the importance of robust and adaptable health systems. Many high-income countries made use of existing structures and standardization within health systems to provide undisrupted care, but in some cases these high levels of structure became a barrier to adaptability. Some emerging economy countries were able to respond to the demands of COVID-19 quickly and effectively and pivoted the system focus to acute care at high volumes. While facing many challenges, less mature health systems have one advantage in being less 'path dependent' as a result of less fixed infrastructure or rigid public expectations – all of which provide flexibility when implementing change[1].

A key step in establishing a strong health system is to improve the payer function. There is a long way yet before the ideal health system is achieved in any country, and even mature systems have scope to improve. Identifying which reforms are necessary in a given health system first calls for understanding the performance of the existing system. This assessment may be supported by peer comparisons and performance benchmarks which help to identify the areas requiring most attention. These attention points may include access to care (in terms of timeliness, availability), equity of services provided (such as variations between different income groups), effectiveness (whether care is well-utilized as well as quality of care delivered) and efficiency (maximizing the value from the available resources)[3,4].

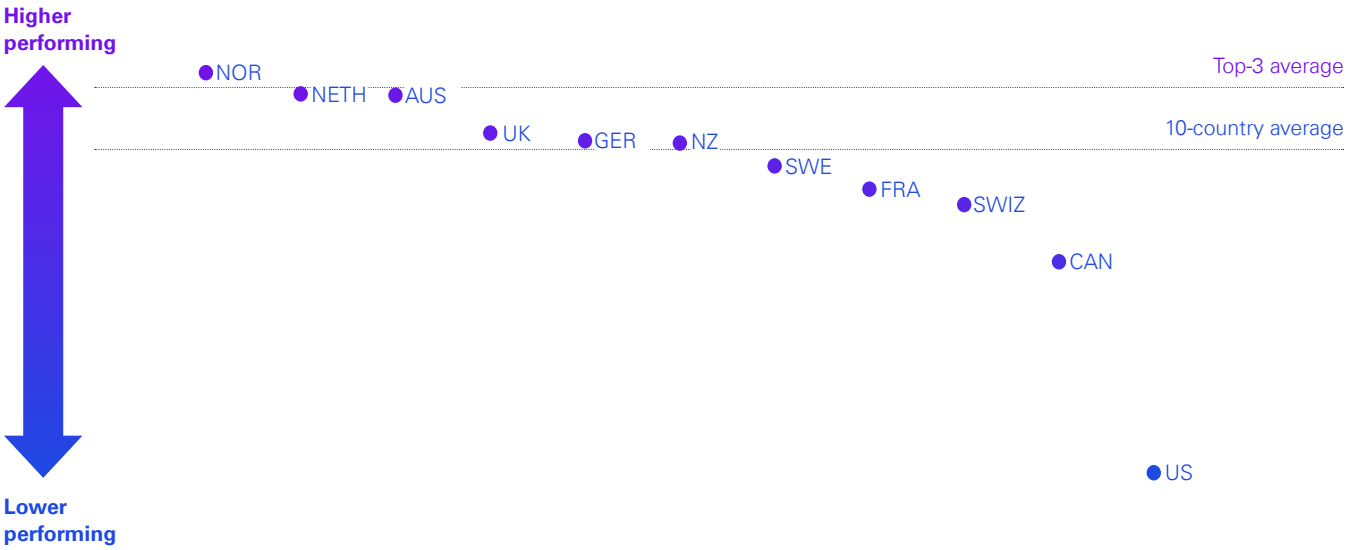
Care effectiveness cannot be realized through financial investment alone. While these investments are a necessary part of the payer function and system reform, increased health spending does not always lead to better outcomes. A recent Commonwealth Fund study, for example, found that even though the US has the highest spending in terms of share of GDP, ten other high-income countries significantly outperformed the US health system on a number of measures. The US was outperformed in terms of access to care, administrative efficiency, equity and outcomes of health care (Figure 1)[5].

While high-income countries frequently outshine emerging economy countries in performance benchmarks, maturing systems have certain advantages over their more matured counterparts. Emerging economy countries can use lessons learned from established systems to deliver cost-effective care while still maintaining quality, using the system's flexibility to implement new measures. Barriers to innovation are lower and this can deliver results unimaginable in a developed system.

Maximizing the benefits from economies of scale, the hospital network Narayana Health in India, for example, strived to improve quality and reduce costs by establishing a 5000-bed facility for cardiac and cancer care, managing teleradiology out of a single hub in Bangalore and employing graduate students to supply surgical gowns at a fraction of their previous cost. A primary care initiative in Brazil sees small teams with a doctor, nurse and community workers supporting assigned families, targeting poorer communities in favelas and the outskirts of larger cities and making great strides towards reducing infant mortality and increasing life expectancy. These examples demonstrate how emerging

Figure 1

Comparative Health Care System Performance Scores, reproduced from the Commonwealth Fund[5]



Note: To normalize performance scores across countries, each score is the calculated standard deviation from a 10-country average that excludes the US. See How We Conducted This Study for more detail.

economies make use of their strengths to maximize the cost-effectiveness, quality and access of care. Designing the payer function of a state-of-the-art health system demands employing the existing system's strengths and tailoring reforms to the local population and local system characteristics[1].

This article focuses on the payer function. The building blocks outlined in this paper are especially relevant to payers and governments looking to reform a health system with a passive or nonexistent payer function. This includes health systems where providers were previously entirely state-subsidized or owned, or health systems where the performance of providers was not actively managed with an (activist) payer function.

Section 2 delves into these key building blocks that form the foundations of an effective payer function and outlines how improvements can be made to the payer function. The key building blocks are the basic health system archetypes, market dynamics, various payment model options, regulation in a payer function reform and how to manage provider quality and efficiency. A carefully designed payer function should be tailored to meet the health system's needs, using variations on the building blocks to improve effectiveness. In addition to examples throughout the report highlighting how the building blocks take shape in practice, Section 3 provides an in-depth analysis of a few case studies showing how these pieces fit together in practice. Section 4 discusses the key success factors for establishing a payer function reform and how to get started with the transformation journey.

Together, these building blocks, case studies and key success factors will help to set up payers and governments looking to start or enhance their payer function reform.

02

Building blocks

Key strategic questions for setting up or reforming a payer function

2. Building blocks

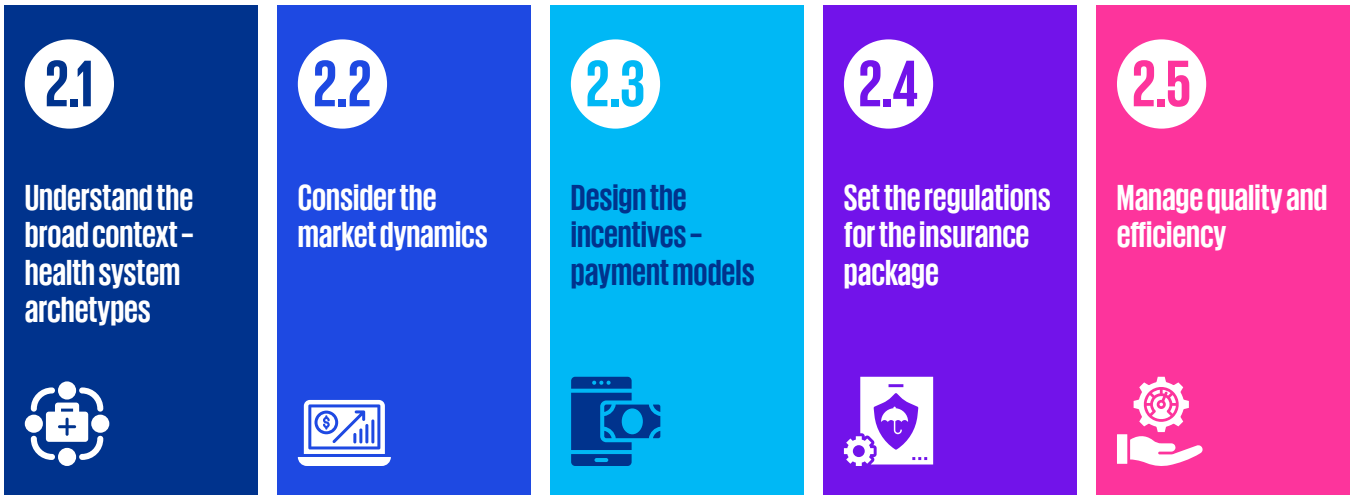
Key strategic questions for setting up or reforming a payer function

Health systems across the globe run on many moving parts: the financing mechanisms, the highly skilled workforce, reliable tools, advancing technologies, shifting policies and flexible logistics. To really thrive, a health system also needs an activist payer function. Establishing an effective financing mechanism and efficient organization of the payer function are fundamental elements to delivering high-quality care. This chapter outlines the key building blocks and strategic questions that need to be addressed when setting up a payer function or undergoing a payer function reform.

The payer function is set in a backdrop of one of four basic archetypes of health systems: Beveridge, Bismarck, market-based and managed competition, described in Section 2.1. . A key element for consideration when reforming the payer function is the relative market power of the main stakeholders. Section 2.2 walks through these market dynamics. Regardless of the health system archetype in place, payers should use appropriate payment models to create the right incentivizes.

The prevailing payment models are described in Section 2.3. Implementing regulation facilitates an effective payer function. Regulation evolves around many facets. The three key considerations regarding regulation for effective payer reform are outlined in Section 2.4. Another way to mitigate financial risk and save costs on the payer side is to improve the quality – and efficiency – of providers. Section 2.5 discusses this (sometimes) inverse relationship between quality and cost, and the measures that can be taken to improve quality, including population health management.

Section 2.6 considers why the perfect health system does not exist: no single health system and combination of payment models and regulation is ideally suited to all countries. The success of a health system and any payer function are dependent on the country dynamics at play, and a newly designed approach must be tailored to the country's characteristics.



2.1 Global health system archetypes

Four global basic archetypes form the backbone of a health system by defining the sources of funding and payer structure, the dynamics of public and private providers and the contributions made by either individuals or organizations. While this section characterizes the essential features of each of these four archetypes of health systems, the reality is that many countries' health systems are a blend of models, containing elements from more than one of these concepts. All of these models are designed to optimize access to care, cost efficiency and quality.

2.1.1 Beveridge model

In the Beveridge model, the government is the single payer and it funds healthcare through tax payments. With the government as the only payer in this system, payer negotiating power is high, helping to keep the costs in check. Health systems with a public national health service tend to have lower healthcare expenditure in relation to GDP[6,7]. The single payer is able to wield its power in price negotiations and contracting arrangements.

Healthcare in this system is considered a fundamental right and is accessible to all citizens, making this an exemplar of how to achieve universal health coverage. These systems are based on equity and solidarity. It is essential that all residents and citizens are able to access care when they need to. However, the high levels of access may come at the cost of efficiency, and widespread use of the available healthcare services will lengthen waiting times. This may result in reduced patient satisfaction and a less optimal customer experience.

Beveridge in practice: Finland

The Beveridge model may still be decentralized even with a single payer. Finland has a highly decentralized publicly funded healthcare system, focused on high quality.

Each of the municipalities, of which there are more than 300, is legally obliged to finance and organize care for its residents. These local councils take responsibility for universal access.

General taxation is the primary source of revenue (65%), with some social insurance schemes and out-of-pocket payments topping up the funding[8].

Within a Beveridge-style health system, public providers dominate the scene. Care providers are largely owned or controlled by central and regional governments[9]. For-profit private providers do not play a key role; they are typically seen as supplemental. Private providers stimulate additional market dynamics (see Section 2.2) and can help to alleviate the pressure on public providers and improve waiting times or access to care for patients. Patients often have to pay out of pocket to access these benefits of private care.

2.1.2 Bismarck model

The Bismarck model is also known as the social health insurance model. Healthcare is financed and managed with risk pooling through private insurers. Citizens pay into a centralized fund, sometimes known as sickness funds, via mandatory insurance contributions. The fund is co-financed by employers and employees through payroll taxes. These (often regional) funds tend to operate on a not-for-profit basis. Universal coverage can be a challenge in this system when access is linked to employment status; it is important to consider how the various population subgroups can still be covered.

Bismarck in practice: Japan

In Japan, universal health coverage is funded by mandatory health insurance. Employees pay through compulsory payroll deductions (the Employee Health Insurance).

The government contributes towards maximum health coverage while individuals pay the rest.

The prices are controlled by the government and the multitude of non-competing insurers do not make a profit.

A Bismarckian system usually has a mix of public and private providers, and the private providers therefore have a more pronounced role compared to the Beveridge system. Optional packages are typically offered alongside the mandatory basic package, giving patients the opportunity to purchase additional access or coverage. Patients have more freedom in choosing where to go for their care needs compared to the Beveridge model, as the insurance will typically cover a range of public and private providers. This freedom of choice stimulates competition between providers and encourages them to deliver more efficient and higher quality care. Doctors and hospitals are often privatized in this model[10]. The government maintains control and monitoring of the fund collections, but non-government insurers handle the administration.

2.1.3 Convergence of and differences between the Beveridge and Bismarck models

Most health systems use a combination of approaches, and even the originators of the Beveridge or Bismarck models now have health systems that have converged to a blend of these two models. The Beveridge model originated in the UK, where the National Health Service (NHS) was established to provide health coverage for all citizens as a basic right. With funding raised by the government via taxes, spending is controlled by publicly owned payers or health agencies and the benefit packages are often implicit.

The Bismarck model was first introduced in Germany and in its initial form linked coverage to labor status. The employed were covered and the government subsidized groups that they deemed should have access to care but could not afford it. In this model, the benefit package is explicit and is administered by one (or often more) regional social health insurance funds. Healthcare is primarily financed through legal contribution requirements for both employers and employees.

The UK's NHS has since adopted characteristics of the Bismarck model, using more explicit benefit packages with support of the National Institute of Health and Care Excellence (NICE). Health Technology Assessment (HTA) is used to determine which services should be covered in the basic package, which now requires a financial contribution from non-nationals living in the country for more than six months[11]. A strong purchaser-provider split was introduced so that third-party payers are organizationally separated from providers and contracts were established between these groups.

Germany has adopted a more Beveridge-style approach to access, with coverage no longer linked to employment and state-subsidized insurance covering almost all non-employed groups – bringing coverage up to 90%. The activity of sickness funds in Germany is now strictly regulated and directed by the government, and the government is the key decision maker for topics such as access, premiums, price setting, contracting partners and coverage.

While both of these systems were established with the goal of achieving universal coverage and providing high-quality care for all, these systems have taken considerably different approaches to reaching these goals. The following table summarizes the key differentiating characteristics between these two models, in terms of government involvement, basis of entitlement, and the labor market dynamics.

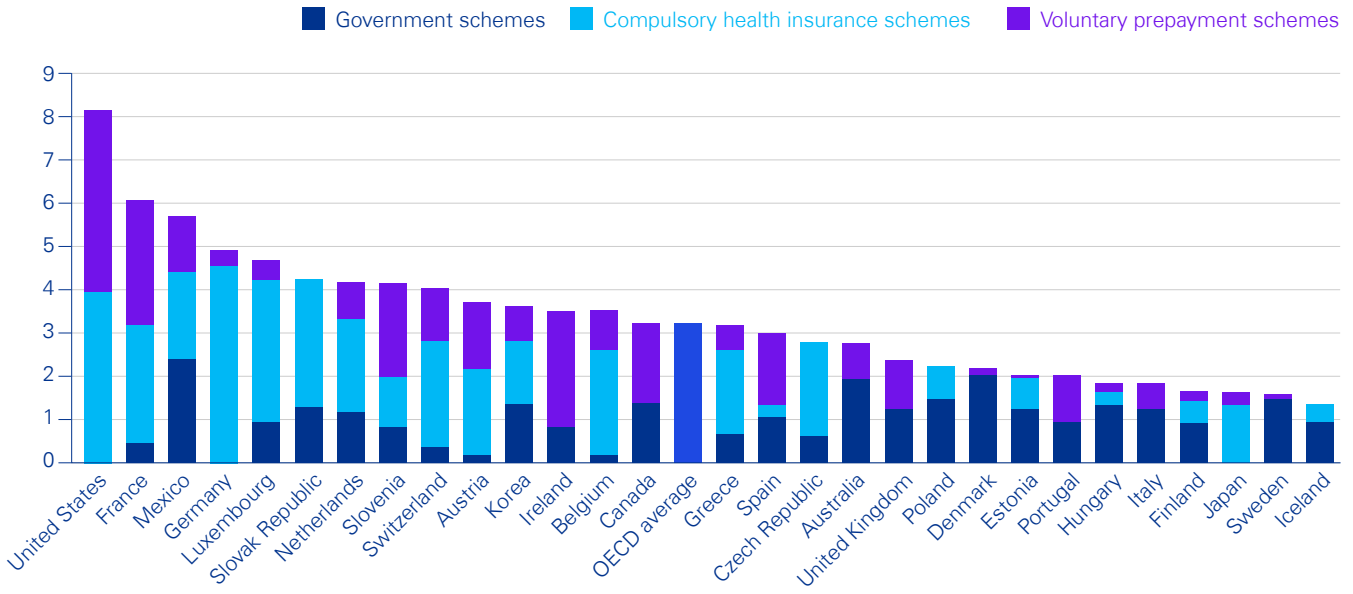
In a Beveridge system...	Whereas in a Bismarck system...
Government involvement	
• Government directly controls both the quantity and allocation of health spending • High transparency and efficiency in budgeting compared to a system with multiple private actors	• Government tends to play a less active role • Government less strongly linked to future reforms, easier to distance itself from necessary but unpopular reforms
Basis of entitlement	
• National health services address access gaps seen in emerging markets with social insurance programs for those not covered by formal employers or government subsidie	• Most high-income Bismarck systems can achieve universal health coverage Universal health coverage harder to achieve in countries with high numbers of informal workers, migrants, refugees and other undocumented persons
Labor market dynamics	
• Impact on health of crises such as a recession can be exacerbated by austerity measures: health spending is typically cut harder and faster • Government does not rely on mandatory contributions for employers per employee, which can also benefit employers	• Insurance revenues may decline in times of crisis as unemployment increases and employers are making fewer contributions[12]

Another key difference between these models are the transaction and administration costs involved. As shown in Figure 2, administration costs tend to be lower in systems with a single dominant payer (government schemes) than in multi-payer systems (compulsory health insurance schemes and some voluntary prepayment schemes). In multi-payer systems, there is an increased volume of transactions between the multiple payers.

This, combined with the insurance-based payment and budgeting model complexities, is what can lead to these increased administration costs. Combining elements of these two models can help to mitigate the downside risks of each.

Figure 2

Administration costs as a share of total health expenditure by financing scheme, 2014 (or nearest year)[13]



2.1.4 Managed competition model

The managed competition model is structured as a three-way marketplace in the healthcare system, visualized in Figure 3 below. The health insurer negotiates contracts with healthcare providers, acting on behalf of the beneficiaries of their plans, and competes for beneficiaries via the premiums that are set[14]. Selective contracting is sometimes used to stimulate providers to keep prices low: providers that agree to the low prices are included in the insurer's contracting network and beneficiaries can choose those providers to receive care from. This generates competition between providers, prompting them to offer high-quality care at lower prices so that patients will choose their services.

In this model, funding is partially premium-based and partially from the government via taxes: typically in a roughly equal split[15]. In some examples of this system, such as in the Netherlands, these sources of funding are combined into a fund, which helps to level the playing field between payers by compensating those of them with a higher-risk pool of beneficiaries[16]. The equalization system is based on health risk profiles per insured person and helps to mitigate adverse selection (see Section 2.4.3).

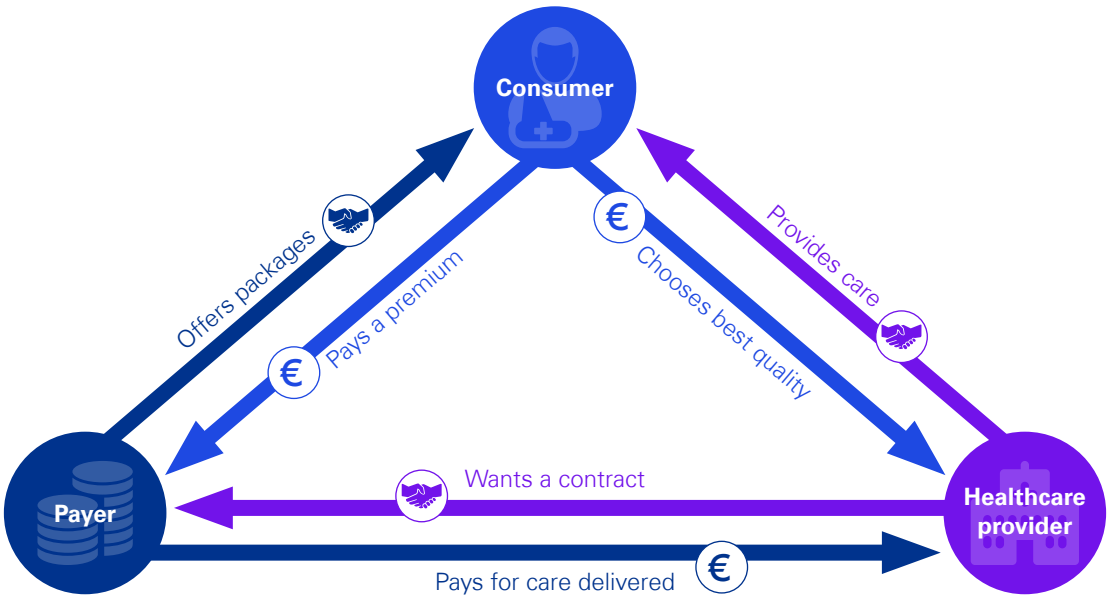
Individuals have freedom of choice in selecting their healthcare provider among the mix of private and public providers. The level of coverage at a given provider depends on the contracts negotiated between the insurer and healthcare providers in the system; these costs may be fully or partially reimbursed[14]. The insurers in this system are typically private and, again, individuals have a free choice in selecting an insurer. To achieve equity in managed competition, all insurers are required to set the same premium for every consumer, regardless of health status. The key principles underpinning the managed competition model are the same for other healthcare systems: increasing access, raising quality and improving cost-effectiveness.

Managed competition in practice: Switzerland

Health insurance is mandatory for all residents in Switzerland, with government subsidies available for those whose income is insufficient to cover their premium. The basic package should not generate a profit for insurers and is administered by local health authorities in the cantons. Statutory coverage is governed by the Federal Office of Public Health. Switzerland uses a risk equalization scheme to adjust for canton, age, gender and major expenditures in the previous year.

Unlike the mandatory package, voluntary health insurance is facilitated by for-profit payers; this insurance covers services not included in the mandatory basic package. A mix of public and private providers deliver care, but selective contracting is not applied in Switzerland[17].

Figure 3
Visualization of the three-way marketplace structure in the managed competition health system model



2.1.5 Market-based model

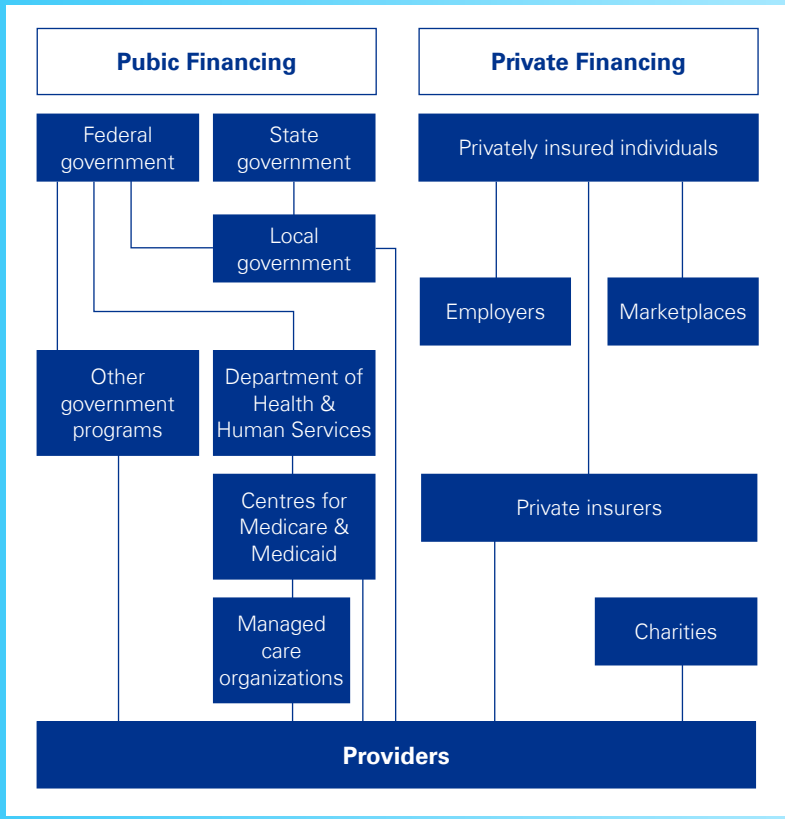
In a market-based system private insurers and private providers dominate, and there is far fewer directives from government mandating access, coverage or pricing. Individuals are largely left to source their own coverage, typically through employer-funded health insurance – creating gaps for groups such as the unemployed, low income, or dependents (for whom there may be some social or donor-funded programs). Individuals can also choose to pay for private insurance directly, but not all are able to afford private insurance. Out-of-pocket payments are typically higher than in other models, further increasing the financial burden on individuals, as are so called 'catastrophic' payments whereby un(der)-insured individuals pay a large amount of their annual income on care, and may go into poverty as a result.

The market-based model uses competition to drive delivery of quality healthcare and optimizing access to and affordability of care. Because of the high levels of competition and the freedom individuals have to choose their providers, these providers are incentivized to deliver the highest level of care in order to win customers. This model assumes that the consumers (i.e., the patients) are well-informed and are able to make decisions based on accurate information about providers and insurers.

Market-based model in practice: US

The US system sources funding from insurance via employers or individuals taking out private insurance as well as government support. In 2020, 9% of the total national healthcare expenditure was paid out of pocket. Private health insurance made up 28% in 2020. Despite its market-based model, almost half (40%) of US healthcare funding is public, largely through programs aimed at the large number of US households who would not be able to fund private insurance (Medicaid for low income households, Medicare for older people, Veterans Administration for military and others).

Insurers contract care directly with care providers and negotiate on volume, price and quality indicators. Consumers are restricted to selecting from a limited number of providers and typically do not have full coverage[18,19,20].



2.2 Market dynamics

A key element for consideration when reforming the payer function is the relative market power of the main stakeholders. Payers and providers compete in different markets. Payers are competing for customers (purchasers of insurance packages), while healthcare providers are competing for patients. Relative market power is dependent on a number of factors, largely related to the possibility of using a different provider or payer for the same services. At a basic level, a high number of providers or payers results in a wide range of choices for the consumer, whereas a low number of providers or payers can lead to a monopolistic, monopsonistic or oligarchic market.

2.2.1 Competition between provider and payer

The matrix in Figure 4 below outlines the four negotiating situations that typically arise between payers and providers. The relative market power of the payer or provider influences the negotiating power that stakeholder will have in contracting agreements. In a single-payer system, the payer has a high market power, as the healthcare providers are unable to seek out an alternative payer for a better deal. Similarly, a large academic hospital is able to exert more power and has a stronger negotiating position than an individual doctor running a private practice.

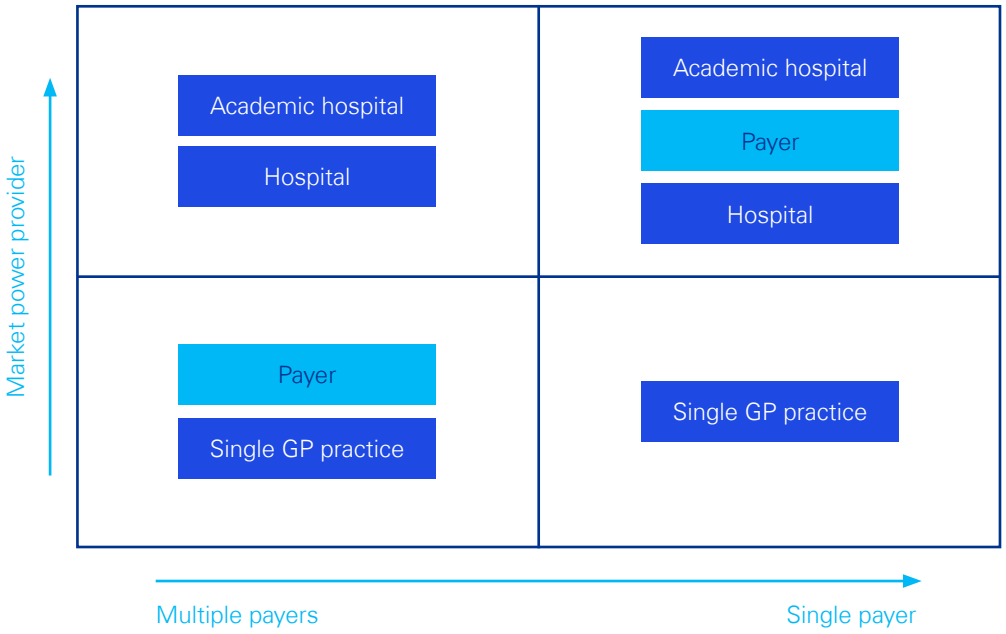
A high negotiating power allows that party to realize more favorable terms when contracting; this may take the form of lower prices for care when the payer is in possession of this power, or higher prices when it lies with the providers[21]. Market power can significantly influence the terms of care provision.

Even in public, single-payer health systems such as the NHS in the UK, healthcare providers exercise their market power over payers[22]. Secondary care providers such as large hospitals often have the most market power, as patients typically have few alternatives when seeking care in both the short and long term. Services may be unique to that provider, for example if there is a specific tertiary care service the hospital provides that is not available elsewhere. Larger hospitals are furthermore typically highly regarded in the community, and this reduces the likelihood that other stakeholders will start a dispute with these players. Providers with high market power as in these examples, are less incentivized to improve quality or innovate care services, as the patients will use their services regardless[23].

It is important to understand that even in a multi-payer system it is possible to have a single price setter for care – for example, Japan has more than 3,000 payers in its system, but prices for care are negotiated and set centrally.

If prices are freely negotiable, providers with a higher market power will tend to drive these prices up. In the case of fixed prices, providers with higher power may be less willing to invest efforts in improving quality,

Figure 4
Payer - provider market power matrix, indicative - actual market power will differ per health system and region



capacity or efficiency, and this may lead to waiting lists. Nevertheless, price negotiations are complex and depend on the location, product and insurers involved; smaller payers may even be able to negotiate more favorable prices than larger insurers in certain cases[24]. Selective contracting is one such way to negotiate lower prices in a market where providers have high relative power[23].

Market dynamics can play a key role in negotiations and should be taken into account when establishing a contract cycle. A matrix such as the one in Figure 4 helps to map out the relative market power in a given health system and this information can be useful in negotiations. It is important for payers to identify where they sit in this matrix.

Furthermore, there are several mitigating measures which may help to reduce the impact of any negative effects to the payer of the specific market dynamics in a given health system, namely:

- Implement stringent competition policies (e.g., policy on mergers)
- Invite in new (specialized) providers to manage waiting lists for low-price contracts
- Pursue transparency of outcomes of care and foster provider competition
- Utilize budget ceilings as well as existing payment models to avoid overruns
- Agree access targets upfront
- In some multi-payer system, centralization price setting for healthcare (price setting on behalf of all payers) could be considered
- Bring providers 'in house' to create a so-called Health Maintenance Organization (HMO) model in which the payer also operates part of the provider system (e.g. has its own clinics in order to more effectively divert demand away from hospitals).

2.2.2 Competition between payers

Section 2.2.1 demonstrated how competition among providers can help to stimulate quality care at reasonable prices. Among payers, competition stimulates insurers to provide the best deal for the consumers so that patients receive improved care without excessive cost. Lower levels of competition among payers give the payer a strong negotiating position and can lead to lower prices. However, the price savings achieved by powerful insurers are not always reflected in the premium pricing and passed on to the patients – especially if they are allowed to operate for profit[21]. Health insurance laws and pricing regulation can help to balance these pros and cons of competition between payers.

Influencing market competition: Bahrain

The Bahraini government decided to implement a new health insurance structure, which has now been written into law and is in the process of being implemented.

Currently, citizens of Bahrain are entitled to services covered under the Bahraini Mandatory Package without additional costs, which only includes publicly owned providers.

A new partially subsidized optional package will be offered by the Social Health Insurance Fund Authority (SHIFA), to increase patient freedom of choice and allow consumers to opt for private providers. These additional packages will address the existing gaps in coverage in the mandatory package.

Additionally, a Residents Mandatory Package will be offered to domestic workers and expats employed by the government, who are not covered by the mandatory package for citizens. This introduces an additional element of competition for the existing private insurance companies.

The level and nature of competition between payers are dependent on the type of system in place. The varying numbers of payers in different systems influence the market dynamics and relative market power, which in turn influences the level of competition. In a system with a single dominant payer, private insurers are only providing top-up benefits for those willing and able to afford it and competition is limited or nonexistent. In managed competition systems with a risk equalization fund the playing field for private insurers is levelled, as they all compete for providing a standardized package for the best price; they are not allowed to differ prices per customer. Providers are stimulated to provide cost-effective care as insurers try to secure the best deal on purchasing. Assessing the local health architecture and system limitations is key to identifying both the current and desired competition levels to stimulate high-quality and affordable care.

Governments are also able to influence the level of competition among payers in the health system. A government can reduce the barriers to entry for new entrants on the market with favorable tax advantages and thus increase the supply of insurance companies into the market[25]. Governments can also implement policies that allow consumers to use healthcare services outside the country, increasing their freedom of choice.

Another way to influence competition between payers in the health system lies in the definition of the basic and

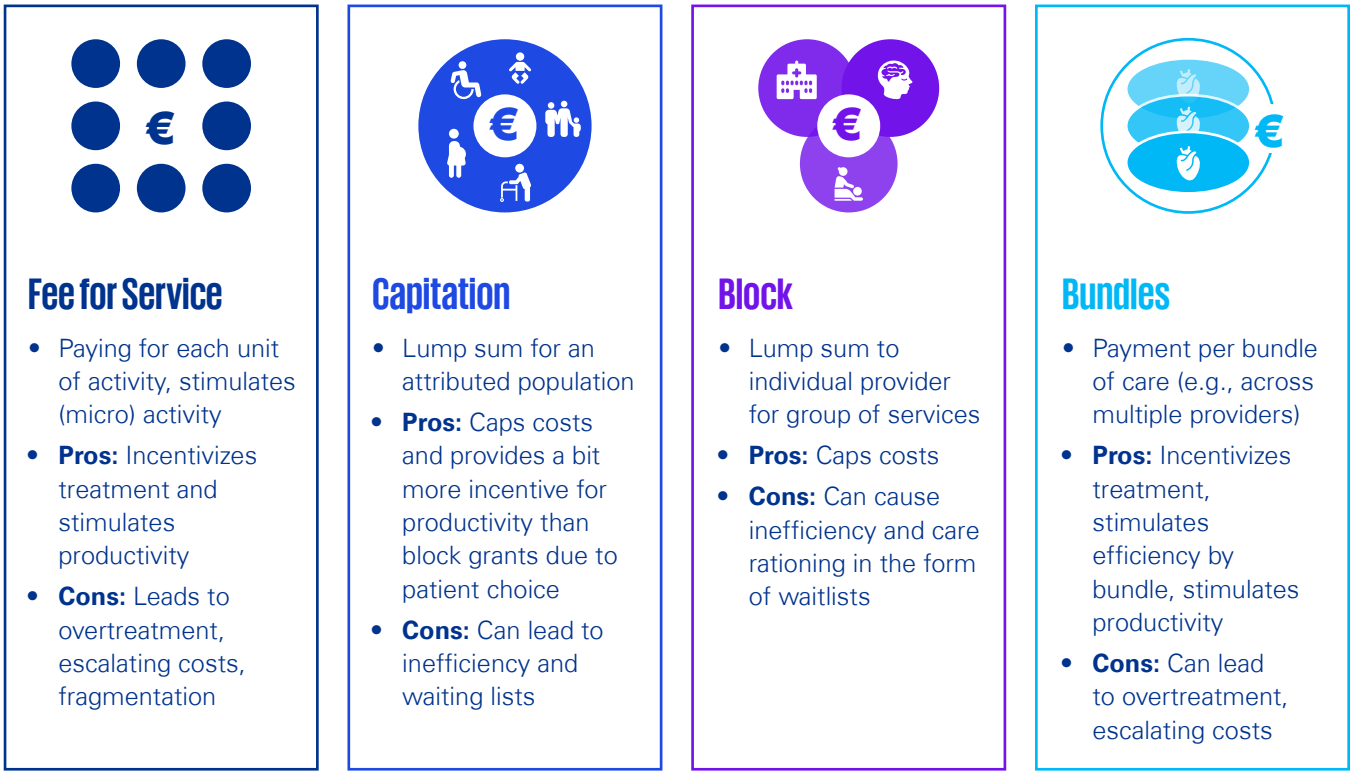
optional health insurance packages. Interest in optional packages is driven by the coverage of the mandatory package: optional packages can offer additional coverage, quicker access and better service. In systems with a relatively limited basic benefit package, many variations of optional packages can emerge. This can come with the risk that consumers can no longer see the forest for the trees. In order for consumers to be effective shoppers, they need to be able to easily sort through health insurance options. Partly standardizing the optional package can help rationalize consumer behavior and hence further improve the marketplace. Moreover, customer experience is increasingly important to consumers in selecting their health insurer, as consumers are likely to choose an insurer with an easy enrolment system, a straightforward process to settling claims and the access the insurer offers to health advice for preventative care[26]. Freedom of choice is another important factor. In the Netherlands, consumers do not keep the same general practitioner for long periods and as such, freedom of choice in secondary care becomes increasingly important[27].

> “When transforming a fully state run system with state hospitals and payments by the state into a more modern system of a public payer and independent providers, it is critical to get the definition of the benefit package and pricing right to make it a success for all parties involved.”
>
> **David Ikkersheim**
> Partner KPMG Health

2.3 Payment models: fee for service, capitation, block payments and bundles

The third building block is the choice of the payment model; the way the payer pays for care. Typically, a combination of payment models is required to ensure the right balance of incentives for the provider. The four most common payment models are fee for service, capitation, bundles and block budgets. Each of these models has its pros and cons, and while a payment model may be effective for one care pathway, it may create perverse incentives when applied in a different pathway. For this reason, it is important to match and blend each of these payment models to care pathways carefully. An overview of these pathways is included in Figure 5 below.

Figure 5
Overview of the core payment models



2.3.1 Fee for service

In the fee-for-service payment model, providers are paid for each unit of service provided, based on a fixed price per type of intervention by the provider. Specific patient characteristics are not relevant. In this model, the payer bears the risk, as the provider is paid or reimbursed for the number of services provided or the number of procedures conducted. Examples of the fee-for-service model include separate payments for specific lab tests and ultrasound, or a per diem charge such as inpatient days. Providers use a medical code to report procedures, which means that line-item budgeting can be used when applying this model.

There are a number of advantages to using this simple reimbursement model. Patients have full access to a wide array of services and the model provides full transparency around the activity of providers and their cost allocations. It incentivizes treatment, thus stimulating productivity at a micro level, and can be beneficial in situations in areas of potential under-treatment, such as preventative screening measures. It is a relatively flexible payment model and can be used regardless of the size of the organizational structure. It also encourages innovation in the expansion or change in use of treatments that are reimbursable or can be reimbursed quickly.

On the other hand, expenditure control is weak in a fee-for-service model, and it creates a sizeable administrative burden: delivered services need to be assessed for appropriateness to avoid overtreatment. Because reimbursement is based on quantity rather than quality, providers are incentivized to perform unnecessary procedures and there is a risk of overtreatment. The care

delivered may not be in the most effective care setting and may even be unnecessary. There are often multiple providers involved in treatment processes and a fee-for-service model can result in poorly coordinated care and duplicated services.

While the fee-for-service model can be beneficial when used for preventative screening treatments and in other areas of potential under-supply, this payment model can disincentivize a population health management approach when applied to all services. Providers are incentivized to generate revenue by providing as many treatments and services as possible. Inefficient providers can still be successful in this model despite their high costs and poor outcomes, and funds are thus ineffectively allocated. The escalating costs are largely steered by supplier-led demand and specific treatment decisions. Providers encourage patients to use more care, and this increases the payer costs. This model may delay innovation or the adaptation of new technologies when these are not on the reimbursement list or even because improved efficiency reduces revenue.

As highlighted in this section, the fee-for-service model certainly has its uses, but it should be used with care and in conjunction with other models to incentivize the right care at the right place at the right time.

2.3.2 Capitation

Under the capitation model, a lump sum is paid to the provider based on a fixed per capita amount and a predefined population – for example, a primary care doctor might receive a set amount for each person registered at their practice for a year, depending on their age or other factors.

The main components of a capitation system are that first, the population must be identified, then the services to be provided to them listed, then the lump sum calculated and paid. The actual activity and treatment performed does not affect the provider's reimbursement. In this model, the providers bear the risk, as they are reimbursed the same amount, regardless of the number of services that they provide.

The capitation model is beneficial because the budget is predictable and the costs are capped: this can simplify financial control. The budget is usually risk-adjusted, herewith considering the social and health inequities in the target population and pay more money to providers with patients who are likely to need more care. Because the money follows the patients, providers are stimulated to take on more patients and thereby provide greater access to care. This model also incentivizes prevention as providers are driven to reduce the volume of care and prevent the need for later treatment. The transaction (i.e. administrative) costs to payer and provider are also relatively low, although these are even lower still in block contracts.

However, the capitation model is not without its downsides. This model may promote inefficiency, as providers will receive the same revenue, regardless of the quality and efficiency of care delivered. As demand increases, providers may feel the need to ration care and waiting times may increase as a result. This is especially true for environments with low competition for patients, although the impact is likely to be less than in block contracting. Providers are further disincentivized to be responsive to patients, while the patients have less choice in providers since they are registered at a single provider. Another potential drawback lies in the contracting: capitation agreements between providers and payers are typically short (e.g., 1-2 years), and this can result in short-termism at the provider side. The providers are less likely to see the benefits of investing in prevention because these benefits are not realizable in the short term. By the time the benefits have been achieved, the terms of the contract may have changed and the investment may no longer be as beneficial or cost-effective.

As with the fee-for-service model, the capitation model is not ideal as a singular payment model in a given health system, and the most benefit can be realized from capitation when it is combined with one or more of the other payment models.

2.3.3 Global budget or block contracting

In the global budget model, a lump sum is paid to a provider for a group of services over a defined period. This sum is independent of the number of patients treated or registered or the activities performed, which means that the provider bears the risk in this setup. This model is often used for hospitals, which receive an annual one-line budget to cover all services delivered and patients treated.

It is easy to see the appeal of a global budget: it has administrative simplicity and low transaction costs. Provider costs are capped, which means it is effective in controlling total costs. Global budgets can also empower providers, because they have the flexibility to innovate and shift care internally where beneficial. It incentivizes

providers to stay within the predefined budget restriction and thereby supports cost containment. Providers are disincentivized to supply unnecessary or low-value care, and are stimulated to reduce their total number of cases and improve operating efficiency to meet budgets.

Nevertheless, a global budget lacks transparency and accountability. Once the budget has been used up, providers may refer patients unnecessarily to transfer the cost concerns to another provider. Providers may end up rationing services and extending waiting times when the care demand is high and does not fit within their budget. Good performance is not specifically rewarded: making efficiencies may even signal that a providers' block budget was too high and may lead to a decreased budget in the future. High-cost breakthrough innovations are also disincentivized, despite the potential cost savings in the long term. Competition between providers is limited and there is no stimulus to grow market share or increase care volumes. For the patients that they do see, providers are motivated to limit spending per patient and reduce the amount of activity and number of visits. Block contracting can also create barriers to access, as providers may try to avoid complex patients due to their high expected cost. Furthermore, the money does not follow the patient: patients are left with less choice and provider competition is limited.

While the block contracting approach offers empowerment and flexibility to providers, the pressure of budgeting may reduce the access and quality of care, and this payment model is best used in conjunction with other models.

2.3.4 Bundles and case-based payments

In a bundle or case-based payment model, a single payment is made for a predefined episode of care, which covers all costs within that episode, potentially across multiple providers in the care continuum.

An example of a bundle of care would be for a maternity episode: the bundle includes all prenatal counseling by the midwives, the delivery itself, neonatologist interventions and the NICU if applicable, and postdelivery care and prescriptions for both the mother and the baby. With a maternity episode, the period of care is discrete by nature and it is relatively clear where the boundaries should be drawn. With chronic care, the time period is determined as part of the bundle so that care is covered for a specified period, for example for a single year.

The most common type of bundled payment is a Diagnosis Related Group (DRG) – one of the most common ways to pay for inpatient care globally. DRGs are also known as a "case-based payment" – meaning a bundled payment with the money only going to one provider.

In this model, the risk is shared: the payer bears the risk for the volume of bundles, while the provider bears the risk within the bundle. It is a prospective payment method based on grouping payments with a similar diagnosis and resource use.

Bundles have the advantage of stimulating efficiency within the bundle as providers are incentivized to reduce the cost per bundle. It can also incentivize collaboration between providers if bundles are defined across a pathway with multiple providers. Providers are also motivated to improve operational efficiency, not only to improve cost-efficiency within the care pathway, but also because of the increased transparency. The collection of data on costs and clinical activity enables comparisons between providers and countries.

However, the required additional layers of complexity in the billing system do lead to a higher administrative burden and higher transaction costs. Implementing DRGs requires a strong technological infrastructure to group services together and have data readily available, as well as the skills to correctly code patients into one of often thousands of DRG codes. A methodology also needs to be in place for grouping these services, which can take time to develop and refine.

Moreover, if there are no external controls, providers are still incentivized to increase volumes of care, because the revenue grows with the number of patients. Overtreatment may also be a risk, as providers are incentivized to unnecessarily code patients as sicker than they are to increase the amount of reimbursement ('upcoding'). This 'DRG creep' can lead to escalating costs, especially where supply-induced demand is highly prevalent. If providers are at risk of exceeding the predefined reimbursement level, for example if they realize that the patient's medical situation is highly complex (before treatment starts), they may even refer high-cost patients to other providers rather than complete the care pathway.

Implementing DRGs in practice: Australia

With a universal health insurance scheme known as Medicare, citizens are entitled to free public hospital care and significant coverage for primary care services (such as physician services and pharmaceuticals). Funding for the public hospitals is raised through taxes and allocated with an activity-based funding methodology.

The Australia Refined Diagnosis Related Groups (AR-DRGs) classification system was implemented to calculate funding by averaging resources required by hospitals per number and type of patients treated. The classification system uses routinely collected medical data such as age, sex and length of stay to determine the relevant AR-DRG for acute care patients.

In addition to supporting budgeting, the AR-DRG system is useful for benchmarking and performance management, epidemiology and research, facilitation of private care payments, health service planning and education[28,29].

Common Performance Based Payments

Many countries are experimenting and implementing Performance Based Payments. Examples of common seen performance based payments are related to the following performance goals:

- Reducing unplanned readmission rates for specific conditions
- Lower rates of 30 day mortality after stroke
- Achieving a certain percentage of patients meeting waiting time targets
- Achieving reductions in average length of stay
- High rates of patient satisfaction
- Reducing demand for emergency rooms
- Controlling key population health indicators, such as blood pressure or cholesterol
- Achieving high rates of child immunization or flu vaccination

2.3.5 Towards more effective payment models

Payment models should be designed such that providers are stimulated to deliver high quality care and avoid waiting lists and, at the same time incentivized to avoid overtreatment and to only provide the care that is appropriate. As highlighted in the previous sections, none of these payment models are perfect and their suitability depends on the specific care setting and pathway (e.g., primary care, secondary care). For example, while fee for service can run the risk of overtreatment if applied to certain services, it can be advantageous when applied in other care settings, such as for preventative screening procedures.

In order to optimize the payment model, a **mix of the payment models** is typically needed. When designing this mix, it is also increasingly common to include **performance-based or 'value-based' adjustments or bonusses** into the payment model. Value-based payment models link a proportion of a provider's payments to specific outcome indicators (i.e. KPIs). These might include quality indicators, efficiency indicators, timeliness or patient satisfaction indicators. An example is, linking the level of payment of a provider to achieving certain targets for waiting times, or even linking the payment of both the GP and the mental health provider to their collective ability to keep their patients from going to the emergency room.

There are four guiding principles to further improve the effectiveness of payment models:

1. **Contract care at an integrated level.** Instead of paying each provider for their specific services rendered, provide a total budget or bundle for providers to share across the pathway of care. This stimulates collaboration between providers, as the providers across the care spectrum deliver the bundle together.
2. **Both costs and quality should be incentivized.** It is essential to establish the clinical baseline first, to know where to invest and where to reroute resources. There are many ways to measure quality and costs; an example of how to evaluate/assess both, are Potentially Avoidable Complications (PACs).
3. **Distribute risk and savings between payer and provider.** Fee-for-service and block budget payment models have one-sided risks. It can be beneficial to shift more of the risk to the provider or the payer, or more evenly between the two. It is therefore important to consider the appropriate level of risk distribution prior to payment reform.
4. **Allow time for transition.** Benefits of payment reform may only become evident in the long term. This is especially true for payment models that incentivize a population health management approach (e.g., general population capitation); it may take a few years to see the benefits of investing in primary and preventative care. It is therefore important to factor in a transition period, and to consider long-term contracts and financial risk mitigation (e.g., incremental risk-sharing agreements).

In addition, payers also may use other mechanisms to adjust their payment mix so as to mitigate the potential downsides of the models used:

- **Stop loss and exclusions.** These can be applied to individual cases or in aggregate and can be applied either between the provider and the payer or the payer and the consumer. If a provider sets up a stop-loss arrangement with its payer, the provider will only cover the costs of care up to a certain amount. Payers can also use stop losses with beneficiaries, whereby services are only reimbursed up to a certain threshold after which the patient must pay some or all of the additional cost. Another way to mitigate the risk of excess costs in extremely complex cases is to exclude specific services or cases in the value-based payment structure (exclusions).
- **Cap and collar.** A similar approach that can protect providers from financial risk associated with expensive care services is to set up a cap-and-collar structure. The payer takes on the downside risk if costs escalate more than expected, but if the services are cheaper than expected and savings are achieved, the payer receives (most of) this benefit, rather than the provider. This measure is useful for providers, as defined margins can insulate providers from incurring losses when the potential for achieving further efficiencies is low.
- **Tapered payments linked to volume.** Some payers agree expected volumes of activity for each provider per year. If the provider exceeds this amount (e.g. they treat more than their allocated volume of patients) then the price they are paid for additional activity gradually begins to decrease. This is often used as a control mechanism to contain hospital costs when using predominantly DRG or fee for service payments.

Whatever payment model is used, the price that is applied to it must also be carefully devised and agreed. Even the best-designed payment model will have failed if providers are unable to cover their costs or make outsized profits. Price setting often begins in countries using historical data (e.g. block contracts or past income) and redistributing it into the new model. This is reasonable as a temporary measure. But it should ideally be replaced with price setting using time-driven activity based costing approach as soon as possible. This is typically arranged via a system of either all or a sample of providers submitting reference cost data about the real-world cost of a standardized list of inputs. This allows prices to more accurately reflect real world costs, and especially to take account of real-world inflation within the healthcare sector, which is often different from inflation in the rest of the economy. Alternatively, providers can be asked to submit bids for their prices for certain services, but typically this only works in systems with significant amounts of excess supply, or for very specific, specialized or new services.

2.4 Regulation in payer function reform with insurance packages

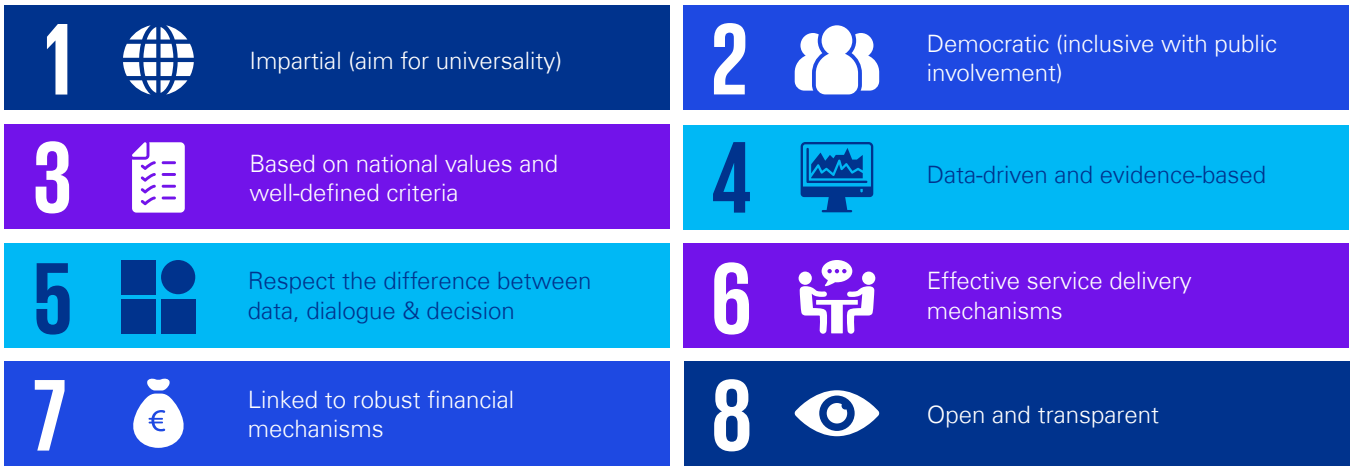
The next building block focusses on regulation. Regulation evolves around many facets, with three key considerations for effective payer reform. The first considers the definition of the basic benefit package, including the definition of controls like co payments and the provider network. The second considers the options for partly standardizing optional benefit packages. The third considers ways to address adverse selection.. At last considerations regarding managing the cost-effectiveness of the benefit packages are provided.

While previously health ministries were typically the primary stakeholders in healthcare decision making, other regulatory bodies and regional and local governments are increasingly playing a role. The Centers for Medicare and Medicaid Services in the US, for example, direct the implementation of the regulation in the healthcare system in the US. The Insurance Regulatory and Development Authority in India, the Prudential Regulatory in the UK and the Brazilian Health Surveillance Agency (ANVISA) are all examples of regulatory bodies that are now key stakeholders in healthcare decision making. Patients and providers are also stakeholders in these decisions, and their interests must also be considered when setting policies.

2.4.1 Definition of the basic benefit package, co payments and provider network

One of the primary goals of health system reform is to achieve universal health coverage: providing the essential care at a high quality to all, while also keeping costs low. Many emerging economies still need to accomplish this goal. One of the most challenging tasks or steps in the process towards universal health coverage, is defining the basic package.

The basic package is the no-frills option for healthcare coverage, providing essential (but still comprehensive) services to consumers. Individuals should be confident in making their choices that they will still get the care they need in a timely and high quality manner if relying on a basic package, and it should be clear for all citizens what options they have. The World Health Organization (WHO) identifies eight aspects that are essential to a basic package[30]. Payers should use these guiding aspects when building the basic package.



Defining the basic benefit package requires a phased and transparent process, not only addressing what is covered but also whether or not co payments or other restrictions are used for certain services. When defining the basic benefit package, the following should be considered[31]:

- **Services**
  The services included in the basic benefit package and the population eligible for the basic benefit package. Packages can be defined as positive (an inclusion list) or negative (an exclusion list). Many basic packages implemented in health systems today use a combination of a positive and negative list of benefits, due to the challenges of an exhaustive listing of services that should or should not be covered.
- **Access controls**
  The use of services can be restricted with controls like co payments, limitations (caps) or gatekeeping (e.g., GP referral required for specialist consults). The decision whether to use controls and, if so, which controls, is part of defining the benefit package. Controls can be effective in containing costs of the basic benefit package.
- **Service level**
  The level of quality or efficiency can be further regulated by introducing minimum standards. Only services of providers meeting the minimum standards are included in the basic benefit package. Most countries demand a minimum level of quality. Moreover, related to this, is the decision on whether or not to allow for comfort upgrade options. Think of allowing patients to pay extra for a private hospital room over a standard non-private room.
- **Provider network**
  Provider network relates to defining the network of providers that are allowed to offer the services of the basic benefit package. A key consideration is if private providers are to be included in this network and, if so, for which services.

As for most things, there is no 'ideal' basic benefit package. The basic benefit package depends on the country's vision, local context and financial means. Ideally though, it should be as comprehensive as possible. Moreover, defining the basic benefit package is not a one-time exercise, but an ongoing process during which the package is constantly reevaluated and optimized.

Transparency is an essential element in setting up the basic health insurance package. Patients should easily be able to identify the benefits that they can expect and make decisions about additional coverage based on these expectations. A lack of transparency opens the door to unethical practices by payers or providers. There is a risk that funds will be misused and that either the payers, providers or both would hold excessive power. This could lead to payers or providers asking patients for additional payments that should be covered by their insurance.

2.4.2 Standardization of the optional benefit package

In addition to designing the basic benefit package, many systems also choose to standardize and regulate what additional, optional packages healthcare payers can operate.

Standardization in practice: India

The Insurance Regulatory and Development Authority of India (IRDAI) set out health insurance guidelines in 2013 to increase standardization in the health insurance industry and promote its growth.

These guidelines specify the meaning of certain terms and processes commonly adopted in the health insurance market, such as third party-administrators, billing formats, and discharge summaries.

In countries with relatively limited basic benefit packages, a wide variety of optional packages can emerge. Standardization helps potential beneficiaries wade through the differences between optional packages and better understand their options. It supports consumers in their decision making. Uniformity in the benefits of optional packages offered can significantly influence the choice that consumers make, and consumers can make much more effective decisions when they can easily assess and compare the health insurance options available to them[32]. An example of this are the guidelines established by IRDAI in 2013[33]).

2.4.3 Addressing adverse selection

Adverse selection refers to the phenomenon in which the proportion of healthy and unhealthy patients in an insurer's customer base is unbalanced. From the patient's perspective, this can happen when less healthy individuals opt for more extensive coverage, while healthy individuals opt for minimum coverage. From the payer perspective, this can happen when insurers practice 'cream skimming': selecting (or excluding) patients on the basis of characteristics unrelated to care needs[34]. This practice results in an insurer having a more advantageous patient risk pool, as the insurer can cover a wide range of patients while incurring a lower cost per patient. This imbalance in the system creates problems for coverage of the less healthy individuals in the population, who end up facing ever-increasing premiums to cover the costs of their care.

Rather than increasing premiums, governments and payers can take other measures to help mitigate adverse selection. One such measure is to use medical underwriting, when payers study a consumer's medical history, past illnesses and prior insurance policies, to assess the consumer's risk profile. Another option is to exclude specified pre-existing conditions from the insurance policy cover. In some health systems – such as in the Netherlands – risk equalization measures are in place to help mitigate the risks of adverse selection.

Addressing adverse selection in practice: The Netherlands

In 2006, the Health Insurance Law 'Zorgverzekeringswet' (Zvw) was introduced, representing the reform of the Dutch health system from a Bismarck system to managed competition.

All citizens were required to purchase the basic package with a mandatory deductible, and health insurers can set prices themselves, but they cannot differentiate their price per customer. They are required to charge the same premium for all beneficiaries, regardless of background. Low-income households had their premiums subsidized.

With its extensive coverage, the basic package can have a high downside risk for the payers – especially if they happened to have a disproportionate share of older or sicker beneficiaries in their pool. To mitigate this risk, a risk equalization fund was established to compensate insurers for high risk individuals.

Long-term care is covered by a separate law and falls outside the scope of the basic package. Care that falls under this regulation is tax-funded, therefore the health insurers do not foot the risk.

2.4.4 Managing cost-effectiveness of the benefit packages

Once the key elements of the basic package have been defined, it is important to monitor and manage the cost-effectiveness of the package. There are a number of measures that can be taken before and during implementation, to manage the costs and mitigate the risks of overruns.

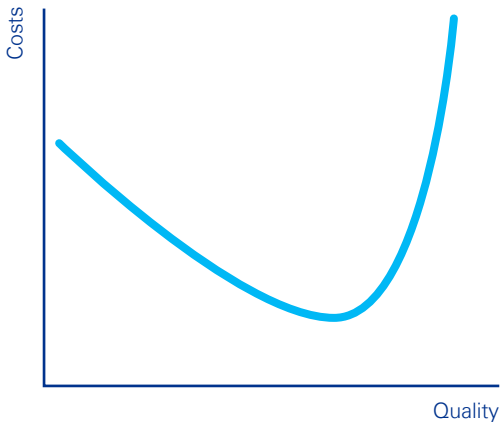
Health Technology Assessment (HTA) is a scientific method that can assess the cost-benefit of covering certain healthcare services. Beneficiaries may ask for new and potentially expensive services and drugs, as new technologies are released on the market – and there will often be pressure from providers as well. Consumers may automatically be entitled to coverage if the benefit coverage in the package is not updated. A HTA can support content updates for packages and reduce the risk that new services are either automatically added to an inclusion list or that the service is not added to an exclusion list.

Other measures may include setting controls for certain services or providers (on top of what is defined as the basic benefit package). Controls can include co payments, deductibles, referrals or limits. While co payments and deductibles can be beneficial for payers by mitigating their financial risk, it may increase the threshold for consumers to seek out care. This can reduce costs in the short term, as consumers may use less care, but in the long term it can have a negative impact if patients delay or avoid necessary care and outcomes decline. High co payments or deductibles may lead to dissatisfaction and subsequently stimulate consumers to look elsewhere for their health insurance or to opt for lower coverage.

2.5 Managing quality and efficiency at provider level

The final building block evolves around further improving or optimizing the quality and efficiency of providers. The safety, patient-centeredness and effectiveness of care varies across different health systems. Too often the desired results are not achieved, with delivered care being too little, too much or entirely inappropriate. From the patient's perspective, this can make care provision seem fragmented or poorly coordinated.

Figure 7
Inverse relationship between costs and quality



Quality and cost exhibit a complex relationship: up until a point, an increase in quality leads to a decrease in costs, as improvements especially in safety reduce complications and avoidable care. However, once a certain tipping point is reached, further investment no longer reduces the costs and increases in quality can only be achieved with significant increases in cost through additional staff, processes and technology.

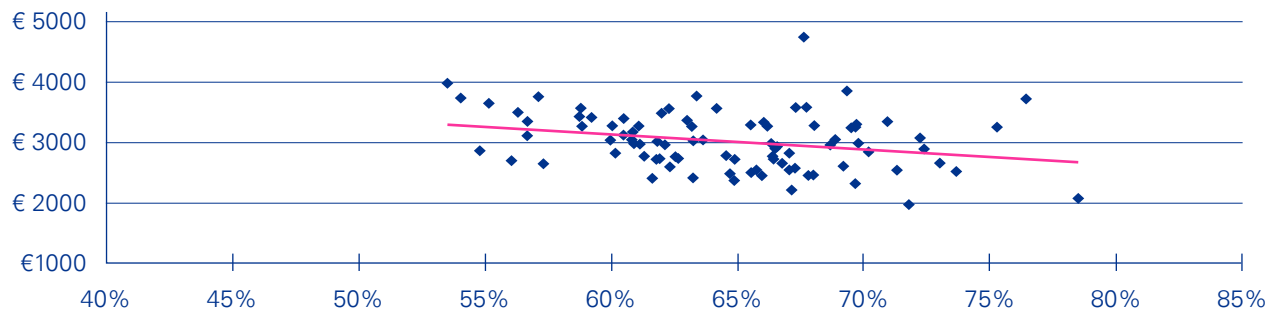
For most health systems, the risk that this tipping point will be reached is limited. There is still substantial scope to reduce costs by improving the quality of healthcare. Where healthcare infrastructure is underdeveloped, a high investment cost is required initially for improvements in quality to be realized, but even in these markets quality improvements can be highly beneficial.

Faced with these insights, policymakers and payers globally are rethinking payment mechanisms to instead reward value: whereby high-quality and efficient care are considered together.

Cost versus quality in practice: The Netherlands

The financial benefits of improving quality were demonstrated by an analysis by KPMG on the costs of stroke care in relation to functional outcome after one year. These costs include both acute and long-term costs, such as nursing home and at-home care. The functional outcome after one year assesses the patient's quality of life in terms of whether they are living at home and whether or not they have home care, as well as the extent of disability, measured by the percentage of patients living at home after one year, either with or without home care. This is an internationally accepted proxy for measuring functional outcome, as those not living at home are patients who either died within one year or who need to live in a nursing home.

Total cost of care (1 yr) vs long term outcome (1yr) - patients living at home post Stroke (CVA) Care, KPMG analysis of Dutch claims data



Although there were large variations in outcomes between regions, it is clear to see how improved outcomes are typically associated with lower costs. The cost of caring for a patient full-time is high, so a higher percentage of patients living at home means a reduced care burden and lower costs. It is important to note that the analysis of total costs also includes patients who died in the hospital or within one year. These patients no longer incur costs and may have lower costs overall, but present in the analysis as part of the minority not living at home.

2.5.1 Contracting to improve value

Payers and policymakers aim to innovate payment mechanisms to reward value: high-quality and efficient care. This requires a combination of different payment mechanisms, and, as described in Section 2.3, they each bring different results to the table. To move towards a more 'value-centered' model, many experiments and payment innovations have taken place that aim to link payment to quality and efficiency measurements. Four guiding principles to further improve payment models have been provided in 2.3.5. An example is shown below.

Quality measures in practice: The United Kingdom

In the UK, the General Medical Services contract was set up in 2004 to reward General Practitioners (GPs) for higher quality scores. The Quality and Outcomes Framework was developed to incentivize GPs to improve quality by allowing practices to earn points that would translate into additional incomes on top of their capitation payments.

GPs were scored based on almost 150 measures and these scores quickly improved. Many similar systems offer bonuses for attaining certain scores and reporting data on quality outcomes. Some systems even use financial penalties for low scores.

However, this blended capitation and pay-for-performance system is not without its flaws. The points system stimulates practices to pay select attention to the areas of care that will deliver the most points. Blended models can measurably improve quality, but the penalties and rewards must be carefully assessed to avoid creating perverse incentives.

Quality management: The United States

The National Quality Forum (NQF) is a non-profit organization aiming to improve the quality of healthcare within the US. In addition to setting standards, the NQF recommends measures to improve payment mechanisms, electronic health records and to ensure that healthcare decision makers have the information and tools needed to deliver quality care. The NQF has a number of projects to promote value-based healthcare delivery through evidence-based cost reduction measures and improvements in health outcomes.

2.5.2 Transparency in value of care

Transparency in value of care is an effective tool in managing the quality and efficiency of care at the provider level.

High levels of transparency give stakeholders insights into the quality, patient experience, and finances within a healthcare system. For payers it helps in identifying risks within the market, provides insights into variation in performance of providers, and can provide, among other insights, information on patient health status. Providers are incentivized to increase their performance – even when this is not linked to payment. Moreover, patients are supported in making an informed decision in choosing a provider. Transparency improves trust among the payers, providers and patients. There are six key dimensions of health system transparency[35], as detailed in Figure 8 on the next page.

There are multiple elements to consider when building a transparency framework in a health system. Firstly, a consistent strategy should be identified, right from system design to delivery and implementation. The transparency strategy should be based on the population need, which means collecting data to measure patient needs. Collected data must be meaningful and up to date in order to allow for valuable insights into the system and reduce superfluous data collection. Care should be exercised in safeguarding patient data, as data breaches can lead to a loss of trust from patients as well as a lag in the data pool itself. Providers can make use of the learnings from other companies and follow the lead of innovative healthcare providers. Providers and payers should be transparent in their prices, allowing patients freedom of choice with respect to services offered. This is especially important in a marketplace where the choice is limited. Additionally, the transparency framework should promote an independent narrative, minimizing discrepancies and improving the communication and understanding of data.

> **"Much more needs to be done to enable consumers or purchasers of care to understand their own healthcare experience, or to make choices in healthcare. I would say we're very much at the beginning of a transparency process here."**
>
> **Dr. David Blumenthal**
> President, Commonwealth Fund New York[35]

Figure 8
Six dimensions for health system transparency

Governance:
Openness in decision making between the providers and the patients, clarity in the roles and responsibilities, appropriately listed patients' rights and a sense of accountability in the organizations.

Quality of healthcare:
Clear information around various aspects, such as mortality/survival rate, causes, hospital re-admission rate, waiting time to receive care, reporting of adverse event, and rate of hospital-acquired infections.

Personal healthcare data:
Protecting the personal information of the patients in case the payers or the providers have access to the patients' healthcare information in the form of electronic health records or clinical documents.

Patient experience:
Patients' overall experience of receiving healthcare services and their satisfaction with the outcomes.

Communication of healthcare data:
Accessibility and sharing of the healthcare information should be reliable and useful for all related stakeholders.

Finance:
Transparency of costs and expenses of healthcare services, including disclosure of prices charged to patients and payers and financial performance of the organizations involved in the health infrastructure system.

Increases in transparency can also present some challenges, but it has the potential to bring substantial change to a health system. An overload of data can shift the focus away from delivering quality, as providers, payers and patients are unable to see the bigger picture. The complexity of the algorithms and artificial intelligence technologies that are used in healthcare decision making can end up reducing transparency within the system. Nevertheless, risk-adjusted and validated data can improve the transparency of a health system, not only in terms of clinical outcomes, but also from the healthcare management perspective. Improving transparency in healthcare systems can eventually improve the reporting and communication of data.

The KPMG transparency index[35]

KPMG created global healthcare systems transparency index to compare countries in order of their performance with respect to implementation of transparency in their respective health systems. The framework emphasizes the role in transparency of relevant data such as mortality rates, cost, error percentage and other areas in improving efficiency and quality of healthcare delivery.

KPMG International. "Through the looking glass: A practical path to improving healthcare through transparency." KPMG Healthcare. 2017. https://assets.kpmg/content/dam/kpmg/nz/pdf/April/through-the-looking-glass-healthcare-transparency-kpmg-nz.pdf

Data infrastructure can be used to gain insights into the costs and quality of care, and this data can come from a number of different sources. Administrative data such as billing data can be linked to national or community statistics on socioeconomic status. This data often yields diagnostic and therapeutic information that can be combined to estimated medium- and long-term outcomes. Clinical registries can measure outcomes of specific care pathways, such as within the Intensive Care Unit, cardiothoracic surgery, or cancer care. This detailed data is registered by healthcare professionals. Another potential source of data are provider questionnaires. However, when the data is not consistently registered by providers, the reliability may be poor and the effort required to aggregate the data can create a significant administrative burden. Patient questionnaires are another source, to understand patient's satisfaction and experience with the care process. Historically, patient questionnaires have been focused on service delivery rather than on actual outcomes, but these can also be used to assess how well delivered care addressed symptoms. For example, asking patients after an elective surgery how symptoms are experienced or how symptoms have changed in the case of chronic diseases can provide valuable data about provider quality.

As reimbursement models shift to value-based payments, it is important to update reporting and performance management systems to identify an individual provider's contribution in the context of the wider pathway. This ensures that providers are still held accountable for the quality of care delivered at an individual level.

Ongoing transformation projects globally are looking to structure frameworks, innovation and policy reforms, to maximize the use of transparency in quality outcomes of healthcare. The potential of transparency in healthcare is as yet largely untapped. As organizations start to implement transparency policies in their organizational structures and healthcare systems, certain trends are expected to emerge[35].

Key trends in the use of transparency as a tool to drive value

1. **Reduction in use of the 'name-and-shame' approach**

   While there are many successful examples of publishing performance data about providers leading to improvements in their care, this approach can also backfire. 'Naming and shaming' can create the perverse incentive for providers to hide quality problems rather than address them – in the long run this actually reduces transparency. Various providers have found ways of sharing information about comparative performance or providers without this threat of 'name and shame', for example, sharing data where only each individual provider can see their name on the distribution. Published data might also carry 'health warnings' alerting any potential users of how this data should and should not be interpreted.

   Furthermore, strategies are being developed to improve learning processes and decision making across healthcare pathways.

Helios Hospital, Germany

A group of 112 hospitals in Germany have been following a peer review approach for the past ten years to help clinicians to improve care quality. All information on work quality is posted to the group. When scores are low, peers perform a review of the quality data to identify potential clinical improvements. Here, transparency is used to improve the quality of work rather than focus on naming and shaming.

2. **Real-time data sharing available in various formats**

   Previously, quality improvement and transparency initiatives could be undermined by a lack of timeliness in the data available. Yet with increasing digitalization of health systems, it is increasingly possible to publish data on health system performance closer and closer to real-time.

East Kent Hospitals University NHS Foundation Trust, UK

A hospital in the southeast of England has implemented a business intelligence system to display live Accident & Emergency waiting numbers on its website. This helps to manage expectations with walk-in patients, as waiting times are publicly available. Smart phones are used to assist in patient management and redirection.

3. **Increased consumer access and use of healthcare data**

   In the past, populations had limited access to healthcare data and were unable to view the performance of specific providers. Consumers now have better access to data and are more likely to use this data to compare providers and research the expected cost and quality of services before making healthcare decisions.

   Improved access to data stimulates quality improvements at providers, as patients increasingly choose providers based on their outcomes. Electronic health records are another example of this type of increased transparency: patients can see their own medical history and make decisions about it, especially in the European Union.

4. **Increased data access for third parties**

   The increasing digitalization of health systems is creating huge volumes of data – but payers and policymakers are often unsure of how best to use this. Many organizations are interested in conducting their own analyses on healthcare data, and as more data is publicly available there are increasing examples of third-party organizations making innovative use of this to create new applications.

   Since independent third parties are supervised by the government and regulatory bodies whenever critical or sensitive data is used, there is scope for healthcare data to be more widely available so that analysts can provide valuable insights on data trends.

5. **Price transparency for consumers**

   Price transparency has the potential to reduce health spending. By providing consumers (patients) with information on the price of health services, consumers are able to take more informed decisions. Currently, the lack of information on quality, personalized information, and information on out-of-pockets costs prevent pricing transparency tools to be used to its potential.

6. **An open approach to adverse events**

   An open and honest approach to adverse events encourages others to use these events as learning opportunities. It is important to reduce the fear of penalties in a regulated way to motivate providers to be open.

Sykehuset Østfold, Norway

Sykehuset Østfold, a private hospital organization in Norway has set up a structured process for adverse events.. If there is an adverse event, the hospital's patient harm group will meet to consider all the collected evidence, decide what should be done differently to prevent repeat occurrence, and help ensure necessary changes are implemented. A full report of the incident and improvement policy and practice is placed on the hospital website (with exception of cases where patient identification is likely).

The management view is that adverse events are system not individual-related and should be used to learn and improve not penalize. New employees are informed on their introductory day that if they report adverse events they will always be supported. Within a year of its introduction other Norwegian hospitals started following this model and it has now been adopted as government policy for all hospitals.

2.5.3 Population health management

Quality and efficiency of providers can be further improved with population health management strategies. Population health management aims to optimize the clinical and financial outcomes for specific population groups through proactive health promotion and prevention activities – often targeted at those assessed as at greatest risk of long-term and/or high care costs.

Population health management can be a key instrument to contain healthcare costs without compromising quality. It can be steered by various stakeholders: insurers have an influence via health programs, while providers and healthcare professionals influence the population via clinical decision support. The key success factors for effective population health management are good quality data and algorithms with which to identify high risk groups, a clear risk stratification architecture, a cohesive delivery system, a well-managed partnership network, effective behavioral health interventions, and robust reporting and performance management.

Population health management uses insights from advanced data analytics to stratify patients and identify populations at risk of developing certain diseases and help payers and providers to identify an appropriate (personalized; tailored) health program for their beneficiaries and patients.

Investments into data analytics and insights are required for effective population management[36]. Clinical and financial information can be synthesized from various sources and business intelligence tools can convert data into actionable insights. It is important to consider and gather data on the social context as well as patient health information. Implementing an effective data analytics approach to manage the population with data insights is a multi-year process and may require implementation of new technologies.

Healthcare professionals must have the tools in place to link patient data across various providers, such as prescriptions, primary care visits and hospital visits to manage their patients and make effective clinical decisions. This allows healthcare professionals to identify their target population and stratify patients for different risks based on their conditions, but also makes it easier to see the complete patient picture. It helps providers to ensure that the location and type of care are appropriate for a given patient. In some cases, it may be beneficial to shift care into patient homes to manage the care system resources more effectively.

Population health management is not just about the activities of payers and providers, it is also essential that patients take on a role in this process. Patients should be enabled to manage their own health. Condition-specific technology such as apps and proactive visits by clinical staff can help to stay on top of preventative care. Frequent communication between patient and provider also helps with care planning and supports providers in clinical decision making. As is evidenced by the Discovery Vitality case in South Africa, payers can have a key influential role in patient engagement. Payers can support patients in managing their own health by the information they send to their patients, the reward programs that are put in place and support customers in choosing a provider. Payers can also engage in care coordination and management, especially when it comes to long-term conditions.

Reimbursement policies dictated by the payers can further drive population health management. Payment models may need to be adapted to award and incentivize population health management initiatives. Often the obstacle for population health management is the payment model in place. For example a group of providers might provide integrated care, but is awarded on an individual basis, resulting in certain providers investing in preventive strategies not reaping the benefits from those strategies. Capitation models and value based models are often seen in population health management initiatives as these provide an financial incentive (benefit) for investing in prevention.

The technological developments will help to improve the accessibility of patient data and provide the required insights from the data to make population health management easier. The shift from silo-based to integrated or pathway-based payment systems encourages coordination and communication across providers and further drives integrated care.

Population management in practice: South Africa

A health insurer in South Africa set up an initiative called Discovery Health to address the behavioral and lifestyle changes required to mitigate long-term health risks. Participants of the wellness program were assessed for risk factors and provided access to a wide network of wellness and health facilities and tools.

Incentives were implemented to encourage participants to engage in prevention and wellness-promotion activities, with Vitality Points awarded to place participants in leagues and assign a status. These Vitality Points could be spent with partner organizations, offering airline, travel and retail discounts.

Patients in the program engaged more in health and wellness activities than those not enrolled. In addition to improved clinical outcomes and reduced healthcare costs, these patients showed increased productivity at work and improved mortality rates. Participants with the highest engagement, namely those that made it to the Diamond league, had 10% lower admission rates compared to enrolled patients that were the least active, and a 14% lower cost per patient versus non-program participants.

Some examples of incentivized behavior were increased participation in prevention health checks, the purchasing of healthy foods from partner chains and engaging in regular exercise. The program saw a 26% increase in screening activity from 2011 to 2013. This simple population health measure can have a significant impact on health outcomes, as early detection prevents excessive costs in the long term. There was also a 34% increase in the number of health food baskets purchased between 2013 and 2014 and an increase in gym visits by 6.6% to 25.7 million visits over this same period[37].

2.6 The perfect health system does not exist

Reflecting on his work across more than seventy national health systems over the past decade, former KPMG Global Chairman for Health Mark Britnell concluded in his book of the same name, that the 'Perfect Health System' does not exist[1]. 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. Britnell identified twelve key principles that underpin an effective and efficient system: universal healthcare, strong primary care, community services, mental health programs, health promotion, patient empowerment, research and development, innovation, information, communications and technology, freedom of choice, strategic funding and effective aged care[37].

Each of these principles is applied to varying extents across the world, and some countries act as exemplars of how they can be implemented[1]. In the UK, the right to healthcare is fiercely defended and the well-established National Health Service is globally applauded for its universal coverage. In Israel, access to primary care is world-class, with effective use of telehealth and mobile consultations, easily accessible out-of-hours services and strong integration and information exchange across the care spectrum. Brazil has implemented a highly innovative approach to preventative care and reaching rural communities, utilizing small community health teams that visit households monthly to provide support. Community services in Australia are also formidable, with a specific focus on mental health, supplying crisis and home treatments as well as early interventions.

Nordic countries have achieved an impressive balance between individual responsibility and collective state-led actions when it comes to preventative care, outshining most of their Western peers in scores on behavioral risk factors. With a high disease burden, several African countries, including Nigeria, Uganda and Kenya, have engaged their patients and communities to improve health outcomes and system sustainability. The US is the clear leader when it comes to research and development, funding biomedical research, diagnostics and therapeutics, resulting in many innovative drugs, devices and therapies that are used across the world. With real-time information systems, standardized care pathways and strong referral networks, India has innovated its care with a hub-and-spoke model to achieve cost-effectiveness rather than just cost cutting.

The world doesn't have a perfect health system, but if it did it might look like this[1]:

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

Singapore has an unparalleled information, communications and technology infrastructure for its health systems, which allows for ease of access to the patient electronic health records, facilitates the use of technology for requesting and accessing care services, and promotes the use of telehealth to educate and support its patient base. Patient satisfaction in France is bolstered by the extensive freedom of choice that patients have; not only over which provider to go to for care, but also when to see a specialist or primary care physician. With a strong economy and high healthcare spending per person, Switzerland demonstrates how a strong economy and plentiful investment can improve health outcomes, having excellent infrastructure, stable institutions, a robust labor market, an outstanding education system and innovative drive. To tackle an ageing population, Japan has developed an insurance scheme specific to long-term care, which provides home help, community services and residential and nursing care to individuals over sixty-five, based on need.

A common theme across these examples is the response to the individual country's needs and making use of the country's existing strengths. Transformations must be tailored to each individual country's situation, and many of these reforms may not even work if another country tried to apply them without modifications, due to cultural or system differences.

For governments and payers implementing payer function reform in a health system, an activist payer and well-governed system better enables the pursuit of increased quality, access and value for money. Effective payers see themselves as activists for patient and public interests and act as a social enterprise rather than as a profit-driven organization. Nevertheless, reform can only be effective if the community values and culture are taken into account.

Policy makers and payers can and should use these building blocks to identify potential areas of reform in the health systems, and use the lessons learned from other countries to implement new processes that work. Policy makers set the scene of the reformed health system by defining the regulatory landscape and influencing the market dynamics in the system. The payer can play a key role in influencing the cost-effectiveness, access and quality of the system: by establishing value-based reimbursement models that stimulate quality, taking measures to ensure the insurance packages are beneficial for all patients as well as the insurers, or influencing quality at the provider level with data, contracting and population management. The perfect health system may not exist, but policy makers and payers can shape the health system to deliver the quality and care the population needs.

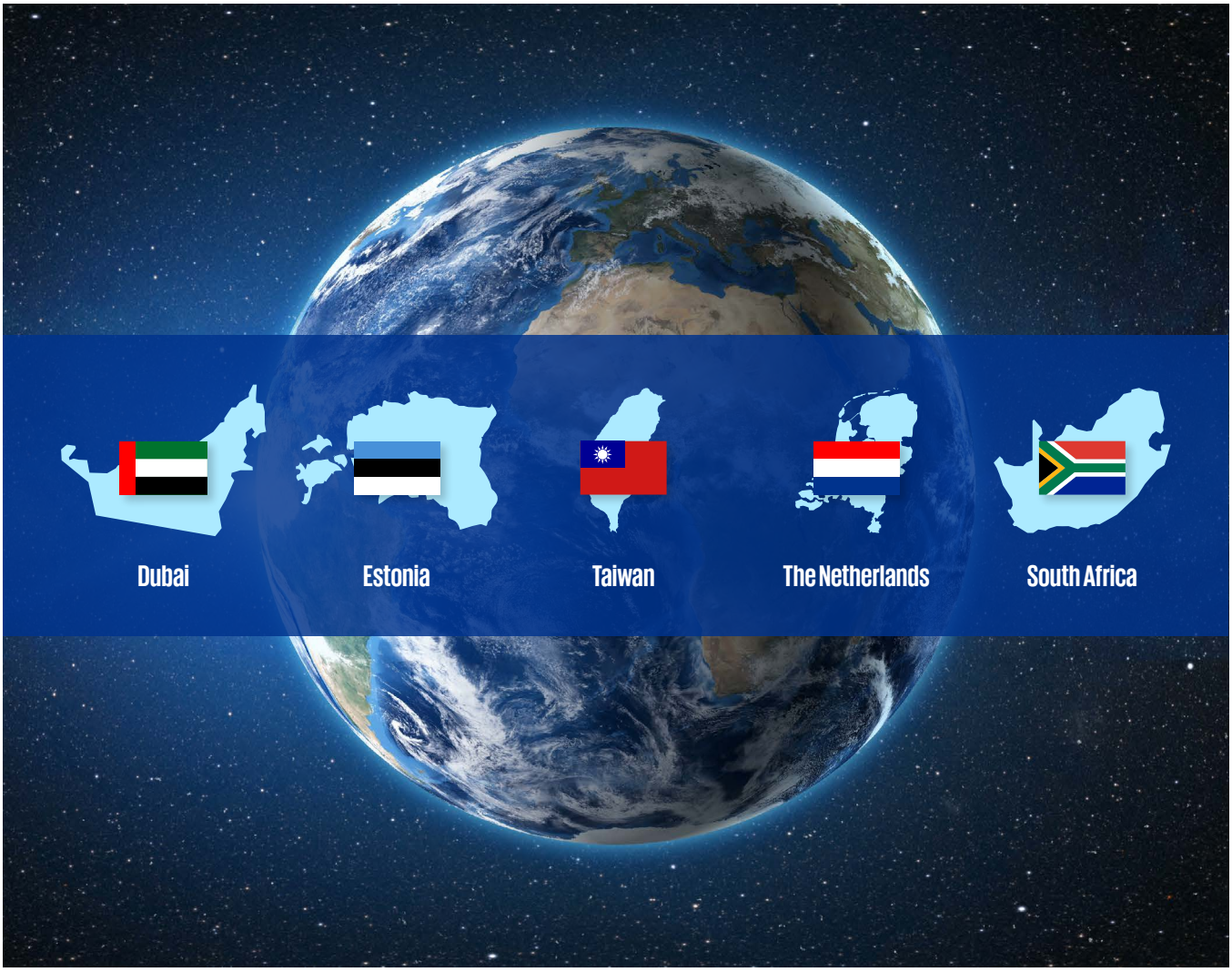
03

How do systems actually do it?

3. How do systems actually do it?

A variety of health system models are applied across the world, each implementing the building blocks described in Section 2 in different ways. Each country's model is inevitably the result of its history, local context, and more recent (and ongoing) reforms. Some have government playing a role, while in others it is more distant. Some have many payers and few providers, and some the opposite. Some are highly regulated and others much less so. These differences offer a valuable insight for healthcare decision makers looking address particular challenges by learning from what works elsewhere and blending these elements into their future reforms.

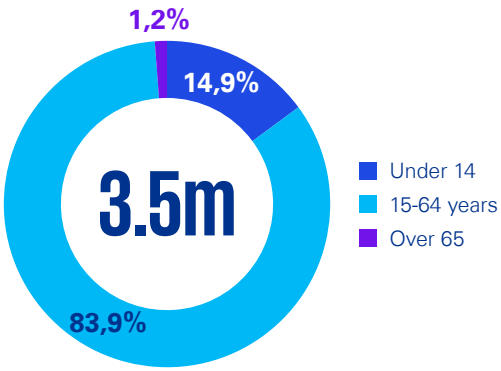
This chapter considers how various health system models have been applied in different countries. Put into context of the macroeconomic state of the health system today, these case studies show what the health system concepts look like in practice, how the market dynamics play out between the various parties, the primary payment models for reimbursing care, the regulation, and how quality and efficiency at the provider level are managed.



3.1 Dubai

Fact & figures

Population (2021)



GDP, USD
(2020)

US$ 104.1 bn

GDP per capita, USD
(2020)

US$ 30,521

% GDP spent on health
(2019)

4.7%

Life expectancy, years
(2020)

81.3 years

Crude birth rate, per 1000
(2020)

9.3

Multi-payer system

Public and private providers

References[38,39,40,41,42]

Reform measures implemented

In 2014, the government of Dubai implemented a health insurance mandate for all residents of the Emirate. This requires that employers must provide healthcare insurance for their employees (and their dependents) who are Dubai residents. The mandate stipulates further that employers are obliged to pay the health insurance premiums of their employees and are prohibited from passing this cost on to the beneficiaries[43,44].

Before this law came into force, health insurance coverage was limited to certain population subgroups. United Arab Emirates (UAE) nationals received government-sponsored care. Non-nationals (making up 90-95% of the Dubai population) in some cases were covered through their employer but many were expected to buy their own private health insurance. A large group of mostly low-income non-nationals was therefore left without healthcare coverage. As a result, public-funded hospitals were suffering from a relatively high influx of emergency care patients with no healthcare insurance, as uncovered patients tend to wait longer to seek car[45].

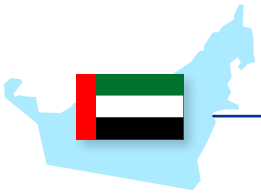
Now there are several health insurance programs in Dubai. Dubai nationals and their dependents and employees of the government of Dubai are covered by the Enaya program. The Enaya program has different packages, with the most basic Enaya program offering a comprehensive range of essential services and enhanced plans offering a wider list of non-essential services, access to more private providers and higher limits and lower co pays. The Enaya program is paid for by the government of Dubai and managed through a third-party administrator (TPA).

Non-nationals are covered through insurance programs chosen by their employers. Residents with a low income (less than AED 4000/month) can avail for the Essential Benefits Plan (EBP), which is a low-cost insurance plan offering basic services within a restricted network of providers. Other employers offer their employees private insurance plans with varying premiums and benefits.

The Dubai Health Authority (DHA) regulates the insurance market for the EBPs. Only a limited number of insurers are allowed to provide EBPs (currently 15). This regulation is aimed at keeping the premium low and at an affordable rate for the low-income segment. This contrasts with the number of insurers offering enhanced private insurance plans, which accounts for approximately 60 insurers.

This means that while the Government of Dubai plays a significant role in the health system, the health insurance market in Dubai is a multi-payer system with a relatively high number of insurers. Around 60% of health expenditure relates to private insurance[44].

Healthcare providers in the UAE are reimbursed through a mix of different models. Outpatient visits, for example, are reimbursed with a fee-for-service model and same-day hospital procedures are on the basis of per diem charges. Initially, reimbursement through the Enaya program was largely based on a fee-for-service model leading to an



incentive to over-treat, increasing the system's cost. The DHA initiated the implementation of the DRG system in April 2020, paving the way to more value-based care payment models – a journey which is ongoing[46,47].

The Dubai Government implemented several additional measures to control costs. First of all, the strategic partnership with a TPA to manage the Enaya program. The TPA performs the day-to-day tasks of managing the health insurance program, including claims management and customer support. This use of a dedicated, experienced administrator helps to realize efficiencies. Second, price control by DHA. Third, by introducing gatekeeping mechanisms (controls) whereby specialist encounters are only covered if a general practitioner is first consulted. Lastly, still in the early stages, the use of a health technology assessment to determine which healthcare services should be included in the benefit package.

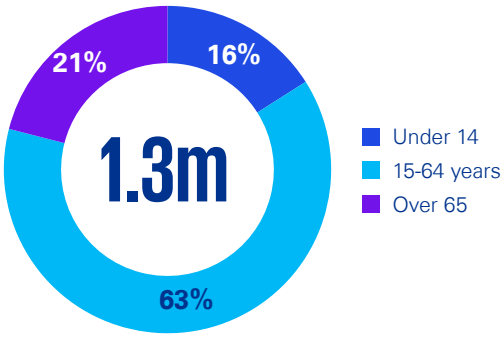
The insurance mandate in Dubai has resulted in a great improvement of the quality of the health system in Dubai. It has resulted in higher access to care for Dubai residents, nationals and non-nationals. It has also reduced the burden on the public healthcare providers (and therefore the government) from uninsured patients: insurance provides a mechanism to direct patient flows. And it has resulted in controlled healthcare spending. Moreover, as the Enaya program includes coverage of private providers, private sector investment has risen.

On the other hand, with the lack of certain (more specialized) services provided by public providers, patients are forced to go to the private sector, which is covered through the insurance. This puts a cost burden on the government. Moreover, with Dubai being one of the seven Emirates of the UAE, there are challenges with – for example – residents of Dubai having limited coverage of healthcare services in other Emirates. Abu Dhabi emirate has a similar model with mandatory health insurance, but the other Emirates do not.

3.2 Estonia

Fact & figures

Population (2021)



Reference[48]

GDP, USD (2021)

US$ 36.26 bn

GDP per capita, USD (2021)

US$ 27,280

% GDP spent on health (2019)

6.73%

Life expectancy, years (2020)

78 years

Crude birth rate, per 1000 (2020)

10

Single-payer system

Public and private providers

Reform measures implemented

The Estonian Health Insurance Fund (EHIF) is an independent organization acting as the main source of financing for healthcare in the country. This social health insurance fund was established by the Health Insurance Fund Act in 2000 and collects the majority of its financing from a social tax applied to all employed individuals[49]. While the social insurance program reaches 95% of the population, around half of these beneficiaries do not contribute to the system and are covered via subsidies[50]. Estonia implements a solidarity-based system; health insurance payments and contributions are independent of age, income or health risks and the contributions of the employed help to cover care of non-contributors[51].

EHIF acts as a single payer for the system and as such has a very strong negotiating position when contracting with healthcare providers. Mandatory contracts are in place between EHIF and all the hospitals and outpatient care facilities and GPs[52]. Hospitals are either public or private. Most outpatient clinics and GPs are private.

In Estonia, a number of payment models are applied for reimbursement of providers, depending on the care setting[53]. Primary care providers are reimbursed through a weighted capitation sum, dependent on the age structure of the underlying patient population. More recently, incentives have been added to the payment mechanisms to encourage primary care providers to offer better quality care, such as a quality bonus system alongside fee for service, basic allowances and the existing capitation setup[49].

Additional financial incentives are also in place for the use of e-consultations, which prevents unnecessary in-person visits to specialists[49]. This helps to manage the cost-effectiveness of care. For outpatient specialist care, there is a price list for various services and this reimbursement is comparable to a fee-for-service setup. Inpatient care is reimbursed with a mixture of per diem and case-based payments and prices are set by diagnosis types[53]. While some of these payment models and initiatives incentivize quality, fee for service and fixed prices are still used for several healthcare services.

EHIF's purchasing policy is based on actual health needs of the population, rather than building the policy on the basis of historical purchases[49]. This ensures that budgets and purchasing take account of the actual expected number of appointments and the average price per appointment to determine a policy that is appropriate for future needs.

The e-Health landscape in Estonia is fairly well developed, with patient data collected via the citizen identity card, using a secure data exchange platform (X-Road) at a national level[49]. Patient data is accessible to the relevant parties – those with permission and a need to access patient data – while patients have power over their own data and how it is used. The quality of electronic patient records is strengthened by this platform, which also

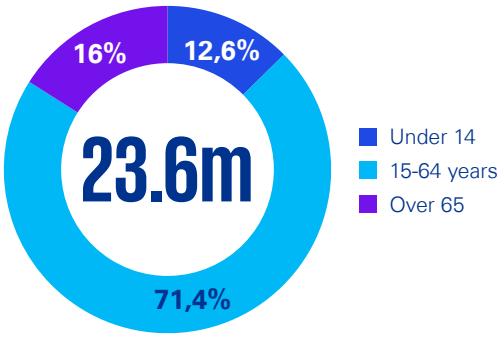
allows medical documents to be digitally signed and uploaded to the database. This patient platform is also useful for EHIF itself, for its budgeting and planning, setting reference prices and monitoring and controlling the quality of service providers.

Estonia has made great strides in achieving universal health coverage with approximately 95% of the population covered[50]. As most coverage is related to employment, citizens with unstable employment, part-time employment or informal employment are more likely to be uninsured. Payment mechanisms across the system are tailored to specific care settings and help to incentivize higher quality care, but greater emphasis needs to be laid on payment models that stimulate quality. With a single payer acting as the centralized regulator, costs in the system are low and EHIF is able to negotiate highly favorable contracts. Other countries can learn from Estonia's use of technology and how its patient data has been applied to improve the quality and experience of care delivered.

3.3 Taiwan

Fact & figures

Population (2020)



GDP, USD
(2020)

US$ 661.74bn

GDP per capita, USD
(2020)

US$ 28,061

% GDP spent on health
(2020)

6.69%

Life expectancy, years
(2019)

81 years

Crude birth rate, per 1000
(2020)

7.01

Single-payer system

Public and private providers

References[54,55]

Reform measures implemented

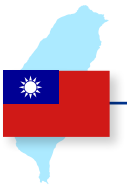
Taiwan implemented a National Health Insurance (NHI) program in 1995, introducing universal coverage with a government-funded scheme[56]. This program is funded and run by a governmental body: the National Health Insurance Administration (NHIA). Almost complete universal coverage has successfully been achieved in Taiwan, with 99.9% of the population covered by the public health insurance program. Even non-nationals residing in Taiwan for at least six months are covered by the insurance[57]. This was a significant increase compared to the less than 50% that were covered only a few years prior[58].

After the initial implementation of the program provided universal access, expenditures rose as the entire population was covered for care and the government started to implement budget programs to contain the costs – starting with dental care in 1998 and followed by hospital care in 2002[59]. In 2003, the focus shifted to improving quality with the launch of the Family Doctor Integrated Care Program to incentivize provision of care to remote patients and improve community and preventative care[57].

While the single-payer structure seems most similar to the Beveridge health system model, funding is primarily collected through employee premiums, with a formula calculating the premium amount based on patient demographics. There are measures in place to ensure the unemployed and those who cannot afford coverage have sufficient financial protection, with a cap of four premiums per household and subsidies to support those in low-income households. There are also interest-free loans and installment plans available for various population subgroups that may struggle with payment. Funding is also partially sourced from general tax revenue (including tobacco tax and a tax on lottery gains) and some government subsidies[57].

Providers are largely private non-profit organizations, although some of the hospitals are owned and operated by the government. The NHIA makes contracts with the private providers and, similar to the EHIF in Estonia, has a high negotiating power with its position as the single payer. While there are private health insurers, this optional coverage is for disease-specific financial protection and does not change the speed of access or increase patient choice of provider. These optional packages thus help to reduce the financial burden of certain patients, but do not give higher-paying beneficiaries higher priority (which could undermine the social solidarity of the system)[57].

A mix of payment models is used in Taiwan, with certain disease categories being reimbursed on a fee-for-service scheme while others (including surgical procedures) are reimbursed using DRGs[59]. However, the implementation of DRG is still a work in progress, with only 22% of hospital payments reimbursed via the DRG structure in 2016 due to some resistance to switch models on the provider side. Physicians are paid on a



fee-for-service basis and patients make co payments at the point of service. Pay-for-performance schemes are limited, with these reimbursements representing less than 1% of physician income[57]. While the shift to value-based reimbursement is underway, progress is slow and expansion of this could help to further stimulate high-quality care.

Co payments for certain services help to manage the cost-effectiveness of the universal health insurance; these are used for prescription drugs as well as outpatient care. Out-of-pocket spending for insured individuals relates mostly to office visits and inpatient care via co payments and coinsurance[60]. The Taiwanese insurance packages also make use of exclusions to manage the cost-effectiveness, for example by limitations on certain non-essential healthcare services. While patients can visit any provider of their choosing at any time without needing a referral, patients are incentivized to use local care facilities through reduced out-of-pocket payments when they have been referred[57].

Overall, the healthcare budget is controlled by central government, which determines how much the NHI global budget should increase from year to year, and puts an annual cap on overall health spending.

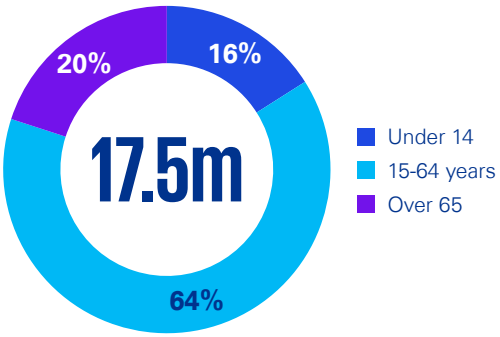
A Health Technology Assessment tool is used to support the NHIA in determining which services should be covered in its insurance packages. This tool helps to manage the costs of reimbursement for drugs and to reduce waste, with a working group established in 2007 to perform policy analyses and maximize the cost-effectiveness of the health insurance program[56]. The quality of healthcare is supported by transparency in the system. Since 2005, the NHIA has publicly reported on provider quality and costs based on specific measures such as registration fees, services provided and hospital-acquired infection rates[57].

Taiwan has made great strides in its provision of healthcare to its population, with the national health insurance program ensuring that the entire population is covered. Premiums calculated on population characteristics and funding from both taxes and premiums helps to manage the financial downside risk. While there are measures in place to manage the quality of the system, an increase in the value-based reimbursement models could help to incentivize higher quality and reduce overuse of the system. Nevertheless, the NHIA does protect itself from some of the financial risk of its wide coverage through exclusions, co payments, coinsurance and the implementation of HTA – all of which help to balance out the lack of gatekeeping in the system.

3.4 The Netherlands

Fact & figures

Population (2021)



Reference[61]

GDP, USD
(2021)

US$ 1,018.0 bn

GDP per capita, USD
(2021)

US$ 58,061

% GDP spent on health
(2019)

10.13%

Life expectancy, years
(2020)

81 years

Crude birth rate, per 1000
(2020)

10

Managed competition system

Private providers

Reform measures implemented

The health system in the Netherlands shifted from a Bismarck-style social insurance system run by Sickness Funds to the managed competition model in 2006 with the introduction of mandatory health insurance under the new Health Insurance Act (Zvw)[62]. Individuals are required to purchase insurance from private insurers and can access care from both public and private providers. Similar to Taiwan, the Netherlands has almost complete universal coverage through its mandatory health insurance, with less than 0.2% of the population uninsured in 2016. There are limited exemptions and new arrivals are required to purchase insurance within four months of moving to the Netherlands[62]. Optional packages are available and provide top-ups for the services that are covered, such as additional visits for physiotherapy. These optional extras do not increase the speed of access to care. Long-term care is financed outside of the standard health insurance package through taxes, and a separate fund exists to pay providers for these treatments[63]. Funding comes from a variety of sources: payroll taxes paid by employers (46%), general taxes (22%), insurance premiums paid by individuals (21%) and out-of-pocket co payments (11%)[62].

The managed competition model in the Netherlands is a multi-payer system. While there are a number of private insurers on the market, the market is dominated by four private health insurers covering around 90% of the population[62]. Private insurers are heavily regulated and as a result have limited scope to differentiate their basic insurance product. As the number of dominant payers is small, these insurers have relatively high market power and thereby high negotiating power.

Dutch health insurers are not allowed to change the premium based on the health risk profile of their beneficiaries to ensure equity and solidarity across the system. To compensate payers with a higher risk population and mitigate the risks of adverse selection, the Netherlands uses a risk equalization model. Essentially, this means that payers put money into a fund each year and then those with a disproportionate share of higher risk beneficiaries receive more money back than they paid (while others receive less). This model has undergone many developments in the Netherlands since its introduction in 1993[64]. The model is complex and makes adjustments based on a large number of factors, including age, region, source of income, pharmacy-based cost groups, diagnoses-based cost groups, socioeconomic status and multiple-year high costs[64].

Both the quality and cost-effectiveness of care are supported by the application of selective contracting in the Netherlands. Insurers choose which healthcare providers to contract for their care and beneficiaries are limited to the providers that will be fully reimbursed[62]. This measure stimulates providers to agree on lower prices and encourages competition among them to deliver the best care. Another measure to manage the cost-effectiveness of the basic package is the use of a mandatory annual excess; beneficiaries are required to

pay a certain amount out of pocket before the insurer will cover the bill[63]. The minimum amount is set by the government and individuals can choose to increase the annual excess to reduce their monthly premium.

Value-based care has been a key focus in the Netherlands, with Diagnosis Related Groups (in Dutch: DBCs) having been applied in Dutch hospitals since 2005. In the application of this reimbursement model, multimorbidity is handled by applying multiple DRGs to the same patient. In some cases, add-ons are applied to the DRG costing, to mitigate the costs of unexpected intensive care or expensive pharmaceuticals[63]. DRG reimbursement incentivizes collaboration across the care spectrum. General practitioners are paid a registration fee per patient as part of the capitation model, which helps to incentivize prevention in primary care.

The Netherlands has been using Health Technology Assessment (HTA) for some time. While this was initially focused only on pharmaceuticals, its application has been broadened to other areas of care[65]. HTA helps to identify the most cost-beneficial services that should be provided, and it is used to advise the government when setting the parameters of the mandatory basic package. This helps to avoid that expensive new technologies or drugs are automatically included in the basic package and helps to maintain its cost-effectiveness.

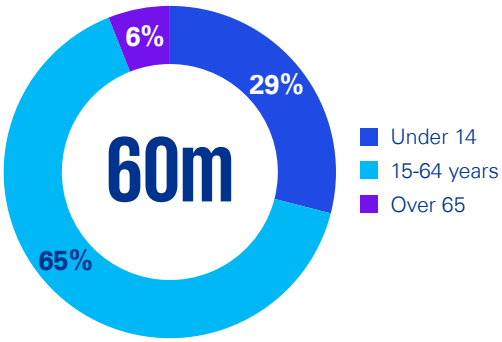
Quality and safety are monitored at the provider level by an external body, the Dutch Health Care Inspectorate[56]. Quality of individual professionals is managed and measured by peer assessments, professional guidelines, and national certification registries. The bundled approach for reimbursement supports collaboration and integration across the care spectrum. Electronic health records are in place but there is limited national standardization, and integration across provider systems remains a challenge[62].

The Netherlands switched to a mandatory insurance and managed competition model in 2006 to improve equity in the system and access to care. Even though some of the goals have not been reached, the model has led to a system which is often praised for its equal access and affordability, and overall quality of care[65]. Implementation of a mandatory basic package and achieving universal coverage does not come without its financial risks, however, and the Netherlands took on this challenge by implementing a risk equalization fund. With a low number of private payers in the system, the health insurers have a relatively high market power and are essential for stimulating cost-effective and quality care. However, the position of providers, especially the larger hospitals, remains strong, even in a marketplace with four dominant insurers. Volume cap contracts are still required to contain costs of the healthcare system.

3.5 South Africa

Fact & figures

Population (2021)



Reference[67]

GDP, USD
(2021)

US$ 419.95bn

GDP per capita, USD
(2021)

US$ 6,994.2

% GDP spent on health
(2019)

9.11%

Life expectancy, years
(2020)

64 years

Crude birth rate, per 1000
(2020)

20

Current:
multi-payer system
Future:
single-payer system

Public and private providers

Reform measures implemented

South Africa is at the beginning of a large health system transformation. From its current system of voluntary private insurance (for a minority) with public providers as a safety net, South Africa has the ambition to move towards National Health Insurance (NHI) that would bring all its citizens under a single system of coverage. Over the last decade South Africa has been working on preparations on the insurance bill that would allow a first step towards NHI.

The envisioned health system transformation can be best described and evaluated with an understanding of the broader context. South Africa, a country with approximately 60 million people, has one of the largest income and wealth inequality rates worldwide, and it has been facing economic issues with significant unemployment rates (30-43%) and high poverty rates for years. The pandemic has worsened the situation. The political situation is described as a young, relatively stable democracy that is struggling with corruption[68].

The current healthcare landscape is mainly dominated by the private sector and market forces. Access to quality care is more of a privilege to the elite few rather than a public good[69]. Only a small proportion of the population can afford private insurance that provides access to quality care. Public providers have been suffering from a lack of general resources, insufficient funding and human resource shortages for decades, putting them far behind in terms of quality and range of offerings in comparison to the private providers.

The private insurance market is complex and fragmented, and unique with its offering of two 'types' of insurance. *Medical schemes* (or medical aid schemes) offer beneficiaries insurance that covers expenses associated with required medical treatment. This can be described as the more 'traditional' health insurance in other countries like the Netherlands and Germany. Medical schemes are regulated by the Medical Schemes Act and governed by the Council for Medical Schemes. *Health insurance*, on the other hand, provides a fixed lump sum amount in case a beneficiary needs funds for medical purposes. The size of the amount is independent of the medical purpose (required treatments, type of care professional, etcetera). Health insurance is regulated by the long-term insurance act and governed by the Financial Services Board. Medical schemes are obligated to provide Prescribed Minimum Benefits as part of their offering, whereas health insurance is not. Premiums for medical schemes are relatively high and with rapid cost inflation in recent years, leaving them affordable only for a small proportion of the population; approximately 16% has a medical scheme. Health insurance provides less coverage, but at a lower premium. The health insurance market has flourished since its introduction.

Since the announcement of the ambition of a move to NHI, South Africa has been working on the design of the transformation program to implement a National Health

Insurance (NHI) scheme. The 14-year transformation program started in 2012[70]. And the NHI has been slowly taking shape, but the economic and political situation and the pandemic has slowed down the process significantly. The insurance bill is aimed to pass in 2023, but the details are yet to be fleshed out and are subjected to change until the moment it passes.

The NHI program aims to achieve universal coverage while bridging the gap between private and public providers, cover certain services that are currently paid out of pocket, and reform the payment structure to improve the efficiency of fund collection, pooling and service purchasing[71]. The new system would be based on the Beveridge model, with funds raised through taxes and the government acting as a single payer[72].

With the envisioned NHI fund, the governance and funding will be organized nationwide, as compared to the current situation in which these are the responsibility of individual provinces (regional districts). The NHI Fund will purchase care from both public and private providers, improving equity of delivered care across the different socioeconomic groups in the country. As a single payer in the system providing universal coverage, the NHI Fund is expected to have more bargaining power and benefit from economies of scale. The new NHI scheme also intends to shift the forms of reimbursement towards more value-based care models, however, the details of such are still to be outlined[72].

As stated before, the pillars have been established, but the exact details have not. One of the major questions is the position of the medical schemes in the future. Potentially, medical schemes will continue to exist, to offer complementary benefits. But the benefit package of the NHI is still unknown, leaving the future of the medical scheme unclear. Another question that has been raised is the feasibility of the funding of the system, which is heavily dependent on the largest taxpayers, who already enjoy coverage through their medical schemes – and so do not stand to benefit as much, yet will foot the majority of the reform's significant bill. Another question is the feasibility of successfully contracting private providers. Private providers have been used to fee-for-service models with relatively high prices. These providers are accustomed to higher fees, and the high bargaining power of a single payer carries little weight as long as these providers can still access revenue from other sources.

Despite these challenges, South Africa can serve as an example when it comes to some of the innovations that its private payers have introduced – especially regarding population health. As highlighted in Section 2.5.3, South Africa's Discovery Health program was a successful initiative by one of the health insurers in the country, to stimulate behavioral and lifestyle changes. In this program, beneficiaries were incentivized to undertake health-improving activities, such as healthier eating and increased physical activity. This focus on preventative care is essential to achieving better cost-effectiveness in the health system: an undeniable way to lower healthcare expenditure is to reduce the need for healthcare in the first place and decrease the volumes.

Moreover, parallel to the developments regarding the NHI scheme, the private sector has invested significantly in increasing quality and efficiency. Successful programs have resulted in decreasing fraud, waste, abuse in the system, a move towards integrated care models and digital health, and further strengthening of the primary care system.

The path towards NHI is still long for South Africa, but it will be interesting to follow how the transformation will unfold over the next years. The next major milestone will be the passing of the insurance bill after which a new phase of the transformation will start.

04

Key success factors for effective payer reform

4. Key success factors for effective payer reform

There are three key success factors for realizing an effective payer function reform: clear strategy, adequate stakeholder engagement and good system governance. Each of these elements plays an important role in applying the building blocks described in Section 2. These success factors act as safeguards and help to mitigate the risk of failure of the transformation project.

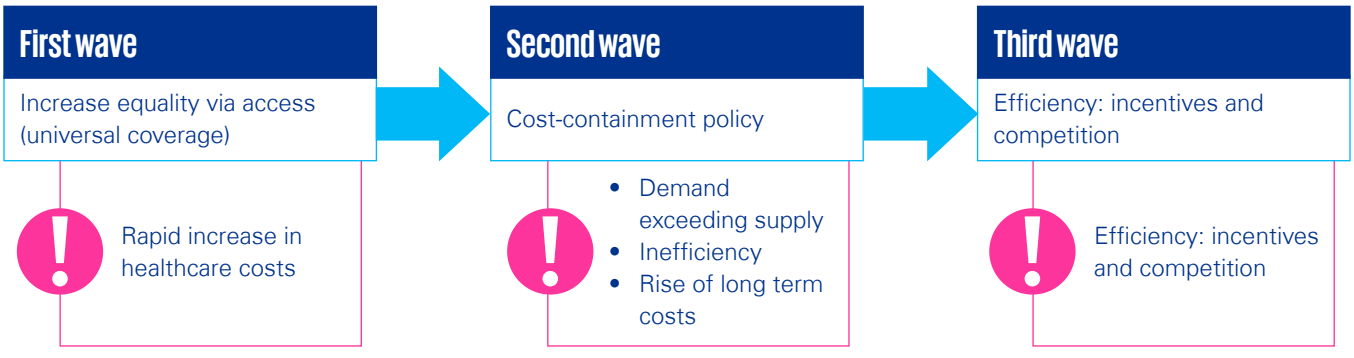
Payer function reform is complex: there are multiple parties, often with conflicting interests, despite having the same goal of realizing an effective, high-quality health system. The success of the transformation lies within effective stakeholder management. Identifying all relevant stakeholders and defining a tailored strategy for each helps in continuing momentum. Ensuring that all stakeholders understand the need for the reform is essential. It must be clear what the goals and purpose of the reform are and there needs to be a clear plan for how that goal can be achieved.

Another key success factor is establishing a clear strategy: the mission, vision and roadmap used to inform and steer the direction of the implemented initiatives. The mission, identifying the focal point for the health system as it stands today, will often need to be updated to be in line with the reformed system. The vision outlines the ultimate end state; the features of the ideal health system for that context. The roadmap pinpoints the steps to take to attain the vision. It identifies the key milestones that the reform aims to reach on the path towards that ideal. Establishing the mission, vision and roadmap is a process that must involve key stakeholders. Setting the strategy is not a one-off process: each of these elements must be sharply defined but should also be periodically updated. The reform process must leave room for innovation and allow for changes as the transformation evolves. Decision makers should also think carefully about potential unintended consequences that might result and prepare for these in advance, as health systems are highly dynamic and can respond to major reform in unpredictable ways.

Good system governance establishes the roles, responsibilities and interactions among stakeholders in the payer function reform. It identifies the role each party will play and how parties will interact with each other during the transformation process. A clear governance structure and approach gives the parties involved the mandate required to make changes, and thereby improves the efficiency of decision making. Relevant agreements and contracting between parties are outlined as part of establishing system governance and serve to delineate accountabilities. Structures established in mature health systems can serve as an example of how governance is applied in practice.

Health economist David Cutler described how in many developed countries healthcare reform evolved in three waves: increase in access, then regulation and then incentives[73] (see Figure 9). As populations started to recognize the value of healthcare after World War II, governments strove to provide universal coverage and

Figure 9
Three waves of healthcare reform of most developed countries



improve rates of access to care services. During this first wave, the primary focus was on increasing equality within the health system and providing access for all. This is demonstrated in examples such as Medicare and Medicaid in the US, or the Sickness Funds that were introduced in Germany and the Netherlands. The focal point in this wave was equity, with little emphasis on efficiency. However, increased access led to increased costs, not only because of the increase in volume of care delivered, but also because of the advancing technology in medicine over time, and the resulting rises in costs of care per individual.

As demand for care soared and governments sought to decrease costs, rationing, controls and expenditure caps were introduced to temper the rising costs. Regulation was employed to limit the use of services and control spending. Yet cost cutting is not synonymous with cost-effectiveness. Shrinking budgets do not always stimulate the desired efficiency gains, and this is what led to the emergence of the third wave of reform: the introduction of incentives and competition. This final wave aimed to maximize results and deliver the highest quality, without sacrificing the access and cost-effectiveness gains realized in the first two waves. Managed care in the US is a prime example of this[74] and it is also demonstrated by both the management of competition between sickness funds implemented in Germany[75] and the gatekeeping role of certain providers to avoid overtreatment established in the UK. This wave also saw quality measures and performance management come into play to monitor the performance of providers and determine whether targets are being reached.

Healthcare reform is driven by an increasingly active role for the payers, as they tackle the challenge of funding the increased access and quality of care. Typically, a mixture of policies is applied to attain this balance, such as increasing competition while also setting expenditure caps. While most developed countries already sit in this third wave, maturing health systems often battle challenges of the first and second wave combined.

Identifying and involving stakeholders, setting a clear strategy and establishing good system governance are fundamental activities when reforming the payer function in a given health system. The historical waves seen in healthcare reform can act as a guide for payers and governments looking to reform their own system, and lessons learned from countries that have already reformed (elements of) the payer function provide valuable insights into what does and does not work. Nevertheless, reform is a lengthy process and it requires consistency and diligence to successfully pull off such a substantial health system transformation. With these building blocks, examples and key success factors, payers and governments can start designing a payer function reform for their respective health systems that is tailored to their specific context and best suits their needs.

References

1 Britnell, Mark. *In Search of the Perfect Health System*. Palgrave MacMillan, 2015.

2 Britnell, Mark. *Human: Solving the Global Workforce Crisis in Healthcare*. Oxford: Oxford University Press, 2019.

3 Arah, O. A. et al. "Conceptual frameworks for health systems performance: a quest for effectiveness, quality, and improvement." *International Journal for Quality in Health Care*, 2003: 377-398.

4 Kruk, Margaret Elizabeth, and Lynn P. Freedman. "Assessing health system performance in developing countries: A review of the literature." *Health Policy* 85, no. 3 (2008): 263-276.

5 Schneider, Eric C. et al. "Mirror, Mirror 2021: Reflecting Poorly - Health Care in the U.S. Compared to Other High-Income Countries." *The Commonwealth Fund*. August 4, 2021. https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly (accessed July 26, 2022).

6 Or, Zeynep et al. "Are health problems systemic? Politics of access and choice under Beveridge and Bismarck systems." *Health Economics, Policy and Law*, 2010: 269-293.

7 Lameire, N. et al. "Healthcare systems - an international review: an overview." *Nephrology Dialysis Transplantation*, 1999: 3-9.

8 Klavus, Jan et al. "Evaluating health care financing in a highly decentralized Beveridge model." *Health*, 2012: 1046-1052.

9 Kulesher, Robert, and Elizabeth Forrestal. "International models of health systems financing." *Journal of Hospital Administration*, 2014: 127-139.

10 Wallace, Lorraine S. "A View Of Health Care Around The World." *The Annals of Family Medicine* 11, no. 1 (2013): 84.

11 UK Government. *Brexit Guidance | NHS entitlements: migrant health guide*. July 14, 2022. https://www.gov.uk/guidance/nhs-entitlements-migrant-health-guide#immigration-health-surcharge (accessed August 16, 2022).

12 Gangopadhyaya, Anuj, and Bowen Garrett. Unemployment, *Health Insurance, and the COVID-19 Recession*. April 2020.

13 OECD. "Tackling Wasteful Spending on Health." *OECD*. January 10, 2017. https://www.oecd.org/health/tackling-wasteful-spending-on-health-9789264266414-en.htm (accessed July 18, 2022).

14 van den Broek-Altenburg, Eline M., and Adam J. Atherly. "The relation between selective contracting and healthcare expenditures in private health insurance plans in the United States." *Health Policy*, 2020: 174-182.

15 Enthoven, Alain C. "The History and Principles of Managed Competition." *Health Affairs*, 1993: 24-48.

16 Ikkersheim, David. "The Dutch health system reform: creating value." 2013.

17 Tikkanen, R. et al. *International Health Care System Profiles: Switzerland*. June 5, 2020. https://www.commonwealthfund.org/international-health-policy-center/countries/switzerland.

18 Tikkanen, R. et al. *International Health Care System Profiles: United States*. June 5, 2020. https://www.commonwealthfund.org/international-health-policy-center/countries/united-states.

19 LeCuyer, Nick A, and Shubham Singhal. "Overhauling the US health care payment system." *The McKinsey Quarterly*. June 2007.

20 U.S. Centers for Medicare & Medicaid Services. *NHE Fact Sheet*. December 15, 2021. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.

21 Roberts, Eric T., Michael E. Chernew, and J. Michael McWilliams. "Market Share Matters: Evidence Of Insurer And Provider Bargaining Over Prices." *Health Affairs*, 2017: 141-148.

22 Gaynor, Martin, Rodrigo Moreno-Seera, and Carol Propper. "Death by Market Power: Reform, Competition, and Patient Outcomes." *American Economic Journal: Economic Policy*, 2013: 134-166.

23 Cerullo, Marcelo et al. "Is Bigger Better? The Effect of Hospital Consolidation on Index Hospitalization Costs and Outcomes Among Privately Insured Recipients of Immediate Breast Reconstruction." *Annals of Surgery*, 2019: 681-691.

24 Roos, Anne-Fleur et al. "Price effects of a hospital merger: Heterogeneity across health insurers, hospital products, and hospital locations." *Health Economics* (Wiley), 2019: 1130–1145.

25 Salinger, Jeremy. "Competitive Ideas for Reducing Healthcare Costs." *Harvard Law School Journal on Legislation* 59, no. 2 (2014).

26 McKinsey. "Great customer experience: A win-win for consumers and health insurers." 2016.

27 Kerssens, Jan J, and Peter P Groenewegen. "Consumer Preferences in Social Health Insurance." E*uropean Journal of Health Economics* 6, no. 1 (2005): 8-15.

28 Independent Hospital Pricing Authority. *Australian Refined Diagnosis Related Groups*. 2019. https://www.ihpa.gov.au/what-we-do/ar-drg-classification.

29 Tikkanen, Roosa et al. *International Health Care System Profiles: Australia*. June 5, 2020. https://www.commonwealthfund.org/international-health-policy-center/countries/australia.

30 World Health Organization. "Principles of health benefit packages." *World Health Organization*. March 7, 2021. https://www.who.int/publications/i/item/9789240020689.

31 Lazarevik et al. "Defining a health benefits package: More tips for emerging markets" *McKinsey & Company*. July 2018.

32 Frank, Richard G. "Making Choice and Competition Work in Individual Insurance in Health Reform Proposals." *The Commonwealth Fund*. January 30, 2019. https://www.commonwealthfund.org/publications/issue-briefs/2019/jan/choice-competition-individual-insurance-health-reform.

33 IRDAI. *Our Mission*. 2013. https://www.irdai.gov.in/.

34 Friesner, Daniel L, and Robert Rosenman. "Do hospitals practice cream skimming?" *Health Services Management Research*, 2009: 39-49.

[35] KPMG International. "Through the looking glass: A practical path to improving healthcare through transparency." *KPMG Healthcare*. 2017. https://assets.kpmg/content/dam/kpmg/nz/pdf/April/through-the-looking-glass-healthcare-transparency-kpmg-nz.pdf (accessed August 4, 2022).

[36] Philips. *What is population health management?* 2022. https://www.usa.philips.com/healthcare/medical-specialties/population-health/what-is-population-health-management (accessed July 7, 2022).

[37] KPMG International. "What Works: Staying Power - Success stories in global healthcare." *KPMG*. 2016. https://assets.kpmg/content/dam/kpmg/pdf/2016/05/staying-power-success-stories.pdf.

[38] Government of Dubai. "Population and Vital Statistics: Population by Gender and Age Groups." *Dubai Statistics Center, Government of Dubai*. 2021. https://www.dsc.gov.ae/en-us/Themes/Pages/Population-and-Vital-Statistics.aspx?Theme=42#DSC_Tab1 (accessed August 15, 2022).

[39] Government of Dubai. "National Accounts: Gross Domestic Product at Current Prices - Emirate of Dubai." *Dubai Statistics Center, Government of Dubai*. 2020. https://www.dsc.gov.ae/en-us/Themes/Pages/National-Accounts.aspx?Theme=24 (accessed August 15, 2022).

[40] Government of Dubai. "Health Accounts: System of Dubai 2019." *ISAHD*. 2019. https://www.isahd.ae/content/docs/HASD_2019_final.pdf (accessed August 15, 2022).

[41] Government of Dubai. "Population and Vital Statistics: Life Expectancy (Year) by Age and Gender." *Dubai Statistics Center, Government of Dubai*. 2020. https://www.dsc.gov.ae/en-us/Themes/Pages/Population-and-Vital-Statistics.aspx?Theme=42#DSC_Tab1 (accessed August 15, 2022).

[42] Government of Dubai. "Population and Vital Statistics: Births, Deaths and Natural Increase by Nationality and Gender." *Dubai Statistics Center, Government of Dubai*. 2020. https://www.dsc.gov.ae/en-us/Themes/Pages/Population-and-Vital-Statistics.aspx?Theme=42#DSC_Tab1 (accessed August 15, 2022).

[43] Malaviya, Shreena et al. "Socioeconomic disparities in healthcare utilization under universal health coverage: evidence from Dubai household health survey." *International Journal for Equity in Health*, 2022.

[44] Government of Dubai. "Medical Insurance." *Law No. 11 of 2013 concerning health insurance in the emirate of Dubai*. 2013. https://medicalinsurance.ae/wp-content/uploads/Health-Insurance-Law-English.pdf (accessed August 8, 2022).

[45] Oxford Business Group. "How private providers and population trends are influencing health care in Dubai." *Oxford Business Group*. 2022. https://oxfordbusinessgroup.com/overview/good-prospects-demographics-and-increased-private-participation-are-expected-drive-expansion-health (accessed August 8, 2022).

[46] Agba, Chibueze Okey et al. "Global Horizons for Value-Based Care: Lessons Learned from the Cleveland Clinic." *NEJM Catalyst*. June 28, 2022. https://catalyst.nejm.org/doi/full/10.1056/CAT.22.0123 (accessed August 9, 2022).

[47] Government of Dubai. "General Circular pursuant to the Health Insurance Law (No 11 of 2013) of the Emirate of Dubai: General Circular Number 04 of 2020 (GC 04/2020)." *ISAHD*. April 2020. https://www.isahd.ae/content/docs/GC%2004-2020%20Full%20DRG%20Implementation.pdf.

[48] World Bank Group. Data - *The World Bank: Estonia*. 2022. https://data.worldbank.org/country/estonia (accessed August 15, 2022).

[49] Habicht, Triin, Marge Reinap, Kaija Kasekamp, Riina Sikkut, Laura Aaben, and Ewout Van Ginneken. "Estonia: health system review." *World Health Organization*. 2018. https://apps.who.int/iris/handle/10665/330201 (accessed August 9, 2022).

[50] OECD. "Estonia: Country Health Profile 2021." *OECD iLibrary*. December 13, 2021. https://www.oecd-ilibrary.org/social-issues-migration-health/estonia-country-health-profile-2021_a6c1caa5-en;jsessionid=G5Qx3p543hTLYj9QR-IVIRgfm5Ts3_xnalmTkRd0.ip-10-240-5-91 (accessed August 9, 2022).

[51] Estonian Health Insurance Fund. "Health Insurance." *Estonian Health Insurance Fund*. n.d. https://www.haigekassa.ee/en/people/health-insurance (accessed August 9, 2022).

[52] Habicht, Triin et al. "Strategic purchasing reform in Estonia: Reducing inequalities in access while improving care concentration and quality." *Health Policy*, 2015: 1011-1016.

[53] Szende, Agota, and Zsolt Mogyorosy. "Health care provider payment mechanisms in the new EU members of Central Europe and the Baltic states." *The European Journal of Health Economics*, 2004: 259-262.

[54] Midyear: Ministry of Health and Welfare, Taiwan. "National Health Expenditure Statistical Tables." *Ministry of Health and Welfare*. March 2, 2022. https://www.mohw.gov.tw/cp-130-67382-2.html (accessed August 15, 2022).

[55] Statistical Bureau, Republic of China. "Population and Housing." *National Statistics: Republic of China (Taiwan)*. 2021. https://eng.stat.gov.tw/ct.asp?xItem=41871&ctNode=6339&mp=5 (accessed August 15, 2022).

[56] Center for Drug Evaluation, Taiwan. *Health Technology Assessment*. n.d. https://www.cde.org.tw/eng/HTA/ (accessed August 10, 2022).

[57] Tikkanen, Roosa et al. "International Health Care System Profiles: Taiwan." *The Commonwealth Fund*. June 5, 2020. https://www.commonwealthfund.org/international-health-policy-center/countries/taiwan (accessed August 10, 2022).

[58] Lee, Sang-Yi et al. "The National Health Insurance system as one type of new typology: The case of South Korea and Taiwan." *Health Policy*, 2008: 105-113.

[59] Cheng, Shou-Hsia et al. "Hospital response to a global budget program under universal health insurance in Taiwan." *Health Policy*, 2009: 158-164.

[60] Cheng, Tsung-Mei. "Reflections On The 20th Anniversary Of Taiwan's Single-Payer National Health Insurance System." *Health Affairs*, 2015: 502-510.

[61] World Bank Group. *Data - The World Bank: Netherlands*. 2022. https://data.worldbank.org/country/netherlands (accessed August 15, 2022).

[62] Tikkanen, Roosa et al. "International Health Care System Profiles: Netherlands." *The Commonwealth Fund*. June 5, 2020. https://www.commonwealthfund.org/international-health-policy-center/countries/netherlands (accessed August 10, 2022).

[63] World Health Organization. "Netherlands: health system review." *World Health Organization: Institutional Repository for Information Sharing*. February 18, 2016. https://apps.who.int/iris/handle/10665/330244 (accessed August 10, 2022).

[64] Van Kleef, Richard C, René CJA Van Vliet, and Wynand PMM Van de Ven. "Risk equalization in The Netherlands: an empirical evaluation." *Expert Review of Pharmacoeconomics & Outcomes Research*, 2013: 829-839.

[65] Stolk, Elly A, Antoinette de Bont, Arnold R van Halteren, Rob J Bijlmer, and Marten J Poley. "Role of health technology assessment in shaping the benefits package in The Netherlands." *Expert Review of Pharmacoeconomics & Outcomes Research*, 2009: 85-94.

[66] Bjornberg, Phang, Euro Health Consumer Index 2018. *Health Consumer Powerhouse*. Feb 25 2019.

[67] World Bank Group. *Data - The World Bank: South Africa*. 2022. https://data.worldbank.org/country/south-africa (accessed August 15, 2022).

[68] Government UK. Overseas Business Risk – South Africa. 2022. https://www.gov.uk/government/publications/overseas-business-risk-south-africa/overseas-business-risk-south-africa (accessed August 15, 2022)

[69] Marten, Robert, et al. "An assessment of progress towards universal health coverage in Brazil, Russia, India, China, and South Africa (BRICS)." *The Lancet*, 2014: 2164-2171.

[70] Government of South Africa. *South African Government*. 2022. https://www.gov.za/about-government/government-programmes/national-health-insurance-0#:~:text=The%20National%20Health%20Insurance%20(NHI,of%20their%20socio%2Deconomic%20status. (accessed August 10, 2022).

[71] Department of Health South Africa. "National Digital Health Strategy for South Africa." *Government of South Africa*. 2022. https://www.knowledgehub.org.za/elibrary/national-digital-health-strategy-south-africa-2019-2024 (accessed August 10, 2022).

[72] Health Systems Trust. "South African Health Review 2019." *Health Systems Trust*. December 31, 2019. https://www.hst.org.za/publications/Pages/SAHR2019.aspx (accessed August 10, 2022).

[73] Cutler, David. "Equality, Efficiency, and Market Fundamentals: The Dynamics of International Medical-Care Reform." *Journal of Economic Literature*, 2002: 881-906.

[74] Cutler, David. "How does managed care do it?" *RAND Journal of Economics*, 2000: 526-548.

[75] Le Grand, Julian. "Methods of Cost Containment: Some Lessons from Europe." *International Health Economics Association's Fourth World Congress*. San Francisco, 2003.

Want to know more?

Get in touch with the KPMG Health team

Authors and contributors

David Ikkersheim

Partner KPMG Health

ikkersheim.david@kpmg.nl

Annemieke Draaisma

Senior Manager KPMG Health

draaisma.annemieke@kpmg.nl

Kemal Arslantas

Manager KPMG Health

arslantas.kemal@kpmg.nl

Contributor:
Rachel Brouwer

KPMG Health is a global network of healthcare professionals and >70 local practices
We are happy to connect you with our local contact

Anna van Poucke

Global Head of Healthcare
KPMG International

vanpoucke.anna@kpmg.nl

Edward Fitzgerald

Head of Healthcare & Life Sciences
Partner KPMG Islands Group

edwardfitzgerald@kpmg.bm

Burhaan Khan

Head of Healthcare
Partner KPMG Saudi Arabia

burhaankhan@kpmg.com

Kerry McGough

ASPAC Region Healthcare Lead
Partner KPMG Australia

kmcgough1@kpmg.com.au

Lalit Mistry

Co-Head of Healthcare
Partner KPMG India

lalitmistry@kpmg.com

Evan Rawstron

Head of Healthcare
Partner KPMG Australia

erawstron@kpmg.com.au

Samson Nyoike

Head of Healthcare & Human Services
Partner KPMG in Africa

snyoike@kpmg.co.ke