

Chapter 2

Add-on health care provider payments

This chapter explores the implementation of additional payments for health care providers, tied to particular objectives or requirements. Specifically, it looks at how additional payments have been introduced to incentivise or facilitate co-ordination, and how they have been used to encourage improvement in performance, also known as “pay for performance” or P4P. The chapter follows a standardised analytical framework to explore policies in select OECD countries, notably the ENMR programme from France, cardiovascular disease care in Germany, the introduction of Family Health Units in Portugal, the diversification of payment methods for primary care practitioners in Ontario, Canada, and the introduction of a performance-based component to hospital budgets in Norway. Best practice and lessons for other OECD countries are highlighted, focussing on the extent to which these forms of innovative payment can be said to contribute to cost savings and quality improvement, as well as other health policy objectives.

2.1. Overview

In OECD countries, ear-marked additional payments – referred here as “add-on payments” – are used to encourage improvement in health system performance across a range of domains, including co-ordination of care, improving care quality, and strengthening management of chronic conditions. These additional payments seek to complement the existing mode of payment, but not to replace them. The payments are tied to specific expectations of the care provider, and can be made either before the actual care delivery (*ex ante*) or after (*ex post*). This chapter considers ex-post and ex-ante add-on payments used to incentivise improved co-ordination of health care activities, and ex-post performance bonuses focussing on improving quality of care, which exist in many countries. The chapter explores the use of these add-on payments, and assesses their effectiveness and utility for policy making by drawing on examples taken from countries including Australia, Canada, France, Germany, Norway, Portugal and the United Kingdom.

Instead of providing a full overview of possible add-on payments, this chapter will focus on two types of payments where there appears to be increasing policy interest in recent years: i) add-on payments used to incentivise improved co-ordination of health care activities across providers; ii) add-on payments to improve quality and efficiency where bonus payments are related to meeting pre-defined targets, also referred to as pay-for-performance (P4P) schemes.

The chapter begins by establishing the distinction between add-on payments which are applied ex-ante, and ex-post payments, which is used as one of the tools to help distinguish between different add-on payments. Then, the chapter sets out the principal case studies examined, looking first at examples of add-on payments which are used to incentivise co-ordination of care in France and in Germany. These cases are then explored following the analytical framework applied to case studies throughout this publication, assessing policy impact against the intended policy objective, across dimensions of quality, savings and unintended consequences, and considering conditions for implementation of the payment reform. Then, several examples of ex-post add-on payments are explored, P4P schemes, including examples of payment reform in Portugal, Norway, and Ontario, Canada. These payment reforms are assessed under the same framework. Finally, conclusions and lessons for OECD countries are drawn together.

Distinguishing add-on payments

Add-on payments to encourage co-ordination have been introduced in a number of OECD countries and consist of bonus payments alongside existing payment systems, such as FFS in outpatient care, and aim to give targeted incentives for particularly desirable dimensions of provider behaviour or organisation, for instance facilitating and incentivising greater collaboration across care settings and between providers. The payments can be made ex post or ex ante and are directed towards activities expected to improve co-ordination, notably establishment of a care plan, collaborative care meetings or improvements in the management of a health care structure. These types of payment can also be made to meet other health policy objectives. Additional payments for extended consultation hours to improve access to health care, for example, exist in a number of countries, but are not discussed here further.

Add-on payments, which reward quality and performance after care is delivered, are also known as P4P. P4P schemes are typically expected to improve desirable provider performance, most frequently in relation to quality or efficiency. That being said there is no internationally established or consistently applied definition of P4P to date. Indeed, P4P is

often used interchangeably with terms such as “paying for results”, “performance-based funding”, or “results-based financing”. In most definitions of P4P, performance and/or quality improvement are common themes (see Table 2.1).

Table 2.1. Definitions of pay for performance

Organisation	P4P definition
Agency for Healthcare Research and Quality (AHRQ)	Paying more for good performance on quality metrics
Centers for Medicare and Medicaid Services (CMS)	The use of payment methods and other incentives to encourage quality improvement and patient focused high value care
Rand Corporation	The general strategy of promoting quality improvement by rewarding providers (physicians, clinics or hospitals) who meet certain performance expectations with respect to health care quality or efficiency
World Bank	A range of mechanisms designed to enhance the performance of the health system through incentive-based payments
United States Agency for International Development (USAID)	P4P introduces incentives (generally financial) to reward attainment of positive health results
Center for Global Development	Transfer of money or material goods conditional on taking a measurable action or achieving a pre-determined performance target

Source: OECD (2010), *Value for Money in Health Spending*, OECD Publishing, Paris.

These add-ons also sit alongside existing payments systems, but unlike ex-post or ex-ante payments for co-ordination, performance payments are dependent on the provider having met certain defined objectives during service delivery. Unlike ex-ante add-on payments, which are applied prior to provision of services and/or are automatically applied to certain processes (i.e. providers understand that certain listed services will receive additional payment), add-on payments for quality are focussed on the degree of achievement of certain defined objectives by providers or practitioners, hence the “performance” dimension. The payment of the bonus, or component of the budget which is allocated based on the defined performance criteria, comes after providers have reported on the required indicators and outcomes, and are judged to have met required targets or thresholds. When providers do not meet the required targets or thresholds for the ex-post bonus, the payment is withheld.

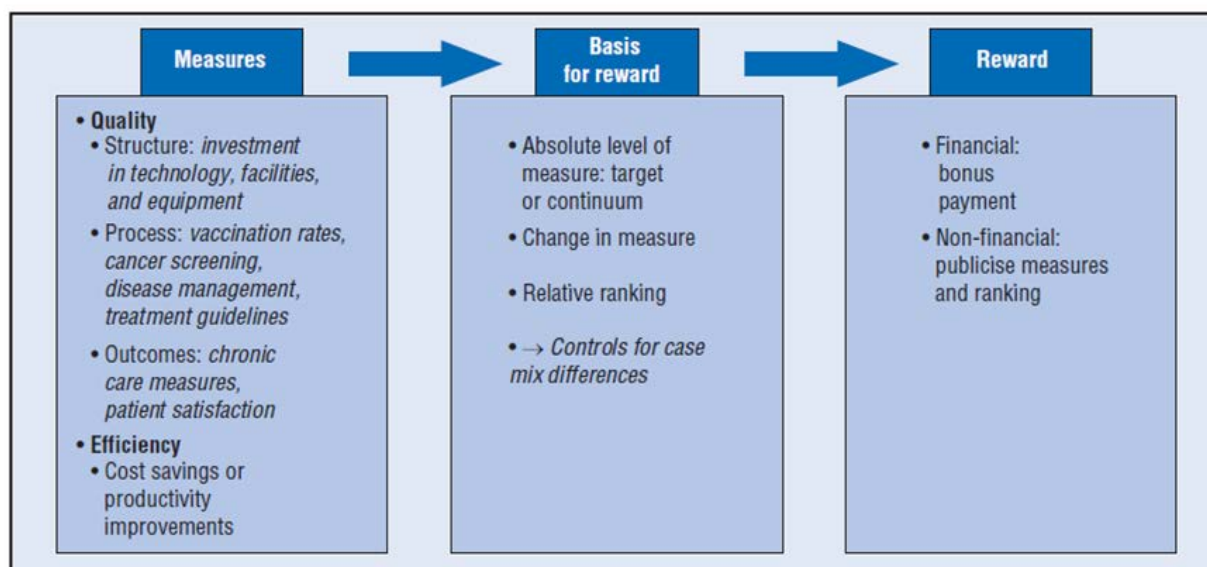
Ex-post add-on payments are very commonly orientated towards improving quality of care and broad improvements in patient outcomes, but they can also be geared towards efficiency, such as increasing the share of prescribed generics, as well as towards improving co-ordination. Payments can be based on achievement of process indicators, for example completion of certain diagnostic tests for set patient groups, and/or on health outcomes. Usually such outcome payments are focussed on intermediate outcomes, for instance controlled blood pressure or blood glucose level, and only more rarely outcome measures such as survival rates.

Underlying and motivating P4P programmes is a desire by policy makers to assess and reward provider performance across a given domain or domains. For example, this can be

an area of health care where quality of care is poor, such as chronic conditions, or where there is under-provision of services, such as preventive activities, for instance influenza vaccination for the elderly population.

P4P payments are made ex post, and have so far been applied as an add-on alongside other dominant payment methods, typically accounting for no more than 15% of total provider revenue in primary care and 12% in the outpatient sector (OECD, 2014). In the inpatient sector the share of provider revenue is much smaller, frequently around 0.1% of hospital budgets and never exceeding 4% (Milstein and Schreyögg, 2015). While P4P programmes can be expected to include at least some performance or outcome measures, most if not all P4P programmes also include simpler ex-post payments linked to service delivery (e.g. completion of certain data and recording, care plan establishment). Figure 2.1 shows a general framework for how P4P programmes are designed, including the programme measures, basis for reward, and reward. This publication focusses on provider-based financial rewards.

Figure 2.1. Framework for assessing and rewarding health care provider performance



Source: OECD (2010), *Value for Money in Health Spending*, OECD Publishing, Paris.

The way in P4P programmes are set up, from the choice of indicators, setting expected targets and outcomes, to the nature of the reward (e.g. a bonus payment) will significantly affect the scope and degree of impact. The awarding of a P4P payment (reward) is based on achievement of designated targets (basis for reward). The way in which this achievement is defined varies, from absolute targets, a relative change, or a relative ranking – which are drawn from selected measures of performance, for instance quality or efficiency (structure, process or outcome). Additional aspects that influence the design of P4P programmes include whether incentives should be targeted at groups or individual health professionals, the time lag between performance and payment and the frequency of bonus payments (Cashin et al., 2014).

In many ways, add-on payments for co-ordination (and to an extent P4P) represent an evolution of FFS payments. Add-on payments for co-ordination frequently constitute an additional payment for an additional delineated activity much as FFS payments do. There

are clear similarities between add-on payments for co-ordination and add-on payments for quality (P4P) and boundaries between the two can be blurred. Both have the same final objective: improving the quality of care. While add-on payments for co-ordination can be interpreted as filling gaps in the existing fee schedule, by paying desirable – but previously unrewarded services, quality-orientated P4P schemes are typically more complex and depend on the achievement of objective targets in certain domains.

This chapter follows the analytical framework applied to case studies throughout this publication, assessing policy impact against the policy objective, – across dimensions of quality and savings, as well as unintended consequences – and considering the conditions for implementation. This chapter focusses primarily on seven case studies: add-on payments to incentivise co-ordination in France (applied ex ante) and in Germany (ex post); and ex-post add-ons and examples of P4P schemes – in Australia, Canada, France, Norway, and Portugal.

2.2. Using add-on payments to encourage co-ordination

Two promising models to improve co-ordination of care

The rise in the prevalence of chronic conditions and demands of patients with complex needs has led to a need for more integrated and co-ordinated care among providers. Add-on payments – both ex ante and ex post – are being used to incentivise co-ordination of health services. Better co-ordination between care providers is seen as desirable because it can improve patient care and outcomes, and/or because better co-ordination can help to generate efficiency gains and overall cost savings. This review shows how payment is used to encourage greater co-ordination and integration of care across different levels of care in France and in Germany.

The ENMR in France

In France, add-on payments called “*Expérimentations de nouveaux modes de rémunération*” (ENMR) (Experimentation of new modes of remuneration) were introduced in 2009 (IRDES, 2013). They were made available to three different types of multi-disciplinary primary care facilities: “*maisons de santé*” (multi-professional medical home), “*pôles de santé*” (multi-professional medical facilities) and “*centres de santé*” (traditional health centre) aiming to enhance the organisation of care and providing new services to patients, and give a financial incentive for collaborative working structures. *Centres de santé* have been in operation for decades and mainly serve under-privileged urban areas. The *maisons de santé* and the *pôles de santé* were established more recently in under-served rural areas. Compared to other countries, there was a perceived lack of alternative delivery models to foster collaboration between health professionals and a need to improve working conditions for young physicians in France. The facilities included in ENMR provide primary care and sometimes secondary care as well as public health, prevention, and health education. A mix of health professionals works in these structures (e.g. doctors, midwives, nurses, pharmacists).

Add-on payments are made to the structures – and not to the professionals – which can freely decide how the fixed ENMR component is spent. All other services provided by the practice are paid in the traditional way, which is mainly FFS. Until 2014, the add-on payment was applied to three different modules: 1) co-ordinating activities, 2) provision of new services and 3) inter-professional co-operation. The activities rewarded could, for example, include the collective discussion of patient files by several health professionals. The ENMR has been modified in 2015 when the French Ministry of Health has rolled out

the ENMR on a wider scale and now also foresees activities to improve access and foster the uptake of IT systems.

The ENMR component represents on average 5% of the structure's income derived from normal business and is paid by the social health insurance (CNAMTS). The regional health agencies (ARS) are responsible for selecting the structures participating in the ENMR innovation and for monitoring results. Initially, the selection criteria for structures were only vague but they have been more clearly defined since 2015. Participating facilities are now required to organise regular formalised meetings among physicians, to clearly identify one person responsible to co-ordinate care for patients, and to start digitalising patient files.

Take-up so far has varied with the majority of multi-disciplinary primary care settings signing up for the co-ordination module and 50% for new service provisions by 2014. Around 150 structures participated in the ENMR by the end of 2012, 150 more joined in 2014 when the experimentation was extended. Of the EUR 8.5 million spent on the ENMR in 2013, EUR 7.6 million were spent on co-ordinating activities (EUR 50 000 allocated per structure); spending associated with provision of new services represented EUR 950 000 across all structures. In 2015, the French Ministry of Health generalised the ENMR and widened its scope to cover new multi-disciplinary settings. Compared to the first wave of ENMR experimentation there are some modifications with regards to payment, consisting now of fixed and variable bonus payments for required and optional activities. The ministry estimates that associated spending will reach EUR 50 million by 2017, covering 1 000 structures with 10 000 health professionals co-ordinating care for 4 million patients (Ministère des Affaires Sociales, 2015).

Integrated care contracts in Germany

Integration of care across different health sectors was introduced in German social law in the year 2000. Previously, cross-sectoral co-operation, for example, between primary care physicians and hospitals, was not very well developed. In this context, integration of care refers to programmes set up by individual health insurers mainly to improve health care quality for their insured through improved co-operation among different health providers. The legislative changes serve as the legal basis for Statutory Health Insurance Funds to *selectively* contract health providers for the provision of health services and the integrated care programmes. The German health system is typically characterised by *collective* contracting between all Statutory Health Insurers and health provider associations. In 2011, around 6 300 different contracts for integrated care programmes existed. The high number can be explained by the high number of Statutory Health Insurance Funds (118 in 2016) and the fact that integrated care contracts are predominantly signed at a regional level. One example of an integrated care contract is the “Cardio-Integral” programme launched by the Statutory Health Insurance Fund “AOK Plus” in 2005 (Milstein and Blankart, 2016). The main objectives of the programme is a closer co-operation between GPs and specialists across ambulatory and inpatient care, the linkage to a Disease Management Program (DMP), a reduction in waiting times and the realisation of efficiency gains by better care co-ordination. The closer co-operation should also lead to better care quality by improved diagnostic, therapy and follow-up care.

All patients with cardiovascular diseases living in Saxony and insured by AOK Plus are eligible to participate in the programme. Contracting partners are a regional association of GPs, the Heart Centre of the University Hospital Dresden and an outpatient clinic of the University Hospital Dresden. Outpatient specialists can also join the contract. All health providers are eligible to receive add-on payments for co-ordinating additional services

associated with the programme such as preparing patients for invasive surgery (Milstein and Blankart, 2016). GPs and specialists have to meet some minimal requirements to participate in this programme, for example, they need access to a 24-hour, blood-pressure-measuring instrument and have to be willing to participate in the programme evaluation.

Patients are treated according to defined care pathways which differ depending on the cardiovascular condition. Both GPs and outpatient specialists have a co-ordination role. Non-invasive specialists decide about the potential participation of patients in the programme, and co-ordinate care between GPs and specialist clinics and hospitals in case invasive treatment is required. Together with invasive specialists, they establish therapeutic plans and define treatment targets and refer patients back to GPs. GPs supervise patient's adherence to protocol and monitor targets. Extensive exchange of data between health providers is required in the programme.

In 2010, there were about 50 000 patients enrolled in the programme, about 1 200 GPs and 91 specialists participating with a total budget of EUR 2.4 million.

Improvements in quality and lower costs

In both France and Germany, add-on payments are associated with an improvement in the quality of care provided and reductions in health spending, although it is difficult to establish clear causality. In France, the multi-disciplinary structures achieve better results for nearly all care indicators (e.g. diabetes care processes, prevention and efficient prescription) than traditional practices but they were already performing better before the introduction of the ENMR (IRDES, 2014a). However, for some indicators, the difference in performance between multi-disciplinary structures and traditional practices has grown with the introduction of the payment innovation. The most significant improvement for multi-disciplinary structures relates to better control for HbA1c levels. Costs in multidisciplinary structures were between 0.5% and 2.3% lower for spending on specialists, nurses, physiotherapy and pharmaceuticals than in traditional practices. But again, the cost differences pre-date the introduction of the payment scheme. Multi-disciplinary settings are more efficient than traditional practices, particularly for the more integrated *maisons de santé*, where doctors see significantly more patients and perform more services. Multi-disciplinary practice is motivated by improved working conditions for health professionals and the add-on payments led to more effective organisation of care through greater collaboration and co-ordination between health professionals (IRDES, 2014a).

Similarly, positive results were found with the Cardio-Integral programme in Germany for patients with cardiovascular disease. There has been a reduction in repeat examination and better patient-centered collaboration between doctors. About 89% of patients acknowledge better co-operation between the GP and cardiologist and 65% of patients report an improvement in their health status after enrollment. GPs and specialists highlight the good quality and completeness of patient data. Hence, the vast majority of providers and patients are satisfied with the programme (Werblow and Karmann, 2012). However, patients still perceive relatively long waiting times for specialist treatment to be an issue although doctors report that Cardio-Integral patients have quicker access to specialists¹. Werblow and Karmann (2012) find higher initial costs for patients enrolled in the programme compared to a control group. Nevertheless, the programme was able to generate savings after four and a half years. Part of the higher initial costs is due to an additional outpatient examination which is part of the enrollment procedure and changes in medication. The subsequent estimated annual savings were about EUR 96 per enrolled patient due to improved drug therapy and better post-acute treatment which helped to bring down inpatient costs for invasive interventions and heart failure. However, it is difficult to

separate out the contribution of the add-on payment provided under the “Cardio-Integral” contract as it overlaps with a DMP for cardiovascular diseases (Milstein and Blankart, 2016). The DMP also foresees additional financial incentives for providers (mainly GPs) to deliver evidence-based care.

Payment experimentation accompanied by additional health reforms

In France and Germany, the introduction of add-on payments was part of broader health reforms which contributed to the ease of their implementation. In France, the implementation of the ENMR complemented other health policy reforms such as the introduction of the P4P scheme CAPI/ROSP,² which was introduced around the same time. In Germany, the Cardio-Integral contract is an application of a change in the federal social code allowing selective contracting between individual health insurance funds and individual or groups of health providers for care delivery models across sectors. Insurers and providers can freely negotiate the nature of integrated services and the way they are paid. In both countries, voluntary participation among providers and patients in the new model appears to be another factor contributing to success. Providers have responded favourably to the innovation in both settings. Patients are free to decide whether they want to participate in the Cardio-Integral in Germany. In France, patients automatically benefit from better co-ordination if they choose to consult one of the structures where the ENMR is implemented.

Payments can target provider structures or physicians

In France, until 2014 nearly all multi-disciplinary settings signed up for the co-ordination module of the ENMR payment, and 50% signed up for the new service provisions module. The third module became operational in 2014. The ENMR payment for each structure was calculated separately for each module. Module one (co-ordinating activities) took into account the number of full-time equivalent staff and the number of patients indicating a “médecin traitant”³ (primary physician). For ENMR-module 2 (provision of new services), the number of patients was considered, and for ENMR-module 3 (inter-professional co-operation), the number of nurses (IRDES, 2013). In most cases, these resources were used to pay the time dedicated for co-ordinating services by health professionals, to purchase IT equipment or to strengthen the management of the sites (IRDES, 2014b). With the extension of the ENMR in 2014 and the generalisation of the innovation in 2015, the mode of payment of the ENMR has been modified. For the co-ordination module, required and optional activities have been defined and for both, a fixed and variable bonus payment has been developed. The payment continues to take into account the number of patients but also reflects achievement in improving co-ordination, access of care and the uptake of IT. This refers, for example, to the development of treatment protocols within the structure or the extension of consultation hours. The structure receives 60% of the expected payment as an advance in the spring of the current year with the remaining part being withheld to take into account any possible adjustments in payments.

At its outset, the ENMR was planned to reward performance and not structural features. Initially, performance per group practice should have been measured on the basis of a number of indicators covering the dimensions quality of care, co-ordination and efficient prescription. However, the idea to link ENMR payments to performance was dropped for practical reasons, principally measurement and reporting problems.

In the German Cardio-Integral, programme-specific tariffs and activities are negotiated between insurers and participating providers. Add-on payments for the Cardio-Integral

programme are available to GPs for regular check-ups, monitoring tasks, and preparing patients for an invasive intervention (EUR 20-40). Specialists receive add-on payments for patient enrollment and for co-ordinating with GPs and invasive specialists (EUR 20-80). Depending on the service bonus payments can be made quarterly, bi-annually or annually.

In both countries, add-on payments represent additional sources of revenue for providers and are not a mere reallocation of existing funds. This appears to be one factor in the overall support of providers to this innovation, although the available payments account for 5% or less of total provider income. In the case of Cardio-Integral in Germany, the financial incentive has been identified as the main motivation for specialists to join the programme (Werblow and Karmann, 2012). Both payment innovations are associated with additional administrative work for health providers, but the additional administration burden of these innovations for participating health care providers is relatively small compared to more advanced payment reforms such as P4P, bundled or population-based payments.

Add-on payment for co-ordination are easy to implement but limited in scope

Overall, add-on payments for co-ordination are relatively easy to implement and generally require fewer IT investments and data exchanges compared to the more sophisticated payment innovations where payments rely on the measurement of patient metrics. Incremental changes within the general payment structure are likely to face less provider resistance than more thorough payment reforms where financial consequences for providers are more difficult to anticipate. In France and Germany, providers supported the introduction of add-on payments. The administrative burden of these innovations can be expected to be comparably small. The scope of these incentives is limited as they focus on the improvement of co-operation of health professionals within and across provider settings. This approach seems to support the provision of seamless care and enhance care quality, but unlike in many P4P schemes, which usually include a broad suite of more output-oriented indicators, the focus of the add-ons for co-ordination remains on incentivising specific behaviours at specific points of the care pathway.

Similar incentives exist also in other countries (The Commonwealth Fund, 2015). To promote care integration and care provision from single practices to group practices consisting of multi-disciplinary teams, some Italian regions pay GPs an add-on to the regular capitated amounts. They are expected to collaborate with specialists, nurses and social workers. In Australia, there are additional incentive payments targeted at practice nurses for co-ordinating activities.

2.3. Add-on payments to reward quality and outcomes

Add-on payments which reward quality and performance, known as P4P, also sit alongside existing payments systems. Unlike add-on payments for co-ordination, which can be applied ex ante to provision of services and/or are automatically applied to certain processes, P4P payments are applied ex post. They are allocated after providers have reported on the required indicators and outcomes, and are deemed to have met the required targets or thresholds. They are focussed on the degree of achievement of specific defined objectives by providers or practitioners. P4P has emerged as one potential lever to address some of the shortcomings of traditional payments of FFS, capitation, and salary. P4P is typically an add-on payment which promotes evidence-based and preventive services that are linked to specific “targets”.

Add-on P4P payments are widespread across OECD countries, and beyond. In 2012, nearly two-thirds of OECD countries reported having at least one P4P scheme in place (OECD, 2014). The popularity of P4P schemes also appears to be increasing; the number of countries reporting such schemes also rose between 2008 and 2012. Based on responses for the OECD Health Systems Characteristics Surveys (2008 and 2012), the largest number of P4P programmes are found in primary care, but P4P are also spreading to specialists and acute hospitals. Between the 2008 and 2012 Health Systems Characteristics Surveys, three P4P schemes were introduced in primary care (Korea, Mexico, Netherlands), three to specialist care (France, Korea, Netherlands), and seven to acute care (Australia, France, Korea, New Zealand, Portugal, Spain, Sweden) (OECD Health Systems Characteristics Survey, 2012; OECD, 2014; Paris et al., 2010). Beyond this, performance-based payment is also being introduced in more diverse care settings, for example long-term care in the United States (CMS, 2015) and public health and prevention outside of GP practices such as for delivery of vaccination services or smoking cessation in pharmacies in the United Kingdom (see Box 2.1). Pharmacy services and their payment arrangements are also evolving in Australia. The Pharmacy Trial Programme will expand the role of community pharmacies in the delivery of primary health care services to collaborate with GPs and other practitioners to improve clinical outcomes of patients (Department of Health, 2016b). The design of the trial programmes and associated payment arrangement will be primarily developed by the organisations putting forward the trial idea, as well as expert advisory groups.

Box 2.1. Performance-based payment incentives for smoking cessation programmes in England

England has been developing ways to apply performance incentives to broader parts of the health service, including developing “payment-by-results” contracts for smoking cessation programmes in a series of pilots from 2010. The objective of this approach was to increase the uptake of high-quality smoking cessation services, and to encourage stop-smoking services to increase their supply of services. Contracts were made with NHS providers, third sector charity and private providers (e.g. pharmacies), for services including assessment, counselling, and follow-up.

The design of the payment incentive varies slightly between schemes and contracts, but the overriding principle is that providers receive an initial payment for the service, followed by further payment provided that the client has not resumed smoking within a set follow-up period.

In one scheme, a bonus payment of GBP 30.50 was made for each new client accessing the service who has their smoking status recorded four weeks after their “quit date” (regardless of whether the person has quit smoking or not), and a further GBP 30 bonus for every person who has quit after four weeks, verified with a carbon monoxide (CO) monitor. An additional bonus of GBP 50 is made for every person who is still not smoking after 12 weeks. A different scheme worked on a very similar basis, with a slightly different bonus structure, and also offered an enhanced tariff for a target population (in this case, identified hard to reach groups including black and minority ethnicities, and lower socioeconomic groups).

A full evaluation has not yet been published, but preliminary results suggest some positive results, both in terms of quit rate and rate at which CO and quit status is recorded. A cluster controlled study found positive results also, suggesting that payment scheme has helped improve the effectiveness and supply of NHS stop smoking services, having incentivised specific clinical outcomes and contributed towards attracting new service providers.

Source: McLeod et al. (2015), Department of Health (2016a).

In OECD countries, P4P schemes are most common in primary care (14 countries) followed by inpatient care (11 countries) and then outpatient specialist care (seven countries) (see Tables 2.2 and 2.3). In primary care, bonuses are paid most frequently for

the achievement of targets relating to preventive care and the management of chronic diseases, less often for the uptake of IT initiatives, patient satisfaction or efficient care provision (e.g. share of generic medicines prescribed). In the majority of countries, bonus payments are made to the individuals based on the achievement of absolute targets. In hospitals, P4P targets relate most commonly to patient experience, clinical outcomes and the use of appropriate processes. In most OECD countries, hospital performance is measured either as absolute targets or observed changes over time.

Table 2.2. Payment for performance activities in primary care and outpatient specialist care

Participation of health providers	Country	P4P target typically relates to						Bonus payment is made to		Performance measurement		
		Preventive care	Management chronic diseases	Uptake of IT services	Patient satisfaction	Efficiency	Other	Individual	Organisation	Absolute	Change over time	Relative ranking
		Primary care										
Mandatory participation	Chile	•	•	○	•	•	•	•	○	•	○	○
	Korea	○	•	○	○	•	○	•	○	○	•	•
	Spain	•	•	○	○	○	○	•	○	•	•	○
	Sweden	•	•	•	•	•	○	○	•	•	•	•
	Turkey	•	○	○	○	•	•	•	•	•	○	○
Voluntary participation with conditions	Australia	•	•	•	○	○	•	•	•	•	○	○
	France	•	•	•	○	•	•	•	○	○	•	○
	Mexico	•	•	○	•	•	•	•	○	○	○	•
	New Zealand	•	•	○	○	○	○	○	•	•	•	○
	Portugal	•	•	○	•	•	○	•	○	•	○	○
	United States	•	•	•	•	•	○	•	•	•	•	•
Voluntary open participation	Czech Republic	•	○	○	○	○	•	•	○	○	○	•
	Hungary	•	•	○	○	•	○	○	•	•	○	○
	United Kingdom	•	•	○	•	○	○	○	•	•	○	○
		Outpatient specialist care										
Mandatory participation	Chile	•	•	○	○	○	•	•	○	•	○	○
	Korea	○	•	○	○	○	○	•	○	○	•	•
	Spain	○	•	•	•	•	○	•	○	•	•	○
Voluntary participation with conditions	France	○	○	•	○	○	•	•	○	○	•	○
	United States	•	•	•	•	•	○	•	•	•	•	•

Note: Estonia and the Netherlands also use P4P in primary care but did not provide additional information. The Netherlands and the United Kingdom also use P4P for outpatient specialist care but did not provide additional information.

Source: Questions 37 and 38 from the OECD Health Systems Characteristics Survey 2012, and OECD Secretariat's estimates.

Table 2.3. Payment for performance activities in inpatient care

Participation of health providers	Country	P4P target typically relate to					Performance measurement		
		Clinical outcomes of care	Use of appropriate processes	Patient satisfaction	Patient experience	Other	Absolute measurement	Change over time	Relative ranking
Mandatory participation	Australia	○	○	○	•	○	○	•	○
	France	○	○	○	○	•	○	○	○
	Korea	•	•	○	○	○	•	•	•
	Spain	•	•	○	•	○	•	•	○
	Sweden	•	•	○	•	○	•	•	•
	Portugal	•	•	•	•	○	•	○	○
	Turkey	○	•	○	•	○	•	○	○
Voluntary open participation	Luxembourg	○	○	○	○	•	•	○	○
	United Kingdom	•	•	•	•	○	•	•	○
Mandatory and voluntary	United States	•	•	•	•	○	•	•	•

Note: Netherlands has a hospital P4P programme, but no additional information was provided. The category "other" refers to hospital management in Luxembourg and the efficient use of medication in France. Patient satisfaction refers to subjective appreciation on the quality of care and accommodation. Patient experience refers to waiting times, information given by medical staff, etc.

Source: Questions 39 from the OECD Health Systems Characteristics Survey 2012 and OECD Secretariat's estimates.

This chapter does not give a full account of P4P programmes across OECD countries, as a comprehensive review can be found in the recent joint OECD publication with the European Observatory and the French Health Insurance Fund (CNAMTS) (see Cashin et al., 2014). Instead, this chapter focusses on new features of more recent P4P schemes, and reflects on the relationship between P4P schemes and other payments systems, both innovative and traditional.

Different approaches to paying for improvements in the care of diabetic patients are also considered, looking at P4P schemes in Australia, Germany and France. This special focus on diabetes is introduced to draw out first, how highly prevalent chronic diseases are an important focus of P4P add-ons, secondly to demonstrate how there are quite significant differences between P4P programmes even when applied to the same condition and expected treatment approach, and thirdly to present in more detail the construction of incentives targeted at one specific area of health care performance.

Reforming GP practice in Ontario, Canada and diversifying payment methods

In Ontario, Canada, P4P was introduced to primary care practitioners as part of a wider diversification of payment mechanisms. In the late 1990s, Ontario inaugurated “Primary Care Reform” characterised by the sequential introduction of a “menu” of payment models replacing traditional FFS payment for family physicians. This reform was brought about by, in part, concerns regarding a shortage of family physicians and about access to physicians during evenings and weekends. Improving health care quality, for example increasing the payment system’s support for preventative health care and chronic disease management, was also an important goal. The FFS payment system was seen as contributing towards an excessive focus on volume-based acute care, and to lack incentives encouraging both physician and inter-professional teams (Kantarevic and Kralj, 2015).

Over time, the reform introduced a menu of blended primary care payment models, employing various combinations of FFS, capitation, P4P in the form of incentives and bonuses, and/or salary. Physicians were given a choice of payment model. These newly introduced models required or encouraged patient enrollment (sometimes called rostering) with GPs. For most models, physicians practiced in groups of at least three and shared records but need not be co-located. Higher level objectives of the reform included improved access, quality and continuity of care (Sweetman and Buckley, 2014). The take-up of these new contracts has been significant: while in 1998, almost 100% of primary care physicians were paid by traditional FFS; this proportion had dropped to approximately 37% by 2009/10, and further still to approximately 30% by 2013.

The introduction of new physician payment models in Ontario was integrated with many other primary care initiatives, such as primary care models involving allied health professionals (e.g., the “Family Health Team” interdisciplinary model and Nurse Practitioner-led clinics), educational campaigns on when it is appropriate to go to an Emergency Department, when and where to seek urgent (but not emergency) care, and initiatives aimed at helping patients to find a family doctor if they did not have one (Health Care Connect programme) (Sweetman and Buckley, 2016).

The new voluntary payment schemes introduced following the Primary Care Reform target all primary care physicians practicing family medicine/primary health care, and family physicians can join at any time (with some administrative delays). The most common models, and their basic payment composition, are listed below. For instance, Family Health Organizations (blended capitation, FFS and P4P) and Family Health Groups (blended FFS and P4P) account for about 55% of primary care physicians (Table 2.4).

Table 2.4. Payment models for primary care physicians in Ontario, Canada, 2009/10

Payment model in Ontario	Percentage of primary care physicians participating	Primary method of remuneration
Traditional Fee-for-service - FFS	37%	~85% FFS (rest: salary/capitation/benefits and premiums/fees)
Family Health Organization - FHO	29%	~70% salary/capitation/benefits (rest: FFS, premiums/fees, bonus and flowthrough)
Family Health Group - FHG	26%	~80% FFS (rest: salary/capitation/benefits, premiums/fees and bonus)
Comprehensive Care Model - CCM	3%	~75% FFS (rest: salary/capitation/benefits, premiums/fees and bonus)
Family Health Network - FHN	3%	~65% salary/capitation/benefits (rest: FFS, premiums/fees, bonus and flowthrough)
Rural and Northern Physician Group Agreement - RNPGA	1%	~75% salary/capitation/benefits (rest: FFS, premiums/fees, bonus)

Note: “Flow through” indicates funds that pass through the practice to others who receive final payment.

Source: Henry, D. et al. (2012), “Payments to Ontario Physicians from Ministry of Health and Long-Term Care Sources 1992/93 to 2009/10 – ICES Investigative Report”, ICES, Toronto, <http://www.ices.on.ca/~media/Files/Atlases-Reports/2012/Payments-to-Ontario-physicians-from-MOHLTC-sources/Full%20report.ashx>.

All primary care incentives/bonuses in Ontario are process-based, and none are outcome-based. Additionally, some incentives are paid periodically (e.g., once a year) while others are paid every time a specific service is provided. Eligibility for some incentives is patient-based (i.e., the physician receives a payment for having provided a specific service to an individual patient), while for other incentives, eligibility is based on performance across all registered patients practice-wide (i.e., the physician receives a payment for having reached a pre-defined target level based on a number of services, a number of patients or a percentage of eligible patients who received the service). The various models differ in their eligibility for incentives.

Across the different models, the incentives include the following:

- Bonus for smoking cessation counselling;
- Bonuses for toddler immunisations, Pap smears, mammograms, influenza immunisations for seniors, and fecal occult blood test (FOBT). Payments are made yearly, and their actual amount depends on the level reached for the performance measure. For instance, payment thresholds are based on the percentage of the eligible population who received the service: e.g., variable payments dependent on the total percentage of rostered seniors who have received flu immunisation, with a higher percentage of immunisations leading to a higher payment;
- Chronic disease management: payment of CAD 60 per year for managing a patient’s diabetes by monitoring levels using a tracking sheet (above and beyond payment for individual services);
- Annual payment for enrolling a fixed number of patients with serious mental illnesses, which can be cumulative if patients with a serious mental illness are already enrolled;

- Special fixed payments for providing services in hospitals and, long-term care homes. Also, special payment for providing particular services such as prenatal care, home visits, labour and deliveries, palliative care, and a minimum number of services from a list of office-based minor surgical procedures. For instance, payment of graduated thresholds between CAD 1 500 and CAD 8 000 for home visits.

It is largely unknown which of these combinations of the payment scheme is delivering the best outcomes as only a few evaluations have been completed at this point. Moreover, it is not clear that any single model dominates in all contexts. A 2013 evaluation by Li et al. suggested that P4P incentives led to only a modest improvement in performance with respect to Pap smears, mammograms, senior flu shots, and colorectal cancer screenings, and no improvement with respect to toddler immunisations. In contrast, Kantarevic and Kralj (2013), and Kiran et al. (2014), find evidence of improved primary care diabetes management. Furthermore the Ontario Government is considering other potential changes to primary care reform including payment reform but the GPs are resisting further changes. It remains to be seen whether further reform will be implemented (Marchildon and Hutchison, 2016).

P4P in Portugal led to building new primary care models of delivery

In Portugal, satisfaction with primary care was low among stakeholders, and there was particular policy interest in improving productivity and quality at the system level, including through the strengthening of primary care. The traditional working style in primary care is of GPs operating relatively independently, even when GPs are co-located in a single physical site (the traditional Primary Health Care Centres). Moving away from solo practices, a new model of primary care centre was created in 2006 – a Family Health Unit (FHU). FHUs are made up of three to eight GPs, the same number of primary care nurses, and a variable number of administrative staff, who were invited to volunteer to form self-selecting groups who deliver primary care together to patients registered with the FHU. FHUs were intended to encourage more multidisciplinary team working, and collaboration between doctors, nurses and administrative staff (Lourenço, 2016).

The average FHU has around 12 000 patients, seven doctors and 20 professionals in total (OECD, 2015). These teams have functional and technical autonomy and a payment system sensitive to performance that is designed to reward productivity, accessibility and quality, with core indicators used to measure performance and tied to the payment system.

Started as a pilot in 2005, the number of FHUs has been increasing steadily since their introduction. FHUs now cover more than 50% of the population, and all patients are eligible to register with a FHU. The FHUs cover primary care services, including services such as nursing services, home visits, etc. Provider participation is voluntary with set criteria on the composition and number of health professionals in each unit. The government is the payer via regional primary care organisations (ACES).

There are two operational models of FHU (Models A and B), with slightly distinct organisational structures and payment methods. Notably, only Model B FHUs have an individual P4P component in their payment method. Model A and Model B FHUs can also access some add-on payments for additional services and a structural P4P component for the group of providers used for quality improvement (e.g. training, equipment, infrastructure, vehicles).

All FHUs start as Model A FHUs, and must prove that they are meeting specific quality, clinical, and functional targets before they are allowed to apply to transition to

Model B. In addition to Models A and B FHUs, a third model – Model C – was developed principally as an avenue for private sector providers (for profit as well as not-for-profit) to participate in the FHU scheme. At the time of writing, no Model C units had been created.

- Model A, 212 FHUs in 2014 (OECD, 2015): All of the Model A FHU's personnel payment is governed by the public administration's legislation for the correspondent sector and profession (e.g. legislation affecting GP salary, primary care nurse salary). FHUs can also negotiate with the contracting agency (typically the ACES/Region) to agree a certain set of objectives or deliverables, the achievement of which leads to additional financing for the FHU. These objectives typically include additional services that the unit will provide, or facilities' improvements (e.g. adding disabled access facilities), and do not include individual reward for performance on indicators.
- Model B, 181 FHUs in 2014 (OECD, 2015): FHUs can progress from Model A to Model B, with the approval of the relevant ACES/Region. The payment process for Model B FHUs has two components: a fixed component and a variable one. The fixed component corresponds to the legislated payment. The variable component, which is one of the main distinctions between Models A and B, combines all supplementary payments that the FHU can receive based on the health professional's performance, and the unit's results, across a selection of indicators.

Staff working in the traditional primary care clinics (Primary Health Care Centres) in Portugal, which still cover close to 50% of the population, are salaried. In Model A, payment remains mostly by salary, but a financial incentive component is included for the whole FHU, which is usually an add-on payment/grant for accomplishing 22 key performance indicators revised every three years from a comprehensive set of more than 100 quality and efficiency indicators (Administração Central do Sistema de Saúde, 2015). In addition to Model A features, FHU Model B staff payment is composed of a smaller fixed salary fraction plus a series of supplements: a capitation-based payment (up to a defined ceiling); a complement for the provision of specific negotiated and contracted services; a FFS component for house calls; and a P4P (da Silva Fialho et al., 2008). In Model B FHUs, the performance-based payment component can reach up to 30% of total physician payment and up to 10% for nurses and is based on the achievement of individual and practice targets.

P4P in Norway aims to improve quality and outcomes in the hospital sector

Norway has introduced a P4P component to payment in Norway's four hospital regions called Quality Based Financing (QBF) (Beck Olsen and Brandborg, 2016). The introduction of QBF came as part of a broader push towards developing a more patient-centered health care service, with increased emphasis on systematic quality improvement, patient safety and reduction in adverse events. Along with QBF, the following elements (amongst others) were proposed: more active patient and user role; greater transparency around quality and patient safety; more systematic testing of new treatment methods; and the promotion of better quality through knowledge and innovation. The Directorate of Health, hospital regions, Norwegian Medical Association, Norwegian Nurses Organisation and the Norwegian Federation of Organisations of Disabled People were key stakeholders involved in designing the P4P policy.

Norway is divided into four health regions, which fund hospitals locally. These four hospital regions are commissioning and governing bodies which include all public secondary care providers and some private hospitals. Each year, funding is distributed to the four health regions by central Norwegian authorities under the Regional Health

Authority (RHA) grant. Before 2014, hospitals were financed through a mix of block grants (capitation-based – adjusted for age, several health indicators, and social indicators, and cost-adjusted for the region), and activity-based financing (DRGs) which represented close to 25% of the global budget. The new payment scheme based on quality, supplements these existing financing systems. The QBF component represents 0.5% (roughly NOK 500 million) of total funding.

The QBF component is a reflection of individual hospital's performance on the selected indicators, but the income is initially distributed at the health region level. The QBF scheme uses a point system where each RHA is attributed points based on how well hospitals perform on a set of 33 quality indicators, drawn from the National Quality Indicator System (NQIS) which was established in 2012, and a set of performance criteria. Using the NQIS, which was already being used in hospitals, meant avoiding introducing additional bureaucracy as part of the scheme. After a review, some NQIS indicators were excluded due to uncertainty in reporting quality or because the performance on the indicators was considered to be affected by factors beyond the control of the secondary care provider.

The scheme is based on outcome, process and patient satisfaction indicators. The indicators measuring patient satisfaction come from the National Patient Satisfaction Survey which is developed by and conducted by the Norwegian Knowledge Centre. Each category of indicator is weighted to reflect their relative importance (50 000 points for outcome indicators; 20 000 points for process indicators; 30 000 points for patient satisfaction). Four different criteria are used to measure and reward performance: reporting quality, minimum performance level, best performance and best relative improvement. A mix of relative performance and absolute targets are used. Absolute targets have been set in a number of areas such as cancer survival, thrombolysis and obstetrics. For instance, for the indicator "Perineal tear 3rd and 4th degree", the target was 2.3% of all vaginal births in 2015. A region reporting a higher rate will not earn points for this indicator.

Due to a time lag in the reporting and quality control of the indicators, the RHAs receive the payment two years after the activities on which the performance measurements are based. This means for example that activities that were carried out in 2012 are rewarded financially through the P4P scheme in 2014. The level of payment in the P4P scheme is set deliberately low at the start of the programme to avoid gaming and crowding out intrinsic motivation.

Since the scheme is a pilot, the government requested that an evaluation be carried out. The results of the evaluation will aid the government in determining whether the scheme will be implemented on a more permanent basis after 2016. If it is to be continued, the results from the evaluation will contribute to an adjustment of the scheme.

Focus on diabetes: Different approaches are taken in designing P4P to address quality of care for diabetes patients

Even if policy objectives are similar and the targeted disease is the same, the design of P4P programmes differs between countries and between care settings. This "special focus" on diabetes is introduced to draw out first, how highly prevalent chronic diseases are an important focus of P4P add-ons, and second, to demonstrate how there are quite significant differences between P4P programmes even when applied to the same condition and expected treatment approach, and third to present in more detail the construction of incentives targeted at one specific area of health care performance. Australia, France and Germany have introduced modifications to their predominantly FFS payment system in the last decade, particularly to facilitate the implementation of care programmes conceived

around patients with diabetes. All three countries have opted to use add-on payments to reward performance of health professionals – unlike the Netherlands which moved toward bundled payments for this condition (see Chapter 3 of this publication) – to improve quality of diabetes care.

In the case of Australia and France, indicators related to diabetic care for patients with type 2 diabetes were introduced as part of broader P4P scheme; in Germany, DMPs targeted at types 1 and 2 diabetes were developed. These schemes all seek to push providers towards delivering high-quality diabetic care. This is done either by identifying and directly rewarding the activities that should be performed or by specifying and rewarding the desired outcomes. The activities set out in the programmes and their outcomes were defined by national authorities and drawn from national clinical guidelines for the treatment of diabetes.

In all three countries, incentive payments for the treatment of type 2 diabetes patients are typically directed at GPs, although specialists can be involved with some standard check-ups (e.g. ophthalmologists for eye examination), and in cases of complications (e.g. cardiologists or nephrologists). The design of the P4P framework in Australia, France and Germany, however, differs.

In Australia, bonus payments for diabetic care are one incentive area of the Practice Incentive Program (PIP). The PIP was implemented in 1998, initially focusing on 13 incentive areas which can be divided into three streams: quality of care, capacity and rural support. GPs need to fulfil certain requirements to participate in the PIP.

Under the PIP, three types of additional payments can be received by GPs for diabetic care:

- A sign-on bonus (a one-off payment for practices which sign up for the PIP Diabetes initiative);
- A so-called “Outcome” payment (an annual bonus payment if 50% of all patients with diabetes registered at the practice complete a cycle of care);
- Service Incentive Payment (an annual bonus payment for each completed cycle of care).

Whereas the sign-on payment and the outcome payment are made at the practice level, the service incentive payment (SIP) is made to the individual GP. In financial terms, the SIP is the most important bonus. It can be claimed by GPs for each cycle of care completed for patients with diagnosed diabetes. A cycle needs to be completed over a period of at least 11 months and up to 13 months. The SIP defines minimum requirements for 13 activities that need to be met under a cycle of care, for example measuring blood pressure at least twice over the cycle. The minimum required services can be provided by the GP himself or delegated to a practice nurse or other health professionals. The bonus is paid in addition to the consultation fee that the GP charges (Wong et al., 2016; Department of Human Services, 2013).

For insulin-dependent patients and patients with abnormal review findings, complications, and/or co-morbidities, additional levels of care are required. In general, the minimum requirements are based on the guidelines on diabetes management in general practice issued by the Royal Australian College of General Practitioners (RACGP) and Diabetes Australia.

In France, a number of different programmes have been established to improve diabetic care outcomes. Diabetes (types 1 and 2) is one of 30 listed long-term conditions (ALD). The physicians selected as the “médecin traitant” receives an additional annual payment for patients diagnosed with an ALD. This payment covers the care co-ordination required to implement specific care protocols. The care protocol of a patient lists all medical and paramedical services required for a comprehensive treatment, and automatically identifies the services for which patients are exempt from co-payment. In nearly all cases, this co-ordinating role is fulfilled by GPs.

A P4P scheme, initially introduced in 2009 as the *Contrat d’Amélioration des Pratiques Individuelles* (CAPI, Contract to improve individual practices), and now known as the *Rémunération sur Objectifs de Santé Publique* (ROSP, Remuneration of public health objectives) incentivises improvements in quality of care and more efficient prescribing. Currently, the ROSP includes 29 indicators from four different areas: organisation of practice, chronic conditions, prevention and efficiency. Eight of the indicators measuring care for chronic conditions relate to diabetic patients. The calculation of the performance payment for each physician is rather complex taking into account the doctor’s individual performance, the average performance of all doctor’s per indicator and the target objectives which are set annually by the Haute Autorité de Santé (HAS, the public entity responsible for setting health care quality standards). The indicators are a mix of measures for procedural quality (e.g. number of HbA1c tests) and intermediate outcomes (e.g. share of diabetics below HbA1c thresholds). They also include cholesterol thresholds and indicators to measure the intake of statins and aspirin among diabetics at high risk of developing cardiovascular diseases (CNAMTS, 2014; Cashin et al., 2014). The bonus payments GPs can generate through the ROSP accounted for 4.1% of total GP payment in 2014 (Rapport de la Commission des comptes de la sécurité sociale, 2015). In 2015, the average bonus was around EUR 6 800 (CNAMTS, 2016).

An additional service for diabetics called “SOPHIA” was been put in place in 2009. SOPHIA provides diabetes counselling and education by nurses over the phone employed by the statutory health insurance. GPs are also financially rewarded for submitting a completed medical questionnaire to health insurance funds for each patient registering for this service.

In Germany, improved diabetes care is incentivised through some of the DMPs which have been gradually introduced since 2002. The aim of the introduction of the DMPs was to improve the care process and the quality of medical care for people with chronic conditions. Currently, DMPs exist for six conditions including diabetes type 1, diabetes type 2, breast cancer, chronic obstructive pulmonary disease (COPD), asthma and coronary heart disease. DMPs are developed by the statutory health insurance funds and the regional organisations of statutory health insurance physicians following the guidelines set out by the Federal Joint Committee (G-BA) and need to be accredited by the Federal Insurance Agency (BVA). The type 2 diabetes DMP is by far the biggest DMP with 1 717 accredited programmes/contracts and nearly four million enrolled diabetic patients (BVA, 2015). The high number of DMP contracts is due to the high number of Health Insurance Funds and because DMP contracting is predominantly a regional matter. The participation of physicians and patients is voluntary.

Overall, there appears to be little variation with regards to the aim and content between the numerous DMP contracts within one clinical area. In practice, the DMP contracts are negotiated between Statutory Health Insurance Funds and regional associations of SHI-affiliated doctors and define the tasks and responsibilities of physicians as well as stipulate the additional payments they can receive. The nature and the tariffs of these additional payments ultimately depend on the specific diabetes DMP contract but generally

GPs are paid for documentation and co-ordination of care, training and patient education. Physicians are only rewarded for fully documented patient files. This requires them to perform or initiate a number of services quarterly or annually.

In some cases, the DMP contracts can also stipulate a quality-related bonus such as in a DMP contract for the state of Thuringia where GPs can receive an additional payment if the share of diabetic patients that meet the Hb1Ac levels in their practice is above the benchmark value of their peers in the region.

2.4. Assessment of policy impact of add-on payments

This section assesses the payment reform in select countries by looking at whether policy objectives were met (such as achieving quality gains and/or savings) and highlights the conditions for implementation that either encouraged or hindered implementation (such as stakeholder engagement, administrative burden). This section follows the analytical framework applied to payment innovations throughout this report (Table 2.5), as a prism through which to assess the impact of the payment reform against the intended policy objective, across dimensions of quality, savings and unintended consequences, and considering conditions for implementation of the payment reform.

Add-on payments have been used widely, and are in place in many countries and across numerous domains of care. Available evidence suggests that add-on payments to promote care co-ordination have been relatively simple to implement, generally require modest IT requirements and data exchanges compared to the more sophisticated payment innovations. The add-on payments in France and Germany (discussed in Section 2.2) seem to show some positive results for selected quality indicators, though it can be difficult to separate their contribution to wider policy objectives, as well as to disentangle their “own” effects from the influence of other factors.

P4P for quality of care paid for ex post is increasingly being used in many countries, and across a growing diversity of settings. There have been recent shifts towards using outcome information and patient experience for payment, and countries with richer data infrastructures have greater scope to develop more sophisticated indicators. P4P programmes are commonly focussed on improving quality, and to some extent efficiency. P4P programmes have been associated with improvements in quality indicators, but it is yet unclear to what extent they are effective in improving health outcomes. Evidence of the impact of P4P programmes on costs is again limited and also depends on how the programmes are set up, notably whether they are conceived as budget neutral or whether new funds are made available. Hence, for some programmes there have been additional costs associated with implementing P4P. Despite the limited evidence on impact of P4Ps on health outcomes, efficiency and cost, their continued popularity among OECD countries may also reflect interest among policy makers to consider the broader health system effects such as an improvement in health data infrastructure, data availability or a greater focus on quality.

Table 2.5. Assessment of payment reform in select OECD countries

	Germany	France	Ontario, Canada	Portugal	Norway
Type and name of payment reform	Add-on co-ordination (Cardio-Integral)	Add-on co-ordination (ENMR)	Add-on payment (P4P) for some GP practices	Add-on payment (P4P) in primary care	Add-on payment (P4P) in hospitals
Assessment of policy impact					
Achievement in terms of policy objective					
Quality	+	+	+/-	+	evaluation due later
Savings	+	+		+	evaluation due later
Unintended consequences					
Conditions for implementation					
Payment reform embedded in larger policy reform	+	+	+	+	-
Stakeholder participation in policy development (e.g. actively consulted in establishment of law/scheme)			+	+	+
Payer participation	voluntary for SHI funds	mandatory payments by SHI	GPs choose from variety of organising models, some including P4P voluntary	dependent on provider take up	applied to all hospital regions
Provider participation	voluntary	voluntary		voluntary	mandatory
Administrative burden					
Data collection and use			existing data	new data and existing	existing data
How are tariffs set	negotiated by SHI funds and providers	individual tariff depend on staff size of setting and number of patients, the total amount available for ENMR set at national level	add-on payment for which eligibility varies between GP practice model	add-on payment based on nationally established indicators, and negotiated bonuses with local commissioner	around 0.5% of the block grant budget allocated to the (4) regional hospital associations is allocated through the P4P scheme
Independent evaluation of reform	+	+	-	+/-	- (forthcoming)

Source: Authors' compilation.

No clear breakthrough in performance improvement following the introduction of a P4P scheme can be identified

The popularity of P4P schemes in OECD countries continues to grow in primary care, specialist care as well as in hospitals, although there is still a scarcity of clear evidence on the success – or otherwise – of P4P programmes. Systematic reviews of available evidence tentatively suggest a positive impact on performance, but evidence on the impact of P4P on health outcomes remains inconclusive and limited. While improvements on some indicators in some P4P schemes are found, no clear “breakthrough” in performance improvement can be clearly linked to the introduction of a P4P scheme.

In Portugal, the reform to primary care, in which a P4P component was introduced, has shown improvements in care quality, patient and practitioner satisfaction (Lourenço, 2016; Lopes Ferreira and Raposo, 2015) but it is too early to determine whether these short-term improvements are sustainable in the long run (Perelman and Lourenço, 2015). The share of hypertensive patients with controlled blood pressure is significantly higher in FHU models A (53.8%) and B (where there is the greatest P4P component) (65.2%) than in traditional health care centres (37.8%). The same is true for controlled diabetics (Lourenço, 2016) (see Table 2.6).

In 2015, a EUROPEP⁴ survey, which measures patient satisfaction, was carried out in a sample of primary care institutions in Portugal (Lopes Ferreira and Raposo, 2015). The survey covered traditional primary health care centres, FHU A and FHU B. Results showed that satisfaction with FHUs is good: on average, 76.6% of users of traditional centres would recommend the health facility to a friend, compared to 85.8% of FHU A users and 91.3% of FHU B users. The global level of patient satisfaction was highest for FHU B (79.5% of patients), followed by FHU Model A (76.8%) and traditional primary care centres (72.7%).

Table 2.6. Comparison of outcomes between traditional primary health care centres and Family Health Units in Portugal, 2013

	Traditional primary health care centres	FHU Model A	FHU Model B (with P4P component)
Proportion of controlled diabetics	41.5%	61.6%	70.3%
Proportion of hypertensive patients with controlled blood pressure	37.8%	53.8%	65.2%

FHU: Family Health Unit.

Source: Lourenço (2016).

Nonetheless, in Portugal as in other voluntary P4P schemes, the influence of self-selection should not be discounted. It is difficult to control for the fact that those providers who sign up for a voluntary scheme may already be performing better, and simply get paid for what they are doing anyway, and would show better performance on selected indicators regardless of whether there was a payment incentive. This effect could be more pronounced in the case of Portugal, where providers are expected to demonstrate a certain level of achievement on performance indicators before they can progress from Model A to Model B.

In Ontario, Canada P4P appears to be a popular complementary payment element for GP practices where it is an aspect of various new payment models. While selection into these models is voluntary, uptake has been good. P4P is normally tied to certain practice and staffing requirements, for instance patient registration goals, minimum staffing levels for group practices, and requirements for after-hours care delivery (Henry et al., 2012).

In Germany, there is some modest positive impact of the diabetes DMP on health care quality in a number of instances showing improved processes of care and better patient outcomes (Cashin et al., 2014). The DMPs were associated with improvement in the implementation of practice guidelines and a reduction of hospitalisation rates and mortality (Miksch et al., 2010; Drabik et al., 2012). Patients participating in the DMPs are more likely to receive structured and co-ordinated care than similar patients not enrolled in a DMP (Szecsenyi et al., 2008). These findings may also partially be explainable by self-selection of patients, with DMPs attracting the more motivated diabetic patients.

In Australia and France, results are mixed. In Australia, evidence is inconclusive as to whether the PIP leads to an increase in diabetic testing. Some positive impact on the completion of treatment cycles could be observed but was not controlled for underlying trends (Australian National Audit Office, 2010). Evaluation of the CAPI in France showed an increase in the number of doctors providing appropriate diabetes management but this difference was not significantly different from increases in the rate of doctors not participating in CAPI. More recent evaluations of the impact of the ROSP (which replaced CAPI) show improvement in the share of controlled diabetics with HbA1c values below 8.5% and also additional progress in relevant process indicators (e.g. the share of diabetic patients with three or four HbA1c test per year) (CNAMTS, 2016). However, given that the ROSP includes nearly all GPs, the influence of any trend effects cannot be distinguished from the impact of the ROSP incentives.

The case studies examined here, taken from Australia, Canada, France, Germany, Norway and Portugal, suggest some possible positive influence of P4P schemes on provider performance, in particular quality of care. However, no clear breakthrough in performance improvement following the introduction of a P4P scheme can be identified. When

improvements in performance on collected indicators have been identified, it has been very difficult to separate out the influence of the change in payment method from other factors, such as the influence of self-selection (in Ontario, Canada and Portugal), underlying trends in improving quality of care (in Australia or France), or indeed changes or improvement to the way that relevant data is recorded and reported.

This finding is consistent with the findings of numerous systematic reviews of P4P programmes. Rosenthal and Frank (2006) conclude that “despite the assertions of its proponents, the empirical foundations of pay for performance in health care are rather weak”, while Christianson et al. (2007) find that the strongest controlled studies provide little evidence that financial incentives improved quality of care. When quality improvements are identified, systematic reviews have, again similar to conclusions from case studies discussed here, found it difficult to disentangle to what degree they can be attributed to the change in payment (Petersen et al., 2006; Christianson et al., 2007). Where some positive outcomes following introduction of P4P have been identified, they have typically been mixed. Results have been found to vary across different areas of performance, for instance with positive results for clinical effectiveness and care equity but apparently less impact on co-ordination or continuity (Van Herck, 2010).

In a review of 12 P4P programmes, amongst them large and well-established programmes such as the United Kingdom’s Quality and Outcomes Framework (QOF), the Australian PIP and French ROSP/CAP, and three programmes from the United States concluded that the impact of P4P has been relatively minimal, even disappointing: “In common with many other authors, we too find that P4P has not produced the direct significant change in performance that many advocates hoped for” (Cashin et al., 2014, p. 15). The authors do find, though, that introduction of P4P programmes has brought some other important system benefits, amongst them clarification of the goals of providers, improved purchasing processes, better measurement of provider activity and performance, and more informed dialogue between purchasers and providers. In the English QOF, one of the most established P4P programmes which is voluntarily applied to GPs working for the NHS, a number of studies show high initial improvements in process indicators after introduction with little change since. Furthermore, little impact on health system performance beyond the immediate GP-provided care was seen, for instance lower hospital admission rates – which might be anticipated with improved primary care management – or an impact on mortality, could not be observed (Eijkenaar et al., 2013).

P4P can be an adaptable and versatile way to target and prioritise quality improvement

One of the strengths of P4P as an add-on payment is its versatility across care settings, with P4P programmes having been introduced to primary, outpatient specialist, and hospital care across a number of OECD countries.

Additionally, the shape of P4P systems is adaptable to system needs and policy priorities – within the constraints of available data. This adaptability has meant that, latterly, patient satisfaction has been introduced to P4P programme indicators in countries where such data is available, including Norway and Portugal. Though P4P programmes have most commonly focussed on intermediate outcome indicators, in Norway where cancer survival indicators for hospital were available and deemed appropriate, these outcome indicators have been used.

P4P programmes can be used to channel existing resources with attention to quality, and need not always demand significant investment of additional resources

Some P4P schemes have been introduced with significant injections of new funds, notably the UK QOF and Turkey’s “Family medicine performance based contracting” scheme (Cashin et al., 2014). Others, including in Canada, Norway and Portugal, have for the most part sought to redistribute or redirect existing resources. In Portugal, the organisational and payment reforms which introduced P4P to primary care appear to have shown quality improvements, and some cost saving as unit costs per medical consultations are lower than in traditional health centres (Lourenço, 2016). Some schemes have a cap on the amount of performance-based rewards available, for instance in Norway where a fixed amount is distributed unequally between the four hospital regions based on their relative performance. In Ontario, Canada an estimated CAD 1.5 billion was invested in primary care, much of this devoted to developing alternative primary care models and alternative modes of payment (Sweetman and Buckley, 2014). Payment to physicians has been increasing at a faster rate than inflation, and much more rapidly than in the non-health workforce (Henry et al., 2012; Leonard and Sweetman, 2014).

In a system like the United Kingdom’s QOF, where all performance points that are achieved are rewarded, performance-based payment is harder to anticipate and can be variable. Nonetheless, investment in design, introduction, and operation of P4P schemes is likely to incur at least initial additional costs. P4Ps schemes are typically associated with higher costs for the health systems including costs for the incentive, for administration and data verification as well as governance (Cashin et al., 2014).

That being said, in some instances improved care processes and efficiency gains led to system-wide savings such as the German DMP for chronic patients (including diabetes patients) in primary care and the Maryland Hospital Acquired Conditions Programme focussing on avoiding complications in the hospital sector (Cashin et al., 2014). Nonetheless, to date there is no clear evidence of P4P programmes that have been cost saving but it has to be borne in mind that in many countries the introduction of P4Ps aim at quality improvements where the generation of savings is a secondary objective at most.

Even when results suggest that P4P schemes are effective it is difficult to attribute successes to payment reform alone

Given a shortage of comprehensive evaluations of P4P schemes, it remains difficult to establish both to what extent P4P schemes are effective at improving quality of care, and to what extent they represent value for money.

The impact of P4P is very difficult to disentangle from other changes likely to influence the quality of care. In instances where P4P programmes are implemented alongside non-financial incentives such as performance feedback or public reporting, some of the potential performance improvement may be attributable to the alternative incentives (Eijkenaar et al., 2013). In some examples, it appears that other non-financial changes were at least as important as the payment mechanism change. For example, there are notable improvements in the quality of care in the new FHUs in Portugal, where P4P is a significant component of payment, but the payment reform was accompanied by significant organisational change. Indeed in Portugal, while a 2015 patient survey found higher overall levels of satisfaction with the primary care units which included a P4P payment component (FHU Model B), the same survey also showed that larger units showed higher levels of satisfaction regardless of the management model followed, and that the time since the establishment of the unit also

positively influenced satisfaction. Even if areas targeted by P4P are showing improvements, these improvements might need to be seen in context of other broader dimensions, such as organisational change in Portugal and Canada, and a broader reform agenda aimed at improving quality of care in Norway, for example.

2.5. Conditions for the implementation of P4P add-ons across health systems and care settings

Conditions for the implementation of P4P add-ons varied across health systems and care settings, but appear to include some broad pre-requisites for success. While a clear verdict on the overall success or otherwise of P4P programmes is hindered by patchy and incomplete evaluation, features of more successful P4P appear to include the use of measures where there is clear room for providers to improve performance, targeting individual physicians or small groups instead of large groups of providers, and rewarding absolute instead of relative targets (Eijkenaar et al., 2013; Cashin et al., 2014).

Stakeholder participation in the selection of indicators, a robust and sufficiently comprehensive source of data from which to develop indicators appears to have a broadly positive impact on the success of the introduction of P4P programmes. Even when a broad range of indicators are available for use in a P4P programme, it can be a challenge to identify the most effective indicators.

Despite the clear and apparently growing popularity of P4P payments, independent evaluations of reforms are not consistently undertaken; rigorous assessment following the introduction of P4P would help individual countries and systems understand what is working or not, and would contribute towards a deeper understanding of the broader trend.

P4P payments have been embedded in broader reforms to payment and organisation, and can be an important incentive for providers

In Norway, as well as in programmes such as the UK’s QOF for primary care, the ROSEP/CAPI for general practitioners in France, in the schemes introduced in primary care in Australia and New Zealand, and for hospitals in Korea and Maryland, United States (Cashin et al., 2014), P4P was introduced as an additional “add-on” payment (or penalty) without significant changes to the underlying organisational or payment model, with the objective to improve quality of care. That said, the introduction of P4P in Norway came as part of a broader reform on systematic quality improvement, as has been the case in other countries, for instance the UK’s Quality Outcomes Framework (QOF). In other cases, though, accessing performance-based rewards has been conditional upon agreeing to other organisational or financial changes (meeting certain pre-requisites around quality of information or indicators). In Portugal, for instance, P4P was introduced to newly created primary care models. P4P was not introduced as an additional component to an existing payment model, but rather was part of a broader organisational change to primary care, and a shift from facility-level payment based on salaries to mixed payment including salary, capitation and P4P. This holds also true for Ontario, Canada where the P4P schemes introduced for primary care physicians were been tied closely to organisational changes, notably requirements that physicians work in group models, and that after-hours care be provided.

In both Portugal and Ontario the primary care re-organisation to which P4P is attached was voluntary for primary care practitioners, and appears to have had a good degree of success with quick up-take by practitioners, especially in Portugal.

Stakeholder participation has shown to have broad involvement

In two of the cases examined as part of this study, stakeholder participation in policy development had broad involvement and may well have had an indirect positive effect. In Norway there was broad involvement of key stakeholders, while in Portugal the initiative started as a pilot in 2005 where the Family Medicine Association and Medical Trade Unions were involved from the beginning as part of a broader primary care reform and improvement efforts before being scaled up. Stakeholder involvement was found to be important in ten out of the twelve P4P schemes (Cashin et al., 2014). Korea and Turkey were two exceptions.

In Estonia's scheme (Primary health care quality bonus scheme) for example, the Society of Family Doctors selected the performance indicators used in the scheme, while the Estonia Health Insurance Fund provided recommendations for implementation. In Brazil's Sao Paulo OSS, an Independent Assessment Commission made up of representatives of government and civil society reviewed performance indicators and calculated penalties. Involvement of broad stakeholders (such as academic experts and clinicians) through the National Institute for Health and Clinical Excellence (NICE) in the UK's QOF is seen as contributing to what is now a highly transparent and participatory process (Lester and Campbell, 2010). Following each revision to the QOF indicators, the proposed new indicators are made available for review through an open consultative process, following which final selections are made.

Stakeholder involvement in developing P4P programmes is judged by Cashin et al. (2014) to be an important part of aligning objectives, for instance between the government and health providers, for services, and thereby strengthening governance processes. Stakeholder participation, consultation and preferably buy-in appears to have a positive potential to support the success of a new scheme, while a failure to ensure stakeholder involvement may have damaging consequences.

Most P4P have been using process indicators or intermediate outcome indicators, with a more limited number of P4P programmes including patient experience measures

Policy objectives of P4P schemes differ between countries and can be wide ranging (quality, efficiency, access, improved outcomes). Policy objectives are influenced by the health priorities identified, the care setting (primary/specialist/hospital), as well as the choice of available indicators to measure performance.

Indicators which measure different domains of provider performance and quality are selected for P4P programmes in line with the objectives of the programme. Typical domains measured by these indicators include processes (e.g. the delivery of certain services, or timely treatment in certain domains), efficiency (e.g. expenditure on pharmaceuticals or generic drugs), and access (e.g. number of consultations per patient, or number of consultations by target patient group). Indicators of quality also include outcome indicators, mainly intermediate outcomes (for instance controlled blood pressure or HbA1C level). Of the programmes presented in this chapter, only Norway's hospital-based P4P programme includes non-intermediate outcome measures, notably cancer mortality.

Changes to the indicators used in P4P schemes can reflect changing policy priority, as well as adjustments to try to increase the impact of the P4P payment on performance. For

instance, the well-established QOF programme in the United Kingdom sees indicators revised on an annual basis. Indicators are retired, for example, when the majority of GP practices are consistently performing in the upper quintiles, or if stakeholders involved in indicator selection consider that more effective measures are available. Differing approaches to the QOF indicators are used. Compared to other devolved nations in the United Kingdom, the number of indicators used and points attributed to the clinical domain was reduced in Wales, and eventually points in the clinical domain were removed completely for the 2015/16 QOF indicator set (OECD, 2016). This decision was taken because it was felt that the clinical indicators either had consistently high levels of performance achieved (for example heart disease area), and/or quality improvement work was ongoing or continuing through other channels. The removal of the clinical indicators was also part of a deliberate decision to use other policy tools to focus on professional clinical judgement – notably the use of best practice guidelines.

In primary care, process indicators are common, alongside a few intermediate outcome measures. Performance indicators in primary care cover different domains. The indicators used in FHUs in Portugal and in primary care in Ontario, Canada, are in large part focussed on clinical processes, and incentivising care that is consistent with best practice guidelines, but also cover access and efficiency domains (see Box 2.2). In Portugal, for example, the performance of each FHU is assessed with 22 indicators of which 10 can be negotiated between FHU and regional health authorities and 12 are common to all FHU (Lourenço, 2016). The indicators cover the full spectrum of the medical field, including family planning, child health, chronic diseases and mental health. Indicators related to clinical performance and efficiency have the biggest weight in the performance mix which determines the monetary bonus.

Box 2.2. Indicators used in add-on for primary care-based quality programmes in Canada and Portugal

In Ontario, Canada, all primary care incentives/bonuses available for general practitioners are process-based (none are outcome-based). Eligibility for the different incentives depends on the organising model that the GP practice is in; for instance, GPs under the Comprehensive Care Model are eligible for quite a few additional incentives, while GPs who are part of the Rural and Northern Physician Group Agreement are eligible for almost all incentives. Some incentives are more closely aligned to FFS add-ons or add-ons for co-ordination, e.g. bonus for providing smoking cessation, for managing a patient's diabetes, or for providing certain services such as home visits. Others are more typical of P4P programme incentives, and more similar to those seen in Portugal and Norway, for instance bonuses for immunising 60-80% of registered seniors.

In Portugal, for Model A and B FHUs, 22 indicators were selected for the P4P component, from a national set of more than 100 indicators. Target levels were set based on national health objectives, population characteristics, good practices, and historical data. Indicators cover four domains which are established nationally: access (two indicators, jointly weighting 7.5%), clinical performance (seven indicators, weighting 26%), efficiency (two indicators accounting for 24%), perceived quality (one indicator, 5%). An additional four indicators are selected regionally (weight 15%), two by sector (weight 7.5%), and each FHU proposes four indicators according to their own improvement quality plan (weight 15%). The indicators categorised under the clinical performance categories are a mix of clinical process indicators, and intermediate outcome measures. The traditional primary care models also report similar sets of indicators. The national set of indicators common to all FHUs from 2014 to 2016 is the following:

Box 2.2. Indicators used in add-on for primary care-based quality programmes in Canada and Portugal (cont.)

Indicator	Area	Type	Weight	ID
Proportion of patients with at least one medical appointment during the last three years	Horizontal	Access	4.50%	6
Rate of nursing home visits per 1 000 patients	Horizontal	Access	3.00%	4
Proportion of pregnant women with adequate follow-up	Women Health	Clinical Performance (process)	4.50%	51
Proportion of women in reproductive age with appropriate monitoring in family planning	Women Health/ Family planning	Clinical Performance (process)	5.00%	52
Proportion of Infants within the first year of life with adequate follow-up	New-born, child and adolescent care	Clinical Performance (process)	6.00%	58
Proportion of seniors without prescription anxiolytics, sedatives and hypnotics	Mental Health	Clinical Performance (intermediate outcome)	2.00%	56
Proportion of patients of more than 13 years old characterised with smoking habits in the last three years	Horizontal	Clinical Performance (process)	2.50%	47
Proportion of hypertensive patients younger than 65 years old with controlled blood pressure	Chronic diseases - High blood pressure	Clinical Performance (intermediate outcome)	3.00%	20
Proportion of controlled diabetics (HgbA1c <= 8.0 %)	Chronic diseases - Diabetes	Clinical Performance (intermediate outcome)	3.00%	39
Pharmaceuticals expenditure per user	Horizontal	Efficiency	16.00%	70
Ancillary exams expenditure per user	Horizontal	Efficiency	8.00%	71
Proportion of patients satisfied and very satisfied	Horizontal	Perceived quality	5.00%	72

Source: Henry et al. (2012) ; Lourenço (2016).

Where outcomes measures are included outside of hospital settings, they measure intermediate outcomes – controlled blood pressure, blood sugar, cholesterol – for instance in the California IHA programme or the QOF in the United Kingdom, and in the Portuguese FHUs. A recent scheme introduced in the state of Hidalgo (Mexico) for primary and hospital care also covers a wide range of performance indicators (Box 2.3).

Box 2.3. Results-based financing to increase effective coverage funded by Mexico’s Seguro Popular: A case study from the state of Hidalgo

The introduction of public health insurance in Mexico (“Seguro Popular”) in 2002 has contributed towards universal financial risk protection. However, effective coverage is low for chronic diseases, with only 26% and 30% of adult men and women, respectively, having access to preventive care. To address this challenge, the state of Hidalgo’s Seguro Popular designed a results-based financial incentive scheme in 2014 to improve performance of key service outputs and health outcomes.

Providers are to receive an annual bonus or deduction on expected Seguro Popular subsidies based on their performance for 20 primary care and five hospital care indicators including diabetes, cardiovascular health, prenatal care, breast cancer screening, oral health, family planning, chronic disease prevention, reduction of preventable surgery and hospital readmissions.

Indicators were designed based on the best evidence of likely health impact, on the feasibility of implementing the scheme and monitoring provider performance. Baselines for each indicator were measured using surveys and other sources of data. Annual performance targets were defined using an expert panel to assess the provider’s capacity to increase performance based on their degree of control over resources and outcomes.

The size of the incentive fund was estimated at 10% of the payer’s budget. The monitoring system was designed to make use of existing information and information systems in accessible formats.

Source: González Block (2014).

When they are used, outcome measures – such as mortality – are typically confined to hospital settings. Norway’s use of outcome indicators (cancer survival) is an interesting departure from typical P4P indicators, even for P4P schemes in hospitals (Box 2.4). Indeed the Norwegian QBF is quite unique, amongst these schemes but also amongst other schemes covered in recent OECD work (see Cashin et al., 2014; OECD, 2010), in that outcome indicators are included, and make up a significant proportion of performance incentives (50%).

Patient experience is an important outcome indicator of quality and a potential lever for quality improvement. Portugal and Norway, as well as England, Israel and Korea, have used patient experience measures in P4P schemes. They are also included as a tool for quality control in the Medicare ACO contracts in the United States (see Chapter 4).

Box 2.4. Indicators used in add-on for a hospital-based quality programme in Norway

In Norway's QBF programme, indicators are selected across three domains: outcome (50%), process (20%) and patient satisfaction (30%). Most of the indicators are measured at the hospital level, with only five-year survival rates for cancer measured on the regional level. Overall performance of hospital regions is calculated combining scores on all indicators across each of the domains and taking into account reporting quality, minimum performance levels, best performance (between hospital regions) and relative improvements in performance. The indicators measuring patient satisfaction come from the National Patient Satisfaction Survey which is developed by and conducted by the Norwegian Knowledge Centre.

In 2014 the indicators used were as follows:

10 Outcome indicators 50 % (50 000 points)	13 Process indicators 20 % (20 000 points)	10 Patient satisfaction 30 % (30 000 points)
Perineal tear, 3rd & 4th degree	Corridor patients	Information
Five-year survival rate for colon cancer, per health region	Discharge summary sent within 7 days	Nursing staff
Five-year survival rate for rectal cancer, per health region	Hip fracture operations performed within 48 hours	Physicians
Five-year survival rate for lung cancer, per health region	Postponement of planned operations	Organisation
Five-year survival rate for breast cancer, per health region	Thrombolysis treatments	Relatives
Five-year survival rate for prostate cancer, per health region	Initiated treatment of colon cancer within 20 days	Standard
30-day survival after hospital admission for hip fracture	Initiated treatment of lung cancer within 20 days	Discharge
30-day survival after hospital admission for myocardial infarction	Initiated treatment of breast cancer within 20 days	Co-ordination
30-day survival after hospital admission for stroke	Waiting time violations	Patient safety
30-day survival after hospital admission for all admissions	Registration of main diagnosis (Psychiatric care)	Waiting time
	Registration of main diagnosis (Addiction care)	
	Discharge summary sent within 7 days (Psychiatric care)	
	Discharge summary sent within 7 days (Addiction care)	

Source: Beck Olsen and Brandborg (2016).

The indicator choices for P4P add-ons vary between countries, even when the disease focus and care setting are the same

As described earlier, P4P schemes frequently target care for diabetes patients, but do not take the same approach in programme design, or in indicator selection.

In Australia, for instance, there are three different financial incentives in places in the framework of the Practice Incentive Program (PIP) to improve quality of diabetes care for type 2 patients. One component – the SIP – is targeted at the individual physician. The SIP can be claimed by GPs for each cycle of care completed for patients with diabetes. A cycle needs to be completed over a period of at least 11 months and up to 13 months. The SIP defines minimum requirements for 13 activities that need to be met under a cycle of care (Table 2.7).

Table 2.7. Performance indicators used in Australia's SIP programme targeting diabetes care

Activity	Frequency and description
Assess diabetes control by measuring HbA1c	At least once
Carry out a comprehensive eye examination	The patient must have had at least one comprehensive eye examination over the current and previous cycle of care
Measure weight and height and calculate Body Mass Index (BMI)	Measure height and weight and calculate the BMI on the patient's first visit and weigh them at least twice more
Measure blood pressure	At least twice
Examine feet	At least twice
Measure total cholesterol, triglycerides and HDL cholesterol	At least once
Test for micro albuminuria	At least once
Measure of the rate of the patient's expected Glomerular Filtration Rate (eGFR)	At least once
Provides self-care education	Provide patient education about diabetes management
Review diet	Review patient's diet and give them information on appropriate dietary choices
Review levels of physical activity	Review the patient's physical activity and give them information on appropriate levels of physical activity
Check smoking status	Encourage patient to stop smoking.
Review medication	Review patient's medication
Activities needed to be performed twice in a cycle of care must be performed at least five months apart	

Source: Department of Human Services (2013), "Practice Incentives Program, Diabetes Incentive Guidelines", Australian Government.

In France, high-quality diabetic care is also incentivised as part of the ROSP scheme; eight of the indicators measuring care for chronic conditions relate to diabetic patients (see Table 2.8). In Germany, due to differences in the arrangement of DMP diabetes contracts, there is more variety in the choice of activities targeted. Generally, GPs are rewarded for periodic documentation of treatment and the measurement of clinical indicators (HbA1c level) and bonuses are only paid for fully documented files. In that sense, it is similar to the Australian cycle of care. Additionally, patient education is an activity that can

be rewarded. Recent trends in few regions show that relative performance in the share of patients with controlled HbA1c level are also used as performance indicators in some contracts (Kassenärztliche Vereinigung Thüringen, 2015).

In comparing the three diabetes P4P schemes some interesting differences emerge. Whereas in Australia and Germany, GPs receive rewards nearly exclusively for carrying out pre-defined activities (generally based on treatment guidelines) the focus in France lies more on the achievement of clinical indicators, such as the share of patients with diabetes with HbA1c levels below 8.5%. In the case of Australia, the P4P scheme provides patients with access to a range of pathology tests used in the diagnosis and management of diabetes. This includes HbA1c and other conventional tests, like oral glucose tolerance testing. It is up to the patient's treating practitioner to decide the testing regime that is appropriate to assist with patient management. The publicly subsidised pathology test items have service limits in line with clinical best practice. However, there is currently some discrepancy between peak practitioner groups on optimal testing intervals and this is the subject of review. The choice of indicators in France appears to indicate a focus of the ROSP on preventing complications. For patients with high blood pressure above a certain age, GPs are incentivised to prescribe low doses of aspirin to avoid cardiovascular complications.

Table 2.8. Indicators related to diabetes in the French ROSP

Domain	Category	Indicator	Intermediate objective	Target objective	Minimum threshold	Number of points	Equivalent in EUR	Type of indicator	Frequency
Chronic conditions	Diabetes	% of diabetic patients tested 3 or 4 times per year for HbA1c	54%	≥ 65%	10 patients	30	210	Calculated	Quarterly
		% of diabetic patients with HbA1c level < 8,5%	80%	≥ 90%	10 patients	15	105	Declared	Annually
		% of diabetic patients with HbA1c level < 7,5%	60%	≥ 80%	10 patients	25	175	Declared	Annually
		% of diabetic patients with LDL cholesterol level < 1,3 g/l	80%	≥ 90%	10 patients	10	70	Declared	Annually
		% of diabetic patients with LDL cholesterol level < 1,5 g/l	65%	≥ 80%	10 patients	25	175	Declared	Annually
		% of diabetic patients who had an eye exam in the past year	68%	≥ 80%	10 patients	35	245	Calculated	Quarterly
		% of diabetic patients treated with antihypertensive drug and statins among men > 50 years and women > 60 years	65%	≥ 75%	10 patients	35	245	Calculated	Quarterly
		% of diabetic patients treated with antihypertensive drug, statins and aspirin at low dose in diabetic patients treated with antihypertensive drug and statins	52%	≥ 65%	10 patients	35	245	Calculated	Quarterly

Source: CNAMTS – Caisse Nationale d'Assurance Maladie des Travailleurs Salariés (2015).

Absolute, relative and competitive targets are used across different P4P schemes, and also within single schemes. Popularity seems to vary, while both Eijkenaar (2013) and Cashin et al. (2014) suggest that absolute measures are preferred. Many countries have schemes that combine these different modes of target setting and these mixed schemes tend to be more common in specialist and acute hospital care. In Portugal, indicators are used to meet absolute target thresholds, while in Norway absolute and relative rankings are used.

A number of payment schemes use absolute measures (e.g. screening rate of 8%) to set a minimum standard, which is then supplemented with or sits alongside differently adjusted targets. In Portugal, the proportion of hypertensive patients with controlled blood pressure, and the proportion of controlled diabetics (HgbA1c \leq 8.0%) are included as indicators, and similar absolute targets are used in the ROSP in France. In the case of the ROSP, the calculation of the performance payment for each physician is, however, complex, taking into account the doctor's individual performance, the average performance of all doctors' per indicator, and the target objectives which are set annually by the "Haute Autorité de Santé" (HAS). In Norway, for the indicator "Perineal tear 3rd and 4th degree", the target was 2.3% of all vaginal births in 2015. A region reporting a higher rate will not earn points for this indicator. The number of points available will be distributed equally between the regions who meet this minimum target.

The introduction of P4P schemes can motivate providers towards better and broader data collection

Unlike many P4P schemes, the examples of P4P programmes explored in this publication draw on existing data resources to develop indicators for rewarding performance. Norway and Portugal in particular have impressive and comprehensive health system information systems. In Portugal, the use of existing data sets has meant that both types of FHUs which include a P4P component, and the traditional primary care models report similar sets of indicators and can be more easily compared directly. In Norway, the use of a pre-existing data set, which already covers a number of years, has been a contributor to the inclusion of outcome indicators (cancer survival) in the scheme.

While in Norway and Portugal pre-existing rich data infrastructures have supported the introduction of P4P, it remains the case that in many countries good building blocks for P4P – notably appropriate performance measures – are missing. However, it is clear that the introduction of P4P programmes can bring significant incentives for improvements in data systems and reporting of data. Data improvements have come through direct incentives for providers to invest in information infrastructure (IT, electronic medical records) as in the Australian PIP, California's IHA, and France's ROSP/CAPI, or related to minimum IT standards being a criterion for participation in the P4P scheme, for instance in the UK QOF.

The collection of appropriate indicators for P4P schemes, and other add-on payments, needs to strike the right balance between targeting the most appropriate indicators, and the administrative burden data reporting imposes on providers and practitioners. If too narrow a selection of indicators is chosen, the risk is both of narrowing focus of the incentives, and of encouraging providers to disproportionately focus care provision on areas tied to the incentive payment (Eijkenaar, 2013; Cashin et al., 2014). On the other hand, a broader range of indicators, and a broader definition of performance, can contribute more comprehensively to improving performance, but a large number of indicators can lead to a more significant administrative burden, and mean that incentives become unclear. The data sources used in P4P programmes will also have an impact on administrative burden; if pre-existing data sources are used, as in Norway and Portugal, the introduction of incentives tied to the data is unlikely to entail new data reporting burdens, but may help improve reporting rate and fidelity.

Given that the P4P component is usually small, the dominant or co-existing payment systems remain influential

Given that the P4P component is usually small, the dominant or co-existing payment systems remain influential and their impact in relation to the P4P objectives has to be considered.

P4P incentives typically amount to less than 5% of total income/revenues with the QOF in England reporting around 15% (OECD Health Systems Characteristics Survey 2012), meaning that co-existing payment systems are – almost without exception – also the dominant payment system. Even in Portugal where P4P payments can amount to as much as 30% of overall revenues, other payment mechanisms account for a greater revenue share. In the hospital sector, the share is much smaller, for instance 0.5% in Norway, or up to 4% in the Portuguese performance-based contracting mechanism for public hospitals (OECD, 2014).

The dominant payment system has the potential to either undo the effects of P4P programmes, or reinforce them in instances where the goal of both incentive structures aligns (Van Herck et al., 2010). Despite all reported examples of P4P for health providers sitting alongside other payment mechanisms, research on the interaction between P4P and the dominant payment system is quite weak.

Negative penalties are being used in performance-based payment schemes in hospitals

The achievement of desired targets can result in supplementary payment or in negative financial penalties. Often, the penalty takes the form of a proportion of nominally attributed funds being withheld. This is the case in the hospital P4P scheme of Norway. The payment covered by the P4P programme is capped (approximately NOK 500 million), and covers a small part of the block grant each region receives annually. This payment is distributed between the regions based on their attainment of absolute performance targets, and their improvement relative to the other hospital regions. This means that some hospital regions see an increase in payment, while others see a decrease relative to previous years (see Table 2.9).

Table 2.9. Comparison of income effect for each Regional Hospital Association in 2015 under Norwegian P4P scheme (“Quality Based Financing”)

Regional Hospital Association	Difference with how the block budget would be distributed if quality performance was not taken into account, compared to under the P4P scheme	Difference in percent
South-East	-21 187 811	-7.70%
West	7 936 991	8.20%
Central	7 602 096	10.40%
North	5 648 724	8.60%

Source: Beck Olsen and Brandborg (2016).

Since 2008, the Centres for Medicare and Medicaid Services (CMS) use similar negative incentives for hospital performance in the United States where payments can be withheld for certain avoidable conditions, including “never” events and other complications that were not present on admission such as hospital-acquired infections, or have been shown to be largely preventable (Nuffield Trust, 2012). From 2012, CMS introduced

penalties for readmissions (hospitals only) following acute myocardial infarction, congestive heart failure and pneumonia. The “excessive readmission rates” includes adjustments for clinical factors such as patient demographic attributes, comorbidities, and patient “frailty”. The hospital payment penalty was initially set at 1% of every Medicare payment for a hospital that was established as having excessive readmissions across the three conditions, a penalty which rose to 2% in 2013 and 3% in 2014. In 2015, additional conditions were added to the calculation of the readmissions ratio. Preliminary data on the impact of the penalties on avoidable readmissions shows a small reduction in readmissions; 30-day hospital readmission was around 19% between 2007 and 2011, and then dropped following the introduction of the penalty, to 18.5% in 2012 and slightly below 18% in 2013 (ACEP, 2015).

Independent evaluation of reform

There have not, to date, been comprehensive independent reforms of either the P4P programme in Canada or Norway.

In Portugal, several independent assessments have been undertaken. The Portuguese Court of Auditors carried out an audit from 2006 and 2012, which concluded that the FHU model shows, on average, greater economic efficiency, in the unit cost per medical consultation or user, when compared with traditional primary health care centres, which have higher unit costs. However, this audit was very controversial and almost all stakeholders contested its conclusions (Tribunal de Contas, 2014). Other studies found a systematic improvement in the quality indicators related to prevention, with less clear effects on access indicators and efficiency where further research is needed (Barros et al., 2015; Entidade Reguladora Da Saúde, 2016).

In Portugal and Canada the existence of non-affiliated primary care physicians does give some scope for comparison of results. In Portugal, the Regional Health Authorities and the Central Administration for the Health System produce annual reports showing the results achieved by FHU and traditional primary health care centres. Invariably, FHU achieve better access to care, and clinical performance and higher efficiency. For example, recent data from 2013 show that hypertensive patients and diabetics are better controlled by USF than traditional health care centres. Nonetheless, in Portugal as in other voluntary P4P schemes, the influence of self-selection should not be discounted. It is difficult to control for the fact that those providers who sign up for a voluntary schemes may already be performing better, and simply get paid for what they are doing anyway, and would show better performance on selected indicators regardless of whether there was a payment incentive.

A full independent evaluation of the reforms discussed in this chapter and their impacts would be very valuable in each case. Such an evaluation is expected from Norway in the near future. As this chapter has pointed out, despite the increasing popularity of P4P programmes, clear evidence of their efficacy and impact is still very weak. A better understanding of the successes and failures of P4P as an approach, and individual P4P programmes, would be greatly advanced by more thorough independent evaluations of existing programmes. While independent evaluation of P4P reforms should be valuable, undertaking the evaluation can be complex. Given the introduction of P4P schemes as part of broader reform and focus on quality improvement may contribute to more significant improvements in quality, but it is extremely difficult to assess the extent to which broader reforms have multiplied the effect of P4P schemes, or indeed whether improvements would have been equivalent with or without either P4P introduction or other quality efforts. In the United Kingdom, for example, where evidence suggests that quality-related processes, and

quality of care for chronic conditions improved following the introduction of the QOF, attribution of improvements to the QOF is difficult given that the trend towards improvement had already started, and given the lack of control group for comparison (Charlesworth et al., 2014).

Indeed, identifying a suitable comparison group to evaluate the P4P reform can be challenging. In the case studies examined in this chapter, the challenge is a clear consideration in Norway – where the application of the reform to all relevant providers means that no control group is available – and in Portugal where selection bias for providers is a clear consideration, given that primary care providers had to demonstrate sufficiently good performance even before they joined the P4P scheme, while peers under traditional payment models did not have to meet such performance benchmarks. Ideally, evaluations would highlight the isolated impact of the financial incentives associated with payment reform. This would require having control groups – providers that do not participate in the P4P programme (to identify overall trends in quality indicators) – and randomised participation among providers (to avoid self-selection), and to leave patients ignorant about participation of their clinicians (to avoid patient selection). In complex OECD health systems, where financing, governance, stakeholder views, and patient rights can be highly challenging to navigate, setting up such elaborated evaluations may be very difficult.

There is a need for more rigour in evaluation methods. In particular, clear considerations for evaluation, including what to evaluate, when to evaluate, the scope of evaluation, and the need to focus on the beneficiaries of P4P programmes (Cashin et al., 2014).

The question of “what” to evaluate is a challenge. Evaluation might consider performance against the intended goals of the payment reform, as this report does. In a scheme-specific evaluation, though, it is worth looking beyond targeted goals – and identified indicators – to consider spillover effects and unintended consequences. There is an understanding that P4P payments may encourage overprovision of unnecessary services covered by the scheme and thus need to be designed so they do not discourage non-incentivised activities (Flodgren et al., 2011; Scott et al., 2011; Sherry, 2015).

As Cashin et al. (2014) state, most impact evaluations are conducted based on the measures and indicators collected to calculate performance within the programme, but a major concern is that providers shift their efforts towards measured indicators or targeted patients at the expense of unmeasured areas. Equally, P4P programmes may well have positive spillover effects, such as positive impacts on quality of care in areas not reflected in measured indicators, or in increasing data availability or reporting rate. There is a clear case for evaluations to take a broader perspective on the impact of the performance.

2.6. Conclusion

Add-on payments have been used widely, and are in place in many countries and across numerous domains of care. Add-on payments to promote care co-ordination, where payments can be made both ex ante and ex post, have been relatively simple to implement. In most instances, there has been little provider resistance to their introduction, and they generally require fewer IT requirements and data exchanges compared to the more sophisticated payment innovations where payments rely on the measurement of patient metrics. They display some positive results for selected quality indicators in France and higher patient satisfaction in Germany and providers supported their introduction.

However, it can be difficult to separate their contribution to wider policy objectives, as well as to disentangle their “own” effects from the influence of other factors.

P4P or add-on payments for quality of care (where payment is made ex post) are increasingly being used in many countries; numbers of P4P schemes continue to increase across the OECD, and across different care settings. There have been recent shifts towards using outcome information and patient experience for payment, and countries with richer data infrastructures have greater scope to develop more sophisticated indicators. Quite often, P4P payments are small as share of provider income and therefore other co-existing payment mechanisms remain strongly influential. P4P policies in Portugal have shown some positive impact on quality and health system governance, especially when used in conjunction with broader organisational or financial reform, and while evaluations are pending in Norway, the ambitious programme is embedded in a quality improvement agenda, and could be reasonably expected to have a positive impact on directing greater attention to quality and outcomes. The inclusion of both patient satisfaction assessments and patient outcomes (cancer survival) is innovative, and a comprehensive assessment would likely be of great interest to policy makers, payers and providers across OECD countries. While P4P programmes are commonly focussed on improving quality, and to some extent efficiency, evidence of the impact of programmes on costs is again limited. Indeed, while for some programmes there have been additional costs associated with implementing P4P, there is no conclusive evidence of any P4P programme which has been cost saving.

Despite the limited evidence on the impact of P4Ps on outcomes, the continued popularity among OECD countries may also reflect interest among policy makers to consider the broader health system effects such as an improvement in health data infrastructure, data availability or a greater focus on quality in discussions between purchasers and providers.

P4P programmes continue to be introduced in OECD countries, with programmes planned or in early stages in the hospital sector for France and Germany, in Latvian primary care, and in Mexico across a range of providers. Given the now-significant range of add-on programmes for quality, in terms of country range, application across provider settings, and programme scale, comprehensive national evaluations of programmes are now needed in order to fully take stock of the successes and failures of P4P. Ideally, evaluations would highlight the isolated impact of the financial incentives associated with payment reform, an approach that would likely require double-blind control groups of patients and providers, but this would be most likely extremely difficult to introduce in reality. Nonetheless, this does not preclude the introduction of greater rigour in evaluation methods, and the systematic inclusion of evaluation mechanisms in payment reforms.

Notes

1. From an international perspective, waiting times for specialist treatment in Germany do not appear to be a major concern (The Commonwealth Fund, 2013).
2. The “Contrat d’amélioration des pratiques individuelles” (CAPI) targeting GPs was replaced by the “Rémunération sur objectifs de santé publique” (ROSP) in 2012, which also opened the scheme to outpatient specialists.
3. “Médecin traitant” can be loosely translated as “Primary physician”. Patients can choose whether they have a “médecin traitant” or not, but face significantly lower reimbursements if they choose not to. The “médecin traitant” can be GP or specialist and their role is to guide patients through the health system and keep patients medical records. If patients have an attested long-term condition (“affection de longue durée”) the “médecin traitant” receives an annual payment for documentation and co-ordination.
4. EUROPEP is a 23-item validated instrument and internationally standardised measure of patient evaluations of general practice care.

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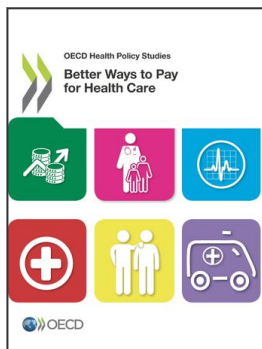
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