HEALTH SYSTEMS AND POLICY ANALYSIS

POLICY BRIEF 24

How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe?

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This policy brief is one of a new series to meet the needs of policy-makers and health system managers. The aim is to develop key messages to support evidence-informed policy-making and the editors will continue to strengthen the series by working with authors to improve the consideration given to policy options and implementation.

What is a Policy Brief?

A policy brief is a short publication specifically designed to provide policy-makers with evidence on a policy question or priority. Policy briefs:

- Bring together existing evidence and present it in an accessible format
- Use systematic methods and make these transparent so that users can have confidence in the material
- Tailor the way evidence is identified and synthesised to reflect the nature of the policy question and the evidence available
- Are underpinned by a formal and rigorous open peer review process to ensure the independence of the evidence presented.

Each brief has a one page key messages section; a two page executive summary giving a succinct overview of the findings; and a 20 page review setting out the evidence. The idea is to provide instant access to key information and additional detail for those involved in drafting, informing or advising on the policy issue.

Policy briefs provide evidence for policy-makers not policy advice. They do not seek to explain or advocate a policy position but to set out clearly what is known about it. They may outline the evidence on different prospective policy options and on implementation issues, but they do not promote a particular option or act as a manual for implementation.

How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe?

Contents

	page
Key terms / Key messages	5
Executive summary	7
Policy Brief	9
Introduction	9
Findings	11
Discussion	15
Conclusions	21
References	23
Appendix 1	25
Appendix 2	25

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What is ICARE4EU?

The Innovating care for people with multiple chronic conditions in Europe (ICARE4EU) project aims to improve care for people with multiple chronic conditions (multimorbidity) in European countries (www.icare4eu.org). An estimated 50 million people in Europe live with multimorbidity. The complex health problems of these people and their need for continuous and multidisciplinary care pose a great challenge to health systems and social services. From a patient perspective, improvements in, for example, the coordination of care and patients' own involvement in the decision-making and the care process are also important. ICARE4EU describes and analyses innovative integrated care approaches for people with multiple chronic conditions in Europe. By disseminating knowledge about innovative care programmes or practices, the ICARE4EU project aims to contribute to the improved design, wider applicability and more effective implementation of integrated care for people with multimorbidity. Observations from the ICARE4EU project are described in five policy briefs and key elements of multimorbidity care are adressed from the following perspectives: patient-centredness [1], use of e-health technology [2], integration [3] and financing systems [this one]. A final policy brief [4] integrates all lessons learned from the ICARE4EU project on how care in European countries could be improved for their citizens with multiple chronic conditions.

How do Policy Briefs bring the evidence together?

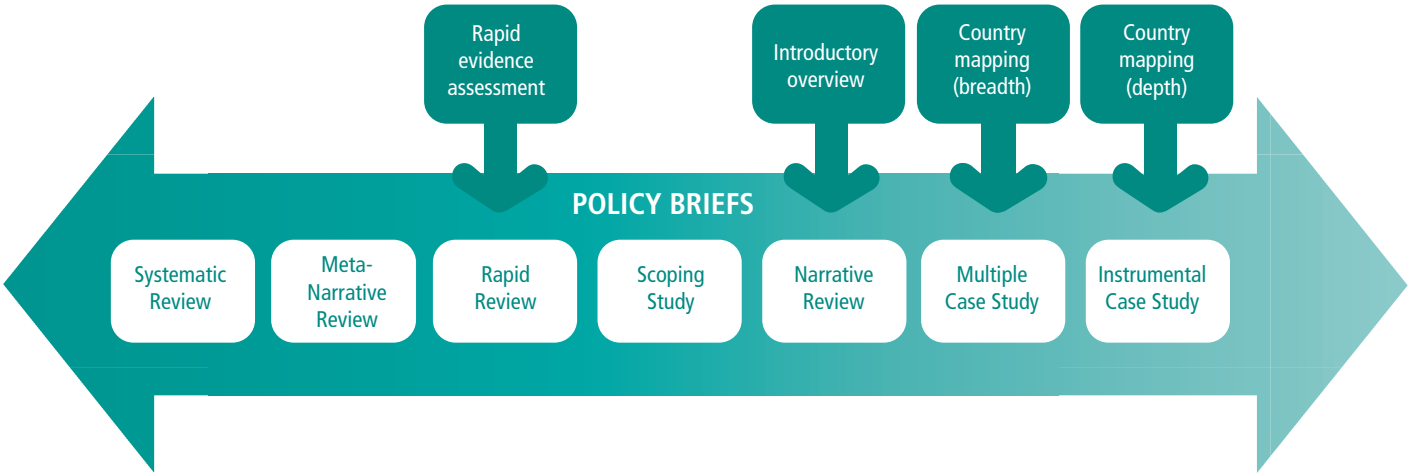
There is no one single way of collecting evidence to inform policy-making. Different approaches are appropriate for different policy issues, so the Observatory briefs draw on a mix of methodologies (see Figure A) and explain transparently the different methods used and how these have been combined. This allows users to understand the nature and limits of the evidence.

There are two main 'categories' of briefs that can be distinguished by method and further 'sub-sets' of briefs that can be mapped along a spectrum:

- **A rapid evidence assessment:** This is a targeted review of the available literature and requires authors to define key terms, set out explicit search strategies and be clear about what is excluded.
- **Comparative country mapping:** These use a case study approach and combine document reviews and consultation with appropriate technical and country experts. These fall into two groups depending on whether they prioritize depth or breadth.
- **Introductory overview:** These briefs have a different objective to the rapid evidence assessments but use a similar methodological approach. Literature is targeted and reviewed with the aim of explaining a subject to 'beginners'.

Most briefs, however, will draw upon a mix of methods and it is for this reason that a 'methods' box is included in the introduction to each brief, signalling transparently that methods are explicit, robust and replicable and showing how they are appropriate to the policy question.

Figure A: The policy brief spectrum



Source: Erica Richardson

Acronyms

DRG	Diagnosis-related group
FFS	Fee-for-service
GP	General Practitioner (physician providing general or family medicine)
ICARE4EU	Innovating Care for People with Multiple Chronic Conditions in Europe
P4C	Pay-for-coordination
P4P	Pay-for-performance
POTKU	Potilas kuljettajan paikalle (Putting the Patient in the Driver's Seat)

Boxes, figures and tables

Box 1: Methods 9

Box 2: Most common payment mechanisms 11

Box 3: Using multiple sources of information in blended payment systems 13

Box 4: The Gesundes Kinzigtal – population-based financing with a shared-savings approach 14

Fig. 1: A framework for understanding incentives of different payment mechanisms 12

Fig. 2: Relationship between the scope of payment, care integration, casemix and quality adjustments 18

Table 1: Basic forms of payment mechanisms and their expected incentives in regard to selected objectives 12

Table 2: A framework of adjustments to basic payment mechanisms that can potentially support high-quality integrated care for patients with multimorbidity 15

Key terms

- **Multimorbidity** means having multiple chronic conditions at the same time and (typically) complex needs that require the involvement of several care providers. It is a significant and growing challenge to Europe's health systems, with some 50 million people already affected.

Key messages

- The growing prevalence of people with multimorbidity will increasingly require new payment mechanism that better account for the presence of multiple chronic diseases and promote better coordination and integration of care.
- Payment mechanisms can provide key incentives for providers to collaborate. Well-designed approaches encourage multiple providers to work together and enable better care, while mechanisms that pay individual providers separately can block effective integration.
- Payment mechanisms need to adequately account for the complexity of cases treated and will inevitably be relatively complex themselves.
- Evaluations of several integrated care programmes suggest that these can lead to savings particularly through, increased multi-professional collaboration, polypharmacy management and innovative, integrative technologies – all of which can be stimulated by payments.
- Innovative payment mechanisms can be combined with more traditional payment (e.g. budget, capitation, Fee For Service and DRGs) and include:
  - Pay for coordination (P4C) which rewards the provider coordinating care.
  - Shared-savings models which divide savings (against historical or other benchmarks) between payers and providers.
  - Bundled payments where the onus is on providers to combine suitable services for patients' needs.
  - Pay for performance (P4P) which can also be adapted to reflect multimorbidity and incentivize better quality care.
- Complex payment mechanisms do not work without extensive data on cost but also on quality.
- Policy makers introducing financing mechanisms to support integrated care must therefore:
  - Improve information systems so that they can support complex payments.
  - Carefully assess the local context and whether the system in place will be able to cope.
  - Make sure that new payment systems do not overburden local provision and management structures
  - Take an incremental approach to introducing new, more complex systems.
- Policy makers should also put in place funding guarantees (short- and long-term) for start up programmes or ensure a real prospect of rapid inclusion in 'mainstream' funding, so that providers are not deterred from innovating.
- Other pre-requisites for the successful implementation of new financing mechanisms are:
  - Strong leadership and
  - Supportive governance structures at national and programme level.
  - Providers with sufficient reserves to assume financial risks (especially in case of broader payments)
- Policy-makers should also ensure continuous long-term evaluation of effectiveness to inform future policy.

Executive summary

The policy issue

Chronic diseases are the leading cause of ill-health and death in Europe. Because of rapid population ageing, the number of people with multiple chronic conditions (multimorbidity) will increase in all countries of Europe in the near future. These trends constitute a challenge for the financing of health and social care in terms of both mobilizing adequate sources of funding and provider payment mechanisms. Payment mechanisms may support or hinder the reorganization of care in line with the needs of people with multimorbidity. The financial incentives of different provider payment mechanisms have implications for the nature and quality of services provided. Traditionally, each care provider is paid separately, which means that there are no incentives for providers to coordinate their care, and misaligned incentives can create an obstacle to the implementation of integrated care. Therefore, the incentives of existing payment mechanisms have to be carefully evaluated when introducing integrated care programmes for people with multimorbidity.

How is it addressed in Europe? Findings of the ICARE4EU project

Results of the ICARE4EU project show that 73 of the 101 identified integrated care programmes for people with multimorbidity use the same payment mechanism as for other care. Only 27 of the identified programmes have payment schemes that have been developed specifically for these programmes. When a specific payment approach is used, there is no dominant method. Payments depend on various factors, but most frequently on the type of provider. Most providers are paid separately, but 10 programmes use some form of bundled payments for either all or some providers. The size of the payment is mostly based on fixed prices/agreements and almost never on negotiations. Only four programmes report that active negotiations take place between payers and providers.

In 32 of the 101 programmes, additional resources are made available to providers that should incentivize providers to participate in the programme or to undertake certain tasks. For example, some programmes pay providers to participate in multidisciplinary meetings. Other programmes provide additional payments for preventive services or finance start-up costs of a new group of providers. Still others provide specific payments for the coordination of care or finance additional staff. Of the 101 programmes, 17 have indicated that payments are adjusted for better performance in terms of quality (i.e. *pay-for-performance*, P4P). Often quality is evaluated based on several indicators, including outcome indicators (in 14 programmes), process (11 programmes) and, less frequently, structure indicators (7 programmes).

Sixteen of the programmes use a form of *shared-savings* approach to incentivize providers to participate in the programme. In addition, 21 of the 101 programmes use incentives for patients to participate, including free access to treatment and free medical and social services. Forty-six programmes, some only internally evaluated, report savings. Programme managers report that the use of innovative technologies, increased multiprofessional collaboration, and polypharmacy management has led to savings.

Discussion

Policy options to establish payment mechanisms promoting the integration of care for patients with multimorbidity include:

- Adopting mechanisms that guarantee start-up and longer-term funding for programmes or the prospect of rapid inclusion into the main care system and access to its funds. This gives stakeholders financial planning security.
- Financial incentives may be used to encourage providers to integrate care for people with multimorbidity or to undertake the desired coordination or quality improvement activities:
  1. Providers can receive additional payment for the task of coordinating care among different providers as *pay-for-coordination* (P4C). Providers can also be reimbursed for specific care coordination activities.
  2. A *shared-savings model*, whereby savings compared to historic or benchmark costs are shared between payers and providers, can incentivize providers to improve primarily the efficiency of service delivery across a defined population with multimorbidity.
  3 *Bundled payments* combine otherwise separate payments to providers into a single fee covering the care required for a person or defined population with multimorbidity for a predefined period of time. Payments can be bundled across providers and services and the price for the bundle can be set or negotiated, but needs to be adapted to the comprehensive care needs of people with multimorbidity to ensure that services are adequate and of high quality.
  4. *P4P* can be used to achieve agreed quality targets, for which payment to providers (professionals or institutions) is modified upwards or downwards. Within a provider network the degree of target achievement can be recorded electronically to compare performance among participating providers, for example, with respect to patient experience.

Policy implications

Local context and health system characteristics have to be considered while designing an integrated care programme for people with multimorbidity as there is no unique or best way of adapting funding and payment systems to foster integrated multimorbidity care. The choice of policy option for implementation will need to match the targeted population, the health system and overall health policy of the country. For example, P4C is the payment mechanism that can be introduced most easily where there are many different individual providers. It does not require structures for shared savings or distributing a bundled payment. Shared

savings would be more complicated but not as complicated as a bundled payment because under a shared-savings model, the individual providers would still be paid separately – just as before. A bundled payment appears to involve more risks – and providers would have to have well-established and sophisticated structures for the coordination and distribution of money. Finally, traditional payment forms, P4C, shared savings and bundled payments can all be made, in part, dependent on performance (P4P). This requires a careful definition, not only of targets to be achieved but also of indicators and data to be measured to target achievement.

Therefore, policy-makers need to assess the local situation carefully and see whether important preconditions are in place that would allow more complex payment mechanisms. Such preconditions include: (1) availability of data on quality and cost, (2) providers with sufficient reserves to assume some risk, and (3) strong leadership and supportive governance structures at national but also at programme level. Policy-makers also need to demand continuous evaluation over the long term to generate conclusions about the effectiveness of programmes and grow the evidence base. This means that future programmes need to be developed in ways that allow comprehensive and rigorous evaluations.

Policy brief

Introduction

Although estimates vary from country to country and across studies, they show similar trends regarding the rising prevalence and burden of multimorbidity in European countries [5-8]. The growing burden of multimorbidity, which tends to be more common among older people, poses a threat to population health in Europe and can be considered one of the greatest challenges to the sustainability of health systems worldwide [9-12].

The complexity of health needs for people with multimorbidity, in combination with increasing frailty because of old age, requires a long-term response coordinated by different health professionals [13]. The growing prevalence of people with multimorbidity also poses new challenges to health financing in terms of [5] adequate sources of funding and [6] provider payment mechanisms [14]. Therefore, it is important to mobilize sustainable funding sources and to develop and implement effective and sustainable provider payment mechanisms that fulfil the requirements of improving quality of care for patients with multimorbidity and promoting better care coordination and integration. Payment systems can create powerful incentives for care providers and influence the delivery of integrated care [15]. Traditionally, each care provider is paid separately, which means that there are no incentives for providers to coordinate their care. However, almost all countries have experimented with payment mechanisms that aim to overcome perverse incentives, that could lead to for example duplicate tests or excessive referrals. Yet there is no single best or most commonly used payment mechanism to finance integrated care for people with multimorbidity and, despite their increasing number, evidence on the effectiveness of interventions to improve the quality of care is limited [8].

What is the policy question?

Health financing plays a key role in the development of comprehensive health care delivery models and can promote collaboration between multiple providers and higher quality of care for patients. This Policy Brief seeks to inform and help decision-makers to overcome some of the challenges involved in financing integrated care for people with multimorbidity. These include identifying and mobilizing sustainable resources to pay for care, and adjusting payment schemes in Europe to provide incentives that better facilitate integrated care for people with multimorbidity. Therefore, the overall question is: *How to strengthen health financing to promote care for people with multimorbidity in Europe?*

This Policy Brief argues that adapting the financing system to integrated chronic care models that address multimorbidity requires meeting three key conditions: (1) funding should come from a sustainable source, (2) payment mechanisms should provide incentives for providers both to collaborate and to provide high-quality care, and (3) payment mechanisms should adequately account for the complexity of treated patients. Therefore, the following three sub-questions will be answered within the brief:

- What is the best way to secure stable funding in the short, medium and long term?
- What payment mechanisms are available and have been used to integrate care for people with multimorbidity?
- Which payment approach is best to facilitate and/or stimulate the development of integrated care of good quality for people with multimorbidity?

Box 1: Methods

For policy-making, insights from practice and from scientific literature are useful and provide information on health care changes that can lead to more patient-centred integrated care. Therefore, this Policy Brief also uses observations collected as part of the ICARE4EU project. The rapid review of the literature focused on identifying publications addressing the use of financing mechanisms in promoting coordination of care across organizational boundaries, collaboration between professionals and professional competences. This was carried out in the context of care integration in general and patients with multimorbidity in particular (see Appendix 1).

Under the ICARE4EU project, information was gathered on 101 innovative care programmes in 24 European countries, 8 of which were visited to obtain a more in-depth understanding of their particular characteristics. Appendix 2 provides detailed information on this research into innovative care programmes in European countries.

Findings

This Policy Brief provides insight into funding options and payment mechanisms for integrated chronic care programmes for people with multimorbidity. Both the rapid literature review and the survey data show potential to improve current practices as funding sources have often run out in the absence of a long-term strategy and there is scant use of innovative payment mechanisms to integrate care and take multimorbidity into account.

Funding options for integrated chronic care programmes for people with multimorbidity

The first set of questions that needs answering when an integrated chronic care programme for people with multimorbidity is developed is where the funding should come from. This includes initial funding for development costs, which may be substantial and increase with a programme's complexity (especially relevant in case of multimorbidity). Then, when the programme is up and running, administrative costs apply and providers have to be paid. Literature addressing resource mobilization mostly focuses on the macro level of the health system rather than on the issue of which sources are most sustainable at the level of certain care programmes.

Findings from the ICARE4EU project show that the funding sources of integrated chronic care models for people with multimorbidity have very different approaches. Start-up funding for development and piloting often comes from governments, purchasers or providers, or a combination of these three. For example, the Finnish POTKU (Putting the Patient in the Driver's Seat) project was initiated using two separate grants (for 2010–2012 and 2013–2014) from the KASTE development project of the Ministry of Health and Social Affairs. The Danish clinic for multimorbidity at Silkeborg Regional Hospital received start-up funding from the regional government and contributes part of its own budget. The Dutch INCA project's first phase was funded by the Ministry of Health, Welfare and Sports through the National Programme of Disease Management of Chronic Illnesses, while the next phase was funded by health insurers and providers. The German Gesundes Kinzigtal Project is the initiative of a private company and a network of physicians and therapists, and they secured funding, including long-term funding, from a German sickness fund, while another fund joined at a later stage.

When a programme becomes operational, most projects use public funds from the usual care system. But some projects have to rely on different sources because they cannot secure access to the usual care funds. For example, the POTKU project relied on grant money and when this money ran out, the programme also stopped, even though evaluations were positive. Although a POTKU II project is now operational, it shows the importance of addressing the medium- and long-term funding issue right at the start of a project. One of the advantages of having a care purchaser on board, as with the Kinzigtal and INCA projects, is that it is more likely that a project will be funded over the medium and long term, especially if results are promising. Governments willing to foster such programmes could consider creating funding mechanism with built-in avenues that eventually lead to inclusion in the usual care system and access to its funding.

Payment mechanisms and incentives for integrated chronic care programmes for people with multimorbidity

Providers delivering integrated care for people with multimorbidity can be at all levels of the health system, from primary care providers to specialist hospitals, and they can be paid on the basis of different mechanisms. Ideally, provider payment mechanisms: (1) motivate actors within the system to be productive in terms of number of cases treated and services provided; (2) avoid incentives that would lead to risk selection, which is a particular concern for people with multimorbidity; (3) contribute to overall health system efficiency, for example, through avoiding unnecessary services, and expenditure control; (4) are administratively easy; and (5) encourage providers to achieve optimal care outcomes.

Table 1 and Box 2 summarize the desired and undesired consequences of the most common payment mechanisms used in both ambulatory and inpatient care with regard to these objectives. The extent of the effects is not clear and, in fact, two Cochrane reviews [16, 17] found that the available evidence is surprisingly weak. Nevertheless, although most studies are not specific to providers in integrated care, there is broad consensus in the theoretical and empirical literature on the broad direction of effects different payment mechanisms may have [16, 18-21]. Two observations stand out: first, all payment mechanisms provide conflicting incentives for "productivity" and "expenditure control"; and, second, no payment mechanisms explicitly provide incentives for higher quality of care.

Box 2: Most common payment mechanisms

Fee-for-service (FFS) systems are frequently used in ambulatory care and involve paying for each unit of service provided (the amount of the fee often depends on the type of service provided). This generally incentivizes providers to provide as many reimbursable services as possible [23, 24]. Therefore, FFS payment mechanisms create the potential for inappropriate or unnecessary use of services and have poor incentives for expenditure control [25]. In addition, providers have no incentive to coordinate their care if this would demand the provision of fewer services.

A capitation payment entails giving providers a fixed amount to provide services to patients for a particular time, irrespective of the volume of services consumed by individual patients. It generates an incentive to provide as little care as possible to each patient as the providers bear the financial risk. This in turn may create the potential for underuse of services, increasing referrals and the adverse selection of low-risk patients [23, 25, 26].

For hospital services, global budgets and DRG-based (diagnosis-related group) case payments are typical forms of payment (FFS is little used in Europe). *Global budgets* are administratively simple and control expenditure, but could discourage productivity while disregarding patient needs, appropriateness and quality of care, and therefore outcomes. *DRG-based case payment* systems provide stronger incentives for production but, in their "pure" form (i.e. based on diagnosis only with weak or no consideration of complications and procedures), run the risk of equally disregarding patient needs and appropriateness [27]. Finally, because the incentives provided by *salaries* for physicians or *per-diem payments* for hospitals are only moderate in nature, these payment mechanisms have neither strong advantages nor strong disadvantages.

Table 1: Basic forms of payment mechanisms and their expected incentives in regard to selected objectives

Payment mechanism	Productivity		Avoidance of risk selection	Expenditure control	Adminis-trative simplicity	Quality of care
	Number of patients or cases	Number of services per patient or case				
Physician payment (ambulatory care)						
Fee-for-service	+	+	+	–	–	0
Capitation	–	–	– (if not casemix-adjusted)	+	+	0
Hospital payment (inpatient/outpatient)						
Global Budget	–	–	–	+	+	0
Case payment	+	–	– (if insufficiently casemix-adjusted)	0	–	0
Per diems	0	0	0	–	+	0

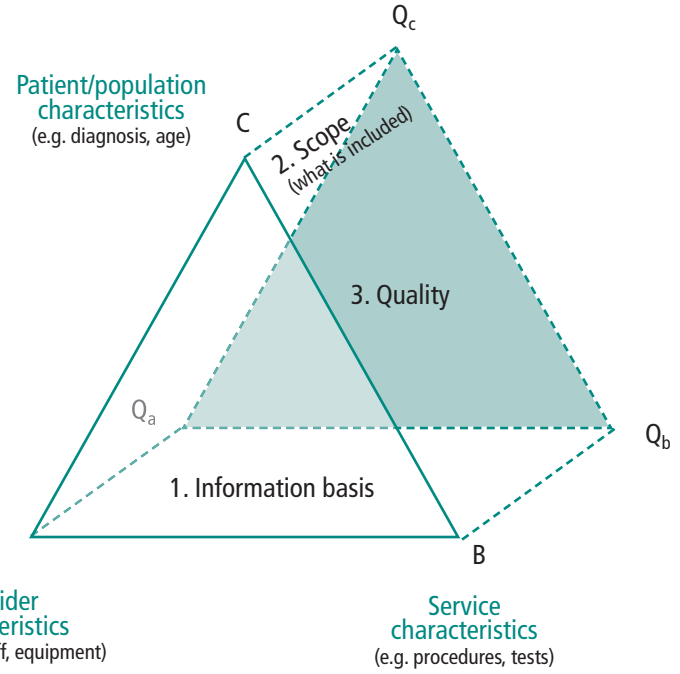
Source: Authors' compilation, based on [19, 22]
Notes: +/- = incentive in positive or negative direction, 0 = no incentive in either direction (or dependent on specific details of implementation).

A framework for understanding payment mechanisms and incentives

There are at least three dimensions of payment systems, which largely determine incentives in the system: (1) the information basis to determine payment, (2) the scope of payment (what is included) and (3) the quality of the care provided (also see Fig. 1).

The *first dimension* relates to the information basis that determines the payment. In other words: what are we paying for? Fig. 1 illustrates that payment mechanisms can, in theory, be based on information about provider characteristics (A), service characteristics (B) or patient/population characteristics (C) [28].

Fig. 1: A framework for understanding incentives of different payment mechanisms



Source: Based on [28].

Global budgets are usually determined on the basis of provider characteristics (A), for example, the number of beds, staff or available equipment – and the incentive is therefore to increase the number of beds, staff or available equipment.

Pure FFS payments consider only information about the services provided (B), such as their complexity or costs. Because FFS pays providers to provide services, the incentive is to provide a high number of services.

By contrast, capitation payments or case payments (such as DRGs) rely primarily on information about patient or population characteristics such as diagnoses and age (C). Consequently, payments based on patient or population characteristics carry incentives to treat a high number of patients (or to register a large part of the population) but to limit the services per case (per registered person). In practice, payment systems often rely on multiple sources (Box 3) because such blended payment systems provide a more balanced set of incentives.

Box 3: Using multiple sources of information in blended payment systems

In order to balance the different types of incentives, payment mechanisms can be defined on the basis of different types of information. For example, FFS payments may be adjusted for the qualifications of staff, for example, fees for case management performed by staff with special training in case management may be higher than fees for staff without this training. Similarly, case payments per patient are often adjusted in relation to the services provided to the patient. For example, DRG-based case payments take into consideration not only information on patient characteristics (e.g. a heart attack of a patient with multiple comorbidities) but also on service characteristics (e.g. percutaneous coronary intervention performed on that patient). Finally, budgets are often adjusted for the number and complexity (i.e. the casemix) of treated patients or they are adjusted for the casemix of the catchment population. Consequently, hospitals or other providers are paid not only for "being there" but also for treating patients and for providing care to patients that have complex conditions as measured by DRGs or other measures of casemix.

The *second dimension* is related to the scope of the payment. It can range from narrow, that is, each provider and each service is paid for separately, to very broad, that is, there is only one "bundled payment" for one patient, which includes all services provided by all providers during a specified time period. All payment mechanisms can be narrow or broad. For example, a capitation payment for a General Practitioner (GP) may include only the first visit of a patient in a quarter with certain additional visits and services (e.g. vaccinations, ultrasound exams) being paid for separately – or all visits of a patient during an entire year, including all ancillary services needed by the patient during the year. Similarly, FFS payments can exist for very narrowly defined services (e.g. each ward round, each lab test, each surgical procedure), or they may be defined very broadly (e.g. all physician services needed for a hip replacement). Often authors use the term "bundled payment" when they describe a payment that is broader than payment under the (previous) system [29-31]. However, in order to understand the incentives of the payment system, it is important to clearly assess the breadth of the "bundled payment", that is, who the providers are, what the services are, and the time frame covered by the payment.

The *third dimension* refers to the question of whether quality is taken into account. In particular, when the scope of payment is broad, for example, there is only one bundled payment for a period of time, it is important that quality is taken into account in order to avoid providers skimping on quality, disregarding patient needs and providing fewer services than necessary. Mirroring the information basis for payment, quality can be assessed and paid for in relation to structural (Q_a), process (Q_b) or outcome (Q_c) characteristics.

What is payment based on in practice?

The ICARE4EU survey found that in 73 of the 101 identified programmes, payments are the same as for usual care. Only 27 programmes have developed payment schemes specifically adapted for this particular programme (one programme did not specify). Furthermore, the findings suggest that there seem to be no payment mechanisms in use specifically developed to foster integrated care for people with multimorbidity.

Payments depend on different factors and there is no dominant method. Payments depend most frequently on the type of provider (e.g. a budget or a fixed allowance for participating), followed by the number/type of patients (e.g. capitation payments or casemix-based payments), and the type of service (e.g. fee-for-service – FFS), and "other" factors. For example, the Gesundes Kinzigtal in Germany uses the time required per patient, which can be seen as mix between type of service and type of provider. The Dutch INCA project uses a casemix based on a patient risk profile (based on the number/type of patients). Few programmes were paid depending on certain (quality) indicators being achieved. The INCA model (implemented in 2016) is one of the few programmes that take the severity of a patient's condition (which includes multimorbidity) into account, as it intends to use payment mechanisms based on two segments. One is based on the casemix of the population through several care modules that each reflect different levels of severity; the other segment is based on the achieved outcome of integrated care delivered to patients.

Policy-makers often assume that an "integrated" payment will promote integrated care, and automatically lead to better health outcomes and lower costs [32]. However, only 10 programmes identified in the ICARE4EU project use some form of bundled payments for either all or a share of the providers; most are paid separately. The size of the payment is mostly based on fixed prices/agreements and almost never on negotiations. Only four programmes report that active negotiations take place between payers and providers.

Specific financial incentives could serve as motivators and can be used to stimulate and control provider and patient behaviour; in contrast, misaligned incentives could even

create an obstacle to the implementation of interventions [23, 33]. The ICARE4EU findings show that, currently, there is much greater scope for introducing more elaborate and sophisticated incentive schemes.

In 32 of the 101 programmes, additional resources are made available to providers that should incentivize providers to participate in the programme or to undertake certain tasks. For example, some programmes pay providers to participate in multidisciplinary meetings. Other programmes provide additional payments for preventive services or finance start-up costs for a new group of providers. Still others provide specific payments for the coordination of care or finance additional staff. Providers in the Gesundes Kinzigtal (Healthy Kinzigtal) programme receive extra payments for services provided that are documented via the central ICT tool and their time spent on additional services provided and follow-up (Box 4).

Box 4: The Gesundes Kinzigtal – population-based financing with a shared-savings approach

The Gesundes Kinzigtal programme's financial goal is to improve the margin for the contracting sickness funds (AOK and LKK). Achieving this involves realizing savings within the Kinzigtal region in relation to German "standardized" costs and a reference period prior to the intervention. Standardized costs are average costs across all sickness funds. They are used in the so-called risk structure compensation mechanism, which allocates money from the central allocation pool. Since 2009, allocations for each individual are based on age, sex and marginal expenditures for one of 80 diseases as coded the previous year [34].

The contracts between Gesundes Kinzigtal GmbH (company) and the two sickness funds are based on the virtual budget of each fund's total allocation from the central allocation pool; "virtual" because the money is not actually passed through to providers, who continue to receive their reimbursements from the sickness funds as usual. The financial result is measured by the total expenditure for the insured Kinzigtal population both within and outside partner institutions compared to the allocation from the pool. If the sickness fund spends less than it receives, the gain is shared between the fund and Gesundes Kinzigtal [13].

Innovative financial models like a shared-savings contract are still uncommon in Europe, although the financial result has proved reliable. In 2010 the per capita expenditures of an LKK policy holder in the Gesundes Kinzigtal programme relative to those in the control group have decreased about 16.9% since 2005 [35, 36]. Results of an internal evaluation of the AOK and Gesundes Kinzigtal over the period 2006 to 2013 show that the programme has led to a net annual saving for the sickness funds of close to 3% (after having shared the 6.5% surplus difference with Gesundes Kinzigtal). In 2012, the relative cost reduction that can be allocated to the activities of the programme amounted to around 7.9% [37].

Of the 101 programmes, 21 use incentives for patients to participate. These include free access to treatment, free medical and social services, a free general health check as well as free self-tests and additional preventive care. In some of the programmes patients are provided with equipment/devices for telehealth and receive free home visits if necessary.

Potential for savings?

Forty-five programmes report achieving savings, of which 16 programmes share these savings among care providers. Savings reportedly result mainly from (1) reductions of utilization and costs (emergency care/acute care visits), (2) increased multiprofessional collaboration, (3) the use of new technologies, and (4) the reduction of polypharmacy. Programme managers report improved cooperation among health professionals, medical and non-medical professionals and the work in multidisciplinary teams as having contributed most to the savings achieved. Case managers who are responsible for the patient and the planning of the care process (e.g. with a care plan) are often part of such teams. Programme managers refer to different types of technologies that contributed to savings, supporting either the patient or the provider. Electronic health records and eHealth protocols are most frequently mentioned, allowing better and safer management of patients and improved communication among providers. Polypharmacy is a well-known problem for patients with multimorbidity. Several programmes use drug monitoring, coordinated pharmaceutical management and regular patient medication reviews to reduce polypharmacy. This reduces the risk of further complications and adverse side effects, and thereby reduces overall costs [38].

Discussion

How to improve payment mechanisms to stimulate integrated care for people living with multimorbidity?

Based on findings from the ICARE4EU project and the framework shown in Fig. 1, it is possible to think systematically about the adjustments to basic payment mechanisms that are necessary to support high-quality integrated care for people with multimorbidity. Table 2 provides a summary of various options for the adjustment of basic payment mechanisms, illustrating that all payment mechanisms can be adjusted to (1) promote coordination and ultimately integration of care, (2) to better account for multimorbidity and (3) to encourage a high quality of care. Payment mechanisms included in Table 2 can be combined in various ways: first, basic payment mechanisms can be combined with each other in order to balance incentives; second, each basic payment mechanism can be combined with different adjustments to promote integration, to take into account multimorbidity, and to enhance quality – based on patient, service or provider characteristics; although some combinations appear more likely than others.

Payment adjustments to promote better coordination and integration of care

Programmes that adjust payment to promote better coordination of care are often called *pay-for-coordination* (P4C) initiatives [39]. One example would be a primary care provider receiving a capitation payment per registered patient, who could receive an additional service-based payment for performing a comprehensive case review (review of documents from other providers) or for documentation activities (for other providers) to support better coordination of care. However, as shown in Table 2, the adjustment could also be made on the basis of provider characteristics, for example, by adjusting the primary care provider's budget to cover the cost of employing a case manager. Similarly, capitation payments could be adjusted (higher payments for each registered patient) for providers with case managers.

Table 2: A framework of adjustments to basic payment mechanisms that can potentially support high-quality integrated care for people with multimorbidity

<table>
<tr><th></th><th>Provider characteristics</th><th>Patient / population characteristics</th><th>Service characteristics</th></tr>
<tr><td>Basic payment mechanism</td><td>Budget</td><td>Capitation, case payment</td><td>Fee-for-service</td></tr>
<tr><td colspan="4">Examples</td></tr>
<tr><td rowspan="4">1. To promote coordination
↓
To pay for integration (bundled payment or shared savings)</td><td>Budgets for multidisciplinary teams (e.g. including a case manager)</td><td></td><td rowspan="2">P4C activities (e.g. case review, documentation, participation in meetings)</td></tr>
<tr><td colspan="2">Higher capitations for providers with multidisciplinary teams (e.g. with case managers)</td></tr>
<tr><td>Budgets for integrated care structures (one budget for multiple providers)</td><td>One capitation or case payment for multiple providers</td><td>One fee for multiple services performed by one or multiple providers (e.g. one fee for a particular type of surgery, including all related services)</td></tr>
<tr><td colspan="3">Payments defined based on patient, service and provider characteristics (e.g. one payment for a patient with a heart attack, including a specific set of services provided during six months after the initial event by a hospital, rehabilitation providers and ambulatory physicians)</td></tr>
<tr><td>2. To better account for multimorbidity</td><td>Higher budgets for providers with professionals trained in multimorbidity</td><td>Comprehensive casemix adjustment of payments, explicitly taking multimorbidity into account</td><td>Pay for patient education and counselling, pay for polypharmacy review</td></tr>
<tr><td>3. To enhance quality (for above/below average performance or for performance improvements)</td><td>Bonus/penalty in relation to meeting structural quality indicators, e.g. proportion of staff with certificate of training in multimorbidity</td><td>Bonus/penalty in relation to mortality, complications or patient satisfaction (after careful adjustment which takes multimorbidity into account)</td><td>Bonus/penalty for proportion of patients treated in line with guidelines, proportion of patients with multimorbidity having had a biannual polypharmacy review</td></tr>
</table>

Source: Authors' compilation.

These approaches all have in common that providers receive additional money for better coordination of care. However, P4C does not provide incentives for providers to coordinate their care in a way that could lead to a reduction of health care expenditures, for example, by avoiding duplicate tests or unnecessary hospitalizations. In order to achieve this aim, providers have to be given the opportunity to jointly benefit from efficiency gains. There are two basic approaches that allow providers to benefit from efficiency gains: (1) shared-savings models, and (2) bundled payments. However, both of these approaches are considerably more complicated to implement than P4C because they require organizational changes that go far beyond the modification of the payment system and because they imply a transfer of financial risk from the payer(s) to the provider(s).

A *shared-savings model* implies that each individual provider continues to be paid according to the established payment system. However, all costs for patients participating in the integrated care programme are registered and retrospectively compared to historic figures or a benchmark, which enables the payer to determine if savings have been made. Participating providers agree to cooperate in a network and to collaborate with the aim of achieving joint savings for the care provided to participating patients. Of course, the providers, patients and services eligible for participation in the programme have to be explicitly defined before the start of the programme [40]. If total payments for participating patients are below the benchmark, which can be a historical time trend (i.e. expected expenditures if the shared-savings model had not been implemented) or a regional/national average of payments for comparable patients, a share of the realized savings is distributed to providers. The Gesundes Kinzigtal described in Box 4 is one example of a shared-savings model, but there are many more operating in the United States of America, which have been further stimulated by the 2010 Affordable Care Act and extensively described in the literature [41-43].

Usually, shared-savings models require a new organizational structure in order to (re)distribute savings across participating providers and to help with the coordination of care. Moreover, the (re)distribution mechanism is extremely important as it may determine the success of the programme and the extent to which providers in the network actually collaborate, and coordinate and reorganize care processes in order to achieve savings. For example, if regular check-ups by primary care providers can reduce the need for visits to secondary care providers, the redistribution mechanism has to make sure that both providers benefit from a reorganization of care, that is, the secondary care provider must be compensated for the loss of revenue and the primary care provider for the increasing workload. Furthermore, the new organizational structure can play an essential role in achieving improvements in the coordination of care, for example, by facilitating the development of joint clinical pathways or joint electronic medical records.

Bundled payments constitute an even more radical change of the payment system than a shared-savings model because they transfer considerable financial risk from insurers to providers [44]. In such approaches, providers are exposed to the full financial risk if treatment costs for their patients are above the amount that they receive through the bundled payment. For example, a negotiated bundled payment covering all ambulatory care costs of diabetic patients as, for example, in the Netherlands [30] may be below the actual costs of the provider network responsible for the provision of care. Because of the financial risk involved in bundled payment approaches, organizational structures with sufficient resources accepting the financial risk and acting as general contractors of care are even more important than they are in shared-savings models.

In theory (see Table 2), bundled payments can be defined on the basis of provider, patient or service characteristics, or on the basis of a mix of these three. Because the incentives depend on the type of information that is used to define the bundle, blended payments defined on the basis of all three types of information provide a more balanced set of incentives.

The effect of a "bundled payment" on care integration depends on the exact scope of the payment in terms of included providers, services and time, for which a payment is made. In general, the broader the scope of the payment, the greater the incentive for integration of care. However, a broader scope also implies a greater degree of financial risk for the contractor because health care costs for broad bundles of care (covering extended periods of time and various services provided by various providers) exhibit a large degree of variation. In fact, this is a problem with particular relevance for patients with multimorbidity because the complexity of their needs means that health care costs can exhibit even larger variation than on average in the population. Very large organizational structures, with sufficient financial reserves, are necessary in order to assume the large degree of risk associated with broad bundles of care. Therefore, the introduction of a bundled payments always has to consider the existing provision structure and the availability of suitable contractors to accept the financial risk involved with the introduction of bundled payments.

Conceptually, the broadest conceivable bundled payment is one where a single payment covers all care provided to all patients living in an area over a defined period of time. However, this type of payment would be usually called a broad capitation payment or a population-based budget. Payment would not be made to individual providers but to large-scale health care organizations (e.g. Health Maintenance Organizations in the United States of America) organizing and paying for all care needed by the adherent populations. This means that the question of how to pay providers and to assure coordination of care is simply transferred from the payer to another organization, which then becomes the payer for individual providers.

Payment adjustments to take multimorbidity into account

Payments can be adjusted in various ways in order to take multimorbidity into account. One option is a provider-based adjustment, where, for example, providers employing personnel with special training in caring for people with

multimorbidity receive a larger budget. Another option is that payments are made for special services required by people with multimorbidity. For example, an additional fee can be paid to pharmacists performing a polypharmacy review. Both options can be implemented relatively easily in combination with other payment approaches to promote coordination or integration of care.

However, one particularly important adjustment required for taking into account multimorbidity is comprehensive casemix adjustment. This is because casemix adjustment assures that different payment mechanisms account for the complexity of different types of patients. People with multimorbidity have particularly complex care needs, often requiring more resources than other people. If payment mechanisms do not adequately account for this increased complexity, providers treating a higher share of people with multimorbidity are not adequately rewarded for their greater efforts. Consequently, in the absence of adequate casemix adjustments, there are incentives for providers to engage in risk selection, that is, to select comparatively healthier people – and to avoid those with multimorbidity.

Casemix adjustment has traditionally been applied to payment mechanisms based on individual characteristics, that is, capitation and case payments, because these payment mechanisms provide strong incentives for risk selection (see Table 1). For example, in England, capitation payments for GPs have been adjusted for many years on the basis of the Carr-Hill formula [45], and capitation payments to Health Maintenance Organizations in the United States of America are adjusted on the basis of the Centers for Medicare and Medicaid Services Hierarchical Conditions Categories (CMS-HCC) model [46]. Similarly, hospital case payments around the world are adjusted on the basis of DRGs (see [27]). In fact, casemix systems have been developed to account for the complexity of patients treated by various providers (including psychiatric hospitals, long-term care providers, outpatient providers) and also for entire populations [47].

With increasing prevalence of multimorbidity, it becomes ever more important to adjust payments for the casemix of treated patients. For example, provider-level budgets should be adjusted for casemix in order to assure that providers (primary care providers, hospitals, long-term care facilities) with a larger share of patients with multimorbidity receive a larger budget. Similarly, FFS-based systems might require casemix adjustment, if services are defined only by service characteristics (B in Fig. 1), for example, one fee for a clinical examination (regardless of whether this is performed on a person with or without multimorbidity). It is possible to refine FFS systems by incorporating individual characteristics into the definition of the service (e.g. by introducing different fees for a physical examination of a person without multimorbidity and for a person with multimorbidity). Alternatively, an FFS payment can be combined with a casemix-adjusted capitation payment.

Clearly, the need for casemix adjustment increases with the scope of the payment. Broader payments – covering longer periods of time, stretching across more providers, and/or including more services – require better casemix adjustment than narrow payments. This is because the care costs of broader bundles exhibit larger variations of health care costs. It is particularly difficult to define broad bundles of care for people with multimorbidity because the multiple conditions require treatment that leads to particularly large variation in treatment costs. Therefore, while people with multimorbidity may benefit greatly from better integrated care resulting from broader payments, they are also the ones most likely to suffer from risk selection if bundled payments do not account for the greater complexity of treatment through adequate casemix adjustment.

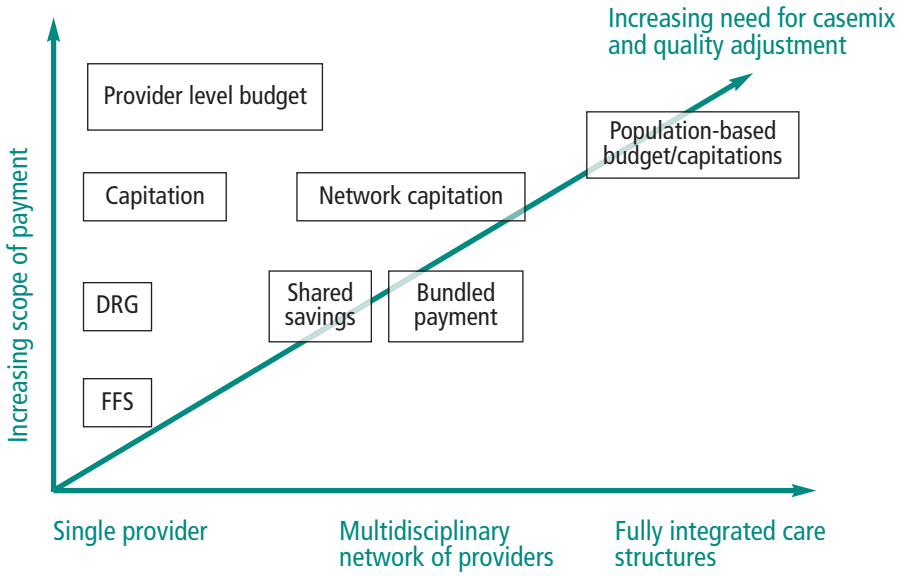
Payment adjustments to promote quality

Table 1 showed that none of the traditional payment mechanisms provides direct incentives for quality of care. Payment systems can be adjusted to incorporate incentives for quality but a precondition is that quality is reliably measured. Quality measurement can focus on structures, processes, and/or outcomes [48]. If quality can be reliably measured and if quality attainments can be attributed to providers, it is possible to provide incentives that encourage providers to achieve better quality of care.

Different options for adjusting payments in relation to quality of care for people with multimorbidity are summarized in Table 2. For example, providers with good structures in place for the care of people with multimorbidity (e.g. employing personnel with special training in multimorbidity, case managers) can receive a bonus, possibly calculated as a percentage of their usual income (independent of whether this is based on budgets, FFS or capitation). Alternatively, providers could receive a bonus if their care processes are in line with recommended treatments for people with multimorbidity (e.g. if they follow treatment guidelines or if they perform a biannual polypharmacy review). Finally, payment could be adjusted in relation to the achieved outcomes of care (e.g. if mortality is below average, if the number of avoidable hospital admissions is low, or if patients are particularly satisfied with their care). Designing adequate incentives through payment adjustments is quite complicated because there are many options concerning the measurement of quality (e.g. which indicators to use and how), the definition of targets (e.g. absolute targets or relative targets), the level of the payment adjustment (e.g. individuals, groups, institutions), the form of the incentive (bonus or penalty), the use of risk-adjustment and so on [49].

However, measuring and incentivizing quality of care is likely to be particularly important when payments are broad, as is the case with shared-savings models, bundled payments or broad capitation payments made to integrated care structures. This is because broader payments provide larger incentives for providers to reduce costs – and, in the absence of adequate mechanisms to monitor and reward quality, providers may attempt to cut costs by reducing the provision of services, disregarding patient needs and providing lower quality care.

Fig. 2: Relationship between the scope of payment, care integration, casemix and quality adjustments



Source: Based on [49, 50].

Fig. 2 summarizes the discussion about the relationship between the scope of payment and the increasing need to adjust for casemix and quality, which is particularly important in the context of patients with multimorbidity. Fig. 2 also suggests a hierarchy in the complexity of payment systems that could serve as a roadmap for countries that have more basic payment systems to incrementally develop towards more complex payment mechanisms.

Limitations

The ICARE4EU survey findings indicate that there is unexploited potential for the promotion of better care integration for people with multimorbidity in Europe. It shows that while some countries are already implementing integrated care programmes with a focus on patients with multimorbidity, only a limited number of programmes are using innovative payment mechanisms to improve care integration. However, the lack of more widespread adoption of innovative payment mechanisms is likely to be related to the greater complexity of appropriately designing such systems, their potential for unintended consequences, and a lack of government strategy.

An all-encompassing conclusion is difficult to draw, as the comprehensiveness of the ICARE4EU survey cannot be guaranteed. First, the ICARE4EU project relied on country experts to identify all integrated care programmes and to collect all the relevant information, which leaves the possibility that not all programmes were found and relevant information collected. Furthermore, the very technical questions in the financial section of the survey assumed a very detailed theoretical understanding of payment mechanisms, which appears to have been overambitious. Lastly, ICARE4EU applied strict inclusion criteria (see Appendix 2), which may have led to the exclusion of programmes with potentially interesting and innovative financing mechanisms.

Policy implications

Generally, policy-makers need to look for ways to foster the development of integrated care programmes specifically designed for people with multimorbidity. This can be achieved by providing funding mechanisms that guarantee short- and longer-term options or the prospect of rapid inclusion in the usual care system and access to its funds. In return, policy-makers need to demand continuous evaluation over a long period to generate conclusions about the effectiveness of active programmes and add to the evidence base. This means that future programmes need to be developed in ways that allow comprehensive and rigorous evaluations.

More specifically, innovative payment mechanisms need to be developed, which are tailored to the specific characteristics and goals of a programme as well as the local context and national health system in which they operate. Some good examples are available but there is no single solution. Nevertheless, some elements seem instrumental. Payment mechanisms for integrated care for people with multimorbidity should provide incentives for providers to collaborate and adequately account for the complexity of cases treated. Innovative payment and incentive systems that could potentially be used to promote integrated care include (1) P4C, (2), shared-savings models and (3) bundled payments – in

combination with the existing more traditional payment mechanisms that are operational in a given country (e.g. budgets, capitation, DRGs and FFS). In addition, P4P can be used to provide incentives for better quality of care, measured in terms of structure, process or outcome quality. Moreover, several of these approaches can, or rather should, be combined. For example, an existing payment system (e.g. capitation or FFS) can be combined with (a) an additional FFS adapted to the care needs of people with multimorbidity (e.g. review of their medication plan or holistic assessment of their needs), (b) P4C (e.g. participation in multidisciplinary meetings) and (c) performance-based remuneration for specific simple quality characteristics (e.g. the documentation of achieved goals). By contrast, the introduction of shared-savings models or bundled payments is much more demanding, requiring integrated care structures, sophisticated methods of casemix adjustment and well-functioning systems for monitoring quality of care.

Participant characteristics have to be defined before designing an integrated care programme for people with multimorbidity. Applicability in current delivery systems has to be considered while designing an integrated care programme – as there is no unique or best way of adapting a payment system to become more encouraging and supportive in multimorbidity care. However, policy-makers should be aware that several preconditions need to be met when developing more complex payment schemes that better account for multimorbidity. These include effective information systems that collect meaningful data on quality and cost (e.g. in order to enable payment adjustments for quality of care), large provider organizations with sufficient reserves to assume some financial risk (e.g. under bundled payment programmes), and strong leadership and governance structures at national but also at programme level. It also implies that countries where such preconditions are lacking may be better advised to focus on refining their current payment mechanisms and the aforementioned preconditions before, for example, implementing bundled payment or shared-saving schemes, let alone population-based payment.

Lastly, if integrated care programmes for people with multimorbidity are implemented effectively, the findings from the ICARE4EU project and the literature suggest that they can save money and control costs. Evaluations of several programmes, some externally evaluated, some only internally evaluated, indicate that the use of innovative technologies, increased multiprofessional collaboration, and polypharmacy management can lead to savings. However, more evidence is needed to back up these findings.

Conclusions

The literature and the findings from the ICARE4EU project in themselves do not lead to an easy conclusion about how to redesign payment and incentive mechanisms. They also do not suggest a standard method that could be used. There is not one model addressing all specificities of the targeted population, the involved providers or the health care systems they operate in. In order to improve the financing of integrated care for people with multimorbidity across the European Union, more evidence is needed. Despite the increasing number of people with multimorbidity, there are surprisingly few studies about how different payment mechanisms can improve care for chronic diseases, and reviews confirm a shortage of evidence about the economic effectiveness of integrated care programmes for people with multimorbidity. Research examining the effects of different incentives on provider behaviour with respect to people with multimorbidity is urgently required. Robustly evaluated integrated care programmes are important in order to evaluate their effectiveness, to justify the investment and to verify their potential for implementation.

In light of the current evidence base, this brief describes policies that aim to combine different, existing payment mechanisms to better fit the characteristics and needs of people with multimorbidity. The need to incorporate the element of cooperation/integration and quality into the payment system is also noted. This framework seeks to capture the complexity of developing a payment mechanism for providers of integrated care for people with multimorbidity. Policy action needs to be correspondingly comprehensive and create an environment that fosters finding solutions to adequately care for a growing population that has multimorbidity and complex care needs.

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Appendix 1

Rapid review of the literature

The literature that was included in this Policy Brief was collected from various sources. First, international policy and strategy documents directed at multimorbidity care, integrated care, and/or financing of integrated care were identified. Second, we performed a targeted search for international scientific literature in PubMed and Google Scholar. Finally, grey literature was searched by hand on the internet, which identified publications that reported on the results of integrated care interventions for people with chronic conditions and/or people with multimorbidity and financing mechanisms for integrated care and or care for people with multimorbidity. Documents were collected via PubMed and journal web sites, as well as web sites of the World Health Organization, the King's Fund and the European Commission. A survey among the project partners and the utilization of their networks of contacts also yielded additional papers and reports.

Appendix 2

Selection of innovative approaches in European countries by the ICARE4EU project

In 2014, data on innovative care approaches at a national, regional or local level were collected via country expert organizations in 31 European countries. These organizations were asked to search for and report on all integrated care programmes that focus on multimorbidity within their country. The term "programmes" refers to initiatives that (aim to) put integrated care for people with multimorbidity into practice. Initially, 178 programmes were identified by the country experts. Based on predetermined selection criteria, the ICARE4EU project partners considered 101 ongoing programmes, in 24 countries, to be eligible for inclusion in the database. Via the country experts, an online questionnaire, available in 11 languages, was provided to managers of the 101 selected programmes to collect detailed programme characteristics and outcomes.

Next, these 101 programmes were evaluated by the project team. Each programme was scored in five dimensions: a general score (assessing general aspects such as its evaluation design, perceived sustainability and transferability) and four scores that provided an indication of its level of (1) patient-centredness, (2) integration of care, (3) use of eHealth technologies and (4) its innovativeness in financing mechanisms for integrated care services, as these aspects had been selected by the project team as different study perspectives on multimorbidity care. Based on these scores, members of the project team built a long list of 25 programmes that had high scores. The second evaluation of these 25 programmes was based on the descriptive information gathered via the survey (e.g. the description of the aims of the programme, reported strengths and weaknesses) and any published evaluation reports. This resulted in a short list of so-called 'high-potential' programmes. To decide whether or not to select a programme from this list for further study, the project team checked with the country expert and/or verified information by contacting the programme coordinator. In this way, eight programmes were selected for a site visit. The eight programmes visited were operational in Belgium, Bulgaria, Cyprus, Denmark, Germany, Finland, the Netherlands and Spain. The results of these visits are described in eight case reports published on the ICARE4EU website (www.icare4eu.org).

Selection criteria

Programmes were considered for inclusion in the ICARE4EU project if they met the following criteria:

- They were aimed at a patient target group consisting of people aged 18 and older, with two or more medically (i.e. somatic, psychiatric) diagnosed chronic (not fully curable) or long-lasting (at least six months) diseases, of which at least one has a (primarily) somatic/physical nature.
- They involved cooperation between at least two services (these services may be part of the same organization, for example services within a hospital, or may be part of different organizations, for example between medical care and social care).
- They have some formal status/formalized cooperation (any form).
- They will be or have been evaluated.
- They are currently running (2014), or finished less than 24 months ago or start within the next 12 months.

ICARE4EU Policy Briefs

22. *How to strengthen patient-centredness in caring for people with multimorbidity in Europe?* Iris van der Heide, Sanne P Snoeijs, Wienke GW Boerma, François GW Schellevis, Mieke P Rijken. On behalf of the ICARE4EU consortium
23. *How to improve care for people with multimorbidity in Europe?* Mieke Rijken, Verena Struckmann, Iris van der Heide, Anneli Hujala, Francesco Barbabella, Ewout van Ginneken, François Schellevis. On behalf of the ICARE4EU consortium
24. *How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe?* Verena Struckmann, Wilm Quentin, Reinhard Busse, Ewout van Ginneken. On behalf of the ICARE4EU consortium
25. *How can eHealth improve care for people with multimorbidity in Europe?* Francesco Barbabella, Maria Gabriella Melchiorre, Sabrina Quattrini, Roberta Papa, Giovanni Lamura. On behalf of the ICARE4EU consortium
26. *How to support integration to promote care for people with multimorbidity in Europe?* Anneli Hujala, Helena Taskinen, Sari Rissanen. On behalf of the ICARE4EU consortium

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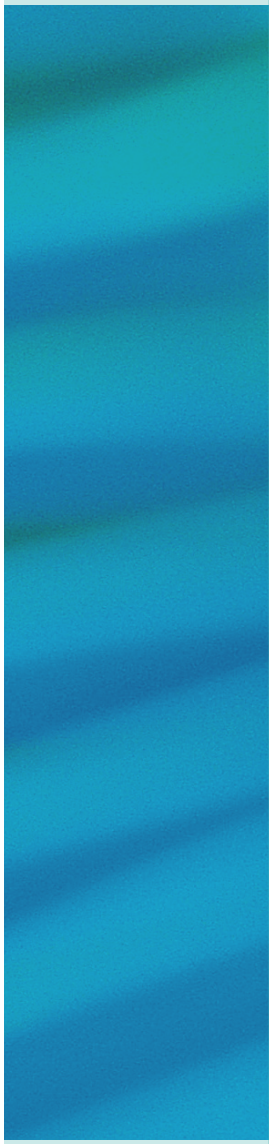

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