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# AICGS POLICY REPORT

**PAY-FOR-PERFORMANCE IN  
THE HEALTH CARE SYSTEM:  
LESSONS LEARNED AND  
STEPS FORWARD**

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American Institute  
for Contemporary  
German Studies

JOHNS HOPKINS UNIVERSITY

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## FOREWORD

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Although the U.S. and Germany have very different health care systems, a more nuanced analysis of the systems shows that both countries are confronted by similar challenges. With aging populations and rising costs, health care provision is a concern for societies on both sides of the Atlantic. Closely linked to the economic welfare of a country, health care policy continues to influence domestic policy debates in Germany and the U.S. today and in the future.

Among the challenges that the U.S. and Germany face is the reform of the health care system so that it rewards quality health care as well as a corresponding payment system for medical providers. In this Policy Report, Dr. Christof Veit and Dr. Dagmar Hertle provide an overview of pay-for-performance projects (P4P), which have been increasingly utilized in the U.S. and Great Britain and are starting to also become more prevalent in Germany. The authors examine the definition of P4P and evaluate a variety of P4P instruments as well as their implementation. While analyzing if P4P should become a larger part of the health care system in Germany, they give specific suggestions on how to develop concepts of implementation and choose the right instruments for achieving increased health care quality. This report provides analysts and practitioners with a sound evaluation of P4P projects and instruments, allowing for a very comprehensive assessment of a tool that is increasingly used in the American and German health care systems.

This publication is based on a more extensive report the authors published in August 2012 on behalf of the German Federal Ministry of Health; the entire report can be requested at [p4p@bqa-institut.de](mailto:p4p@bqa-institut.de). The Policy Report is part of AICGS' current focus on health care and health care reform in the United States and Germany. AICGS is grateful to the Robert Bosch Foundation for its generous support of AICGS' work on health care and this Policy Report. The Institute would also like to thank the authors for sharing their insights, Jessica Riester for her work on this publication, and Susanne Dieper and Kirsten Verclas for their translation of the German original.



Jack Janes  
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# 01

OVERVIEW

# OVERVIEW

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## Introduction

Over the past few years, the United States and Great Britain have seen an increasing number of pay-for-performance (P4P) projects. P4P elements have also been used in selective contractual areas<sup>1</sup> in Germany for a while now. Narrowly defined, P4P connects the payment of providers completely or partially to the provided service, which has been verified through quality control. This report will provide a basis of discussion for the question, if and in what form P4P should become part of the German health care system.<sup>2</sup>

## Approach

This report first defines pay-for-performance and illuminates the normative background that is the basis for the assessment criteria of the P4P projects. The report then evaluates P4P projects in Germany and internationally, outlining the current understanding of the effectiveness of P4P elements in different areas. To develop concepts of implementation, questions of P4P development are differentiated and methodically reflected; specific suggestions and the corresponding instruments are presented as a base for further discussion.

The relevant literature on the topic of P4P in health care was gathered with the help of a systematic literature research, aimed at identifying various P4P models, pilot and demonstration projects, research activities, and practical experiences in national and international academic and provider sectors, and describing the projects' essential characteristics and differences. Furthermore, the scientific evidence for the effectiveness of P4P projects was examined. As there are only a few studies with a high level of

evidence, publications offering lower grade evidence as well as expert opinions and reports of practical experience with P4P projects were also considered, as long as they met inclusion criteria in terms of content. Additionally a survey was conducted by mail and internet with German institutions about P4P. A selection of P4P projects found in Germany that met the definition of this report are presented in detail. Twenty-three representatives of different health care institutions in Germany were interviewed and asked political, scientific, and practical questions about the topic. The interim results were discussed in workshops. On the basis of the collected facts and views as well as other, theoretical sources, working assumptions were generated for the implementation and further development of P4P projects and bundled to form an agenda for Germany.

## Results

P4P projects display remarkably different courses of action. These span from classical bonus projects and targeted payments to non-pay-for-non-performance, shared-savings approaches and accountable care organizations (ACOs) in the United States. The P4P projects implemented in Germany also exhibit a variety of goals and organizational forms. Many P4P projects work simultaneously with non-financial incentives, for example training and benchmarks with feedback or public reporting. In Germany, the law provides different opportunities to realize P4P projects, such as: pilot projects (section 63 Social Code, volume V), structural contracts (section 73a Social Code, Volume V), care centered on primary care physicians (section 73b Social Code, Volume V), selective contracts (section 73c Social Code, Volume V), and integrated care (section 144 Social Code, Volume V).



A critical evaluation of the literature on primary and hospital care and the cost effectiveness of P4P reaches the same conclusion as prior reviews (even taking the new literature from 2010 and 2011 into account): Studies have not yet been able to prove the effectiveness of P4P projects with absolute certainty. While there are signs of effectiveness of the combined procedures, i.e., including non-financial incentives, the part played by the financial incentives in achieving success has not yet been determined. This contradicts the universal experience that money is indeed a strong incentive and changes in the compensation system usually trigger intense reactions. The complexities of medical care as well as the systemic optimization and avoidance reactions strongly influence the results of some projects through miscellaneous selection effects. This obscures much of the effectiveness, which can be demonstrated with some examples. Many organizers of existing projects, however, believe in their projects and their good practical experience and choose to continue their projects, or even expand them. Despite lacking evidence for the effectiveness of P4P, many of the people surveyed in Germany believe that P4P will play a larger role in the future. To what extent this is already politically realizable at the moment remains, however, unclear.

Based on the results of the study (literature) and the collected expertise (conversations with experts, workshops, and surveys), this report generates several working assumptions for P4P, which should become a basis for discussions and activities for future projects.

P4P projects are an intervention in the regulation of a complex system; solid understanding of the complexities and the context is necessary for successful implementation. Therefore, this report first lays out a model that describes the different elements of such a project. A taxonomy was developed specifically for this purpose and the corresponding check list for P4P projects allows for standardization and thus for comparative documentation. Additionally, the catalogue of project items can serve as a check list for the implementation of projects.

The starting point for P4P projects is a clear formulation of the goals and the intervention instruments<sup>3</sup>

designed to reach those goals. Borrowing from risk management makes it clear why different intervention instruments are needed for different types of care deficits. Since many of the quality deficits already react to feedback, education, and public reporting, the more complex P4P instrument should be used if all other possible instruments have been exhausted. In the concrete example of a benchmarking project with feedback and public reporting, one could examine whether additional financial incentives can further increase the effectiveness of a project. This gradual introduction is advised because existing quality measurements have already provided certain experience and the system reactions are known. The direct use of new indicators in a P4P system seems risky, as one has to anticipate unexpected artifacts, which might not be identified as such and can endanger the success of the project.

P4P addresses variance in the quality of care. Thus, measuring quality is a central element of P4P. However, many areas of medical care still lack operationalized quality indicators. It is important to provide methodological development work in this area, for example by identifying useful intermediate outcome indicators that would show the perspective of long-term results much earlier with a high predictive value. Additionally, the problem of small case numbers can and should be solved with new statistical methods, as most medical care occurs within the volume range of twenty to fifty cases. This will entail some entirely new methods of quality measurement, for which there are already some approaches. Furthermore, one should consider that outcome and process indicators behave very differently, and P4P projects must use the right indicators for the desired goals. Indicators on the appropriateness of the medical indication will play a growing role in the future and should be further developed.

Not all indicators are equally qualified to be used for P4P projects. Consequently, a new testing method for the applicability of P4P quality indicators was developed on the basis of QUALIFY,<sup>4</sup> which is presented in the detailed report.<sup>5</sup> This method was tested on over 2,000 indicators and is already in practical use.

Most problems with P4P involve measuring quality. It

is important that with all projects the balance of feasibility, usefulness, and appropriateness is ensured and that the statements about quality are limited to the facts that the measuring instruments can provide. This includes considering additional effort and costs. The effort can be minimized by centralizing the problem and having a dual-step documentation with minimal monitoring and a detailed documentation of quality in case of an abnormality.

the broad acceptance by the parties, and on clear political guidelines.

Both the quality indicators and incentives have to match the regulation goals. There are five primary regulation goals: Monitoring care, correction of care deficiency, care development, support of excellent care quality, and efficiency-oriented care regulation. In implementing the projects, one has to consider the side effects of P4P as well as questions of data privacy, the acceptance of all people involved, and the appropriate evaluation. For all phases of implementation, methodological and practical information are provided and minimum standards have been formulated.

The main fields for implementing P4P are the support of excellent quality and new care structures as well as penalizing continued underperforming quality of care. The focus of innovative development will mostly take place in the selective contracting area, but some sensible, medium-term options are also recognizable for the collective contracting area, especially within the already existing mandatory quality benchmarking. In addition to the providers, the cost bearers and their associations, the medical organizations, and the Federal Joint Committee will also play a role concerning this topic.

Politically, there are three options:

- Leave the current framework in place;
- Add P4P elements to the possibilities currently available, especially in the area of data availability and the established remuneration systems;
- Strategically promote methodological development and implementation in various projects.

Whether P4P will be an additional instrument for quality-oriented regulation of the health care system in Germany in the future depends on the urgently needed advances in the area of measuring quality, on



## DEFINITION OF P4P AND EXAMPLES

02

## DEFINITION OF P4P AND EXAMPLES

### Definition of Pay-for-Performance and Normative Background

If certain regulations for the remuneration of services provided are established, this always entails a certain degree of strategic control. Attempts to regulate the health care system through financial incentives are accordingly nothing new. One has to distinguish between two different forms:

- Prospective determination of compensation for certain services; and
- Retrospective forms, for which compensation is only determined through measurement of the quality of the provided service (process or outcome).

This report analyzes mostly the retrospective compensation form, because this touches on uncharted territory. These forms consider the individual performance levels of the provider and thus broach the variance of quality within the health care system.

The definition of pay-for-performance in the narrow sense—that is, in the sense used in this report—is therefore the following:

Pay-for-performance is understood as a special strategic form of compensation. Pay-for-performance methods connect the compensation of providers in the health care system to the provided performance level, which is displayed by quality metrics. Differentiating financial incentives are supposed to motivate providers to optimize and further develop their care in a sustained and comprehensive fashion with regard to the quality and efficiency of the health care system.

Based on the above-mentioned reasons, the following prospective forms of compensation are not part of the pay-for-performance projects in the narrow sense and therefore are not analyzed further in this report, their value for the health care system notwithstanding:

- Fee-for-service: Prospective determination of a remuneration amount for individual services or service packages.
- Pay-for-transparency: Payment for measuring and informing about the quality of care.
- Pay-for-competence: Financing of special care structures, such as high-performance diagnostic and therapeutic machines, IT-equipment, or additional personnel for special services.

### Normative Background

Individual P4P projects determine their own goals and contents. An overarching assessment of these procedures, however, has to be based on an overall consensus-oriented canon of values, so that sensible and binding assessment criteria can be deduced from that, independent of particular interests.

To establish a normative background in a health policy context, a useful framework is the concept of “High Performance Health Care System” established by the Commonwealth Fund,<sup>6</sup> in which Germany is included in an annual comparison of international health care systems.<sup>7</sup> The quality dimensions for a high-performing health care system that seek to enable people to live long, healthy, and productive lives are:

- High quality care
- Access to care
- Equity of care

- Efficiency of care
- System and workplace innovation and improvement.<sup>8</sup>

The success and the applicability of a pay-for-performance model are thus not only based on the fact that it achieves its own goals, but in also that the achieved changes are an improvement for the entire health care system. This needs to be considered when the societal effects of P4P projects are assessed.

### P4P as Practical Instrument

Pay-for-performance plays a major role among the many different compensation schemes because it is based not only on performance definition, but also on the measurement of performance. Thus, regulating the health care system is possible at least to a small degree through a differentiation of the provided care. P4P is often treated as a new paradigm whose effectiveness has to be proven overall. This misses the fact that P4P projects are a very heterogeneous group of regulating instruments and it is often difficult to assess their overall effectiveness.

The primary question of P4P projects is their effectiveness in individual situations: the question to be asked is whether use of one of the P4P instruments has much prospect of success in a certain control problem in the health care system. Thus the following questions arise:

- How do I recognize if pay-for-performance is a useful option to a given problem?
- How do I recognize which P4P approach is most useful to address the problem?
- What do the involved parties have to consider when they implement the P4P project so that they achieve the most success with justifiable effort?
- What minimum standards have to be adhered to when a P4P concept is designed, implemented, documented, and evaluated?

### P4P Project Diversity: Examples

#### CLASSIC PROJECTS

The most common and best known way of designing

P4P projects is to take an already established set of quality indicators and connect a part of the compensation to the completion of certain target or quantitative threshold values from the chosen indicator set. Within those programs, financial resources that are then used to pay the bonus can be withheld from the overall budget, or additional money is provided.

A well-known example is the British Quality and Outcomes Framework (QOF). Such projects have so far not been very successful and can thus only be conditionally recommended for simulation.<sup>9</sup>

#### TARGET PAYMENTS

Target payments are a form of compensation that is similar to fee-for-service. There are additional single payments for certain services, for example a vaccination. Compensation can be increased for the actual administration of the vaccine.<sup>10</sup> An actual relation to quality and P4P is only given, however, when the amount of the single payment is combined with a certain target value, i.e., the additional compensation is only paid when a certain percentage of the population in question is vaccinated. Such P4P projects can be helpful in cases of insufficient care with clearly defined measures (such as vaccination).

#### NON-PAY-FOR-NON-PERFORMANCE

P4P can also penalize poor performance, meaning that costs for undesired outcomes, such as avoidable complications, or medical malpractice, are not paid by the health insurance providers. Without being explicitly called pay-for-performance, such an approach is part of the German DRG-System.<sup>11</sup> Other projects, such as Centers for Medicare and Medicaid Services' CMS-Never Events<sup>12</sup> and CMS Non-Coverage Wrong-Site Surgeries,<sup>13</sup> choose this approach as well. Few doubt that these measures are successful, but evaluations are not available.

#### PROVIDER-DRIVEN P4P

A characteristic of these projects is the desire of the doctors involved to improve a certain care situation that they experience as dissatisfactory and to receive adequate recompense for their efforts. The project is thus initiated by the providers; the pay-for-perform-

ance aspect is the fact that the health insurance providers asked to provide additional compensation are seeking evidence for the actual improvement in quality and/or the savings that are created by improved performance. It is not designed to pay for additional work in the sense of fee-for-service, but the compensation depends on improvements actually achieved in the level of quality.

Examples of such projects are the so-called “feet networks” that have been established in Germany to treat and prevent diabetic feet.

#### USE OF DISCOUNT CONTRACTS FOR P4P (HOSPITALS)

Established discount contracts between health care providers and hospitals can be used for pay-for-performance. This is already happening in the framework of an integrated health care agreement on care for stroke patients. Criteria in the contract are in-patient remittance within a year, the thirty-day mortality rate as well as in-patient remittance within a year of diagnosis of cerebral infarct, transient ischemic attacks, or intra-cerebral bleeding. Performance is compared to the federal average; the insurance provider adjusts the amount of the discount stipulated by the hospital depending on the quality of care. If the quality is bad, the whole discount is granted; if the quality is very good, only a small discount is awarded.

#### PATIENT INVOLVEMENT

P4P can also be used to motivate patients to behave a certain way. Health care insurers use positive as well as negative financial incentives to motivate patients to participate in certain measures. One example is regular dental check-ups as a requirement for a higher participation of the insurers in paying for dental prosthesis or a reduced co-payment if the patient participates in disease management programs.

#### GAIN-SHARING AND SHARED SAVINGS

Gain-sharing projects are relatively old. Already in the 1990s, contracts between doctors and hospitals in the U.S. allowed for savings and cost efficiencies that

were achieved through the improvement of processes, for example, by reducing unnecessary use of materials. The quality goal of gain-sharing is the avoidance of inappropriate use or waste.<sup>14</sup> The incentive for doctors is to share in the savings of the hospital. In this type of P4P, concerns are justified that savings could be made at the patients’ expense or that the costs are transferred with the patient to other facilities.

Gain-sharing is thus a special case of shared savings. The shared-savings approach becomes more and more of a focus—as already explained—and applies to all kinds of savings, especially savings that can be achieved through better outcomes (avoidance of complications, in-patient re-admittance, long inability to work, etc.). It is often complicated to calculate these savings because they are usually achieved in the long term and the calculation must be risk-adjusted. If the compensation depends on this, it is important that these often very complicated calculations are transparent. A well-known example of a shared-savings project is the CMS Physician Group Practice Demonstration.

#### IMPLEMENTATION OF P4P TO IMPROVE CROSS-SECTOR CARE: THE EXAMPLE OF THE PROMETHEUS PAYMENT MODEL

The Prometheus Payment Model drew great attention as a cross-sector P4P project in the U.S. Between 2007 and 2010 many publications detailed the design of the pilot project and the accompanying evaluation.<sup>15</sup>

#### P4P AS A RESPONSIBILITY FOR THE BUDGET: THE EXAMPLE OF ACCOUNTABLE CARE ORGANIZATIONS

The Patient Protection and Affordable Care Act in the U.S. stipulates the transfer of the responsibility for the budget to local provider groups, so-called accountable care organizations (ACOs). This moves the shared-savings concept to a new level by having the savings remain within the provider network and by having all parties involved also be responsible for savings distribution. In transferring the responsibility of the budget, the intent is to create an incentive to achieve savings within local provider structures

through improvements of the care coordination, among others. These savings can then be distributed as bonuses and/or as additional payments for achieving quality targets. This shared-savings approach is designed to be cost neutral and relies on the personal responsibility and creativity of the provider. Through the creative freedom within the existing budget, the hope is that motivation is created to develop own concepts regarding how the goals can be achieved together. A disadvantage could be that because participation is voluntary, providers with reduced quality of care might not take part (selection bias).<sup>16</sup> Germany also has some local provider networks with a responsibility for the budget and P4P elements, such as the Nuremberg-North health care network.

#### P4P ON THE LEVEL OF EXTERNAL AND INTERNAL MANAGEMENT

The Baylor Health Care System, a multi-hospital system in Texas, has connected hospital management-level bonuses to the quality of the patient care (so-called administrator incentive). The quality of care is measured on the basis of the Joint Commission Clinical Quality Indicators.<sup>17</sup>

Additionally, there are service companies that offer pay-for-performance in form of shared-savings projects. Normally, these companies offer services such as case management or disease management to a sickness fund and point to the realized savings for the insurance companies. The honorarium for such a company is then fully or partially dependent on the measured and realized savings.

#### P4P AND OVER-SUPPLY

Projects that are related to the topic of oversupply and unnecessary service are covered in Chapter 5.







P4P PROJECTS IN GERMANY:  
AN INVENTORY

03

## P4P PROJECTS IN GERMANY: AN INVENTORY

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There are only a few P4P projects in Germany. The selection is presented in more detail in the following section.

### Pay-for-Competence

A variety of projects supports certain structural conditions and qualifications through the possibility of higher earnings. If these structures and/or processes classified as promoting quality are not established and evidence of the relevant knowledge cannot be furnished, certain deductions will be made from remuneration. There are many projects of this type in Germany, which overlap with a number of other quality initiatives. The quality indicators used are indicators that reflect the regional, technical, procedural, or personal competence to provide quality, but they do not measure the actual quality of performance. The term “pay-for-competence” or “pay-for-structure” is accordingly used for this type of project. Because of the lacking proof of effect, the efficiency of the allocation of resources is completely unknown.

### Network Mental Health

The network mental health is a P4P project to support integrated care for people with mental illnesses. A coordinating entity is the central point of the integrated care process to manage the coordination of primary doctor care, specialty care, psychotherapy, occupational therapy, social therapy, and out-patient psychiatric care. The participants get a risk-adjusted, prospective allowance for each registered patient as well as bonus payments for each patient for whom an in-patient treatment can be avoided. If a patient is admitted for in-patient care or treated in a psychiatric institute, the overall budget of the contracting partner is cut by the incurred costs (Bonus-Malus-Rule<sup>18</sup>).

### Integrated Health Care Agreement for Headache and Back Pain

The integrated health care agreement for headache is an inter-regional, nationwide network for pain therapy for patients with headaches with a central coordination point for the cross-sector treatment. Providers are only commissioned if they can assure that a patient previously unable to work can return to work after eight weeks of treatment. If the patient is indeed able to return to work within the agreed-upon time frame and in the following six months is unable to work for no more than seven days (based on the same diagnosis), the provider receives a bonus. If the patient is not able to work after eight weeks, the provider has to return part of the payment). A 2007 evaluation showed that a bonus was paid in 81.6 percent of cases and only in 18.4 percent of cases a reduction of the payment was imposed.<sup>19</sup>

The integrated health care agreement for back pain functions similarly: The goal is also the long-term ability of the patient to work and the financial risk is distributed between the health care provider and the providers through a Bonus-Malus regulation. The pain center receives a 10 percent bonus if it is successful (pain free within four weeks). If the patient is not pain free after eight weeks, a reduction of 5 percent on the honorarium is imposed. The evaluation so far has shown that the participants are able to return to work on average seventy-two days earlier than non-participants.

### Health Care Network Quality and Efficiency Nuremberg

The Health Care Network Quality and Efficiency Nuremberg was set up in 2005 and has been working

with P4P elements since 2006. The main element is a primary doctor contract with the insurance provider AOK. Financing is based on a shared-savings approach. The network of doctors is responsible for the network's budget, whereas the available funds are calculated from the expected costs. Savings are calculated by comparison to non-participating doctors and divided between the providers, AOK, and the management organizations. Quality is measured through the disease management program indicators and the rate of prescriptions of generic medications. Additionally, there are mandatory quality circles, feedback, public disclosure, and possibilities for counseling to avoid polypharmacy. Surveys measuring patient satisfaction are also part of the program. Acceptance is generated through a high identification of the parties involved with the project and the group, increased possibilities to self-organize, positive marketing effects, and increased compensation.

### Integrated Health Care Agreements for Stroke and Transient Ischemic Attacks and for Alloplastic Joint Replacement

Contracting partners for these two projects are AOK Hessen<sup>20</sup> and care-providing hospitals. On the basis of selective contracts, discounts were negotiated that can be reduced depending on quality. This makes the existing contract a P4P project. A central criterion for quality for both projects is in-patient re-admittance within the first year of the event. In the stroke project there are additional criteria of thirty-day mortality, as well as the diagnosis of stroke, transient ischemic attacks, and cerebral bleeding when re-admitted.

### Disease Management Programs with Compensation-Relevant Indicators

Disease management programs are established for a variety of chronic diseases in Germany and can be easily combined with P4P elements. This was done by KV Thüringen<sup>21</sup> together with health care providers and participating doctors. For each of the measures related to the Disease Management Program Diabetes, such as a documented ophthalmologist control examination, foot inspection, etc., a bonus is paid retroactively.

### Outcome-Oriented Compensation of Stroke Rehabilitation

This is a pilot project for quality competition between rehabilitation hospitals. A research institute functions as referee and undertakes the evaluation. A specific measurement instrument was developed based on functional tests—this is used to calculate the expected treatment success with risk adjustment, which can be compared with quality achieved. The best hospitals receive bonus payments, the hospitals that do not rank highly get deductions from payments. Financing of the project is thus based on redistribution.

### Foot Networks for Patients with Diabetic Foot Syndrome

In Berlin, as well as in Cologne/Leverkusen, cross-sector foot networks were established by an initiative of diabetes specialists who sought to provide better care for patients with diabetic foot syndrome. Compensation is an allowance based on the severity of the illness. The quality criteria are amputation rates and relapse quotas.<sup>22</sup> As far as already known, there is no direct linkage between the compensation and the result quality—most likely because the outcomes are only visible in the long term (for example, amputation rates). Thus these projects are currently pay-for-competence projects.

### Integrated Health Care Contract for Assisted Reproduction Techniques (ART)

The Integrated Health Care Contract "ART" is a project for pregnancy and in-vitro fertilization. The goal is an improved coordination between fertility centers, OBGYN-provided care for pregnant women, and pediatric care. The compensation plan reduces basic compensation for in-vitro fertilization centers in combination with a success fee for each pregnancy.





P4P: HOW DOES IT WORK  
AND IS IT EFFECTIVE?

04

# P4P: HOW DOES IT WORK AND IS IT EFFECTIVE?

## P4P Model

The following P4P model was developed to illustrate the concurring elements of the P4P projects in a clear manner and to analyze their interaction (see figure1). It does not portray a process but rather the different factors and elements that cooperate in realizing a P4P project.

The starting point is a medical care situation within the health care system which is considered in urgent need of improvement in terms of quality and efficiency. The necessary improvement will be promoted by the financial incentives of a P4P project, if necessary alongside other control measures. A precise formulation of goals is needed for the success of a P4P project. The core feature of the change is the motivation of the care professionals recruited to participate in achieving the goals. A high identification

Figure 1: P4P Model

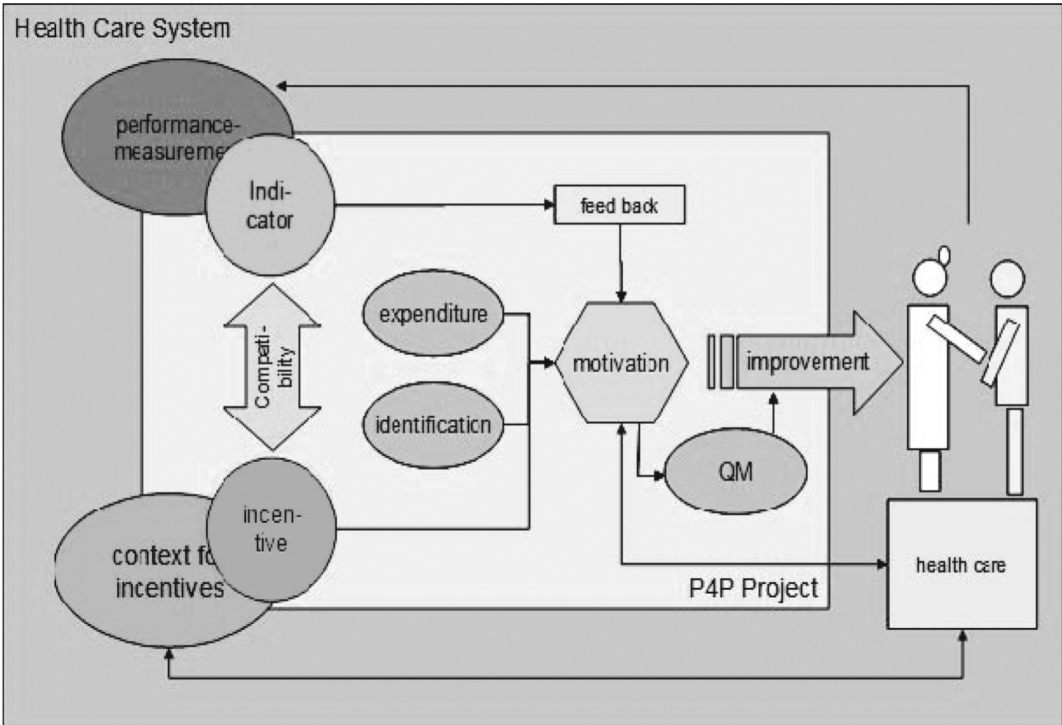


Figure 1: P4P Model

of the participating providers with these goals should be aspired to and can be ensured by involving them in the project design. The relevant information regarding these goals and the care processes considered necessary are given to the providers and the patients. Suitable financial incentives are established, which should develop their motivating effect within the framework of the other compensation rules and the legal and other frameworks (incentive framework). Through measuring performance the providers are receiving feedback on the quality of the care provided. The precondition is that the quality of care is displayed reliably through indicators. One should consider the compatibility of indicators and incentives, so that the validity of the process is not endangered. The efficiency of the process and the motivation of the providers can be disturbed significantly by the increased effort for administration and documentation. Thus, the additional effort should be minimized as much as possible. The goal of the process is an improvement of care, which can be supported through explicit measures of internal quality management (QM). A prospectively defined evaluation verifies the achievement of the goal and the overall usefulness of the project.

### Taxonomy and Checklist

To systematically describe P4P projects, a category was developed that abstracts from the detail information of the individual projects and instead portrays the relevant characteristics necessary to realize and embed the compensation schemes.

A checklist highlights the central elements of P4P projects and can be used for the systematic compilation and evaluation of existing projects as well as to support the conception of new P4P projects.<sup>23</sup>

### DATABASE

The relevant P4P projects were included in a database, which is based on the elements of the described taxonomy.

The database in general provides the possibility to systematically document P4P projects and creates the possibility of a comparison based on project characteristics. An evaluation through statistics of P4P

projects does not seem to be reasonable, since the results of the analysis were misleading, for one due to the variability of the projects and the high similarity within certain groups of projects. The results are dependent to a high degree on what projects or sub-projects were combined in one entry, without being able to discern a general valid criterion for this combination. However, one can search for projects that are designed for an assumed under supply or for which, in addition to the financial incentives, quality results are publicly reported. Through the description of projects with defined individual dimensions, existing and lacking elements can be analyzed and comparisons can be drawn where appropriate. The checklist and the database could become the basis for a systematic documentation of P4P projects in Germany, for example at a central registry agency.

### Evidence for the Effectiveness of P4P

Most P4P projects are modifications of existing compensation schemes, initiated by the private or public health care insurances (mostly in the U.S.) or national compensation reforms (e.g., the NHS in England). Normally, high-quality evaluations of these projects are not available. Most of the information on the effectiveness of P4P—when scientific data are available—comes from experimental studies, retrospective comparative studies, or expert opinions. Systematic evaluations by independent institutions, for example with randomized, prospective, and controlled studies, are usually not available.

Since the available evidence for the effectiveness of P4P is rather limited, other references were also considered, which can be found in case-control studies, other study-based experiences, and expert opinion (evidence level IIc to V), as long as they included the criteria for P4P defined here.

At this point, we will forego a detailed account of the results of the examined studies, which can be found online.<sup>24</sup> This report is restricted to a more general summary, which is the central basis for the analysis of the following areas and projects:

#### *General Practitioner Care:*

- Results from the available Cochrane Reviews

- Examinations of the large general practitioner P4P projects (QOF, PGPD, Project of the IHA California, PIP Australia)
- Special areas of general practitioners' focus (prevention and screening, chronic diseases)

#### *Hospitals:*

- Premier Hospital Quality Incentive Demonstration (PHQID)
- Blue Cross Blue Shield of Michigan Participating Hospital Agreement Incentive Program
- Hawaii Medical Service Association Hospital Quality Service and Recognition Program
- Non-Pay-for-Non-Performance (CMS Never Events, German DRG System)
- P4P projects in rehabilitation

The few studies that conform to the inclusion criteria of the Cochrane Reviews are mostly over ten years old. In most projects many different interventions were combined, so that the effectiveness of additional payments cannot be clearly separated from other measures such as feedback or public reporting. Additionally, parallel introduced initiatives to improve quality such as the implementation of guidelines, educational measures, introduction of disease management programs, etc., already led to quality improvements, so that the effect of financial incentives is usually not separable. Furthermore, it should be noted that many studies that examined only the non-financial impulses to improve quality were able to detect improvements with similar effect levels.

The areas that were analyzed in the context of the P4P studies represent only a small slice of the day-to-day care, so that it is almost impossible to deduce substantial conclusions for the entire spectrum, for example primary care. Because process indicators were mostly used, one cannot make a correlation between the isolated measured, perhaps P4P-related, quality improvements and an improvement on the basis of patient outcomes or even the level of population health.

Individual improvements in a few indicators are also juxtaposed with side effects, such as selection effects, decreasing quality after reducing financial incentives,<sup>25</sup> or gaming strategies and change of

documentation.

Most P4P initiatives are not studies, but rather pilot or routine projects by insurance companies or public institutions. The more detailed analysis of larger and more important P4P projects supported the picture, which could be concluded from studies. Evidence for the effectiveness of financial incentives, if present at all, was weak in in-patient as well as out-patient care and was evident only on the basis of individual quality indicators. In addition, most of the projects analyzed were not cost-effective.

However, the thesis that financial incentives have an effect cannot be disproved, as there are many interferences. Side effects experienced and the adaptive processes after the change in compensation, for example, moving from fee for service to capitation, show that providers are very focused on changes in the compensation schemes, though this is sometimes contrary to the P4P goals. However, one can assume that an established base compensation for provider performance is a greater incentive than smaller, performance-based financial add-ons.

#### LIMITATIONS OF STUDIES

In summary, almost all studies about the effectiveness of P4P have at least one, but often more than one, of the following limitations:

- No control group
- No attention to time trends
- No clear delineation between the effects of financial incentives from the effect of other measures designed to improve quality, such as implementation of guidelines, feedback, implementation of disease management programs, etc.
- Missing data validation
- Analysis of small care area (only certain vaccines, screening, counseling to quit smoking, or others)
- Mostly process and structural indicators, only few results on hard outcomes, no conclusions for population health

#### INTERIM RESULT: CONFLICT BETWEEN EVIDENCE AND DAY-TO-DAY EXPERIENCE

Even though they have been used for many years, the



effectiveness of P4P projects is still missing a reliable evidence base. Thus the question arises whether the topic should be dropped or if it still makes sense to consider P4P as a regulating instrument.

The lack of evidence is surprising because the day-to-day experience shows that financial incentives are a very powerful regulatory tool and that this is evident regularly in the framework of the current compensation system.<sup>26</sup> This goes as far as some analysts warning publicly about too much power for financial incentives.<sup>27</sup> Thus the German experts interviewed were largely of the opinion that P4P compensation schemes will continue to play a role in the future. Several authors are conceptualizing a concrete possibility of further projects,<sup>28</sup> and those, who discussed their projects in the framework of this report, were not confused by the lack of evidence. In the U.S. and other countries, for example Taiwan, new P4P projects have also been started, accompanied both by protagonists that believe in their success and opponents that doubt them. The dispute will only be solved if improved design as well as improved evaluation of P4P projects uncover the missing scientific evidence that either they are effective or showing that even optimal projects remain ineffective in the routine of day-to-day-care.

### Variance and Selectivity: The Strategic Approach of P4P

P4P projects in the U.S. were implemented after the discovery of large quality deficits in care—even though the overall costs of the health care system are high.<sup>29</sup> Contrary to that, Germany has not experienced a principal concern about quality in health care. The practice of medical care already includes very effective mechanisms of the continued quality control and improvement. Without these, the current care level would not have been achieved. The evaluation of some P4P projects have shown that even prior to projects and without an incentive, a continual improvement of the quality of care occurs.

However, even the most careful procedures to measure quality comparatively usually show a large variance in the quality of process and outcome between the providers.<sup>30</sup> Some shortages and inefficiencies are a serious ethical and economic problem

that need targeted regulation. The decrease in variance is an important goal, because on the one hand, this protects patients from malpractice and, on the other, it prevents good money being paid for bad quality. P4P addresses this variance with a targeted approach. It can give selective incentives and at the same time combine quality, efficiency, and financing in one instrument. This is a conceptual strength; however, its weakness lies at the same time in this complexity.

For general problems of health care that one would like to regulate with financial means, the modification of the established compensation schemes should be employed. If one uses P4P, the focus is on variance. This plays a central role in further consideration of effort and usefulness of P4P projects.

P4P projects' goals can be categorized as follows:

- Support and development of excellent quality of care
- Long-term improvement of quality of care within a medium level of care
- Stringent improvement or prevention of care which is below an acceptable level

Each category has different demands on the quality indicators and incentives. A consideration of the balance of efforts and benefits should be included for all three. Thus, it is important to formulate a defined goal at the beginning of the project, so that goals and instruments actually match and the project is successful.





## QUALITY DIMENSIONS AND CONTROL INSTRUMENTS

05

# QUALITY DIMENSIONS AND CONTROL INSTRUMENTS

## Quality Dimensions of P4P Projects

Probably the greatest challenge for P4P projects is a valid quality measurement that can be achieved with a justifiable effort and can cope with the additional demands of a compensation that is based on performance.

### QUALITY OF OUTCOMES IN P4P PROJECTS

Outcome indicators measure what is intended as the goal: improved care for patients. Thus, they have complete precedence over other indicators. They are open to innovation of care processes and to different organizational forms: Only the outcome is relevant.

These indicators are problematic, as follows:

- The outcome mostly depends on multiple factors and therefore risk adjustment is required.
- Pinpointing the outcome to one provider is complicated with long-term care or complex therapies.
- The outcome can depend strongly on the compliance of patients.
- The goals of care are often long term (for example, decrease of relapses) and the treatment results that are relevant to the patient are usually only available after a longer period of time.
- Chronic diseases comprise a special combination of factors and there are usually no single therapeutic interventions.
- Outcomes can vary strongly depending on personal evaluation, as they are gradually characterized in different ways.
- Small samples are a problem when trying to make relevant statistical statements concerning the quality of outcomes.

In realizing P4P projects that depend on outcome quality one has to consider the following aspects, which are also detailed in the longer report:<sup>31</sup>

- Risk adjustment
- Responsibility for outcomes
- Time dimension of the outcomes: the relevance of intermediate outcomes
- Quality of outcomes in patients with chronic diseases
- Quantifiable outcome quality in shared-savings projects
- Problems of small numbers of cases

### QUALITY OF PROCESSES

Many indicators for P4P projects reflect the quality of processes. Contrary to the outcome indicators, they have the following advantages:

- Usually clear contents and clear goals are formulated;
- Implementation of demands can usually be documented with a yes or no;
- There is a direct link to the care professional and the time of the provision of care;
- Process indicators require no risk adjustment;
- Process indicators can also be evaluated with small numbers of cases and no confidence range is needed.

### QUALITY OF MEDICAL INDICATION

As part of quality insurance and the cost debate, the question often arises how an oversupply of care can be prevented. Assessing the quality of the medical indication, that is whether the performed medical procedure has been appropriate, is of central impor-

tance. The quality of the medical indication plays also a role in recognizing incorrect and insufficient care.

Indicators on the medical indication will most likely demand that a minimum number of patients must meet hard criteria for a certain intervention and that the number of patients for whom there is only a weak or no traceable indication should not be over a certain amount.

#### *Development of Indicators on Medical Indication*

For indicators on medical indication there are principally two different questions:

- Did all patients who received a certain medical intervention have a sufficient indication?
- Did all patients who were in a certain medical situation receive the right diagnostics and treatment?

There are guidelines for both questions; these either formulate the indication criteria for certain diagnostic processes or therapies or show the diagnostic and therapeutic alternatives for certain symptoms. Based on these guidelines, indicators for medical indications can be developed for P4P projects. Such indicators can also be important to limit possible side effects of P4P projects, for example, if oversupply is suspected because of financial incentives.

#### *Projects with Indicators on Medical Indication*

This study found only a few P4P projects that include the measurement of the quality of the medical indication as a central element that regulates compensation. Examples in the U.S. are the Rochester Individual Practice Association's (RIPA) Value of Care Plan, which aims at a reduction of the overly used and misguided supply of antibiotics and x-ray diagnostics for acute sinusitis and acute otitis media. Another suggestion along these lines is an evidence-based reimbursement for coronary angiography.<sup>32</sup> In Germany, Phlebologicum GmbH, an institution for quality assurance in phlebology, entered into selective quality-based contracts that envision a compensation system which is scaled on the effort and quality of care. The payment for the surgical treatment of varicose veins is scaled on the basis of the individually documented severity of the disease. This includes

a very stringent check of the appropriateness of the medical procedure performed. Not indicated surgeries are not compensated.

#### QUALITY OF STRUCTURE: PAY-FOR-COMPETENCE

As already mentioned, there are also indicators that provide a financial incentive, if the providers use certain structures that are assumed to have a positive influence on the quality of care. Structure is often only weakly correlated with outcomes, especially if it is a surrogate parameter, such as IT equipment whose mere existence does not say whether the quality of outcomes has improved for patients or not. Structure can enable performance, thus we understand financing of structure as pay-for-competence, but this is not the further focus of this report.

#### Handling the Care Deficit: Borrowing from Risk Management

P4P regulations initiate care processes with the providers that are not happening yet, due to a variety of reasons. Risk management has many differentiated concepts<sup>33</sup> to analyze why some aspects do not happen the way they should and how this can be corrected; these concepts differentiate between slips, mistakes, and violations. Borrowing from these concepts, the list for the causes of flawed process that are relevant for P4P has been expanded by the following:

- Slips
- Mistakes
- Justified violations
- Violations based on motivated reasons
- Violations for self-interest
- Limited capacities

#### The Interaction of P4P with Other Quality-Related Control Instruments

Almost all P4P projects combine different control instruments, which on the one hand makes a subsequent evaluation of the effects of individual instruments more difficult. On the other hand, it seems to advance the project's success. The instruments include education, quality measuring with benchmarking, feedback, public reporting, and financial

incentives. Chart 1 describes the correlation between the flaws, the required procedures, and existing instruments.

The question to be asked is no longer whether P4P works, but rather under what circumstances P4P, in combination with other instruments, seems appropriate. An ascending hierarchy of intervention instruments (see Figure 2) applies. On a simpler level, the attempt is made to regulate with the help of information about what to do (education/training) while on an advanced level one or more instruments are applied because the information level is insufficient.

### Motivation and Incentives

“In theory there is no difference between theory and practice, in practice, there is.” (Yogi Berra)

Pay-for-performance uses monetary incentives to intervene in the complex motivational scenario of the

care professionals. The following four statements serve as starting points for further discussions:

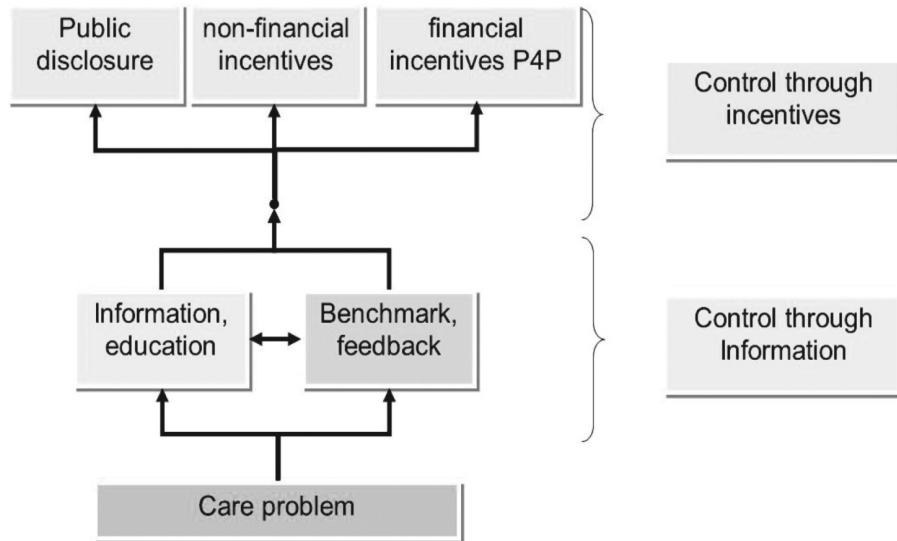
- There is a significant (“intrinsic”) motivation to provide high quality health care, as evidenced by the current high quality of medical care;
- There is a distinct variance of motivation among the individual care professionals;
- Money is a powerful incentive that can effect big changes, also in the public health care sector;
- To date, it has not been scientifically proven that monetary incentives within P4P projects have any influence on the improvement of the quality of care.

It has already been stated that the complexity of the public health sector is one reason why it is so difficult to prove the effects of individual compensation schemes and monetary incentives. This does not mean, however, that the influence of money on the quality of care should be neglected. But monetary incentives represent an instrument that should be

*Chart 1: Relationship Between Behavior-Related Flaws, the Appropriate Measures to Be Applied for Them, and the Appropriate Interventions*

Behavior-Related Causes for	Measures to Correct the Flaws	Intervention Instruments
Slips and oversights	Increasing awareness, focusing on attention, improvement of the system	Education, feedback; Corrections of a combination of circumstances locally that contributed to causing the slip or oversight
Mistakes	Transparency of performance, information; Updating of knowledge	Feedback, training, education
Violation: justified	Improvement of the QA system	Feedback
Violation for motivated reasons but unjustified	Information Social attention Financial incentives	Feedback, public reporting, P4P bonus/penalty
Violation out of one’s own interests	Financial sanctions	Feedback, public reporting, P4P penalty
Shortage of resources	Financial incentives	P4P bonus

Figure 2: Hierarchy of the Intervention Instruments



applied only after other methods to reduce variances in health care either could not have been applied (e.g., public reporting is not possible) or have not shown any effects. Hence, the following care scenarios will be considered:

- motivation exists but resources for excellent quality are insufficient (promotion of excellent quality);
- motivation exists and new, cooperative forms of patient care are to be tested and advanced (care development); or
- motivation is missing and keeping with flawed care processes should be made unattractive to those who refuse to comply.

For the topic “monetary incentives” the following aspects should be considered:<sup>34</sup>

- Financial reward and/or punishment?
- Incentives for individual health care professionals or provider groups?
- Amount of monetary incentive
- Connection between incentive and initial base performance
- Interaction between P4P incentives and the basic compensation schema
- Focusing and spill-over effects







## SIDE EFFECTS AND COUNTER STRATEGIES

06

# SIDE EFFECTS AND COUNTER STRATEGIES

## Side Effects of P4P and Counter Strategies

### SELECTION EFFECTS

Selection effects are part of the side effects of P4P projects. They exist on different levels:

- Selection of the project participants (“selection bias”)
- Selection of patients (“cream of the crop”)
- Selection of procedures

The terms already describe the type of selection. The detailed report contains additional information under the respective heading. An English version of the complete report is available. Please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de)

### CHANGED ENCODING BEHAVIOR

Changing the encoding behavior can be observed frequently. Some authors even suspect that a majority of the measured improvements of indicator results, e.g., in the Quality and Outcomes Framework (QOF), are the result of increased documentation of incentivized processes by the care professionals, while they tend to be more negligent with their documentation efforts when there are no incentives. Since data validation for most projects does not exist, this can only be confirmed in a few cases. The fact that performance deteriorates after removing the incentive<sup>35</sup> leads to the conclusion that there has not been a significant and solid change in procedure but rather an increased focus on documentation. The missing “spillover effect”<sup>36</sup> points in that direction as well.

Both an emphasis as well as downplay of diagnoses

with corresponding “up or down” encoding has been observed depending on which behavior promised the higher reward.<sup>37</sup>

### COST SHIFTING

The described circumstances can lead to cost shifting into other areas, e.g., shorter hospitalization periods can result in sicker patients during rehabilitation and therefore in increased costs and cost shifting to the rehabilitation hospital.<sup>38</sup>

Cost shifting in connection with a change in compensation modalities can also be observed in the U.S.<sup>39</sup> In connection with P4P, “strategic” behavior is applied when hospitals internally or entire provider groups calculate across sectors which quality goals they are primarily supposed to fulfill to receive certain incentives. They then connect this to the resulting costs.<sup>40</sup>

### ADAPTATION IN MEDICAL PRACTICE

The requirements of P4P projects are supposed to promote decent medical care considerate of patient interests. Certain quality indicators, however, can lead to precautionary care, which originally was not intended as such. In the U.S., for example, hospitals prescribe antibiotics to patients with asymptomatic bacteriuria to prevent possible urinary tract infections, provided this is one of the indicators.<sup>41</sup>

### GAMING/GAMBLING

All the compensation models, including pay-for-performance, prompt the health care provider to act strategically and attempt to use compensation optimally. This is completely legal up to a certain point; however, it can create considerable false incentives,

which is illustrated by the cases of changes in the patient selection, coding, and provider behavior. In this context, Donald Berwick commented that to avoid major conflicts the physician's compensation should not be tied too closely to the treatment option of individual patients: "Though there is little evidence that doctors withhold needed care, even when their income is at risk, many policy analysts and HMO managers agree that a prudent incentive structure should not link an individual doctor's financial well-being too tightly to a specific choice for a specific patient."<sup>42</sup>

#### COUNTER MEASURES

Exactly because P4P projects work with financial incentives and have to be fair and litigable, the potential side effects have to be considered carefully when it comes to the construction of indicators, documentation, and controlling. This is also a reason why P4P projects should, whenever possible, first build on already established quality measurement systems whose systemic side effects and possible counter measures are at least partially known. A "cold start" with new indicators that have only been tested by cooperative institutions and with new incentives is prone to failure.

The four most important counter measures against side effects of P4P are:

- Effective documentation controls via statistical plausibility checks and random sampling against miscoding;
- Precise indicators on medical indication against inappropriate extension of services due to financial incentives;
- Testing of quality indicators as to their potential to set wrong incentives and, where appropriate, arrange for counter measures;
- Risk adjustment to reduce the incentive for excluding high risk patients from therapy;
- Comprehensive set of indicators to avoid neglect by focusing on P4P metrics (e.g., inclusion of patient experience and patient satisfaction)





## QUALITY MEASURING AND QUALITY STRATEGIES

07

# QUALITY MEASURING AND QUALITY STRATEGIES

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## Excursion Quality Measuring

### IDENTIFICATION OF APPROPRIATE INDICATOR BUNDLES, QUALITY DIFFERENTIATION

A clear description of the project goals, the identification of the controlling targets, and the intervention concept mark the beginning of designing a P4P project. In addition, an appropriate concept for quality measuring has to be developed. With the help of the goals it defines which quality dimensions are to be indicated, which indicators or sets of indicators are required, and in which quality range the indicators have to be able to differentiate good from bad quality. A project that strives to support the implementation of a new guideline primarily requires indicators on process quality and the quality of medical indication, which specifically display the implementation of the guideline and differentiate in the area of sufficient quality. In support of excellent quality a set of indicators will most likely be required that adequately represents outcome quality, patient safety, patient experience and satisfaction, and that individually or in combination are able to adequately differentiate between excellent and good quality so that they are compatible with the selected incentives. This also requires the availability of corresponding data as well as the applicability of the indicators in terms of their time dimension.

### PROBLEM FOCUSING

To achieve efficiency of P4P but also other quality-assuring procedures it is important that they use their resources in a way that is focused on the problem. The intended correction of care deficits must be followed stringently and detailed documentation should be restricted to the most deficient care

providers and should be abandoned or at least reduced once the goals have been achieved. A distinction should be made between minimal care monitoring and problem focused, detailed quality documentation. Area-wide and open-ended documentation with inconspicuous care providers makes little sense, even for P4P projects. Given the stable care quality of these providers, documentation responsibility could be suspended or reduced to a minimum with the help of a monitoring procedure. The focus of the activities should be placed on those providers with consistently deficient quality. The efficiency of a procedure should not be measured by the amount of data collected but rather by the achieved improvement in a relevant problem area in relation to the total outlay.

The actual relevance of the topic and the achieved improvements should therefore be critically evaluated on a regular basis. It is important to note that a majority of providers with high quality should not be required to conduct continuous documentation because there are only a few providers with low quality. At the same time, if most providers achieve their quality goals, the few who exhibit deficits should not be ignored. This requires consistent problem focusing for quality-assuring procedures and especially for P4P projects.

### ALLOCATION OF INDICATORS

The exclusive development of indicators is often too complex and time intensive, except for projects with a high participation rate. Most projects in Germany and the U.S. use already existing indicators and indicator sets. The QUINTH database<sup>43</sup> of the National Association of Statutory Health Insurance Funds (GKV-Spitzenverband) has a growing number of

quality indicators that are evaluated regarding their usefulness for P4P projects.

In the future, additional and more elaborate indicators will be needed. With regard to P4P projects, for example, intermediate outcome indicators consider both the need for short-term as well as long-term results. Areas where further development is required include evaluation concepts for care areas with small case numbers and the increasing relevance of outcome quality.

#### FEASIBILITY, APPROPRIATENESS, AND USEFULNESS

Especially when measuring quality there are both methodological as well as practical restrictions that should be considered. It is neither useful nor possible to continuously measure the quality of every single care provision in medicine. Even a detailed consensus about what quality means would be difficult to achieve. Quality measurement in P4P projects has to adhere to particularly high standards for the following reasons:

- It must be litigable, i.e., it must lead to reliable, fair statements with high sensitivity and high specificity about whether the care quality of a provider or a group of providers meets the requirements, and
- The effort of measurement must be appropriate.

Quality indicators that are appropriate for P4P already exist. Others still have to be developed and for several medical areas such indicators will not be available for some time. P4P is limited to what is feasible, which is an important aspect to be considered. However, there are already several possibilities to extend the area of feasibility without compromising what is appropriate and useful.

Opposite the feasibility of quality measurement we find the feasibility of improving the quality of care. Quality measurement is only useful if changes can be effected.

#### THE ROLE OF THE MEDICAL ASSOCIATIONS

Scientific evidence is the foundation for litigable quality measurement when it comes to optimal patient

care. The normative function of medical associations represents an important, although not the only, foundation for the development of operationalized quality indicators. It is to be expected that the use of guidelines in P4P projects will have an effect on their development, e.g., in the case of indicators on medical indication, where in addition to the categories “indicated” and “contra-indicated,” as well “not indicated” and other intermediate phases are possible. In these cases maintaining a strictly professional neutrality of the guidelines is highly important.

#### SIGNIFICANCE OF QUALITY RESULTS

Quality results are interpreted by formulating quality statements from measuring results. These statements will then be used as arguments according to the interests in very different contexts. This gradual transformation has to be critically analyzed, especially when comprehensive quality statements are derived from individual measuring results.

The measured results and derived statements always have to be well balanced. Otherwise the acceptance of the procedures will suffer eventually. This is relevant for care providers, who have to realize that in published rankings other providers are rated at the top because of simpler procedural parameters or surrogate parameters, while their own exceptional work could not be displayed and therefore not be evaluated.

It is legitimate to check the adherence to certain procedural requirements, e.g., guidelines, by quality indicators. However, generalizing individual process results into comprehensive quality statements for the provider is misleading and hinders the cause in the long term. The derived statements should reflect the focus of the quality indicators. Comprehensive quality statements can be made when a comprehensive set of quality indicators is simultaneously applied to relevant treatment outcomes, process quality, patient safety, patient experience, and patient satisfaction.

#### APPLICABILITY OF QUALITY INDICATORS FOR PAY-FOR-PERFORMANCE

The quality of medical care in a mature quality-ensuring procedure can be reliably evaluated with

valid quality indicators. This could lead to simply adopting those indicators in the context of a P4P project. However, this would mean overlooking that indicators and incentives of a P4P project have to match to avoid errors.

The differentiation aspect of the applied quality indicators needs to be particularly considered, i.e., the question whether and in which range the applied indicator can differentiate with certainty between good and bad quality. Furthermore, P4P indicators in addition to the general criteria, like relevance, scientific aspects, and practicality,<sup>44</sup> need particular requirements for the specific application context. The BQS-Institute has developed a specific procedure to test the applicability of quality indicators for P4P projects which accounts for the necessary compatibility of incentive and indicator.<sup>45</sup>

## Quality Strategies in P4P Projects: Central Aspects

### CLARITY OF OBJECTIVES

Clear objectives that define the content, structures, and processes of a project are an important prerequisite for the successful realization of a project. The pertinence of the chosen performance measuring and incentives can be checked via the objectives.

Publications often describe the applied indicators instead of the project goals. Those are insufficient, however, to clearly describe each important aspect of the project objectives. The important objectives are described below:

#### *Medical Objectives*

The clear description of the medical objective, either as outcome quality or process quality or a combination of both.

Citing the evidence in support of the objective. It is important to provide evidence, particularly for process indicators, that they are relevant and legitimate for the quality of care. Citing the prevailing evidence for the quality of outcomes is only necessary in cases of indirect outcomes, e.g., attaining certain physiological results (blood count, blood pressure). For results that

directly concern a patient's condition and quality of life, e.g., pain free condition, ability to walk, or relapse-free interval, evidence-based legitimization is not required.

#### *Strategic Objectives*

The determination whether a project is supposed to specifically correct care deficits during a certain time frame or be part of the care management through continuing monitoring.

The determination whether developing the care structures is a goal or whether processes and behavior in delivering care should simply be adjusted within an institution.

An ambiguous definition of the goals brings with it the danger that neither the quality measurement nor the intervention instruments match the objectives. To counter this danger we will try to develop a system of controlling situations that can master the assignment and adequacy of focussing problems, goal setting, documentation, indicators, and intervention instruments.

#### *Feasibility of Meeting Objectives*

For the objectives it is necessary to determine whether

- the politically relevant health care objectives have corresponding indicators or whether those can be developed,
- they can be reliably measured during the routine provision of healthcare, or
- realistic possibilities exist to influence the provision of care in relation to the measured results.

When choosing the project the feasibility of meeting the objective is an important criterion, but the relevance of the objectives are almost even more important. A project that has been well executed, both methodically and practically, suffers if the priority and relevance of its objectives cannot be communicated to the public.



## CLASSIFICATION OF CONTROL GOALS

P4P represents one possible tool among several to influence care processes and individual as well as combinations of these tools have proven to be effective. The P4P model schematically presents the interplay between the various elements. The following phases are to be distinguished during the sequence of these interventions:

- Problem identification: Determination and exact localization of the care defects
- Problem analysis: Cause analysis and concept design for correction
- Problem correction: Measures for the correction of the care defects or promotion of more efficient provision structures.

As an instrument for problem correction, P4P projects sometimes have been implemented only in the third phase, but can be integrated in all three phases. Sometimes P4P projects deal with the problem analysis and advance certain provision constellations, sometimes they leave analysis and correction to the care providers and only measure the achievement of objectives, which is then advanced through incentives.

We differentiate between the following categories for the controlling objectives for which P4P is implemented or that are followed by P4P:

- Care monitoring
- Correction of care deficits
- Care development
- Promotion of excellent care quality
- Efficiency oriented care control

For a diagram of controlling situations, see the chart on page 43.

## CLARITY OF THE INTERVENTION CONCEPTS

The above referenced categories of controlling objectives clearly indicate how differentiated the contexts of action are and how coordinated the documentation, quality indicators, and intervention instruments have to be in order to be able to meet the objectives.

It is also essential that the project concept clearly states which intervention will be used to reach the project goals and whether the intervention instruments are appropriate for the projects.

Given the need for differentiation, it is not possible to give a general recommendation for the choice of intervention instruments. An overall concept for intervention has to be derived from the project goal, the type of care deficit, and the contexts of the project so that it may deploy its specific efficiency in the appropriate places.

It is fundamental that this intervention concept does not rely on the general effectiveness of financial incentives. Instead, it needs to develop and describe a clear view of how and with which instruments the project goals can be individually accomplished. This includes the transparent determination of the implementation parameters, e.g., the desired time line.

## EVALUATION OF THE PROJECTS

Evaluation should be a firm component of every project. The topic has the known areas:

- (1) Scientific evaluation, whether P4P under controlled conditions and in contrast to other instruments can be effective at all.
- (2) Scientific evaluation, whether P4P projects are successful in the general provision of every day care outside of studies.
- (3) Project evaluation that shows whether the change in compensation regulations together with other instruments has led to meeting the project goals.

We are primarily talking about project evaluation here. It is necessary to define prospectively how reaching the objectives can be determined. It is extremely useful for each project if the goal parameters are already known during implementation. Therefore every project is required to conduct a serious evaluation based on set prospective success criteria, ideally by a neutral third party. For individual projects it might be important how much, in the view of participants, the individual project elements have contributed to the success or have been counterproductive for the

objectives.

The following measuring dimensions can be considered:

- Development of the quality of medical care
- Development of the costs of medical care
- Project effort and expenses (additional investment, additional compensation, savings)
- Provider acceptance including assessment of the different project elements
- Cost carrier acceptance including assessment of the different project elements
- Patient acceptance including assessment of the different project elements

#### *Acceptance of P4P*

The critical success factor for P4P and other quality assurance projects is the acceptance among providers and patients. Improvement is only possible when they change the provision of care. Financial incentives can support the primary motivation but should never replace it. This should also not be attempted.

The question is how good to very good medical care by a majority of care providers can be left undisturbed, how care deficits by motivated care providers can most effectively be improved in conjunction with them, and how the insistence by a small minority on their own, qualitative deficient priorities can be prevented through sanctions.

#### *Acceptance by Care Providers*

A 2006 poll examined the attitude of care providers regarding P4P programs. Over 600 doctors who participate in P4P programs were polled and their answers evaluated. The assumption was confirmed that the following seven factors are essential for the acceptance of P4P programs:

- It is important that participants understand the program and are aware of the problems (“awareness and understanding”).
- The care providers have to identify with the evidence-based targets (“Clinical relevance of the quality targets”).

■ “Salience of the financial incentive” that also should be viewed in relation to the effort and to possible reduction risks.

■ “Availability of the resources needed to achieve the quality targets.”

■ “Fairness in the administration of the incentive program”; e.g., adequate risk adjustment.

■ “Frequency and nature of performance feedback provided”, e.g. helpfulness of the feedback for care professionals.

■ “Possible unintended consequences associated with the pursuit of the quality targets”, e.g., for medical care areas that are not supported by financial incentives, i.e., there should not be a concern that care professionals must neglect other areas.

#### *Acceptance by Cost Carriers, Patients, and Population*

Cost carriers are naturally interested in the improvement of the quality and efficiency in the care of their patients. However, this does not automatically lead to an acceptance of P4P approaches. Care providers who propose improvements often find it difficult to convince cost carriers to implement their ideas because of their concern that the care providers’ ultimate motivation is to increase their earnings.

Marketing aspects also play a role as they target particular groups of the insured instead of aiming at a description of decent medical care for the chronically ill or problem patients.

In addition to being transparent about data privacy efforts, it is also necessary for larger P4P projects to adequately educate the public about purpose and objectives of the projects and to secure their cooperation. Transparency of the projects also makes it possible to determine whether the project goals really serve to improve the health care system or whether they only serve particular interests to the detriment of the patient. For P4P projects, simultaneous public relations efforts, including critical observation, campaigning for cooperation, and protection against polemic attacks, are important.

#### REDUCTION OF COSTS

One of the critical aspects of P4P projects is the

additional effort that must be made at the expense of patient care and that therefore has to be well justified. When this effort does not result in a perceivable advantage, the acceptance of quality assurance and P4P projects is understandably low.

Therefore, minimizing the effort is one of the central success factors for project acceptance. Throughout the report, recommendations are made within practical contexts that we are only hinting at here.

This in essence relates to a minimization of effort:

- when creating indicators,
- when creating the tools for documentation and data transfer,
- of documentation via problem focusing, and
- when using already available data.

#### DATA AVAILABILITY AND SECURITY

Data security within P4P projects primarily concerns the following three areas:

- data protection-compliant use of data from recovery and treatment,
- realization of data protection-compliant data flows
- data availability
- confidence building among the population

Complete patient data security is of utmost priority with all these issues. This is compatible with the goals of P4P projects and does not require extensive effort.

Chart 2: Overview of Control Situations

Type of Goal	Target Group	Problem	Goal	Documentation	Intervention
Care monitoring	All providers, comprehensive provider groups	No known problem. Routine search for remarkable deviations to enable targeted focus on problems and their correction	Isolation of the group of providers, who must provide detailed documentation of their health care quality	Simple documentation as a first screening evaluation of the health care situation	Orienting measurement of quality for identification and localization of potential deficiencies in quality
Correction of care deficits	A minority of providers	Significant deviation from quality specifications (process or outcome quality) without apparent reason	Incidence analysis, clarification and correction of deficiencies	Obligation for directed, extensive documentation and analysis in the field of remarkable providers.	Education, feedback, institutional intervention, public reporting, P4P sanctions
Care development	A majority of the providers	A quality standard is not routinely achieved by a majority of the providers	Implementation of a quality standards in medical routine	Specific documentation in respect to the quality standard, at the same time also reminder	Education, feedback, P4P bonuses and sanctions
Promotion of excellent care quality	Individual providers or group of providers	-	Promotion of excellent quality	Care-specific documentation, which can especially measure higher quality and efficiency	P4P bonuses and shared savings
Efficiency-oriented care control	All providers, groups of responsible providers	Reduction of obviously avoidable extra costs of treatment, e.g., by reducing avoidable complications	By financing extra effort, support of the change of care structures, outcome-oriented promotion of efficient cooperative structures	Efficient measurement of cost-relevant events	P4P as shared savings



## IMPLEMENTATION AND POLITICAL OPTIONS

08

# IMPLEMENTATION AND POLITICAL OPTIONS

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## Implementation of P4P Projects

### BUILDING ON BENCHMARK PROCESSES

The quality and capacity of quality measuring is one of the most important success factors for P4P projects. It is therefore recommended to attach P4P to existing benchmarking procedures with feedback. This guarantees a certain experience with the indicators as well as the desired and adverse reactions and evasive strategies. Documentation instruments are available and the providers will collect the data in any case. At this time some projects with integrated care contracts are already using the data from mandatory quality benchmark, when necessary together with routine data indicators. Starting a new P4P project with new indicators is very risky in that it could lead to artifacts and unexpected and unknown system reactions that could harm the success of new projects.

Since benchmarking, feedback, and public reporting are more simple but just as efficient tools for quality control, it makes sense to first run through the order of benchmarking, feedback, and if necessary public reporting with a set of indicators and determine their effectiveness. Only this experience should determine whether it is useful to increase the effectiveness of the procedure with P4P. In this respect P4P should be viewed in many cases as a tool of third line—after benchmarking and public reporting, with public reporting being applied less often in selective contracts. The recommendation to build on an existing benchmarking procedure does not mean that these procedures can simply be copied without a check for suitability for P4P. They should only be adopted after checking, whether their use for P4P would be appropriate.

### SELECTIVE AND COLLECTIVE HEALTH INSURANCE CONTRACTS

In the area of collective contracts one should not experiment with new procedures. P4P is therefore typically applied in the selective contract area. There are better opportunities here to try innovative approaches and further develop care structures at the regional level, for example. Shared savings and pure promotion projects fare best with the providers because of low or non-existent risks. Projects with a deficit risk due to sanctions will potentially only gain participation from good providers, which renders their potential for improvements, as described, minimal. In addition, selective contracts serve a comparatively small number of patients so that P4P would only have a small general effect.

Opening up the established compensation forms for optional P4P supplements creates several possibilities in the collective contract area. For example, established service areas of the mandatory quality benchmarking may be given a tool that could be used at the federal level as positive motivation as well as sanctions where continuously deficient care situations exist. Since several procedures of mandatory quality assurance have proven successful and the data have been collected, P4P might increase their efficiency.

Minimizing effort and expense as well as the actual change potential are particularly important aspects for collective contracts. Here the collective contract area can look to successfully implemented models of the selective contract area.

## REALIZATION PATH TO IMPLEMENTATION FOR P4P PROJECTS

The main aspects that are necessary and useful for the design and implementation of P4P projects are summarized in form of a implementation path (Figure 5).<sup>46</sup> The codes in brackets refer to the chapters in the detailed report, where further information on the topic can be found.

### MINIMUM REQUIREMENTS FOR P4P PROJECTS

The following minimum requirements for P4P projects can be derived from the descriptions above:

- The project goal is clearly defined, patient-oriented, evidence based, relevant, capable to reach a consensus, and the targeted improvement is achievable.
- The quality indicators match the project goals and incentives and are checked for their suitability.
- The care professionals receive sufficient support during implementation.
- Standardized project documentation is done (profile form).
- Incentives match the project goal and quality indications, they are transparently accessible, they combine quality results with compensation retrospectively; possible false incentives are considered.
- Evaluation with prospective formulation of success criteria is part of the projects.

Supported P4P projects are also required to submit the corresponding project documentation and the evaluation reports to a central registry.

### Political Options for Further Development

In consideration of the political requirements discussed so far, three options can be differentiated:

- Phase 1: Development within the existing framework
- Phase 2: Expansion of possibilities for P4P projects
- Phase 3: Active promotion of P4P projects and their development

#### PHASE 1: DEVELOPMENT WITHIN EXISTING FRAMEWORK

The existing general framework currently allows the realization of P4P projects in Germany for selective contracts in various constellations. There are cost carriers and providers who take advantage of the possibility and want to expand it because current projects are successful even if they are on a smaller scale.

The discussion about sensible areas of application for P4P projects, their success-oriented design, further development, and evaluation should be further advanced. This report and its possibly controversial reception can contribute to the discussion. However, it cannot be expected without further supporting measures that P4P projects will overcome their current niche existence.

#### PHASE 2: EXPANSION OF POSSIBILITIES FOR P4P PROJECTS

The following points are recommended for an expansion of possibilities for P4P projects.

##### *Political Signal*

The possibilities to realize P4P projects depend in large part on the political environment which provides the necessary framework for the projects. P4P can only reach its potential if the political message clearly states that the financially differentiating way of dealing with both excellent and deficient care providers is intentional and deemed necessary. The clearer the perspectives the more the partner within the health care system will seize the available opportunities.

##### *Stability*

It is important that all participants can count on the framework and basic structures for P4P projects to be stable for a certain period of time and that the projects are intended for the long term. The political statement as well as the regulations that need to be set should include a clear announcement regarding stability and perspectives.

##### *Availability of Data*

##### *Legitimate availability of data*

The acceptance of P4P procedures depends on

several issues, including the availability of appropriate data and that the related effort and expense remain small for all partners but in particular for the care professionals. Any outlay can be reduced when already existing routine data and medical treatment data are used for quality measuring and can be combined at a secure place without requiring patient consent. This presupposes that the procedure is done by following strict data security measures. Finally, the inclusion of other data sources, e.g., lab data as routine data, for useful and promising projects should be provided. The legal parameters should be set so that the use of data for the improvement of quality and efficiency is allowed without the patients having to fear being (re-)identified.

#### *Participation with all Patients of the Provider*

One problem of P4P projects of individual health care insurances is that their patients may only make up a small part of the patients treated by a provider, which increases the problem of small case numbers. It would be a useful regulation to at least give the option to a provider to participate in P4P projects with the data of all of his/her patients if it is technologically feasible.

#### *Protection Against Parallel Projects*

When P4P projects are conducted at the same time with different insurers under determined criteria, providers should be allowed to only participate in one of the projects in order not to have to fulfill possibly different quality requirements for patients with the same illnesses.

Several parallel projects by different insurers generally diminish the acceptance by providers significantly because they lead to increased effort and expense, favor confusing structures, and create annoyance among patients when they are supposed to be treated according to different standards or different measures are reimbursed. Cooperation of insurances consistent with all-payer initiatives would be desirable for all involved parties. These projects should legitimize themselves because of their direct usefulness instead of their advertising functions.

#### *Selective Contracts Also Independent of Integrated*

#### *Care Contracts*

Regulations based on selective contracts should be allowed directly between cost carriers and providers without having to integrate other provider sectors.

#### *Expansion of Established Compensation*

One possibility for a simpler introduction of P4P projects could be the expansion of established compensation models via differentiation through P4P elements. This would allow switching to a P4P compensation structure in both selective and collective contracts.

#### PHASE 3: ACTIVE PROMOTION OF P4P PROJECTS AND THEIR DEVELOPMENT

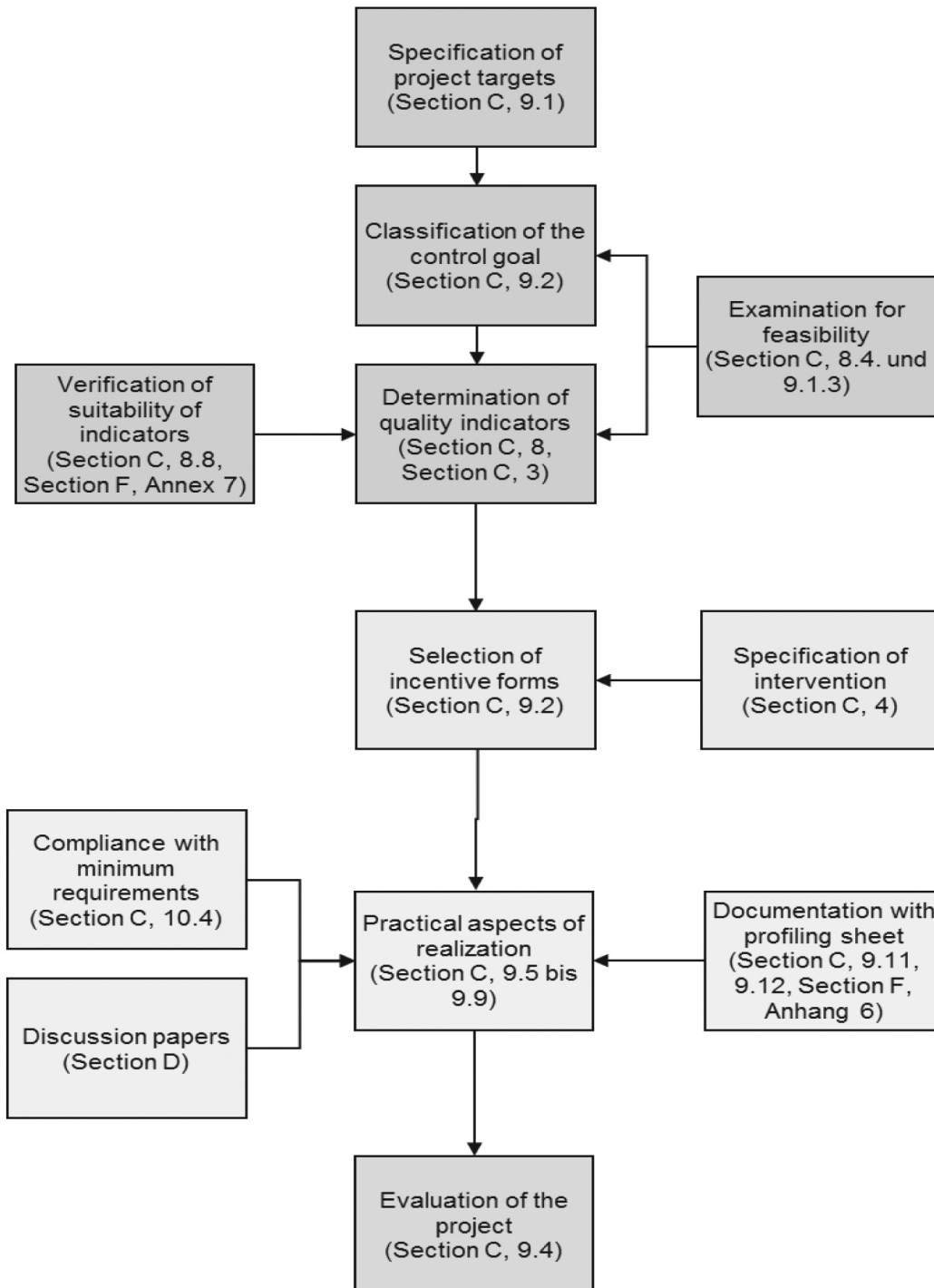
It could be politically necessary to advance the development of P4P instruments because there will be a significant demand for P4P control instruments in the near future and it would be useful to have mature instruments available. Failures due to unsuitable instruments that were developed under time constraints should be avoided. In principle, P4P projects make sense if they are financially self-sufficient. However, a lot of development work remains to be done that may exceed the capacity of one project alone. Therefore, financial support of P4P projects could be accomplished, e.g., through allocating 1 to 2 percent of the budget amount or through the risk adjusted compensation schema. The following conditions should be set for project partners:

- Supported projects must meet minimum standards;
- Projects have to be documented and evaluated according to a uniform standard;
- Project documents need to be available at a central place to enable mutual learning.

In case the project partners have legitimate privacy concerns, the project description and evaluation could possibly be submitted anonymously. An adequate compromise between transparency and privacy should be found in individual cases to enable collective learning through the experiences made. The promotion of P4P projects can also focus on specific topics, e.g., outcome-oriented care structures at the regional level.



Figure 3: Realization path for P4P projects in respect to parts of the report







CONCLUSIONS AND  
DISCUSSION PAPERS

## CONCLUSIONS AND DISCUSSION PAPERS

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### Conclusions

Compared to the U.S. and the UK, P4P projects still only lead a niche existence in Germany. P4P projects, nationally and internationally, have so far been relying primarily on experience and expectations rather than scientific evidence. Many experts, however, expect that given the foreseeable limits and the limits that have already been reached when it comes to existing controlling instruments in the health care system, there is an acute need for alternatives. P4P is one alternative, especially since it appears to be an understandable and simple concept. This may also lead to the danger of high expectations. This report examines P4P as a tool from different angles and tries to describe its implementation through approaches from practice. It is important to remember that between these concepts and the success of an implemented project there are methodical, practical, and political hurdles in terms of feasibility and concrete implementation of a project.

Projects that were completed with little or no success show that implementation is more complex than it appears at first. Successful projects demonstrate that it is possible. The concepts that are shown here recommend ways that make projects feasible. This requires a clear political will, critical and constructive evaluation throughout the project, as well as realistic expectations. Positive developments for the health care system can then be achieved. Professionally and practically convincing P4P instruments form an important part of this process.

### Discussion Papers

#### DISCUSSION PAPER: QUALITY MEASUREMENT

Outcome quality is of high priority also for P4P but is often difficult to realize due to the known high demands (e.g., time-frame, risk adjustment, responsibility). The fact that patient compliance sometimes plays an important role for the quality of outcomes needs to be considered.

Process quality has been measured most frequently in P4P projects, although whether or not process requirements have been fulfilled will provide only limited information from the point of view of overall quality of care. This does not negate the use of process indicators but speaks for caution when interpreting the results.

Indicators on medical indication, strictly speaking, belong to the process indicators but represent a special group of indicators that will play an increasingly important role within health care controlling.

Not all indicators are equally suitable for use in P4P projects. The report therefore introduces a tool that makes it possible to evaluate indicators for P4P and has been applied in practice. The measuring process of the indicators is very important for this evaluation with the quality being defined as "status," "qualified status," "quantity," or "statistical description."

Most of the problems of P4P result from problems of quality measurement. There is a need for development, e.g., regarding

■ Those care areas that do not yet have quality indicators,

- The significance of intermediate outcomes for incorporating long-term perspectives,
- The issue of a reliable statistical evaluation of health care processes with case numbers between 20 and 50 per year (small quantity procedures),
- The introduction of a two-step measuring system with monitoring and quality documentation,
- Possibilities of short-term quality control,
- The assessment of regional quality of care and the quality of care for patients with chronic diseases.

It is important to maintain a balance between feasibility, usefulness, and appropriateness with all projects and to limit the statements about quality to areas that can be measured with the instruments available.

P4P projects should build on existing benchmarking procedures with established quality indicators because of existing experience and known system reactions. Once benchmarking with feedback and possibly public reporting have been established, including financial incentives as P4P to improve the effectiveness of quality assurance procedures may be considered.

#### DISCUSSION PAPER: P4P, INCENTIVES, AND MOTIVATION

Definition of Pay-for-Performance (P4P) according to the report: Pay-for-performance means a particularly strategic form of compensation. Pay-for-performance procedures bind the compensation of providers in the health care system to the level of their service provided that is measured according to quality metrics. With the help of differentiated financial incentives providers will be motivated to substantially optimize and develop the quality and efficiency of their care within the health care system.

Although structural support and direct promotion of processes are often called P4P, they are not considered in this report because this report deals mainly with the retroactive coupling of compensation to a delivered level of service.

The question for P4P is in which situations it can be useful and appropriate to supplement existing controlling instruments.

The precise definition of goals for P4P projects is essential to guarantee a balanced functioning of the P4P elements. At the same time it is important to determine the evidence for the quality targets for the legitimization of the procedure.

Even though there is insufficient evidence that proves the effectiveness of isolated financial incentives, studies have shown that effects are seen in combination with other interventions (benchmarking, feedback, public reporting). The experience with established compensation systems shows that financial incentives can have a strong effect. Therefore it is important to always consider the influence of base compensation.

P4P is able to reward proven good outcome quality and with the help of sanctions make persistent quality deficits unattractive. Once this differentiation, assuming it is based on a sound and fair measurement process, has been politically accepted, P4P can operate in a meaningful way. Replacing a deficient motivation for adequate care quality with financial incentives does not appear to be successful. On the other hand the primary, intrinsic motivation of the providers during the planning of quality assurance procedures should be considered because training, benchmarking with feedback, and public reporting can have similarly strong effects as financial incentives but with much less effort. A priority should be to determine whether in certain situations non-financial incentives are equally suitable or maybe even more effective.

For hospital care, incentives between 2 percent and 4 percent of the regular compensation are already seen as effective, while for physicians in private practice, incentives between 10 to 15 percent are considered necessary to be effective.

Incentives and implemented quality indicators must be compatible. They need to differentiate in a concordant way between quality and incentive recipient. It is not useful to reward according to ranking when the indicator does not have sufficient differentiation ability above a certain threshold value. In addition, the assignability of quality responsibility is an important prerequisite for P4P.

The market environment of the provider should be considered. Financial incentives can be helpful when there is no competitive situation; where there are many competitors, public reporting is generally sufficient.

#### DISCUSSION PAPER: P4P IMPLEMENTATION

With the instruments of the pilot projects according to section 63 ff Social Code, Volume V, structural contracts according to section 73 a Social Code, Volume V, family doctor-centered health care according to section 73b Social Code, Volume V, selective agreements according to section 73c Social Code, Volume V, and integrated health care provision according to section 140ff Social Code, Volume V several possibilities exist to implement P4P projects.

The availability of data outside of the mentioned regulations should be possible for future procedures.

There are several P4P varieties that can be roughly divided into four types: pure bonus payments, redistribution, shared savings, non-pay-for-non-performance.

The control goals can be divided into five types: care monitoring, correction of care deficits, care development, promotion of excellent care quality, efficiency-oriented care controlling. Each of these types has a distinct combination of problem, target, documentation, intervention, quality indicators, and time frame. This classification will facilitate the selection of the appropriate instruments in concrete decision situations.

The following issues are important for the acceptance by the providers: provider involvement in project design, transparency of the procedure, quality of the indicators and fairness of the procedure, appropriate data base, acceptable low additional effort, existence of support during implementation, and attractive incentives—possibly without risks.

Effort reduction, e.g., through survey instruments requiring little effort, problem-centering in the collection and use of available data are very important for the project's success.

Because of the importance of outcome quality the functionally anonymous retention of patient data is important for P4P projects as it realizes secure data flow possibly with the help of modules of other projects.

Standardized documentation of the project, e.g., according to the check list of this report, is strongly recommended. It can serve at the same time as a reminder.

During implementation of P4P projects side effects are to be considered: e.g., false incentives, strategic documentation, patient selection, and selection of participants (excellent providers are easy to recruit for voluntary P4P projects and receive additional support for the things they are already doing. This can mean "a lot of money for little improvement"). Appropriate counter measures need to be applied.

The greatest flexibility and the most opportunities for innovation will be found in the selective contract area. However, as mentioned before, there is the danger that those providers that are already providing adequate service are likely to participate.

Within the collective contract area an opening up of established compensation systems for P4P elements could lead to additional, useful care control measures.

The development of new care structures, tied to success, can be advanced through P4P.

Politically, there are three options:

- Maintaining current framework requirements;
- Expansion of possibilities especially in the area of data availability and established compensation systems by P4P elements; and
- Strategic promotion of the methodical development and implementation in various projects.

## NOTES

- 1 Selective contracts: optional contracts between health insurers and health care providers. Collective contract: collective agreement between statutory health insurance and the association of statutory health insurance physicians.
- 2 A detailed expert opinion on this question was carried out by the BQS-Institute for the German Federal Ministry of Health. This report was published in August 2012 (Veit et al. 2012). An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).
- 3 See Chapter 11.
- 4 Reiter et al. 2008
- 5 Veit et al. 2012
- 6 The Commonwealth Fund 2006; Davis 2005
- 7 Schoen et al. 2011
- 8 Many of these dimensions are used by the Commonwealth Fund for its projects.
- 9 A detailed description and analysis can be found in Veit et al. 2012
- 10 Fairbrother et al. 1997
- 11 DRG: Disease-Related Group
- 12 Mattie and Webster 2008; Milstein 2009
- 13 Shalts 2009
- 14 Weiss 2006
- 15 Health Care Incentives Improvement Institute 2010; de Brantes et al. 2010; de Brantes et al. 2009; Rastogi et al. 2009; de Brantes and Rastogi 2008; Gosfield 2008; de Brantes and Camillus 2007. Details about the project can be found there.
- 16 Accountable Care Organization (ACO) 2011; American Health Care Association (AHCA) 2011; Becker et al. 2011; Berenson und Burton 2011; Berwick 2011; Correia 2011; McClellan et al. 2010.
- 17 Herrin et al. 2008
- 18 Bonus = higher compensation in case of success; Malus = reduction of compensation in case of not meeting the target.
- 19 Klusen et al. 2009
- 20 AOK is a German sickness fund.
- 21 KV, or Kassenärztliche Vereinigung, an association of statutory health insurance physicians.
- 22 Hochlenert et al. 2009
- 23 The detailed check list can be found in Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).
- 24 They can be found at length at Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).
- 25 Lester et al. 2010
- 26 For example Byrnes and Fifer 210; Gosden et al. 2000
- 27 Baumann 2012
- 28 For example SVR 2007; Malzahn et al. 2011)
- 29 Institute of Medicine of the National Academies (IOM) 2006; McGlynn et al. 2003
- 30 For example, see the reports on mandatory benchmarks in Germany (per §137, Social Code, Volume V).
- 31 Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).
- 32 By Diamond and Kaul 2009
- 33 For example Reason 1995
- 34 These are provided in more detail in Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de)
- institut.de
- 35 Lester et al. 2010
- 36 Mullen et al 2010
- 37 e.g., Norton 1992, Haaf et al 2004
- 38 Haaf et al. 2004
- 39 Friesner and Rosenman 2002
- 40 Bernacki and Ko 2010
- 41 Mullen et al. 2010
- 42 Berwick 1996
- 43 See <http://quinth.gkv-spitzenverband.de>
- 44 QUALIFY, Reiter et al 2008
- 45 Details about the testing algorithm can be found in Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).
- 46 Meterko et al (2006)
- 47 Detailed descriptions of the concrete approach to the various topics can be found in Veit et al. 2012. An English version of the complete report is available, please contact [p4p@bqs-institut.de](mailto:p4p@bqs-institut.de).

# LITERATURE

- Accountable Care Organization (ACO), *National Overview of ACO Implementation: Analysis of the Medicare Shared Savings Program Final Rule* (Washington, DC: American Health Care Association (AHCA), 2011).
- American Health Care Association (AHCA), *Memorandum* (Washington, DC: American Health Care Association (AHCA), 2011).
- Daniel Baumann, "Wenn der Mammon regiert. Immer mehr Chefärzte erhalten Bonuszahlungen für das Erreichen finanzieller Ziele," *Frankfurter Rundschau*, 6 February 2012.
- Scott Becker, R. Brent Rawlings, Barton Walker, and Lindsey Dunn, *50 Things to Know About the Proposed ACO Regulations* (Chicago: Becker's ASC Review, 2011).
- Robert A. Berenson and Rachel A. Burton, *Accountable Care Organizations in Medicare and the Private Sector: A Status Update* (Princeton, NJ: Robert Wood Johnson Foundation, 2011).
- R. Bernacki and D. Ko, "SIG Symposia and Concurrent Sessions. Peer Mentoring: An Innovative Model for Professional Advancement in Hospice and Palliative Medicine," *Journal of Pain and Symptom Management Conference: Annual Assembly of the American Academy of Hospice and Palliative Medicine* (Boston: AAHPM and the Hospice and Palliative Nurses Association (HPNA), 2010): 339.
- Donald M. Berwick, "Making Good on ACO's Promise – The Final Rule for the Medicare Shared Savings Program," *New England Journal of Medicine* 365 (19) (2011): 1753-1756.
- Donald M. Berwick, "Quality of Health Care: Part 5: Payment by Capitation and the Quality of Care," *New England Journal of Medicine* 335 (16) (1996): 1227-1231.
- Bundesärztekammer (BÄK), Kassenärztliche Bundesvereinigung (KBV), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), "Nationale VersorgungsLeitlinie Kreuzschmerz – Langfassung. Version 1.X. 2010," <<http://www.versorgungsleitlinien.de/themen/kreuzschmerz>> (16 February 2012)
- John Byrnes and Joe Fifer, "Recommendations for Responding to Changes in Reimbursement Policy," *Frontiers of Health Services Management* 27 (1) (2010): 3-11.
- The Commonwealth Fund, *Framework for a High Performance Health System for the United States* (New York: The Commonwealth Fund, 2006).
- Edward Correia, "Accountable Care Organizations: The Proposed Regulations and the Prospects for Success," *American Journal of Managed Care* 17 (8) (2011): 560-568.
- Karen Davis, "Toward a High Performance Health system: The Commonwealth Fund's New Commission," *Health Affairs* 24 (5) (2005): 1356-1360.
- François de Brantes and Joseph A. Camillus, *Evidence-Informed Case Rates: A New Health Care Payment Model* (New York, Washington: The Commonwealth Fund, 2007).
- François de Brantes and Amita Rastogi, *Evidence-Informed Case Rates: Paying for Safer, More Reliable Care*, Issue Brief 40 (New York: The Commonwealth Fund, 2008): 1-13.
- François de Brantes, Amita Rastogi, Michael Painter, "Reducing Potentially Avoidable Complications in Patients with Chronic Diseases: the Prometheus Payment Approach," *Health Services Research Journal* 45 (6 Pt 2) (2010): 1854-1871.
- François de Brantes, Meredith B. Rosenthal, Michael Painter, "Building a Bridge from Fragmentation to Accountability – the Prometheus Payment Model," *New England Journal of Medicine* 361 (11) (2009): 1033-1036.
- G.A. Diamond and S. Kaul, "Evidence-Based Financial Incentives for Healthcare Reform: Putting It Together," *Circulation: Cardiovascular Quality and Outcomes* 2 (2) (2009): 134-140.
- Avedis Donabedian, *The Definition of Quality and Approaches to its Assessment* (Ann Arbor, Michigan: Health Administration Press, 1980).
- Gerry Fairbrother et al., "Impact of Financial Incentives on Documented Immunization Rates in the Inner City: Results of a Randomized Controlled Trial," *Ambulatory Pediatrics* 1 (4) (2001): 206-212.
- Gerry Fairbrother et al., "The Impact of Physician Bonuses, Enhanced Fees, and Feedback on Childhood Immunization Coverage Rate," *American Journal of Public Health* 89 (2) (1999): 171-175.
- Gerry Fairbrother et al., "Effect of the Vaccines for Children Program on Inner-City Neighborhood Physicians," *Archives of Pediatrics & Adolescent Medicine* 151 (12) (1997): 1229-1235.
- Elliott S. Fisher, "Paying for Performance – Risks and Recommendations," *New England Journal of Medicine* 355 (18) (2006): 1845-1847.
- Daniel L. Friesner and Robert Rosenman, "Cost Shifting Revisited: The Case of Service Intensity," *Health Care Management Science* 5 (1) (2002): 15-24.
- GKV-Spitzenverband, *Der Qualitätsindikatoren-thesaurus des GKV-Spitzenverbandes*, <<http://quinth.gkvspitzenverband.de/content/index.php>> (10 February 2012)
- Toby Gosden et al., "Salary, Fee-For-Service and Mixed Systems of Payment: Effects on the Behaviour of Primary Care Physicians (Review)," *Cochrane Database of Systematic Reviews* (3) (2000): CD002215.
- Alice G. Gosfield, *Making Prometheus Payment Rates real: Ya' Gotta Start Somewhere* (Princeton, NJ: Robert Wood Johnson Foundation, 2008).
- Robert A. Greene et al., "Increasing Adherence to a Community-Based Guideline for Acute Sinusitis through Education, Physician Profiling, and Financial Incentives," *American Journal of Managed Care* 10 (10) (2004): 670-678.
- H.G. Haaf, E. Volke, F. Schliehe, "Neue Vergütungs- und Versorgungsformen und ihre Auswirkungen auf die Rehabilitation," *Rehabilitation* 43 (5) (2004): 312-324.
- Health Care Incentives Improvement Institute, *Prometheus Pilot: Policy Decisions* (Newtown: Health Care Incentives Improvement Institute, 2010).
- J. Herrin, D. Nicewander, D.J. Ballard, "The Effect of Health Care System Administrator Pay-For-Performance on Quality of Care," *Joint Commission Journal on Quality and Patient Safety* 34 (11) (2008): 646-654.
- Dirk Hochlehnert, et al., *Qualitätsbericht: Netzwerk Diabetischer Fuß – Köln und Umgebung 2009* (Köln: Netzwerk Diabetischer Fuß – Köln und Umgebung e.V., 2009).
- Institute of Medicine of the National Academies (IOM), *Performance Measurement: Accelerating Improvement. Pathways to Quality Health Care* (Washington, D.C.: Institute of Medicine of the National Academies, National Academies Press, 2006).
- Integrated Healthcare Association (IHA), *Innovation Through Collaboration. The California Pay for Performance Program. The Second Chapter. Measurement Years 2006-2009* (Oakland, CA: Integrated Healthcare Association (IHA), 2009).
- Norbert Klusen, Andreas Meusch, Juliane Piesker, *Pay for performance* (Königs- noch Holzweg Hamburg: Meusch-Verlag, 2009).
- Helen Lester et al., "The Impact of Removing Financial Incentives from Clinical Quality Indicators: Longitudinal Analysis of Four Kaiser Permanente Indicators," *BMJ* 340 (2010): c1898.
- Jan Mainz, *Defining and Classifying Clinical Indicators for Quality Improvement*, *International Journal for Quality in Health Care* 15 (6) (2003): 523-530.
- Jürgen Malzahn, Christian Günster, Claus Fahlenbrach, "Pay for



- Performance – Einsparungen und Bonuszahlungen am Beispiel Hüftendoprothesen-Implantation," in *Krankenhaus-Report 2012 – Schwerpunkt: Regionalität*, ed. Jürgen Klauber et al. (Stuttgart: Schattauer: 2011): 237-258.
- A.S. Mattie, B.L. Webster, "Centers for Medicare and Medicaid Services' 'Never Events': An Analysis and Recommendations to Hospitals," *The Health Care Manager* 27 (4) (2008): 338-349.
- Mark McClellan et al., "A National Strategy to Put Accountable Care into Practice," *Health Affairs* 29 (5) (2010): 982-990.
- Elizabeth A. McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *New England Journal of Medicine* 348 (26) (2003): 2635-2645.
- Mark Meterko et al., "Provider Attitudes Toward Pay-For-Performance Programs: Development and Validation of a Measurement Instrument," *Health Services Research Journal* 41 (5) (2006): 1959-1978.
- Arnold Milstein, "Ending Extra Payment for 'Never Events' – Stronger Incentives for Patients' Safety," *New England Journal of Medicine* 360 (23) (2009): 2388-2390.
- Kathleen J. Mullen, Richard G. Frank, Meredith B. Rosenthal, "Can You Get What You Pay for? Pay-For-Performance and the Quality of Healthcare Providers," *The RAND Journal of Economics* 41 (1) (2010): 64-91.
- Edward C. Norton, "Incentive Regulation of Nursing Homes," *Journal of Health Economics* 11 (2) (1992): 105-128.
- Jesse M. Pines, "Profiles in Patient Safety: Antibiotic Timing in Pneumonia and Pay-For-Performance," *Academic Emergency Medicine* 13 (7) (2006): 787-790.
- Amita Rastogi et al., "Prometheus Payment Model: Application to Hip and Knee Replacement Surgery," *Clinical Orthopaedics and Related Research* 467 (10) (2009): 2587-2597.
- James Reason, "Understanding Adverse Events: Human Factors," *Quality in Health Care* 4 (2) (1995): 80-89.
- Anne Reiter et al., "QUALIFY: Ein Instrument zur Bewertung von Qualitätsindikatoren," *Zeitschrift für ärztliche Fortbildung und Qualität im Gesundheitswesen* 101 (10) (2008): 683-688.
- James C. Robinson, Thomas Williams, Dolores Yanagihara, "Measurement of and Reward for Efficiency in California's Pay-For-Performance Program. How the Integrated Healthcare Association Discovered the Problems of Using 'Episodes of Care' as the Basis for Physician Performance Rewards," *Health Affairs* 28 (5) (2009): 1438-1447.
- Meredith B. Rosenthal et al., "Early Experience With Pay-for-Performance – From Concept to Practice," *JAMA – The Journal of the American Medical Association* 294 (14) (2005): 1788-1793.
- Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen, *Kooperation und Verantwortung: Voraussetzungen einer zielorientierten Gesundheitsversorgung. Gutachten 2007* (Bonn: Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen, 2007).
- Cathy Schoen et al., "New 2011 Survey of Patients with Complex Care Needs in Eleven Countries Finds that Care is Often Poorly Coordinated," *Health Affairs* 30 (12) (2011): 2437-2448.
- Faina Shalts, "Wrong-site Surgeries: Will Non-Coverage by CMS Produce Adverse Results?" *Journal of Law, Medicine & Ethics* 37 (2) (2009): 382-385.
- Yujing Shen, "Selection Incentives in a Performance-Based Contracting System," *Health Services Research Journal* 38 (2) (2003): 535-552.
- Mark Stovsky and Irina Jaeger, "BPH Procedural Treatment: The Case for Value-Based Pay for Performance," *Advances in Urology* (2008): 954721.
- Christof Veit et al., *Pay-for-Performance im Gesundheitswesen: Sachstandsbericht zu Evidenz und Realisierung sowie Darlegung der Grundlagen für eine künftige Weiterentwicklung. Ein Gutachten im Auftrag des Bundesministeriums für Gesundheit, 2012* (Düsseldorf: BQS-Institut für Qualität und Patientensicherheit, 2012)
- Mark F. Weiss, "Gain your Fair Share: Gainsharing Makes a Comeback," *Seminars in Anesthesia, Perioperative Medicine and Pain* 25 (3) (2006): 183-186.
- Rachel M. Werner et al., "The Effect of Pay-For-Performance in Hospitals: Lessons for Quality Improvement," *Health Affairs* 30 (4) (2011): 690-698.
- J. Frank Wharam et al., "High Quality Care and Ethical Pay-For-Performance: A Society of General Internal Medicine Policy Analysis," *Journal of General Internal Medicine* 24 (7) (2009): 854-859.



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