

# **International Research on Financing Quality in Healthcare**

**Newsletter 6, February 2014** 

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#### In this issue

Save the date: final conference, Brussels 24 April 2014

InterQuality: Reflections on the project

Activity Report: WP 3

**Activity Report: WP 4** 

Meeting Report: Odense, 18-19

November 2013

Activity Report: WP 2

InterQuality video

## **Project Information**

International Research on Financing Quality in Healthcare

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## Consortium

Medical University of Warsaw (MUW) - coordinator

Hannover Medical School (MHH)

University of Southern Denmark (SDU)

University of Catania (UniCT)

**Urban Institute Washington (UI)** 

University of York (UY)

Sopharm Sp.z o.o. (SPH)

Standing Committee of European Doctors (CPME)

European Patients' Forum (EPF)



## InterQuality - Reflections on the project

## by Prof. Dr Hab. Tomasz Hermanowski, Project Leader (MUW)



I am pleased to welcome you to the 6th issue of the Inter-Quality newsletter. Our three-year research is now coming to an end and the time has come for an attempt to formulate policy recommendations. The research of WP3 on pharmaceutical care investigated pricing and reimbursement of medicinal products in the wider context of health systems performance assess-

ment, and analysing the impact of pharmaceutical expenditure on life expectancy.

Differences in access to appropriate medicines attributed to social inequalities proved to be an urgent issue in some of the EU Member States. Thus, reimbursement and delivery of pharmaceuticals should reflect patients' rights to equitable and timely access to appropriate medicines. In pursuing this paradigm, adequate, equitable and sustainable financing models are essential. Reimbursement decisions should take into account patients' annual out-of pocket payments on all drugs they should receive in order to best meet their individual health needs. Simple co-payment on each transaction should be replaced by deductibles and caps on annual out-of-pocket spending on pharmaceuticals, preferably adjusted on an annual basis, and accompanied by protection mechanisms covering highly vulnerable groups of patients. The EU Member States should investigate the feasibility of innovative reimbursement models offering better ways to contain moral hazards, such as Medicare Part D coverage gap (informally known as the Medicare donut hole), i.e. the difference between the initial coverage limit and the catastrophic-coverage threshold.

The implementation of advanced reimbursement schemes providing for more equitable and sustainable access to medicines requires active investment and incorporation of e-health solutions. Most EU Member States promote implementation of selected e-Health tools, such as e-prescribing, but there is still little understanding that, without a proper institutional framework providing for their integration, there is a chance that these tools will not yield results comparable to those in the US. Pharmacy benefit management (PBMs) technology provides an integrated package of cost-containment methods implemented within a transparent institutional framework and powered by

strong motivation of the agent. Without integration, selected e-Health tools will not work as a coherent logical and operational entity and may not yield results comparable to cost and quality improvements obtained thanks to the implementation of PBMs in the US. Innovation is often regarded as the main cost driver responsible for the rising prices of new medicines, but in parallel to inventing new active substances, innovation produces also new management and financing models which reduce costs and improve the quality of care. In this respect, a mixed health care system, as prevails in the US, seems to be more flexible and open to implementation of radical, new and creative management and financing models, such as integrated care or PBM, than EU social security or tax-based healthcare systems.

It should be also remarked that improvements in pharmaceutical care financing may be limited or compromised by the lack of flexibility of the EU Member States national or regional administrative regulations. Relaxation of these restrictions and innovative changes in the traditional pharmacy business model may help improve patient access to appropriate pharmaceutical care. Instead of focusing on administrative regulations regarding ownership and location of pharmacies, which may create barriers to vertical and horizontal integration of pharmacies and wholesalers, or prohibit direct deliveries or distribution of prescription medicines by mail order pharmacies, the traditional pharmacy business model, still prevailing in most EU Member States, should be changed. Retail distribution margins should not be pharmacies' only source of revenue. If Italian or Polish pharmacies are expected not only to sell medicines but also to provide pharmaceutical care, their business model cannot be the same as a business model of a shoe shop. Following the UK example, pharmaceutical care services should be remunerated for, and pharmacies should have a share in savings resulting from generic substitution. The medicines produced by XXI century technology may not be efficiently distributed by XIX century distribution chan-

This outline of recommendations for the pharmaceutical sector is to give you a foretaste of the Project outcomes, which will be presented in full at the InterQuality final conference, to be held on 24 April 2014 at the EU Committee of the Regions in Brussels. On behalf of the InterQuality consortium partners, I would like to invite you to join us there.

More information at http://interqualityproject.eu/final -conference



## InterQuality - Reflections on project findings ctd.

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## **Activity Report**

## Work Package 3: Deliverable D 3.1 Report on "Report on financing pharmaceutical care"

## by Dr Zbigniew Tytko (SPH)

This deliverable focused primarily on the description of evidence found for the identification of favourable attributes of pharmacy benefit financing schemes. It was intended for internal purposes of the InterQuality project, pointing out the main direction of further research aimed at identification of the recommended model. It also pointed out some promising solutions already implemented in European partner countries and the US. With the aid of the findings presented in this document, a model of pharmaceutical benefit financing will be designed and described by <a href="WPP3">WPP3</a> in deliverable 3.2.

In order to achieve our goals and to collect a set of information, a standard systematic literature review in medical databases was performed, followed by manual search, consisting of searching relevant literature, following interesting links related to chosen full texts as well as performing interviews with experts working in areas of our interest about other relevant papers they were familiar with. The gathered information and data were extracted to a pre-defined table. Then the assessment of the quality of literature included was conducted. On this basis, the literature data was evaluated to identify data which were considered sufficient and of adequate quality for our reports.

As a result of our work, we have identified two broad directions for the future development of the recommended pharmaceutical benefit financing model. We achieved this using bibliographic approach, identifying and summarising accessible information about pharmaceutical benefit financing models used in partner countries. Our work also revealed some promising

WP 1 Incentives

WP 2 Value Benefits

**WP 3 Pharmaceutical Care** 

WP 4 Hospital care

WP 5 Outpatient, Home care

WP 6 Integrated care

WP 7 Dissemination

WP 8 Scientific Coordination

WP 9 Management

solutions, which will probably help achieve the above mentioned goals, when implemented in a healthcare system.

The first important direction of further research should be on progressive reimbursement schemes with the introduction of deductibles (possibly annually adjusted caps on out-of-pocket spending on pharmaceuticals



## **Activity Report**

## Work Package 3: Deliverable D 3.1 Report on "Report on financing pharmaceutical care" ctd.

and protection mechanisms for especially vulnerable groups of patients). This should go together with implementation of e-prescribing solutions supplemented by online adjudication of pharmacy claims and very wide access to pharmaceutical services in community pharmacies as well as improving pharmacovigilance. For this purpose a new pharmaceutical distribution financing model should be developed, to remunerate pharmacists for pharmaceutical care services.

The second important direction of further research should be the introduction of professional third-party administrators for pharmaceutical benefits supply (model solutions are pharmaceutical benefit managers in US), having enough power to negotiate pharmaceuticals` prices and gaining rebates from producers, thus

improving the transparency of distribution process and transferring profits to payers and patients to achieve slowdown in dramatically increasing pharmaceuticals costs. Third-party administrators should share savings with clients for better incentives to gain a decrease of pharmaceutical expenditure, and compete for contracts with insurers. All aspects of pharmaceutical's provision should be in the hands of a single agent responsible for financing and organising beneficiaries access to medicines.

Both solutions might be implemented together, since they are not mutually exclusive, thus probably producing more gain in terms of curbing down the pharmaceuticals costs and diminishing the known effect of decreasing equity of access in managed care settings.

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## **Activity Report**

## **Work Package 4: Hospital Care**

## by Prof. Giacomo Pignataro (UniCT)

The main aim of the "Report on financing hospital care  $-\frac{WP4}{2}$  Deliverable 4.1" of the InterQuality project is to investigate the effects of different prospective payment systems (PPS) on quality of hospital care, taking into account how they are affected by relevant features of the health care systems. This comprehensive task has been conducted by the research group of the University of Catania, in collaboration with the University of Southern Denmark and the University of York.

The first part of the report offers an overview of the organisation and financing of hospital care provision in three European countries: Denmark, Italy and the UK. The characteristics of these payment systems are framed within the general features of prospective payment mechanisms. The description of the healthcare arrangements in place in each of the three countries under consideration has highlighted some broad similarities but also many substantial differences among them. In terms of similarities, all the three countries rely on tax-funded, publicly administered national health care systems, provide universal coverage and health services free at the point of use and deliver services mainly through public providers. Moreover,

they have all opened up their national health systems to internal competition to diversify supply as well as to increase purchasing power and have devolved health responsibilities to subnational governments, albeit with different emphasis and modalities. There are, however, substantial cross-country disparities in how activity-based funding has been actually implemented and developed over time, since each country has tried to tailor hospital payment mechanisms to its local context. In particular, the cross-country comparison of the hospital diagnosis-related groups (DRG)-based payment schemes has found differences with regards to many DRG design features such as number of groups, type of costing, funding characteristics of particular hospital activities, specific adjustments, reimbursement of outliers and so on. Nonetheless, considering these dissimilarities alone does not allow to fully appreciate the effect of a country-specific DRG-based payment scheme on the achievement of the typical PPS incentives for cost efficiency, quality and equity of

Evidence on the impact of the hospital funding reforms implemented in the last decades, usually intro-



## **Activity Report**

## Work Package 4: Hospital Care ctd.

ducing some form of PPS and reducing the scope for retrospective global budgeting, does not seem to have established very clear-cut results. In particular, factors that might affect the actual realisation of the expected incentives provided by PPS are potentially quite numerous. To this extent, the second part of the report is devoted to theoretically evaluate those features of the health system which are considered to be particularly crucial in affecting the result of PPS on hospital efficiency and quality. In particular, the discussion is divided into "design features", those concerning the specification of the payment system (e.g., prospective budget vs. prospective price, readmission policies, etc), and "institutional features", those concerning the context in which the PPS is implemented (e.g., degree of competition, public-private mix, etc.). The general picture emerging from the analysis is that the main features of the context in which a given payment system is implemented are certainly relevant in driving hospitals' behaviour and, in turn, in affecting the level of efficiency and quality induced by that payment system. Specifically, the public-private mix of hospitals, the degree of competition and the extent of non-financial motivations turn out to be crucial in establishing what payment system should induce the best performance in terms of both efficiency and quality. Similarly, relevant design features as readmission policies and the degree of soft budget constraint also appear to be very important in affecting the results expected from PPS.

Finally, in the last part of the report, empirical analyses of the effects of the PPS adoption on different efficiency and quality issues in Italy are carried out, using various methodological (parametric and non-parametric) approaches. Firstly, the efficiency of Italian hospitals is considered. For this purpose, a two-stages efficiency analysis is conducted, where in the first-stage the Data Envelopment Analysis (DEA) efficiency scores are estimated for all Italian hospitals and, then, in the second-stage, the above scores are regressed on different explanatory variables, aiming at capturing the role of regional financing systems. Indeed, evidence is found that hospitals financed through PPS tend, on average, to be more efficient than those financed through glob-

al budget. As a further step, an analysis of the impact of PPS on different dimensions of hospital quality, such as standard outcome-based indicators, diffusion of medical technology and inappropriateness, is carried out. As far as the investigation of outcome-based indicators is concerned, the analysis of the Italian hospital system relies on data from the National Programme for Outcome Assessment on mortality and readmissions for acute myocardial infarction (AMI), congestive heart failure (CHF), stroke and chronic obstructive pulmonary diseases (COPD) in the years 2009-2010. Results show that hospitals operating in regions where PPS are used more extensively are generally associated with better quality of care. A similar empirical analysis has been then replicated for Denmark, where the impact of an activity-based hospital financing system on readmissions for chronic obstructive pulmonary disease (COPD) is considered.

All in all, empirical findings for Italy tend to confirm theoretical predictions and further strengthen the positive impact of PPS on hospital efficiency, quality (as measured by outcome-based indicators), medical technology diffusion and appropriateness of care (as measured by cesarean section rates). The analysis for Denmark also shows that key design elements of the prospective hospital reimbursement system (i.e. operating above baseline and having high reimbursement rates) do have an impact on quality of health care as measured by the risk of readmissions for COPD.

In our view, the comprehensive theoretical framework presented in the report along with the results of the empirical part should form an ideal basis to provide policy recommendations related to the peculiarities of a country's system. Therefore, as a further contribution to the InterQuality Project, the research group of the University of Catania will develop policy recommendations on the desirability of the adoption of PPS for hospital care, as related to the country-specific features of the health care system. These policy recommendations will be included in the final report on "Recommended financing models – WP4 Deliverable 4.2" of the InterQuality Project.

Find more information on all InterQuality deliverables on www. interqualityproject.eu



## **Meeting Report: Odense 18-19 November 2013**

The final InterQuality partners' meeting on took place on 18-19 November in Odense and was hosted by the University of Southern Denmark (SDU). As the project has reached its final phase, the meeting focused on planning dissemination activities and formulating policy recommendations emerging from the InterQuality team's research.

Prof. Hermanowski, the project leader, opened the meeting, summarised the project status quo and pointed out challenges of spreading the project results to policy-makers and main stakeholders.

The session of <u>WP3</u> on pharmaceutical care included presentations by Dr Anna Zawada (MUW) and Dr Zbigniew Tytko (SPH). Under the 'smarter spending' leitmotif, Dr Tytko presented specific 'islands of excellence' that offered best practices for improving pharmaceutical care financing in an attempt to efficiently and effectively provide greater access to high quality care. These "islands" included pharmacy benefit management in the United States, progressive reimbursement in Denmark, and reimbursement reform in Poland. Anna Zawada presented the results of a collaborative empirical study on health care expenditure and equity of healthcare usage in Denmark, Germany and Poland.

The next session, featuring presentations by Mr Tomasz Pawlęga (MUW) and Prof. Volker Amelung (MHH), <u>WP6</u> leader, was dedicated to integrated care. The speakers focused on financial incentives for integrating care, integrated care models and obstacles for developing such models in Europe.

The first day of the meeting was concluded with an overview of financial and management issues of the project, provided by Jakub Rutkowski and Michał Skrzek, project manager and financial manager respectively.

The second day opened with the session on hospital care. Dr Domenico Lisi (UniCT) presented the main findings of a theoretical analysis of relations between crucial features of healthcare systems and prospective payment schemes implemented in Italy, Denmark and the UK. He then moved on to the results of a study on the impact of prospective payment system on hospital efficiency and quality conducted in Italian hospitals.

Dr Lu Han (UY) presented the results of an analysis of the relationship between total income generated by payment-by-results tariff and the probability of survival and readmission after stroke, hernia repair, and hip replacement in UK hospitals. Results of a similar study, focused on the effects of activity-based funding on 30day readmission after COPD in Denmark, was presented by Prof. Christian Kronborg (SDU).

Prof. John Hutton (UY), <u>WP5</u> leader, discussed the effects of two main payment methods in outpatient care — capitation and fee-for-service — on access, effectiveness and patient experience. He also summarised existing evidence from the UK Quality and Outcomes Framework. Prof. Hutton drew attention to the dual and contradictory effects of payment methods on different dimensions of the quality of outpatient care. Ms Sarada Das (CPME) presented the results of a snapshot exercise on doctors' opinions on different pay-



ment methods, which gave rise to a number of questions for further research.

The basic functionality of the InterQuality data warehouse was discussed by Mr Stanisław Brzozowski (MUW), who explained how to import healthcare data from the data warehouse to Excel and how to perform a comparative analysis with graphical visualisation.

The last session, dedicated to the dissemination of the Project results, took the form of a brainstorming discussion and was moderated by Ms Liuska Sanna (EPF), WP 7 leader. For the second work stream of WP7, Ms Das presented a discussion on the strengths and weaknesses of the healthcare reform in Germany in 2004, focusing on the introduction of a 'surgery fee'.

The meeting was concluded with wrap-up and closing remarks by the project leader, Prof. Hermanowski.

After the meeting partners are now looking forward to presenting and discussing the project results and policy recommendations at the final conference, which will take place in Brussels on 24 April 2014.



## **Activity Report**

## Work Package 2: Survey on doctors' views on payment systems

## by Dr Konstanty Radziwill and Ms Sarada Das (CPME)

The reimbursement of doctors and other healthcare professionals for services rendered in the scope of their professional practice forms a significant factor in every healthcare system's financial structure and is a frequent focus of healthcare reforms. Reforms affect not only the volume of payment, but often address the system on the basis of which payments are calculated and issued. Here, certain intuitive assumptions as regards doctors' and patients' behaviour in response to a specific payment system and its effect on healthcare in general inform the political decisions.

While previous research has examined to what extent these assumption hold true once a reform has been implemented, as was explored in the activities of WP1, only little data exist on doctors' and patients' first-hand views on different payment systems and their effect on healthcare.

To gain a 'snapshot' of these opinions, CPME and MUW collaborated within WP2 to create a survey which aimed to collect an insight on doctors' views on payment systems. The survey hoped to provide an impression of practitioners' perceptions and experiences to gain a better understanding of their attitudes towards and acceptance of payment systems. While it was expected to achieve qualitative rather than quantitative insight, it was hoped that the findings could contribute to the discussion on payment systems' effect on healthcare systems, in particular with regard to quality of care.

The survey covered a variety of topics, including time spent on reporting on activities to determine volume of pay and the involvement of national medical associations in healthcare reform policy.

A main focus however was on payment systems and the respective systems' positive or negative impact on healthcare. By way of indicators, a number of objectives were identified addressing quality, cost, utilisation and access to/of healthcare. Doctors were asked to assess the payment systems' impact on these objectives based on their experience.

In line with the overall InterQuality approach, the following payment systems included for assessment: salary, capitation, fee-for-service, and pay-for-performance.

On average respondents showed only moderate preferences for one payment system over the other as regards their impact on the objectives listed.

With regard to quality of care, two main indicators were included in the questionnaire. To achieve the

best quality of clinical outcomes, respondents showed a preference for pay-for-performance systems, with capitation ranking as most negative in terms of impact on clinical outcomes.

In terms of achieving best patient satisfaction, a slight preference for fee-for-service systems was indicated, while capitation again ranked as least positive.

As regards cost to the system, respondents were asked to indicate which payment system could be expected to be most effective at minimising costs. The favoured system here was pay-for-performance while reimbursement on the basis of fee-for-service was estimated to impact negatively on the objective.

Similarly, pay-for-performance was estimated to cause the least negative impact as regards the prevention of overuse of healthcare systems, while fee-for-service systems were attributed the most negative impact; however none of the systems included were assessed as having a positive impact on minimising utilisation.

Respondents were furthermore asked to assess payment systems' impact on assuring best access to the services for patients. Here fee-for-service systems were the preferred option, while salary-based systems were deemed to affect patients' access to healthcare negatively.

Lastly, it was asked to identify the payment systems' positive impact on public health. Here the salary system scored most positive, while capitation was found to be the least positive.

As described, the low variance of median scores limits the validity of the opinions shown. In addition the imbalanced mix as regards countries' participation in the survey, together with the small overall sample size must qualify any commentary on the results.

Nonetheless these 'snapshots' give rise to interesting impressions to complement the work of WPs 1-6. The more detailed analysis of the survey results will look into the specifics of the responses received and discuss, for example, whether the involvement of doctors in healthcare reform policy results in more positive attitudes towards the introduction of payment systems.



## **Discussing InterQuality:**

Click here to view the consortium's video message www.youtube.com/watch?v=-yYTLS4iTaE



The InterQuality consortium looks forward to welcoming you again soon.



















