International perspectives on quality in healthcare system

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Vice President French Health Economics Society SFES
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Elements of sustainable, high-quality and fair models for European healthcare systems

• Thought provoking experts: A Top-down reform. Is there a best structure for healthcare systems? Can different stakeholders agree on common goals? What needs to change now to move towards an improved system?
  – Pascal Garel, Chief Executive, European Hospital and Healthcare Foundation (HOPE) Jaak Peeters, Chairman, EMEA, Janssen Joanna Groves, Chief Executive Officer, International Alliance of Patients’ Organizations. Birgit Beger, Secretary General, Standing Committee of European Doctors

• Financing: who pays? Should the private sector bear more of the cost of healthcare and be more involved with the modernisation of the public sector? Should the individual be prepared to shoulder a higher cost of healthcare?
  – Guillem López Casanovas, President, International Health Economics Association; Member of the Board, Central Bank of Spain and Professor of Applied Economics and Dean, Universidad Pompeu Fabra. Paul Garassus, Vice-president, French Health Economic Society and Member of the Board, European Union of Private Hospitals (UEHP). Josep Figueras, Director, European Observatory on Health Systems and Policies and Head, WHO European Centre on Health Policy
Too many hospital beds in London… and other challenges

World Congress WHO Amsterdam, 24 May 2012

Delivering “perfect healthcare” by Brian De Francesca (executive vice president TBS Group, UK)

- Too much democracy, A total lack of leadership, No alignment of incentives, Downsizing…

The German Hospital market in numbers

<table>
<thead>
<tr>
<th>(source DKG)</th>
<th>Hospitals</th>
<th>Hospitalbeds</th>
<th>Cases</th>
<th>Chargeable Days</th>
<th>Average Stay</th>
<th>Average Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>2 447</td>
<td>685.976</td>
<td>14.341.216</td>
<td>210.390.458</td>
<td>14,7</td>
<td>85,5 %</td>
</tr>
<tr>
<td>2008</td>
<td>2 083</td>
<td>503.360</td>
<td>17.519.579</td>
<td>142.534.88</td>
<td>8,1</td>
<td>77,4%</td>
</tr>
</tbody>
</table>

Changing Market for Hospital services. More cases, less time, less capacities (Quicker & Sicker)
Rechtsanwalt Jens Wernick jens.wernick@wernick-ius.de

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fallzahl</td>
<td>17 187</td>
<td>17 259</td>
<td>17 398</td>
<td>17 313</td>
<td>17 233</td>
<td>17 033</td>
<td>17 142</td>
<td>17 568</td>
<td>17 937</td>
<td>18 231</td>
</tr>
<tr>
<td>DVw</td>
<td>9,7</td>
<td>9,4</td>
<td>9,3</td>
<td>9,0</td>
<td>8,6</td>
<td>8,6</td>
<td>8,4</td>
<td>8,3</td>
<td>8,1</td>
<td>8,0</td>
</tr>
</tbody>
</table>
The government of the former Yugoslav Republic of Macedonia has introduced pay-for-performance for all specialist doctors in all public hospitals.

The system is based on mandatory reporting of each intervention a doctor performs; it measures an individual doctor’s workload, and not the performance of clinical teams.

There are no performance measures such as quality, teamwork, complexity of the interventions, nor does it include any hospital outcome measures. Implementation of this reform created enormous frustrations and distress among the majority of physicians who went on a 42-day general strike.

The implications of this system as currently implemented may lead towards greater numbers of doctors moving to private hospitals or going to work abroad.
Nearly fourteen years ago the Institute of Medicine’s report, To Err Is Human: Building a Safer Health System, triggered a national movement to improve patient safety.

Despite the substantial and concentrated efforts that followed, quality and safety problems in health care continue to routinely result in harm to patients. Desired progress will not be achieved unless substantial changes are made to the way in which quality improvement is conducted. Alongside important efforts to eliminate preventable complications of care, there must also be an effort to seriously address the widespread overuse of health services.

That overuse, which places patients at risk of harm and wastes resources at the same time, has been almost entirely left out of recent quality improvement endeavors. Newer and much more effective strategies and tools are needed to address the complex quality challenges confronting health care. Tools such as Lean, Six Sigma, and change management are proving highly effective in tackling problems as difficult as hand-off communication failures and patient falls.

Finally, the organizational culture of most American hospitals and other health care organizations must change. To create a culture of safety, leaders must eliminate intimidating behaviors that suppress the reporting of errors and unsafe conditions. Leaders must also hold everyone accountable for adherence to safe practices.
Goal of the study presented PCSI 2012
P4O reform prospective

Retrospective study on five DRG follow-up in French casemix 2009 analysis for the determination of quality indicators in P4O reforms

To anticipate further negotiation concerning DRG prospective payment tariff, to propose quality indicators as incentives for private hospitals

Context

- Rising cost containment for hospital using DRG payment
- To propose positive benchmarking between French “for profit” private hospitals
- Outcome as the main goal of hospital strategy: “Payment For Outcome”
- Incentives according to quality indicators

- DRG and statistical analysis performed by HEVA, Health Economics Consultant, 186 avenue Thiers, 69465 Lyon Cedex 06 France. www.hevaweb.com/

- Study supported by FHP-MCO (Fédération de l’Hospitalisation Privée – Médecine, Chirurgie, Obstétrique): Acute Care “For Profit” Hospital French Federation, 81 rue de Monceau 75008 Paris France. www.fhpmco.fr/
Twelve months follow-up in French Hospital case-mix 5 DRG, public and private sectors data

<table>
<thead>
<tr>
<th>2009</th>
<th>Coronary Stent (without MI)</th>
<th>Hip Replacement (coxarthrosis + fracture)</th>
<th>Mastectomy (total + subtotal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Stays</td>
<td>117 984</td>
<td>125 340</td>
<td>61 164</td>
</tr>
<tr>
<td>Sector</td>
<td>Private</td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>Stays by sector</td>
<td>62 719</td>
<td>55 265</td>
<td>69 026</td>
</tr>
<tr>
<td>Hospital Number</td>
<td>266</td>
<td>233</td>
<td>455</td>
</tr>
<tr>
<td>Stays per hospital (mean value)</td>
<td>236</td>
<td>237</td>
<td>152</td>
</tr>
<tr>
<td>Share</td>
<td>53%</td>
<td>47%</td>
<td>55%</td>
</tr>
<tr>
<td>Emergency (%)</td>
<td>3,3%</td>
<td>14,1%</td>
<td>4,3%</td>
</tr>
<tr>
<td>ALOS (Mean)</td>
<td>3,6</td>
<td>4,3</td>
<td>9,6</td>
</tr>
<tr>
<td>ALOS (Median)</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Age (Mean)</td>
<td>67,7</td>
<td>66,6</td>
<td>71,0</td>
</tr>
<tr>
<td>Age (Median)</td>
<td>69</td>
<td>67</td>
<td>73</td>
</tr>
<tr>
<td>% Male</td>
<td>74,9%</td>
<td>75,1%</td>
<td>42,2%</td>
</tr>
<tr>
<td>% Female</td>
<td>25,1%</td>
<td>24,9%</td>
<td>57,8%</td>
</tr>
<tr>
<td>DRG Level 1</td>
<td>69,1%</td>
<td>64,3%</td>
<td>55,6%</td>
</tr>
<tr>
<td>DRG Level 2</td>
<td>20,5%</td>
<td>19,0%</td>
<td>39,5%</td>
</tr>
<tr>
<td>DRG Level 3</td>
<td>2,0%</td>
<td>3,6%</td>
<td>3,9%</td>
</tr>
<tr>
<td>DRG Level 4</td>
<td>0,4%</td>
<td>0,7%</td>
<td>1,0%</td>
</tr>
<tr>
<td>DRG Level J</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>DRG Level T</td>
<td>8,0%</td>
<td>12,5%</td>
<td>x</td>
</tr>
<tr>
<td>Number of death</td>
<td>350</td>
<td>1 212</td>
<td>433</td>
</tr>
</tbody>
</table>
Severity of illness SOI and Risk of mortality ROM
Two independent main factors for analysis, separately analysed

- **Severity of illness SOI**
  represents the stage of the pathology:
  - In our example, the risk is not the same between hip replacement for osteoarthritis and for fracture.
  - The same situation is present for planned coronary stent

- **Risk of mortality ROM**
  All studies for outcome analysis need a carefully adjustment according to specific casemix, depending of SOI and ROM both.
  Other factors could be included as planned versus emergency care. But this problem depends on the pathology: appendectomy for example... and pertinence of procedure. We don’t have but we need, international comparison for the best quality indicators concerning outcome.
% death after coronary stenting (except MI),
French private casemix 2009

<table>
<thead>
<tr>
<th>DP (ICD10)</th>
<th>Title</th>
<th>Stays</th>
<th>Death</th>
<th>% death per DP</th>
<th>Mean age death</th>
</tr>
</thead>
<tbody>
<tr>
<td>I25</td>
<td>Chronic ischemic cardiopathy</td>
<td>22 565</td>
<td>40</td>
<td>0,18%</td>
<td>79</td>
</tr>
<tr>
<td>I74</td>
<td>Arterial embolism and thrombosis</td>
<td>8 317</td>
<td>36</td>
<td>0,43%</td>
<td>82</td>
</tr>
<tr>
<td>I20</td>
<td>Angor</td>
<td>13 167</td>
<td>33</td>
<td>0,25%</td>
<td>80</td>
</tr>
<tr>
<td>I21</td>
<td>Myocardial Infarct</td>
<td>1 456</td>
<td>26</td>
<td>1,79%</td>
<td>78</td>
</tr>
<tr>
<td>I50</td>
<td>Cardiac failure</td>
<td>801</td>
<td>19</td>
<td>2,37%</td>
<td>81</td>
</tr>
<tr>
<td>R57</td>
<td>Shock</td>
<td>21</td>
<td>12</td>
<td>57,14%</td>
<td>81</td>
</tr>
<tr>
<td>I46</td>
<td>Cardiac arrest</td>
<td>13</td>
<td>7</td>
<td>53,85%</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>62 719</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Proposition:** Shock and Cardiac arrest (and MI !) are not allowed as DP in DRG 05K06, and will be oriented to special emergency care unit DRG, as severity or procedure oriented DRG.

**Our goal:** to differentiate chronic situation and planned stays, from emergency care
## Deceased Patients after Hip Replacement in French Private Hospital 2009: Repartition by DRG and Age Mean Value

<table>
<thead>
<tr>
<th>Hip Prothesis by DP and DRG</th>
<th>GHM 08C47</th>
<th>GHM 08C48</th>
<th>Total</th>
<th>Hip replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By DP</strong></td>
<td>Nb</td>
<td>Age mean</td>
<td>Nb</td>
<td>Age mean</td>
</tr>
<tr>
<td>M16 coxarthrosis</td>
<td>2</td>
<td>87</td>
<td>75</td>
<td>81</td>
</tr>
<tr>
<td>S72 fracture</td>
<td>261</td>
<td>86</td>
<td>0</td>
<td>x</td>
</tr>
<tr>
<td><strong>Total Private Hospitals</strong></td>
<td>266</td>
<td>86</td>
<td>96</td>
<td>79</td>
</tr>
</tbody>
</table>
Exhibit 8. Volume of Knee and Hip Replacements, 2009

Knee replacements per 100,000 population

<table>
<thead>
<tr>
<th>Country</th>
<th>Knee Replacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER</td>
<td>213</td>
</tr>
<tr>
<td>US*</td>
<td>213</td>
</tr>
<tr>
<td>SWIZ</td>
<td>200</td>
</tr>
<tr>
<td>DEN</td>
<td>168</td>
</tr>
<tr>
<td>AUS*</td>
<td>158</td>
</tr>
<tr>
<td>CAN*</td>
<td>143</td>
</tr>
<tr>
<td>UK</td>
<td>141</td>
</tr>
<tr>
<td>SWE</td>
<td>127</td>
</tr>
<tr>
<td>NETH*</td>
<td>124</td>
</tr>
<tr>
<td>OECD Median</td>
<td>122</td>
</tr>
<tr>
<td>FR</td>
<td>119</td>
</tr>
<tr>
<td>NZ</td>
<td>102</td>
</tr>
<tr>
<td>NOR*</td>
<td>75</td>
</tr>
</tbody>
</table>

Hip replacements per 100,000 population

<table>
<thead>
<tr>
<th>Country</th>
<th>Hip Replacements</th>
</tr>
</thead>
<tbody>
<tr>
<td>GER</td>
<td>296</td>
</tr>
<tr>
<td>SWIZ</td>
<td>287</td>
</tr>
<tr>
<td>DEN</td>
<td>236</td>
</tr>
<tr>
<td>NOR*</td>
<td>232</td>
</tr>
<tr>
<td>FR</td>
<td>224</td>
</tr>
<tr>
<td>SWE</td>
<td>214</td>
</tr>
<tr>
<td>NETH*</td>
<td>213</td>
</tr>
<tr>
<td>UK</td>
<td>194</td>
</tr>
<tr>
<td>US*</td>
<td>184</td>
</tr>
<tr>
<td>OECD Median</td>
<td>166</td>
</tr>
<tr>
<td>AUS*</td>
<td>154</td>
</tr>
<tr>
<td>NZ</td>
<td>149</td>
</tr>
<tr>
<td>CAN*</td>
<td>123</td>
</tr>
</tbody>
</table>

* 2008.
** 2007.

Source: OECD Health Data 2011 (Nov. 2011).
Hospital follow-up after mastectomy in 2009 French casemix (by HEVA*)

The best way for quality of outcome and complication prevention

No limited access but an optimal condition for ambulatory and hospital coordination
Propositions to be discussed

- **Stent**
  - % death per procedure
  - % rehospitalisation within 30 days for cardiovascular disease
  - % of myocardial infarct in the following 12 months

- **Hip replacement**
  - % death per procedure
  - % rehospitalisation within 30 days
  - % of related complication: infection and mechanical complication of implant in the following year

- **Mastectomy**
  - Rapid access to medical treatment, if required (chemotherapy and radiotherapy)
  - No hospitalisation in the same DRG in the following year
The most difficult question: proposition for incentives according to “outcome indicators” for each hospital

- The threshold of related complications is often very low. And then sensitivity to the evolution depends on a few patients.

- Complications must be carefully analysed and reported, for the best comprehension of outcome.

- The incentives could be positive: fees in an “ex post” determination of quality result. But it could be too, a negative for poor performer.

- We have to anticipate (participate) new propositions of best practice evolution for hospital payment

- Is P4O a incentive or a punishment? How enhance quality in hospital with quality problems?

- Is a national federation of hospital developing a strategy of selection in favour of a support for economic restriction?

- Quality of observed results needs a full implication of managers and physicians

- A quality program needs a full implication of all partners, caregiver and policymakers. Determination of outcome incentives depends on public policy in difficult time of budget containment

- A competitive advantage could be obtained by transparency concerning outcome result and efficiency of caregiver
Two main topics

- Payment reform to achieve better health care
  
  *Health Affairs, September 2012, vol.31, N 9*

- Getting control of Big Data
  
  *Harvard Business Review, October 2012*
The three interrelated goals of the Affordable Care Act (ACA) of 2010 are to improve access, improve quality, and contain the costs of health care in the United States.

Pay-for-performance (P4P) initiatives have been the primary approach used to link payment and quality.

This article focuses on P4O for inpatient care and distills the lessons learned from the successful implementation of the Medicare Inpatient Prospective Payment System (IPPS).

The first priority of P4O reforms should be to reduce or eliminate any increase in payment resulting from negative outcomes caused by quality failures, such as preventable admissions (for example, ambulatory sensitive conditions), readmissions, complications, and emergency department visits.
In German hospitals, quality measurement, monitoring, and management have undergone considerable development.

This includes an array of mandatory measures, including a nationwide benchmarking exercise based on 194 indicators.

Because of better and deeper coding of diagnoses, procedures, and demographic information since the introduction of the diagnosis-related group (DRG) system, two further “generations” of instruments have been developed: quality measurement performed at the provider (hospital) level using administrative data, and long-term performance measurement using administrative data at the payer level.

All three approaches have specific pros and cons concerning validity regarding final outcomes and resistance against manipulation.
Konsequenzen aus der Qualitäts-messung im Krankenhaus Vorschläge auf Basis internationaler Beispiele (IGES Institut GmbH Friedrichstraße 180 10117 Berlin)
Dr. Karsten Neumann Patrick Gierling Dr. Björn Peters Jean Dietzel, Nov 2013

- In Deutschland existiert für die Messung von Qualität im Krankenhaussektor bereits ein etabliertes System. Das AQUA-Institut ist derzeit im Auftrag des Gemeinsamen Bundesausschusses (G-BA) u. a. mit der Qualitätssicherung im stationären Sektor beauftragt. Zu seinen Aufgaben gehört die Entwicklung, Pflege und Ergebnisauswertung von Qualitätsindikatoren. Auf diesem System bauen wir auf, um Konsequenzen vorzuschlagen.

- Unser Konzept sieht vor, dass für geeignete Qualitätsindikatoren verbindliche Mindeststandards gelten müssen, die für die Erlaubnis zur Leistungserbringung nicht unterschritten werden dürfen. Leistungserbringern unterhalb des Mindeststandards werden zwei Jahre Zeit gegeben, den Mindeststandard zu erreichen.

Deutschlands Zukunft gestalten Koalitionsvertrag zwischen CDU, CSU und SPD (1)
18. Legislaturperiode

- Die sektorübergreifende Qualitätssicherung mit Routinedaten wird ausgebaut. Wir werden gesetzlich ein Institut begründen, das dauerhaft und unabhängig die Qualität der ambulanten und stationären Versorgung ermittelt und dem Gemeinsamen Bundesausschuss Entscheidungsgrundlagen liefert. Die gesetzlichen Krankenkassen werden verpflichtet, dem Institut geeignete pseudonymisierte Routinedaten zur Verfügung zu stellen.

- In einer Qualitätsoffensive werden wir die Qualität der stationären Versorgung verbessern. Qualität wird als weiteres Kriterium für Entscheidungen der Krankenhausplanung gesetzlich eingeführt (1 KHG).

Deutschlands Zukunft gestalten Koalitionsvertrag zwischen CDU, CSU und SPD (2)
18. Legislaturperiode


- Gute Qualität muss sich für die Krankenhäuser auch finanziell lohnen. Die Menge soll künftig nur da berücksichtigt werden, wo sie entsteht. Das heute bestehende System der Mehrleistungsabschläge wollen wir dabei differenzieren: Leistungen mit nachgewiesen hoher Qualität können von Mehrleistungsabschlägen ausgenommen werden, für besonders gute Qualität sind Zuschläge möglich. Umgekehrt sollen bei unterdurchschnittlicher Qualität für einzelne Leistungen auch höhere Abschläge möglich sein.

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.

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).
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, which is presented in the detailed report. This method was tested on over 2,000 indicators and is already in practical use.

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.

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.
Thank's to Thomas BUBLITZ
BDPK, Berlin

- Have a look at
http://www.qualitaetskliniken.de/
Physicians are increasingly becoming salaried employees of hospitals or large physician groups. Yet few published reports have evaluated provider-driven quality incentive programs for salaried physicians. In 2006 the Massachusetts General Physicians Organization began a quality incentive program for its salaried physicians. Eligible physicians were given performance targets for three quality measures every six months. The incentive payments could be as much as 2 percent of a physician’s annual income. Over thirteen six-month terms, the program used 130 different quality measures. Although quality-of-care improvements and cost reductions were difficult to calculate, anecdotal evidence points to multiple successes. For example, the program helped physicians meet many federal health information technology meaningful use criteria and produced $15.5 million in incentive payments.

The program also facilitated the adoption of an electronic health record, improved hand hygiene compliance, increased efficiency in radiology and the cancer center, and decreased emergency department use.

The program demonstrated that even small incentives tied to carefully structured metrics, priority setting, and clear communication can help change salaried physicians’ behavior in ways that improve the quality and safety of health care and ease the physicians’ sense of administrative burden.
The group came up with the following possible objectives for such a project:

- to allow citizen to make a fact-based free choice
- to ensure medical coordination as a basis of the treatment chain
- to guarantee access to high quality emergency care at moving conditions (holiday, business, ..)
- to be able to be included in the EU referral network

For these objectives, perspectives and arguments have been collected. They are summarized under the following aspects:

- Patients perspective
- Interest of hospitals
- Health Care System
- Interoperability
- Methods
- Technological aspects
- Pilot study
New health care delivery and payment models in the private sector are being shaped by active collaboration between health insurance plans and providers. We examine key characteristics of several of these private accountable care models, including their overall efforts to improve the quality, efficiency, and accountability of care; their criteria for selecting providers; the payment methods and performance measures they are using; and the technical assistance they are supplying to participating providers.

Our findings show that not all providers are equally ready to enter into these arrangements with health plans and therefore flexibility in design of these arrangements is critical. These findings also hold lessons for the emerging public accountable care models, such as the Medicare Shared Savings Program—underscoring providers’ need for comprehensive and timely data and analytic reports; payment tailored to providers’ readiness for these contracts; and measurement of quality across multiple years and care settings.
The main objective of the PaSQ Joint Action is to support the implementation of the Council Recommendation on Patient Safety

- 1. Review/data collection: Review of existing data: previous mapping exercises (national and international experiences), literature Review. Needs assessment: collection of the expectations of MS, from the proposed collaboration and networking through the JA

- 2. Action plan development based on the review and on a feasibility analysis, in the framework of the available resources

- 3. Implementing tools development

- 4. Implementation
Joint Action for Patient Safety

PaSQ - European Union Network for Patient Safety and Quality of Care
Some references concerning P4P and P4O


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- Robinson James C. Comparative effectiveness research: from clinical information to economic incentives. Health Affairs, October 2010, volume 29, number 10, pp 1788-1795.


Some references concerning economic context in healthcare

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- Svaljek S. The recent health reform in Croatia: True reforms or just a fundraising exercise? Health Policy 2013 Oct 3 [Epub ahead of print]