Improving quality in European health systems – a comprehensive framework approach

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&
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Background – conceptualizing quality of care

(1) “Quality” is one of the most frequently cited principles of health policy, e.g. in EU health systems’ common values and principles

<table>
<thead>
<tr>
<th>Author/Organization</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Donabedian (1980)</td>
<td>Quality of care is the kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts.</td>
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<tr>
<td>IOM (1990)</td>
<td>Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.</td>
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<td>Department of Health (UK) (1997)</td>
<td>Quality of care is:</td>
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<tr>
<td></td>
<td>• doing the right things (what)</td>
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<td>• to the right people (to whom)</td>
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<td>• at the right time (when)</td>
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<td>• and doing things right first time.</td>
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<tr>
<td>Council of Europe (1998)</td>
<td>Quality of care is the degree to which the treatment dispensed increases the patient’s chances of achieving the desired results and diminishes the chances of undesirable results, having regard to the current state of knowledge.</td>
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<tr>
<td>WHO (2000)</td>
<td>Quality of care is the level of attainment of health systems’ intrinsic goals for health improvement and responsiveness to legitimate expectations of the population.</td>
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</tbody>
</table>

Notes: IOM: Institute of Medicine; WHO: World Health Organization.
Background – conceptualizing quality of care (2)

(1) “Quality” is one of the most frequently cited principles of health policy, e.g. in EU health systems’ common values and principles.

(2) Understanding the term and what it encompasses varies as the Observatory book “Assuring the quality of health care in the EU” has convincingly shown.

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**Figure 1.3** Levels at which quality may be assessed

- Care provided by individual practitioners and other providers
- Amenities; attributes of the care setting
- Implementation of care
- Community setting
(1) “Quality” is one of the most frequently cited principles of health policy, e.g. in EU health systems’ common values and principles.

(2) Understanding the term and what it encompasses varies as the Observatory book “Assuring the quality of health care in the EU” has convincingly shown.

(3) Most definitions take a very broad perspective on quality which includes not only effectiveness and efficiency, but also access, safety, equity, appropriateness and timeliness.
Table 1.2 Dimensions of quality of care

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<tbody>
<tr>
<td>Effectiveness</td>
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<td>Efficiency</td>
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<td>Access</td>
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<td>Safety</td>
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<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Equity</td>
<td>X</td>
<td>X</td>
<td></td>
<td>(X)</td>
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<td>X</td>
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<td>Appropriateness</td>
<td>X</td>
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<td>Timeliness</td>
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<td>Acceptability</td>
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<td>X</td>
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<td>Responsiveness</td>
<td>Respect</td>
<td>Choice</td>
<td>Information</td>
<td>Patient-centredness</td>
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<tr>
<td>Satisfaction</td>
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<td></td>
<td>(X)</td>
<td>X</td>
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<tr>
<td>Health improvement</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Continuity</td>
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<td>X</td>
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<tr>
<td>Other</td>
<td>Technical</td>
<td>Efficacy</td>
<td>Availability</td>
<td>Prevention/early detection</td>
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<td>competence</td>
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<td></td>
<td>Relevance</td>
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Notes: IOM: Institute of Medicine; JCAHO: Joint Commission on Accreditation of Healthcare Organizations.
Background – conceptualizing quality of care (5)
Many “movements” claim importance in contributing to quality of care, sometimes unaware of parallel activities under a different label:

- Evidence-based medicine
- Health Technology Assessment (HTA)
- Accreditation
- (Clinical) Practice Guidelines
- Clinical pathways
- Patient safety
- ...
EU-funded projects – while providing a useful basis for various strands of quality assurance – have contributed to our fragmented understanding by being focused on one thing only:

- AGREE (Appraisal of Guidelines, Research and Evaluation in Europe)
- SIMPATIE (Safety Improvement for Patients in Europe)
- MarQuis (Methods of Assessing Response to Quality Improvement Strategies)
- EUnetHTA (European network for Health Technology Assessment)
- COCANPCG (Coordination of cancer clinical practice guidelines research in Europe)
- DuQueE (Deeping our understanding of quality improvement in Europe)
Aim of current European Observatory/OECD study

To provide...

1) a comprehensive framework for understanding, measuring, and ultimately improving the quality of health care through a variety of strategies,

2) an overview on the status of activities of the various strategies in the countries of the European Region (including highlighting best practice examples) as well as European initiatives/projects active in the respective areas,

3) an analysis of the effectiveness of different strategies in actually improving quality of care and their cost-effectiveness,

4) lessons for policy-makers interested in developing and implementing comprehensive approaches to improve the quality of their health system.
Outline

Part I: definition of “quality” and framework for understanding the selection as well as the role of the various strategies, basics of measurement of quality of care

Part II: Analysis of individual strategies regarding
• Characteristics and contributions to quality
• Status of activities in European countries
• Effectiveness and cost-effectiveness
• Implementation tools (organizational and institutional requirements)
• Lessons for policy makers
Developing the framework

Quality strategies - what do we need/want to know?

Initial attempt at categorization...
Health care outcome: satisfaction, complications etc.

**Personnel** sufficient and well qualified? **Institutions** of high standards? **Technologies** effective?

Patients satisfied, services safe and of high (technical) quality?

Health gain/Outcome

Population health status (need)

Needs-based, equitable access?

Resource creation adequate?

- Human resources
- Technologies
- Financial resources

Utilization appropriate, coordinated, timely …?

**Health care system**

- Environment
- Nutrition/ agriculture
- Other sectors

How much? Is it worth it (cost-effective)?
Health care outcome: satisfaction, complications etc.

Structures and organisation

Patients

Process

Health care system

Population health status (need)

Human resources

Technologies

Financial resources

Environment

Nutrition/ agriculture

Other sectors

• Professional/provider (re-)certification
• Institutional provider (re-)accreditation
• Health Technology Assessment
• Volume and quality standards

Quality indicators based on clinical and adm. data, registers & patient surveys → public reporting & pay-for-performance

• “Do the right thing“: *ex ante* Guidelines/ disease management programmes; *ex post* Review/Medical audit
• “Do the thing right“: Quality indicators, Patient safety
• “Do the things better“: Quality improvement strategies

Health gain/ Outcome
Dimensions and needs

Figure 0.1 OECD framework for health care system performance measurement

Current focus of HCQI project

Health care needs
1. Primary prevention
2. Getting better
3. Living with illness or disability/chronic care
4. Coping with end of life

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Access</th>
<th>Cost/expenditure</th>
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<tbody>
<tr>
<td>Health</td>
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<tr>
<td>Non-health care determinants of health</td>
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<td>Health Care System Performance</td>
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<td>How does the health system perform?</td>
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<td>What is the level of quality of care across the range of patient care needs?</td>
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<td>What does the performance cost?</td>
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<td>Safety</td>
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<tr>
<td>Responsiveness/patient centredness</td>
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<td>Individual patient experiences</td>
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<td>Integrated care</td>
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Efficiency
Macro and micro-economic efficiency

Health system design, policy and context
Bringing these perspectives together...

Quality Measures

- Structures
  - Effectiveness
  - Safety
  - Responsiveness
- Processes
  - Effectiveness
  - Safety
  - Responsiveness
- Outcomes
  - Effectiveness
  - Safety
  - Responsiveness

Areas of Care
- Coping with end-of-life
- Living better with illness
- Getting better
- Staying healthy

Dimensions of Quality
Which strategies does the study look at?

1) General legislation on quality in Europe
2) Regulating the Input: Professionals (training, specialization, licensing ...)
3) Regulating the Input: Technologies (market access, HTA)
4) Regulating the Input: Facilities
5) External institutional strategies (accreditation, certification, inspection)
6) Clinical guidelines
7) Audit (and feedback)
8) Internal strategies and culture for patient safety
9) Patient involvement
10) Clinical Pathways (within an institution)
11) Disease Management Programmes
12) Public reporting
13) Paying for Quality (financial incentives)

⇒ inductive addition of one more layer to the framework...
...how do we look at individual strategies?

... but also who/what they are aimed at
General (preliminary) conclusions

1) Quality is a multidimensional concept – most important dimensions are effectiveness, safety, patient-centeredness/responsiveness.

2) A narrow definition based only on these dimensions can be helpful when the aim is to understand the role of quality assurance and improvement strategies BUT

3) Fully categorising quality strategies entails five levels:
   a) Target (professionals, organizations, technologies, patients)
   b) Activity (setting standards, monitoring, assuring improvements)
   c) Main dimension (effectiveness, safety, patient-centeredness)
   d) Types of quality measures (structures, processes, outcomes)
   e) Care area(s) of focus (prevention, acute care, chronic care, palliative care)
More preliminary conclusions & implications

4) Looking at different strategies based on these elements demonstrates their complementarity

5) Improving quality of care is complex and requires a multifaceted approach

6) Countries are moving in this direction: most in Europe make use of several quality assurance and improvement strategies

7) Although most strategies are effective (process indicators), the size of the effect is generally modest

8) Comparative effectiveness (esp. Outcomes) and cost-effectiveness are less well researched and evidence is very limited

9) Quality-related information is increasingly available but still limited to specific indicators for certain types of providers
Thank you for your attention!

questions/feedback/requests to
dimitra.panteli@tu-berlin.de
<table>
<thead>
<tr>
<th>Dimension of care</th>
<th>Indicators</th>
<th>Data source</th>
</tr>
</thead>
</table>
| **Effectiveness** | Case-fatality rates for specific diseases  
Hospital admission rate for asthma  
Percentage of sick child visits during which health worker counseled mother on nutrition  
Percentage of women aged 40 years and over who reported a mammogram within the past two years  
Percentage of women who received prenatal care in the first trimester | Record review  
Record review  
Observation, exit interviews  
Survey  
Record review or survey |
| **Safety** | Percentage of providers who know hand hygiene guidelines  
Birth trauma rate in neonate per 1000 live births  
Percentage of adults whose provider asks about other prescribed medication | Interviews with health workers  
Record review  
Observation, exit interviews |
| **Patient-centredness** | Percentage of adults with recent health visit who stated their provider always listened to what they had to say  
Percentage of adults with recent health visit who stated their provider explained things clearly  
Percentage of adults with recent health visit who stated their provider showed respect to them | Exit interviews, household survey  
Exit interviews, household survey  
Exit interviews, household survey |
| **Timeliness** | Percentage of persons who state they have a usual source of care  
Percentage of emergency department visits where patients left without being seen  
For heart attack patients, median time to thrombolytic therapy or percutaneous transluminal coronary angioplasty (PTCA) | Survey  
Record review  
Laboratory records |