Updating Guideline based Quality Indicators

The Methodology of the German Breast Cancer Guideline Development Group

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Disclosure of Interests (last 3 years)

Markus Follmann

I certify that, to the best of my knowledge, no aspect of my current personal or professional situation might reasonably be expected to affect significantly my views on the subject on which I am presenting.
Rationale

- need for quality improvement in cancer care
- need for better knowledge transfer
- need for a common basis to improve networking of quality initiatives
- German National Cancer Plan

GGPO was launched 2008, setting the goal to develop and implement clinical practice guidelines (CPGs) in oncology by:
GGPO Objectives

- Supporting CPG development by scientific medical societies
- Providing independent funding for CPG development
- Improving methodological quality of CPGs
- Improving implementation and evaluation by
  - Patient guidelines
  - Short / long / pocket versions of CPGs
  - Performance measures / quality indicators
- Consolidating the network of quality initiatives
GGPO Context: Quality Improvement in Oncology

- Cancer Registries data analysis / reporting
- Certified Cancer Centers documentation
- Documentation: Providing of data
- Feedback to GDGs

GGPO:
- Setting up a process
- CPG recommendations
- QI development following a standardized methodology
From guideline to QI: The GGPO Process

1. Finalized recommendations of the guideline

2. Constitution of a working group (WG QI)

3. 1st meeting (WG QI)
   - Presentation of methodology
   - Discussion of documents/results

4. Primary selection
   - Criteria:
     - Measurability (technically)
     - Potential for improvement in HC

5. Set of potential indicators to be assessed
6. Formal assessment
   - Criteria:
     - Relevance
     - Scientific soundness
     - Feasibility

7. 2nd Meeting (conf. call)
   - WG QI final consensus

8. Finalized QI

WG QI consists of:
- Members of GDG
- GCS certification
- AQUA institute/cross sectoral quality in HC
- Patient representatives
- Others
GGPO Context: Quality Improvement in Oncology

General points to consider

- Composition of the QI working group
- Selection and ‘translation’ of CPG recommendations
- Systematic search, identification of existing QI
- Formal assessment (QUALIFY, RAND, AIRE…)
- Consensus finding process
- Feedback to the GDG
Updating guideline based QI in breast cancer

Particular challenges

Who is currently measuring what?
Who should be involved in the QI updating process?
How to deal with the results of measured QI?
How to consider changes in evidence based recommendations?
From guideline to QI: The German Breast Cancer GDG

- members of GDG
- representatives GGPO
- GCS certification
- GSCR (cancer registries)
- SQG cross sectoral quality in HC

1st meeting:
- discussion of results / tasks

Primary selection

Set of potential indicators to be assessed

formal assessment

Criteria
- measurability (technically)
- potential for improvement in HC

2nd Meeting (conf. call)
WG QI
final consensus

finalized recommendations of the guideline

WG QI consists of
- members of GDG
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Updating QI: The German Breast Cancer Guideline Development Group
Review of existing QI and relevant data measured in Germany

Updated Quality Indicators
Updating QI: The German Breast Cancer Guideline Development Group
Updating guideline based QI in breast cancer

Example 1:
Eliminating an existing QI due to current results
Example 1:
Eliminating an existing QI due to current results
QI # 19 (2012):
N: Number of carcinomas with determination of hormone receptor status and HER2 status
D: All invasive carcinomas
Example 2: Confirming the potential for quality improvement of an existing QI by measured data

QI #9 (2012):
N: Number of pts. with chemotherapy
D: All pts. with steroid receptor neg. tumors and histologically confirmed invasive carcinoma
Example 2: Confirming the potential for quality improvement of an existing QI by measured data

QI #9 (2012):
N: Number of pts. with chemotherapy
D: All pts. with steroid receptor neg. tumors and histologically confirmed invasive carcinoma

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standorte</td>
<td>246</td>
<td>241</td>
</tr>
<tr>
<td>Sollvorgabe &gt; 95%</td>
<td>------</td>
<td>49,9%</td>
</tr>
<tr>
<td>Max</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>95. Perzentil</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>75. Perzentil</td>
<td>91,3%</td>
<td>100%</td>
</tr>
<tr>
<td>Median</td>
<td>84,2%</td>
<td>94,7%</td>
</tr>
<tr>
<td>25. Perzentil</td>
<td>77,9%</td>
<td>86,9%</td>
</tr>
<tr>
<td>5. Perzentil</td>
<td>66,7%</td>
<td>71,5%</td>
</tr>
<tr>
<td>Min</td>
<td>16,7%</td>
<td>42,9%</td>
</tr>
</tbody>
</table>
Example 2:
Confirming the potential for quality improvement of an existing QI by measured data

QI #9 (2012):
N: Number of pts. with chemotherapy
D: All pts. with steroid receptor neg. tumors and histologically confirmed invasive carcinoma

Adj-9 | Adjuvante Chemotherapie bei rezeptronegativen Tumoren
---|---
Empfehlungsgrad | A
Level of Evidence | 1a
a. Alle Patientinnen mit rezeptronegativen Tumoren (pN0 und pN+) sollen eine adjuvante Chemotherapie erhalten.

(EBCTCG 2011; NICE 2009; NZGG 2009)
Review of existing QI and relevant data measured in Germany

Review of evidence based changes in recommendations and check for implications for guideline aligned QI

Updated Quality Indicators
Updating guideline based QI in breast cancer

Example 3:
Creating a new QI due to a new recommendation based on current evidence

QI # 11(2012):
N: Number of patients with metastatic disease having received endocrine therapy as first line therapy
D: Number of patients with steroid receptor positive breast cancer at first diagnosis of metastatic disease
Updating guideline based QI in breast cancer

Example 3:
Creating a new QI due to a new recommendation based on current evidence

QI # 11(2012):

N: Number of patients with metastatic disease having received endocrine therapy as first line therapy

D: Number of patients with steroid receptor positive breast cancer at first diagnosis of metastatic disease

<table>
<thead>
<tr>
<th>Met-4</th>
<th>Systemische endokrine Therapie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empfehlungsgrad</td>
<td>Die endokrine Therapie ist die Therapie der Wahl bei positivem Hormonrezeptorstatus.</td>
</tr>
<tr>
<td>A</td>
<td>(Fossati, R et al. 1998; NICE 2009; Stockler M et al. 1997; Stockler, M et al. 2000)</td>
</tr>
<tr>
<td>Level of Evidence</td>
<td>1b</td>
</tr>
</tbody>
</table>


Updating QI: The German Breast Cancer Guideline Development Group

Review of existing QI and relevant data measured in Germany

Review of evidence based changes in recommendations and check for implications for guideline aligned QI

Developing a set of potential QI to be assessed

Updated Quality Indicators
Review of existing QI and relevant data measured in Germany

Review of evidence based changes in recommendations and check for implications for guideline aligned QI

Developing a set of potential QI to be assessed

Formal assessment of pot. QI for relevance, feasibility and scientific soundness

Updated Quality Indicators
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Using a standardized tool for assessment: QUALIFY

![Table 1: QUALIFY: Criteria and Categories](http://www.bqs-institut.de/images/stories/doc/106_QUALIFY-english-v10.pdf)

<table>
<thead>
<tr>
<th>Category</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Importance of the quality characteristic captured with the quality indicator for patients and the health care system</td>
</tr>
<tr>
<td></td>
<td>Benefit</td>
</tr>
<tr>
<td></td>
<td>Consideration of potential risks / side effects</td>
</tr>
<tr>
<td>Scientific soundness</td>
<td>Indicator evidence</td>
</tr>
<tr>
<td></td>
<td>Clarity of the definitions (of the indicator and its application)</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
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<tr>
<td></td>
<td>Ability of statistical differentiation</td>
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<tr>
<td></td>
<td>Risk adjustment</td>
</tr>
<tr>
<td></td>
<td>Sensitivity</td>
</tr>
<tr>
<td></td>
<td>Specificity</td>
</tr>
<tr>
<td></td>
<td>Validity</td>
</tr>
<tr>
<td>Feasibility</td>
<td>Understandability and interpretability for patients and the interested public</td>
</tr>
<tr>
<td></td>
<td>Understandability for physicians and nurses</td>
</tr>
<tr>
<td></td>
<td>Indicator expression can be influenced by providers</td>
</tr>
<tr>
<td></td>
<td>Data availability</td>
</tr>
<tr>
<td></td>
<td>Data collection effort</td>
</tr>
<tr>
<td></td>
<td>Barriers for implementation considered</td>
</tr>
<tr>
<td></td>
<td>Correctness of data can be verified</td>
</tr>
<tr>
<td></td>
<td>Completeness of data can be verified</td>
</tr>
<tr>
<td></td>
<td>Complete count of data sets can be verified</td>
</tr>
</tbody>
</table>
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Review of existing QI and relevant data measured in Germany

Review of evidence based changes in recommendations and check for implications for guideline aligned QI

Developing a set of potential QI to be assessed

Formal assessment of pot. QI for relevance, feasibility and scientific soundness

Analysis of assessment & final consensus, allocation of QI

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Final set of 12 QI

Allocating the final QI
Quality Management in Oncology: the Network

it works!

evaluating & updating & harmonizing QI
Thank you!