Quality Management in Oncology
Building up a network between the German Guideline Program in Oncology, Cancer Registries, and Certified Cancer Centers

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BACKGROUND: GERMAN NATIONAL CANCER PLAN

PARTICULAR OBJECTIVES

- #5 Certification and quality management of oncological health care institutions
- #6 evidence based guidelines in oncology
- #8 meaningful reporting of quality by cancer registries
  (joint working group ‘documentation’)
GERMAN GUIDELINE PROGRAM IN ONCOLOGY (GGPO)

BACKGROUND AND 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 high quality clinical practice guidelines (CPGs) in oncology by:
OBJECTIVES

- to support CPG development by scientific medical societies
- to harmonize formats, procedures, and methodology of oncological CPGs
- to provide independent funding for CPG development
- to improve methodological quality of CPGs
- to improve implementation and evaluation by
  - patient guidelines
  - short / long / pocket versions of CPGs
  - performance measures / quality indicators
- to consolidate the network of quality initiatives
OBJECTIVES

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Clinical Practice Guidelines (CPG) provide evidence- and consensus-based recommendations.

Cancer Registries assess and report processes and outcomes. They are linked with Quality Assurance within the framework of the German Social Code Book (§137a SGB V).

Certified Cancer Centers support implementation – transfer of guidelines into practice.

Guideline-based Quality Indicators circularly illustrate the relationship between guidelines, indicators, and implementation.
GGPO CONTEXT: QUALITY IMPROVEMENT IN ONCOLOGY

CPG
recommendations

QI development following a standardized methodology
DEVELOPMENT OF QUALITY INDICATORS: STEPS

„Translation“ of strong guideline recommendations (recommendations grade A) or guideline outcome objectives into potential QI (numerator/denominator) by a methodologist

Compilation of a preliminary list of QI taking potential measurability into account (2 methodologists)

Written assessment according to further specific criteria by GGPO author (Required: > 75% acceptance for each criteria)

Final selection and integration into the GGPO after review of expert panel and after discussion and formal consensus process with GGPO authors (Required: QI >75% acceptance)
## DEVELOPMENT OF QUALITY INDICATORS: THE QUALIFY INSTRUMENT

<table>
<thead>
<tr>
<th></th>
<th>1 Does not apply</th>
<th>2 Rather does not apply</th>
<th>3 Rather does apply</th>
<th>4 Applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Importance of the quality characteristic captured with the quality indicator for patients and the health care system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Clarity of the definitions (of the indicator and its application)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Indicator expression can be influenced by providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Evidence and Consensus Basis of the Indicator*</td>
<td>only strong recommendations – not reassessed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*criteria modified for GGPO process: added: consensus basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Consideration of potential risks / side effects of the indicator: Are there risks for inappropriate care which cannot be compensated for?</td>
<td>yes</td>
<td></td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

* http://www.bqs-qualify.com/anw
GGPO CONTEXT: QUALITY IMPROVEMENT IN ONCOLOGY

CPG recommendations

Certified Cancer Centers Documentation

QI development following a standardized methodology
## GUIDELINE BASED QI: EXAMPLE I
### COLORECTAL CANCER

<table>
<thead>
<tr>
<th>Guideline Recommendation</th>
<th>Goal</th>
<th>Quality Indicator (Reference Range)</th>
</tr>
</thead>
</table>
| Adjuvant Chemotherapy is indicated in pts with colon carcinoma UICC Stage III who underwent R0 resection. LoE 1a, GoR A | High rate of adjuvant chemotherapies in pts UICC stage III | **Numerator:** Pts with colon carcinoma UICC III and R0-resection having received chemotherapy  
**Denominator:** All pts with Colon carcinoma UICC III and R0-resection (>80%) |

* Schmiegel et al: S3-Guideline on Colorectal Cancer, 2008 (Update)
Colorectal Cancer Stage III vs. Overall Survival

- Chemotherapy
  - ja
  - nein

Survival Time (months) vs. Overall survival

*
### GUIDELINE BASED QI: EXAMPLE II
### BREAST CANCER

<table>
<thead>
<tr>
<th>Guideline Recommendation</th>
<th>Goal</th>
<th>Quality Indicator (Reference Range)</th>
</tr>
</thead>
</table>
| Investigation of nodal status should be performed by SNLE. GoR A | High number of excl. SLNE for assessing nodal status in pts with invasive breast cancer pT1 pN0 | Numerator: number of exclusive SNLE in invasive breast cancer pT1 pN0  
Denominator: number of all primary surgery of invasive breast cancer pT1 pN0 (>75%) |
| Morbidity after SNLE is reduced in comparison to axillary dissection. LoE 1 |                                                                      |                                                                                                   |

* Kreienberg et al: S3-Guideline on Breastcancer, 2008 (Update)
GGPO CONTEXT: QUALITY IMPROVEMENT IN ONCOLOGY

- Cancer Registries: Data analysis / reporting
- Certified Cancer Centers: Documentation
- CPG: Recommendations
- QI development following a standardized methodology
- Data analysis
  Feedback to GDGs

Documentation
Providing of data
Adjuvante chemotherapy in colorectal Cancer Stage III

<table>
<thead>
<tr>
<th>Year</th>
<th>No Adj. Chemotherapy</th>
<th>Adj. Chemotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1996</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>1997-1998</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>1999-2000</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>2003-2008</td>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Exclusive SNLE in patients with stage pT1 pN0

Mean: 88.2%

Goal: > 75%

* German Cancer Society: Benchmarking 2011 Annual report of the certified breast cancer centers
Axillary dissection (AD) vs. Sentinel-lymph node biopsy with/without AD

* German Cancer Registries 2010
GGPO CONTEXT: QUALITY IMPROVEMENT IN ONCOLOGY

CPG recommendations

Cancer Registries
Data analysis / reporting

Certified Cancer Centers
Documentation

QI development following a standardized methodology

Data analysis
Feedback to GDGs

Documentation
Providing of data
QUALITY MANAGEMENT IN ONCOLOGY: THE NETWORK

- QI DEVELOPMENT
- QI MEASUREMENT
- QI ANALYSIS & REPORTING

GGPO

CERTIFIED CANCER REGISTRIES

METHODOLOGISTS
CLINICIANS
DATA MANAGERS
REPRESENTATIVES OF STEERING COMMITTEES

QI EVALUATION & UPDATING & HARMONIZATION
CONCLUSION: QUALITY MANAGEMENT IN ONCOLOGY

POINTS TO CONSIDER

• QI are crucial tools for implementation and evaluation of CPG’s
• QI development from CPGs should be established according to a standardized methodology
• These QI should be fitted into existing QM structures and duplication of documentation should be avoided
• A network between GDGs and institutions responsible for measuring and analyzing QM data is essential in order to update and review QI
Thank you!

… view from the GGPO Office    Berlin, Germany