Excellence in care and chemotherapy: Goals and challenges for the oncology team

How do we measure quality in Medical Oncology?
Quality indicators in oncology practice

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Cologne/Germany
Disclosure slide

case 1) any financial interest in, or arrangement with, a company those products or services are discussed in their presentation

Director of the WINHO institute

WINHO is a limited liability company run by the professional association of office-based hematologists and oncologists in Germany

WINHO provides services in the field of quality promotion for office-based oncologists

case 2) any financial interest in, or arrangement with, a competing company

no conflict of interests

case 3) any other financial connections, direct or indirect

no conflict of interests
The WINHO Network

- Founded in 2004 by the professional association of office-based hematologists and oncologists (BNHO)
- Quality promotion and health services research – without industry sponsoring
- More than 410 BNHO members share in WINHO
- 50% of oncologists in outpatient care represented
- More than 400,000 cancer patients p.a.
The WINHO Project

Development of quality measures for outpatient oncology care in Germany

AIMS

- Enhancing ongoing quality reporting
  - with approach to the core of care in medical oncology
  - moving from description to measurement
- Fair assessment of every outpatient care unit
- Peer-to-peer benchmarking
- Systematic support of practice quality improvement
Quality measurement

Quality indicators may allow to distinguish between proper and poor quality of structures, processes, and outcomes of treatment.

It is a mechanism to quantify
- the quality of a selected aspect of care
- the degree of adherence to a standard of care.

It is an auxiliary quantity for imaging quality indirectly by a numerical ratio.

<table>
<thead>
<tr>
<th>WINHO measure: (simplified)</th>
<th>Documentation of the therapy goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patients for whom the treatment goal is documented in the chart at baseline.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of all patients with invasive malignoma or malignant hemoblastosis receiving medical cancer treatment</td>
</tr>
</tbody>
</table>
Quality measure work is widely adopted

- as projects in more than 10 European countries
- as a matter of routine in several countries (USA, Can, Aus, etc.)
- with varying scopes and aims
Features of quality measures

Quality measures

- focus on technical aspects of care
- can only be based on issues with high volume of cases
- should be applied to processes rather than to outcomes or structures
- need evidence of a solid impact on outcomes
- can lead to misincentives (e.g. along with public reporting)
What is a good quality measure?

<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>
</tr>
<tr>
<td></td>
<td>Ability of statistical differentiation</td>
</tr>
<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>

QUALIFY
Instrument for the Assessment of Quality Indicators

© BQS gGmbH 2007
## WINHO sources for indicator building

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRQ</td>
<td>(Agency for Healthcare Research and Quality) Evidence Reports: Breast Cancer Evidence Reports: Colorectal Cancer Evidence Reports: Symptoms and End-of-Life Care</td>
<td>USA</td>
</tr>
<tr>
<td>CMS</td>
<td>(Centers for Medicare &amp; Medicaid Services)</td>
<td></td>
</tr>
<tr>
<td>IOM</td>
<td>(Georgia Cancer Coalition &amp; Institute of Medicine)</td>
<td></td>
</tr>
<tr>
<td>HBI</td>
<td>(Health Benchmarks Inc.)</td>
<td></td>
</tr>
<tr>
<td>NCCN</td>
<td>(National Comprehensive Cancer Network)</td>
<td></td>
</tr>
<tr>
<td>NCI</td>
<td>(National Cancer Institute)</td>
<td></td>
</tr>
<tr>
<td>NCQA</td>
<td>(National Committee for Quality Assurance)</td>
<td></td>
</tr>
<tr>
<td>NICCQ</td>
<td>(National Initiative for Cancer Care Quality)</td>
<td></td>
</tr>
<tr>
<td>NQF</td>
<td>(National Quality Forum)</td>
<td></td>
</tr>
<tr>
<td>NQMC</td>
<td>(National Quality Measures Clearinghouse)</td>
<td></td>
</tr>
<tr>
<td>PCPI</td>
<td>(Physician Consortium for Performance Improvement)</td>
<td></td>
</tr>
<tr>
<td>PQRI</td>
<td>(Physician Quality Reporting Initiative)</td>
<td></td>
</tr>
<tr>
<td>QMIS</td>
<td>(Quality Measures Management Information System)</td>
<td></td>
</tr>
<tr>
<td>QOPI</td>
<td>(Quality Oncology Practice Initiative)</td>
<td></td>
</tr>
<tr>
<td>BQS</td>
<td>(Bundesgeschäftsstelle Qualitätssicherung)</td>
<td>Germany</td>
</tr>
<tr>
<td>WBC</td>
<td>(Westdeutsches Brustcentrum)</td>
<td></td>
</tr>
<tr>
<td>WDC</td>
<td>(Westdeutsches Darmcentrum)</td>
<td></td>
</tr>
<tr>
<td>NHS</td>
<td>(National Health System)</td>
<td>Great Britain</td>
</tr>
<tr>
<td>ACHS</td>
<td>(Australian Council on Healthcare Standards)</td>
<td>Australia</td>
</tr>
</tbody>
</table>
What is addressed?

Well covered fields in projects of quality measures:

- early detection of cancer
- diagnosis processes
- cancer surgery
- initial care
- hospital admission

Poorly covered fields:

- core processes in medical oncology
- long time care / survivor care
- rehabilitation services / palliative care
- patient reported outcomes
Limitations of ongoing quality measure projects

- Selected cancer entities; regional frameworks
- Mostly state driven
- Focus on performance of oncology care
- Still under construction
- Incomplete data
- Care providers partially included
- Expert driven - limited patient orientation
- Reference to population - not to care units
The Swedish example

Figure 38
Percentage of patients who had a multidisciplinary team meeting after colon cancer surgery, 2008–2009

Source: National Colon Cancer Register

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Västmanland</td>
<td>96.6</td>
</tr>
<tr>
<td>Dalarna</td>
<td>90.0</td>
</tr>
<tr>
<td>Norrbotten</td>
<td>80.4</td>
</tr>
<tr>
<td>Gävleborg</td>
<td>80.1</td>
</tr>
<tr>
<td>Stockholm</td>
<td>78.4</td>
</tr>
<tr>
<td>Gotland</td>
<td>76.2</td>
</tr>
<tr>
<td>Värmland</td>
<td>72.5</td>
</tr>
<tr>
<td>Orebro</td>
<td>68.7</td>
</tr>
<tr>
<td>Västra Götaland</td>
<td>63.2</td>
</tr>
<tr>
<td>Uppsala</td>
<td>62.5</td>
</tr>
<tr>
<td>Kronoberg</td>
<td>61.8</td>
</tr>
<tr>
<td>Östergötland</td>
<td>61.5</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>59.2</td>
</tr>
<tr>
<td>Kalmar</td>
<td>54.0</td>
</tr>
<tr>
<td>Sörmland</td>
<td>46.5</td>
</tr>
<tr>
<td>Västernorrland</td>
<td>42.4</td>
</tr>
<tr>
<td>Skåne</td>
<td>40.3</td>
</tr>
<tr>
<td>Blekinge</td>
<td>35.6</td>
</tr>
<tr>
<td>Västerbotten</td>
<td>33.0</td>
</tr>
<tr>
<td>Jämtland</td>
<td>31.8</td>
</tr>
<tr>
<td>Jönköping</td>
<td>25.9</td>
</tr>
<tr>
<td>Halland</td>
<td>11.8</td>
</tr>
</tbody>
</table>

www.esmo2012.org
Data capturing

- Routine data, business and billing data are rarely sufficient for meaningful quality indicators
- Data from cancer registers cover a small scope of measurable care processes
- Data for meaningful quality measures come from predefined items that have to be documented in the care process
- Record abstracting is exhausting but the appropriate technique to date
- In the long run, electronic physician documentation-tools are necessary with parametrical data entry
Our role model

QOPI®
THE QUALITY ONCOLOGY PRACTICE INITIATIVE
Assess & Improve
Cancer Care in your Hematology-Oncology Practice

American Society of Clinical Oncology
Making a world of difference in cancer care

Summary of Measures, Spring 2009

Core
1. Pathology report confirming malignancy
2. Staging documented within one month of first office visit
3. Pain assessed by second office visit
4. Pain intensity quantified by second office visit
5. Plan of care for pain documented
6. Pain addressed appropriately (combined measure, 1, 4, and 5)
7. Effectiveness of narcotic assessed on visit following prescription
8. Constipation assessed at time of narcotic prescription or following visit

Documented
9. Documented

Care at End-of-Life
10. Chemotherapy
11. Chemotherapy
12. Number of 21
13. Signed patient
14. Patient consent
15. Patient consent
16. Chemotherapy
17. Chemotherapy
18. Chemotherapy
19. Chemotherapy
20. Chemotherapy

Cancer at End-of-Life
21. Patients not on comfort, hospice or palliative care diagnosed within the last 2 months of life
22. Hospice enrollment within 3 days of death (Lower Score - Better)
23. Hospice enrollment within 1 week of death (Lower Score - Better)
24. For patients not on comfort, hospice or palliative care diagnosed within the last 2 months of life
25. Chemotherapy administered within the last 2 weeks of life (Lower Score - Better)

Disease Specific Modules
Breast Cancer
64. Family history for patients with breast cancer
65. Breast-specific hormone for patients with breast cancer
66. Chemotherapy administered within 4 months of diagnosis for women under 70 with AJCC stage I (T1c) to III ER, PR, negative breast cancer
67. Combination chemotherapy received within 4 months of diagnosis by women under 70 with AJCC stage I (T1c) to III ER, PR, negative breast cancer
68. Test for HER2/neu overexpression

Non-Hodgkin
70. Granulocytic growth factor administered with CHC
71. Rituximab administered when CD-20 antigen expressed (Better)

Lung Cancer
72. Chemotherapy recommended for patients
73. Chemotherapy recommended for patients
74. Chemotherapy recommended for patients
75. Cisplatin-based chemotherapy recommended for patients with AJCC stage II or III NSCLC
76. Cisplatin-based chemotherapy recommended for patients with AJCC stage II or III NSCLC
77. Chemotherapy recommended for patients (Lower Score - Better)
78. Chemotherapy recommended for patients (Lower Score - Better)

*All measures are reported as percentages.
WINHO Quality Measures - for outpatient cancer care

Systematic measure development accomplished:
- With experts from several scientific societies in oncology
- Using modified RAND/UCLA method
- Multi level rating: relevance, patient’s benefit, oncologist’s responsibility, feasibility
- Exchange with ASCO/QOPI

46 measures endorsed:
Suitable for all ambulatory care sites:
- Basic documentation: 10
- Planning and conducting of therapy: 14
- Comprehensive care: 3
- Pain management: 4
- Palliative care: 1
- Breast cancer: 9
- Colorectal cancer: 5

Feasibility test finished
Pilot is starting

with support of:
Best accepted WINHO measures

All_Basics_3  Special (cancer-specific) anamnesis is documented by second office visit
All_Basics_7  Histological / cytological pathology report is in chart at beginning of treatment
All_Basics_8  pTNM-stage, resection status, grading, vascular infiltration is in chart at beginning of treatment
All_Basics_10 Cancer-specific staging examination is in chart at beginning of treatment
All_Basics_11 Internal-medicine status and basic laboratory examination is in chart before treatment
All_TP_1    Multidisciplinary tumor board review for treatment planning was conducted
All_TP_3    Treatment goals and/or action parameters are in chart at beginning of treatment
All_TP_14  Chemotherapy plan is in chart at beginning of treatment
All_TP_15  Chemotherapy process is documented completely
All_TP_16  Updated treatment report for family doctor is available
Breast_TP_1 Adjuvant endocrine treatment starts within 6 weeks past surgery / 4 weeks past radiatio
Breast_TP_2 Planned endocrine treatment procedure is in chart before treatment
Breast_TP_4 Adjuvant cytostatic treatment starts within 6 weeks past surgery
Breast_TP_7 Trastuzumab treatment in HER-2/neu positive patients starts within 6 weeks past primal therapy
Bowel_TP_1  Adjuvant cytostatic treatment starts within 6 weeks past surgery
Bowel_TP_2 Planning of the procedure of cytostatic therapy in colorectal cancer is in chart by treatment
Lessons learned from the WINHO project

- Translating guidelines into quality measures needs careful attention
  - Guideline-development has to include statements about measurement of the predefined standards
  - All relevant items require clear specifications

- Accountability of oncologists for measured processes is crucial
  - Measures have to focus on processes in the outreach of oncologists
  - Processes that cannot be changed do not need to be monitored

- Measures on treatment planning and conducting are well accepted
  - Documentation counts: what is not in the chart that has not been done
  - Measures on supportive care, pain management, emotional well-being etc. need additional efforts for implementation
Questions left

- What do we achieve: better documentation or better care?
- Is the measure approach is the easier way to improve quality?
- How do we open the black box: what is the key element that really leads to better outcome?
- How do we provide feedback? Which data are really helpful for learning and initiating improvement?
Take home message

- The quality measure approach is widely accepted
- Quality measures are applicable in medical oncology
- Quality measures should be implemented in peer-based improvement arrangements
- Affordable documentation tools are crucial
- Community oncologists should not leave the quality measure approach to public health authorities

What ESMO can do:

- Think about: „European oncology quality measures clearing house”
- Initiating research on evaluating of quality measures
The unsung heroes

Thanks to

The WINHO staff:  Dr. Gudrun Klein (2009-2010)  
                  Dr. Regina Buschmann-Maiworm (2010-2012)  
                  Kerstin Hermes (2012- )

WINHO partners:  Dr. Herbert Lebahn  
                 (oncologists)  Dr. Burkhardt Otremba  
                 Dr. Hans Tillmann Steinmetz

and in particular:  Prof. Dr. Ulrich R. Kleeberg