Quality Programs for Breast Centers in US

No Disclosures

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Paris Statement – 2012

“All women across the world should have access to fully equipped, quality assured, dedicated Breast Centers/Units that provide competent, compassionate and comprehensive care.”

- - Chairmen of SIS, NAPBC, EUSOMA
<table>
<thead>
<tr>
<th>EU</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governments “accredit” certifying agencies who in turn “certify” breast centers</td>
<td>“Accreditation” and “certification” are used interchangeably (sorry)</td>
</tr>
<tr>
<td>“Indicators”</td>
<td>“Process Measures”</td>
</tr>
<tr>
<td>“Schemes”</td>
<td>“Programs”</td>
</tr>
<tr>
<td>“Process”</td>
<td>“Pathway”</td>
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</tbody>
</table>
Breast care went unchecked

• Requirements for breast care:
  • Medical license
  • Hospital privileges
• Leads to:
  • Variation from established care guidelines
  • Errors of the inexperienced
  • Diversion of procedures for non-medical reasons
• Quality breast care was not well controlled by:
  • Hospital
  • Payers
  • Lawyers (malpractice vs restraint of trade)
There were major gaps in the desired vs. the actual breast care delivered.

Written guidelines were not adequate to impose consistency of breast care.

Designing a quality improvement system should be developed by clinicians.
Status in the US
Incidence of Breast Cancer
Uniform vs. Mosaic

GLOBOCAN 2008

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Incidence of Breast Cancer
Uniform vs. Mosaic

GLOBOCAN 2008

© Kaufman 2015
Distribution of Breast Cancer

CDC Data
Distribution of Screening Mammography Yields Late Stage Disease

LEFT FIGURE. Percentage of women aged 50--74 who had recommended breast cancer screening. Behavioral Risk Factor Surveillance System, United States, 2008

RIGHT FIGURE. Percentage of breast cancers diagnosed at late stage among women aged ≥50 years - United States,* 2004--2006

Found at Centers for Disease Control: http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5909a1.htm

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Distribution of Mastectomy Rate 2007

+50% higher than average

-50% lower than average

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Distribution of Reconstruction by State

No Reconstruction

Implant Reconstruction
Breast Care Is Difficult to Assess

1) Short list of evidence-based quality metrics
2) Breast care primarily involves outpatient care
3) Multiple specialists involved over many months
4) Separate office charts, data files, organizations
5) Long term survival common
6) Little acute morbidity/mortality to measure
7) Difficult to assign benefit/blame to specific interventions
8) Treatment methods change over time
9) Mixed incentives due to varied financial environments

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Voluntary Quality Programs (Schemes) (2005 to present)

- National Accreditation Program for Breast Centers
  On-site survey & list of 28 standards
  ![NAPBC logo]

≠

- National Quality Measures for Breast Centers
  Web-based list of 31 quality measures (indicators)
  ![NQMBC logo]
How do you measure breast care quality?

• Structure – “Do you have the ability to . . .?”

• Process – “How well do you perform this task . . .?”
  • The “Indicators”?

• Outcomes – Mortality / Morbidity / Pt Experience
  • The “Quality Targets”?

• Comparative Effectiveness – Valuing outcomes
Voluntary Quality Programs
Voluntary Quality Programs

NAPBC Structure  NQMBC Process

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Voluntary Quality Programs

2005 to present

• American College of Surgeons invited 21 breast care organizations to develop standards –

On-site survey & list of 28 standards
## 21 Professional Organizations to Develop Standards

<table>
<thead>
<tr>
<th>American Board of Surgery</th>
<th>Association for Cancer Executives</th>
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<tbody>
<tr>
<td>American Cancer Society</td>
<td>Association of Oncology Social Work</td>
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<tr>
<td>American College of Surgeons</td>
<td>National Cancer Registrars Association</td>
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<tr>
<td>American College of Radiology Commission on Breast Screening</td>
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<td>American College of Radiology Imaging Network</td>
<td>National Consortium of Breast Centers</td>
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<tr>
<td>American Institute of Radiologic Pathology</td>
<td>National Society of Genetic Counselors</td>
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<td>American Society of Breast Disease</td>
<td>Oncology Nursing Society</td>
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<td>American Society of Clinical Oncology</td>
<td>Society of Surgical Oncology</td>
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<tr>
<td>American Society of Plastic Surgeons</td>
<td>Breast Cancer Advocates</td>
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</tbody>
</table>

- **Radiologists**
- **Pathologists**
- **Surgeons**
- **Medical oncologists**
- **Radiation Oncologists**
- **Plastic Surgeons**
- **Nuclear Medicine**

- **Nurses**
- **Genetics professionals**
- **Navigators**
- **Social Workers**
- **Administrators**
- **Cancer Registrars**
- **Advocates**
National Accreditation Program for Breast Centers

NAPBC Standards Manual
2014 EDITION

© Kaufman 2015
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Genesis of Quality Programs – NAPBC

• All participation is voluntary – no increased income
• Must be 100% compliant with all 28 standards (<1 yr)
• Site visit survey (audit) occurs every three years
• Initially high quality centers participated, then competitive centers participated
• Now over 600 accredited breast centers in 48 states
Growth of NAPBC centers – 2009-2014

Total Number of Accredited Centers

- Number
- Total Number of Accredited Centers

PILOT SITE SURVEYS 2007-2008

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593 NAPBC Accredited Centers can be found in 48 States, including Alaska, Hawaii & Puerto Rico.

Geographic distribution of Centers as of June 21, 2015 at www.napbc-breast.org
NAPBC Standards

Key Ingredients

I. Administrative Leadership
II. Comprehensive Clinical Breast Care

Primarily Structural Standards
NAPBC Standards

Key Ingredients

I. Administrative Leadership (structure)
   a) Treatment Guideline Utilization (Research)
   b) Data Base Documentation (Quality Measures)
   c) Provider Education Management
   d) Outreach to Community

II. Comprehensive Clinical Breast Care
NAPBC Standards

Key Ingredients

I. Administrative Leadership (structure)

II. Comprehensive Clinical Breast Care

   A. Interdisciplinary Breast Conference

   B. Multidisciplinary Care by Specialized Breast Physicians

   C. Allied healthcare by multi-professional providers
A. Interdisciplinary Breast Conference

- Educational
  - Collaborative Decisions
- Non-threatening Discussions
- Use Treatment Guidelines
- Identify Research Candidates
B. Clinical Breast Care

• Multidisciplinary Care by Specialized Breast Physicians
  • Radiologist
  • Pathologist
  • Surgeon
  • Medical Oncologist
  • Radiation Oncologist
  • Plastic / Reconstructive Surgeon
  • Nuclear Medicine physician
C. Allied Breast Care

• Advanced Practice Providers (multi-professional providers) –
  • Oncology nursing
  • Patient Navigation
  • Genetics
  • Research coordinator
  • Social Worker –
  • Cancer Registrar –
  • Psychotherapist / Psycho-Oncologist
  • Physical Therapy
  • Survivorship and follow-up
National Cancer Data Base

• Started in 1989, now data from 1,500 cancer programs = cancer registries
• 70% of all cancer cases in US
• 29 million records of all types of cancers
• 636,385 records from 488 NAPBC breast centers from 2006-2012
• Joint ownership by Commission on Cancer & American Cancer Society
NAPBC Quality Improvement Measures

Process Measures

1) Needle biopsy before surgical treatment
2) Breast conservation surgery rate
3) Sentinel node biopsy rate
4) Radiation therapy for BCS patients
5) Post mastectomy radiation for \( >4 \) pos nodes (PMRT)
6) Chemotherapy for ER neg patients
7) Endocrine therapy for ER pos patients
8) Trastuzumab for Her-2 pos patients
NAPBC Quality Improvement Measures

Process Measures

Does participation improve performance?

1) Needle biopsy before surgical treatment
2) Breast conservation surgery rate
3) Sentinel node biopsy rate
4) Radiation therapy for BCS patients
5) Post mastectomy radiation for ≥4 pos nodes (PMRT)
6) Chemotherapy for ER neg patients
7) Endocrine therapy for ER pos patients
8) Trastuzumab for Her-2 pos patients
Increasing years of NAPBC accreditation are associated with increased compliance with the post mastectomy radiation quality measure for 4 or more positive nodes.
Voluntary Quality Programs
2005 to present

- National Accreditation Program for Breast Centers
  On-site survey & list of 28 standards

- National Quality Measures for Breast Centers
  Web-based list of 31 quality measures

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National Consortium of Breast Centers
2003 – Peer Comparison Concept

Two Reasons for Quality Improvement

✓ “If clinicians know how they compare with others, they will try to improve their care.

✓ The “Hawthorne effect” – measure it and it will improve.
National Consortium of Breast Centers
NQMBC – 2003
Peer Comparison Concept
Focusing on Process of Care

We need to choose the right quality measures and standards

• Must be important
  (improvement makes a difference in outcomes)

• Must be appropriate to study
  (value as compared with other measures)

• Must have variation in care provided
  (lack of uniform performance)

• Must be feasible to obtain data
  ($$$ to abstract, access to data, accurate)
Quality measures help us do the right thing! (Indicators)

We want to identify the

• right person with the
• right diagnosis to provide the
• right treatment to be given at the
• right time by the
• right people with the
• right safety concerns using the
• right compassion to get the
• right outcome
Program

• Web Based = universal access (No Site Survey)
• “Snapshot of care” submissions
• Confidential (access by breast center only)
• Comparison reports immediately available
• May filter comparisons with “Like-centers”
• International comparisons with US aggregate
NQMBC Numbers

- Number of Centers: 412

Yearly Volume

- Screening Mammograms: 4,261,914 /yr
- Diagnostic Mammograms: 1,344,210 /yr
- Total Mammograms: 5,442,392 (12% of US)
- Breast Cancers: 114,402 (42% of US)

Breast Cancer Surveillance Consortium 2009 = 1,960,150 Screening Mammography Examinations
National Quality Measures for Breast Centers – 37 Process Measures (Quality Potentials vs. Indicators)

Choose those measures you wish to use

Timeliness of Care (7)
Imaging (3) (need more)
Surgical Care (6)
Pathology Report completion (7)
Radiation Oncology (3)
Medical Oncology (5)
Patient Satisfaction (5)
Miscellaneous (1) (need more)
5) Surgical Timeliness of Care: Time Between Needle Biopsy and Initial Breast Cancer Surgery

Average number (\#) of business days from needle breast biopsy to when initial breast cancer surgery is performed (lumpectomy or mastectomy). Take the cancer surgery date and subtract the biopsy date. Subtract intervening non-business or weekend days to determine number of business days. Excludes patients having neoadjuvant chemotherapy. (Use one month's data.)

If your data point equals zero (days), this means all patients used in your calculation would have received initial breast cancer surgery on same day as their needle biopsy; only then would zero be an accurate data point representing your performance.

<table>
<thead>
<tr>
<th>Your Value</th>
<th>17.75</th>
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<tbody>
<tr>
<td>Your Percentile</td>
<td>49th</td>
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<td>25th Percentile</td>
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<tr>
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<td>Mean</td>
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<td>Mode</td>
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<tr>
<td>Patient Data Pool</td>
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</tr>
</tbody>
</table>
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<th>Your Value</th>
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<tbody>
<tr>
<td>Your Percentile (vs. filtered data)</td>
<td>45th</td>
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<td>25th Percentile (of filtered data)</td>
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<tr>
<td>Median (of filtered data)</td>
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<tr>
<td>75th Percentile (of filtered data)</td>
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<tr>
<td>Mean (of filtered data)</td>
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<tr>
<td>Filtered Patient Data Pool</td>
<td>8,814</td>
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</table>

100-200 breast cancers vs. All Centers (Filtered)
Is Breast Conservation Rate a Quality Indicator?

- EUSOMA >70% (80% desired)
- NAPBC >50% (66% actual)
- SIS >65%

Adjust to realities of location
Radiation Therapy Facilities

One machine per population

http://www-nawebiaea.org/nuhu/dirac/

Volume 61, Issue 2,
http://onlinelibrary.wiley.com/doi/10.3322/caac.20107/full#fig3
Integrate NQMBC into Software

The NQMBC™ has no participation fee thanks to the generous underwriting of our sponsors, tracking software companies and vendors.
Harmony in Quality Measures

• We should strive for harmony in defining quality measures both nationally and internationally to validate our efforts.

• Peer comparisons using uniform quality measures may be an effective method to improve quality.

• Some quality measures will not apply universally due to local factors, yet they still have value as goals (MRI, trastuzumab use, genetic testing, genomic testing).
Quality Programs for Breast Centers in US

Thank You

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