Oncology Nursing Society (ONS) Develops Evidence-Based Breast Cancer Chemotherapy and Survivorship Quality Measures

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Project Background

- Evidence-based practice (EBP) is a focus across all ONS activities
- Care practices on both the organization and clinician level must be guided by the highest-level of evidence available
- Evidence syntheses, clinical practice guidelines, comparative effectiveness research tell us what to do, but…

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Clancy, 2009

How well do clinicians implement the evidence where it matters?

How well does everyone implement the evidence where it matters?

- Ideally, a good quality measure is derived from a strong evidence base
- Focuses on a high-volume, high-impact process or outcome
- Is one that lends itself to a clear method of measurement

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Project Overview

- The Oncology Nursing Society Foundation (ONSF) received a 3 year grant from the National Philanthropic Trust's Breast Cancer Fund
  - Develop and test quality measures
  - Facilitate incorporation of measures into existing quality measurement databases
  - Provide education on quality and quality measurement

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Measure Sets

- Developed and tested with

  The Joint Commission's Dept. of Quality Measurement
  - Based on ONS PEP resources and other sources
- **Breast Cancer Care (BCC)**
  - Focus on the care of patients receiving chemotherapy for breast cancer
- **Survivorship Quality Measures (BCS)**
  - Focus on the first year post-completion of treatment for early-stage breast cancer
- Visit www.ons.org/Research/Quality for more info

Breast Cancer Care (BCC)

- **Pre-treatment assessment**
  - Fatigue, Distress and Sleep-Wake Disturbance
- **Continuing assessment**
  - Same problems, assessed *every* cycle
- **Intervention for clinically significant level of Distress or Sleep-Wake Disturbance**
- **Exercise recommendation** made prior to chemo start
- **Assessment of antiemetic regimen control**
  - Before cycle 2 moderate to highly emetogenic chemo
- **Hand washing and fever** level to contact practice
- **CSF prescribed** for admin. 24-48h after myelosuppressive chemo

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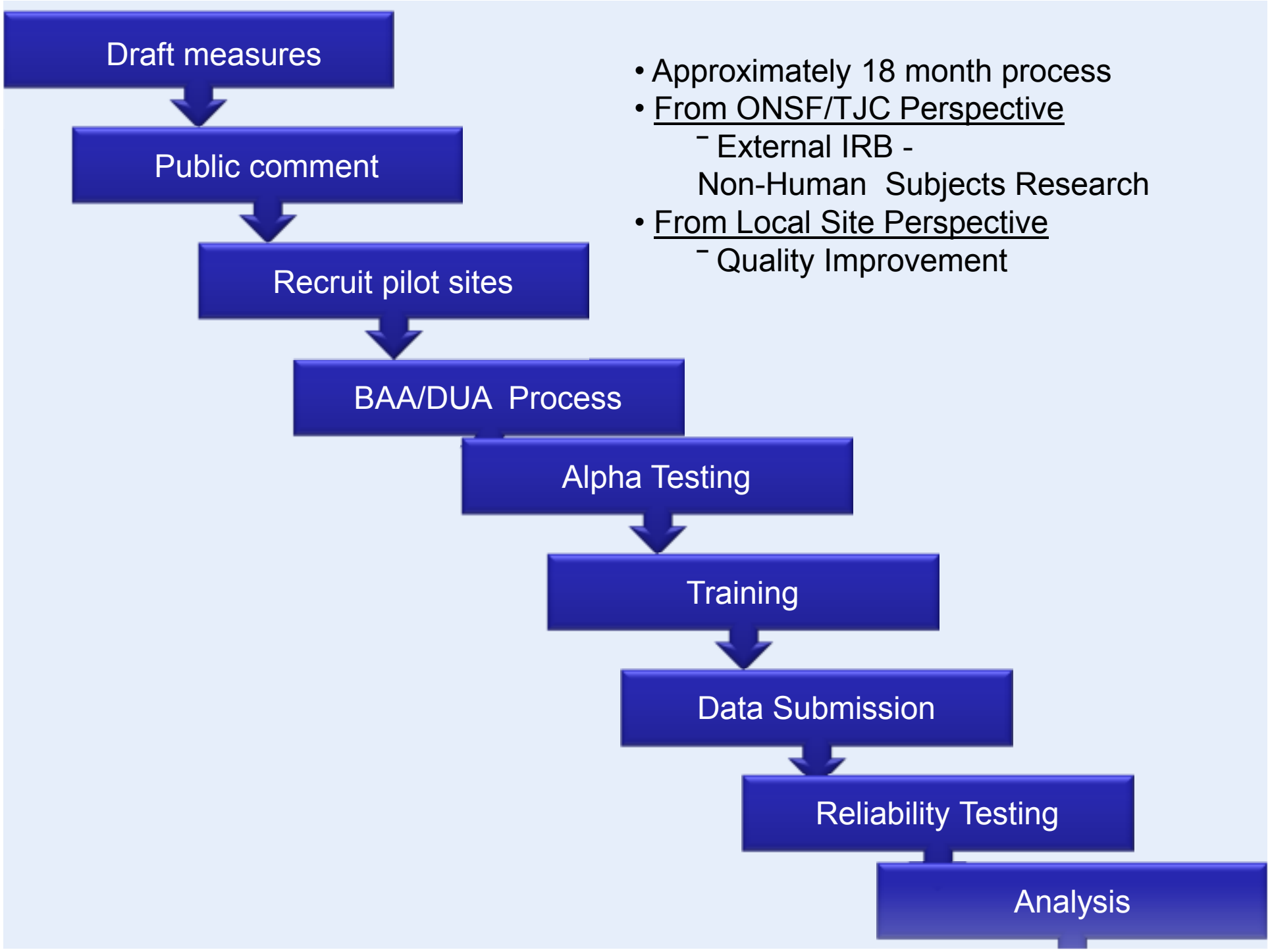
Breast Cancer Survivorship (BCS)

- **Continued assessment of disease and treatment-related symptoms**
- **Interventions for clinically significant issues with assessed symptoms**
- **Education** regarding:
  - Diet and exercise
  - S/S to report to provider
  - Resources available in the local community
  - Lymphedema risk reduction practices
- **Individualized goal setting and attainment**, with evidence of patient and family involvement (OUTCOME)
- **Individualized follow up care recommendations** for:
  - Bone density, breast imaging, LVEF monitoring, and pelvic exams where indicated
- **Improvement of fatigue and distress scores** over end-of-treatment baseline at 1 year follow up (OUTCOME)

Purpose of Pilot Testing

- Refine measure specification language to stand alone “on the shelf”
- Determine Reliability
  - Measure Level
  - Individual Data Elements
- Determine Burden Relative to Measure Set Implementation


Draft measures
Public comment
Recruit pilot sites
BAA/DUA Process
Alpha Testing
Training
Data Submission
Reliability Testing
Analysis
• Approximately 18 month process
• From ONSF/TJC Perspective
– External IRB - Non-Human Subjects Research
• From Local Site Perspective
– Quality Improvement

Test Site Selection

- Wide geographic spread
- Mirror the universe of health care organizations – “real world”
- Based on demographic characteristics
  - Practice size
  - Region (state)
  - Type of practice (organization, ownership)
  - Setting of Care (teaching/non-teaching, rural/sub-urban/urban)

Alpha Testing

- Establishes “basic” content validity
- Small focus group meetings at 4 pilot sites
  - Review language for each measure and associated data elements
    - What do you think this is really asking you to find?
    - Where would you find it in your records?
    - How feasible would that be to do for multiple cases?
- Rank measures within set

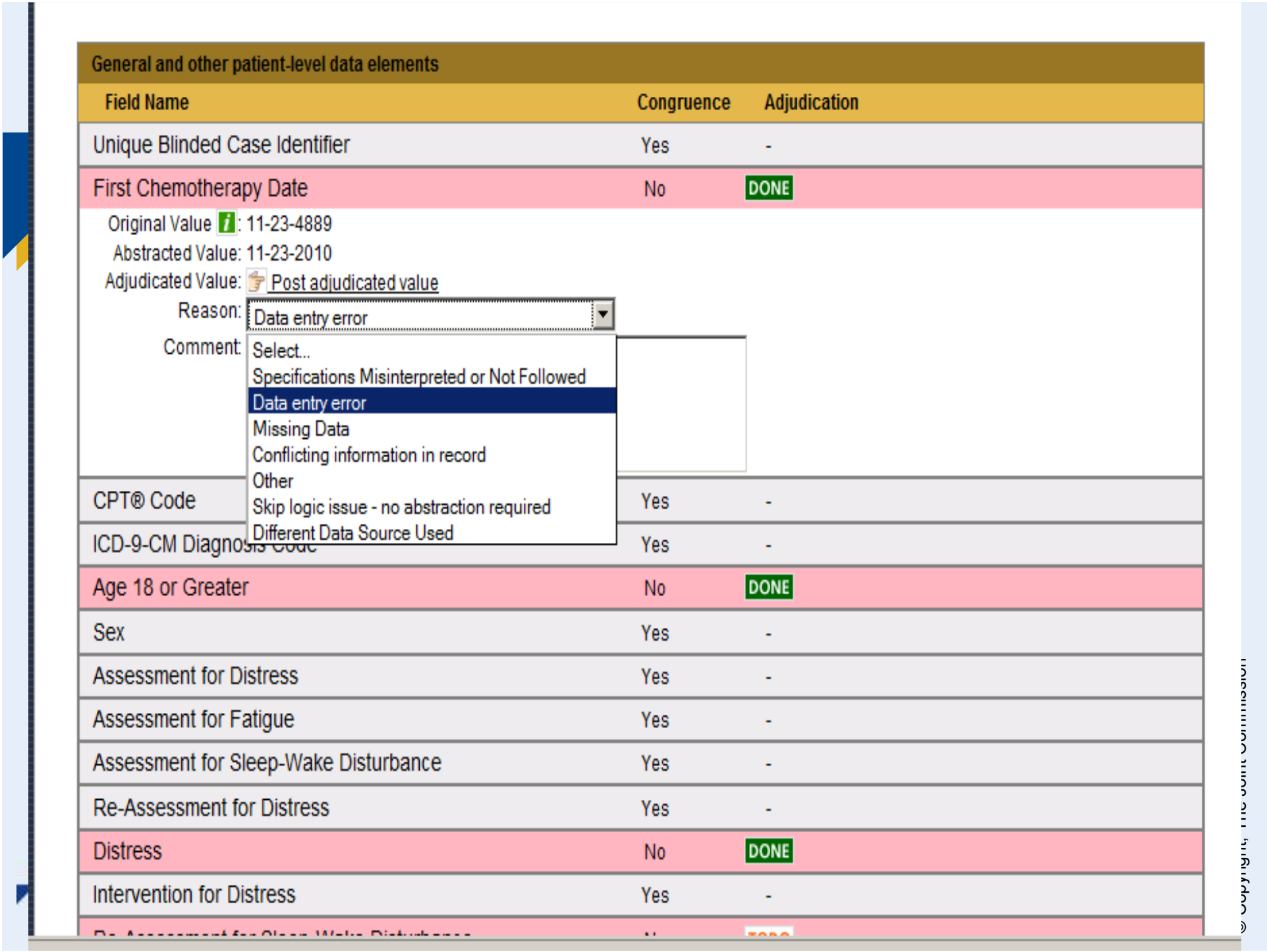
Reliability Testing

- Re-abstraction site visits at 12 pilot sites
- Project staff abstract data on 20 cases
  - Adjudication software compares originally submitted data to staff collection
  - Mismatches immediately flagged
  - Staff interviews pilot site data collectors to uncover cause; frequently due to unclear specification language
- Data analysis provides adjusted scoring

UBCI	First Chemotherapy Date	CPT® Code	ICD-9-CM Diagnosis Code	Adjudication Report	Status
1	11-23-2010	96365	1741	Finished	
987654	51-36-8496	96360	8997*/	Finished	
Cycle1	07-01-2009	96413	1759	Adjudicate	

General and other patient-level data elements

Age 18 or Greater	Y
Sex	F
Assessment for Distress	1
Assessment for Fatigue	2
Assessment for Sleep-Wake Disturbance	2
Re-Assessment for Distress	
Distress	4
Intervention for Distress	Y
Re-Assessment for Sleep-Wake Disturbance	
Sleep-Wake Disturbance	
Intervention for Sleep-Wake Disturbance	
Re-Assessment for Fatigue	
Exercise Program	
Reason for Not Recommending Exercise	
Emetogenic Agents	
Assessment for Chemotherapy Induced Nausea and Vomiting	
Myelosuppressive Chemotherapy	
Instructions on Hand Washing	
Instructions to Contact Provider	
Neutropenia Risk Cycle	



Reliability Findings

- Good agreement on:
  - Demographics
  - Lack of exercise recommendations
- Most mismatches related to:
  - Definition of distress
  - Lack of documentation of symptom intensity
  - Identification of myelosuppressive regimens
  - Need to evaluate all cycles in the continuing assessment measures (BCC-02)

Selected BCC testing results

- Exercise not often recommended
- Sleep-Wake disturbance not commonly assessed
- Symptom assessment by nursing varies
  - Charting by exception
  - SOAP note format
  - Symptom intensity not commonly documented

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Pilot Data Summary

Measure ID	Measure Name	Denominator for Pilot Study	Rate for Pilot Study
BCC-01a	Pre-treatment Assessment – Overall Rate	1076	33.27%
BCC-01b	Pre-treatment Assessment – Distress	1076	75.93%
BCC-01c	Pre-treatment Assessment – Fatigue	1076	64.50%
BCC-01d	Pre-treatment Assessment – Sleep-Wake Disturbance	1076	37.17%
BCC-02a	Continuing Assessment – Overall Rate	1073	19.85%
BCC-02b	Continuing Assessment – Distress	1073	55.55%
BCC-02c	Continuing Assessment – Fatigue	1073	62.07%
BCC-02d	Continuing Assessment – Sleep-Wake Disturbance	1073	27.03%
BCC-03	Intervention for Distress	697	32.14%
BCC-04	Intervention for Fatigue	1072	9.79%
BCC-05	Intervention for Sleep-Wake Disturbance	809	12.36%
BCC-06	Assessment for Chemo-Induced Nausea and Vomiting	961	87.41%
BCC-07	Education on Neutropenia Precautions	851	55.82%
BCC-08	Colony Stimulation Factors (CSF) Prescribed	4276	76.26%

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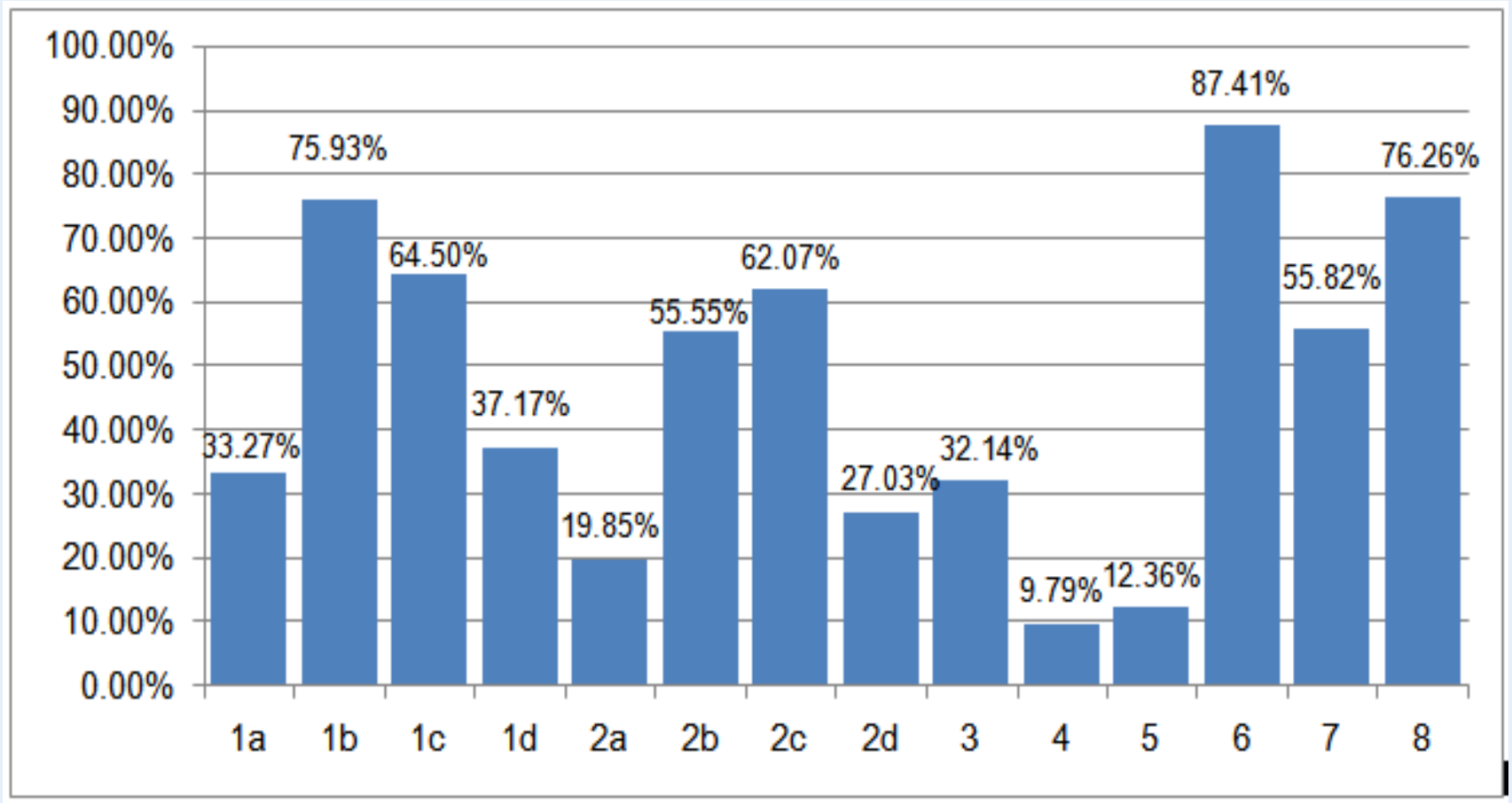

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Pilot Site Feedback

- Overall, measure set is meaningful
- Clarification of what distress includes, and how it is measured in practice needed
- Clarification of which regimens are considered myelosuppressive
- More specific guidelines for exercise recommendations
- More examples in Notes for Abstraction

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Oncology Quality Collaborative (OQC)

- Implementation work group
- Community of Practice model
- First session of OQC limited to interested BCC pilot site participants
  - 15 sites opted in
- Focus on evidence-based practice changes needed to increase QM scoring
  - Symptom Assessment
  - Exercise Recommendations

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Expansion

- Breast Cancer original focus in deference to funder
  - National Philanthropic Trust's Breast Cancer Fund
- Many measures easily applied to other disease states
- Opportunities to develop many additional sets based on existing strong evidence

Summary

- High-level evidence supports creation of meaningful quality measures
  - How consistently are we implementing our best knowledge?
- Nationally tested measures based on PEP resources allow benchmarking of nurse-sensitive interventions across diverse sites
- QM are one important link in a chain of evidence translation and implementation
- Nurses are well-positioned to drive “Patient-centeredness” and high-quality cancer care!

Partial List of Pilot Sites

- Central Vermont Medical Center; Mountainview Medical, Berlin, VT
- CR Wood Cancer Center, Glens Falls, NY
- The Cancer Institute of New Jersey, New Brunswick, NJ
- Edwards Cancer Centers, Napierville, IL
- Fairfax Northern Virginia Hematology Oncology, Fairfax, VA
- Froedtert Hospital and the Medical College of WI, Milwaukee, WI
- Group Health, Seattle, WA
- Lankenau Hospital, Wynnewood, PA
- Magee Womens Hospital of University of Pittsburgh Cancer Centers, Pittsburgh, PA
- Norton Cancer Institute, Louisville, KY
- Our Lady of Bellefonte Hospital (The Women's Center), Ashland, KY
- Saint Joseph's Hospital, Nashua, NH
- Seidman Cancer Center, Cleveland, OH
- University Of Miami, Miami, FL
- Southwestern Vermont Regional Cancer Center, Bennington, VT

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Questions?
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