



National
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NCCN.org



NCCN Guidelines Quality of Care and Value Initiatives

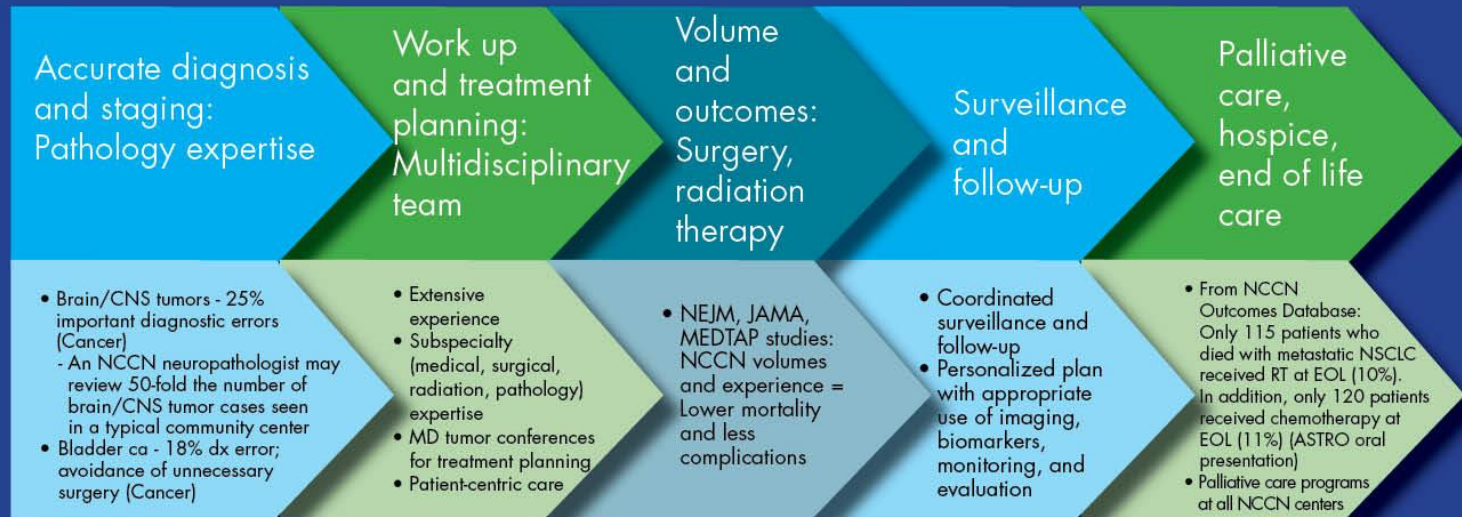
November 20, 2010

US Health Care Reform

- Broader access to health insurance; no adverse selection
- Payers (insurers and employers) are increasingly focused on cost.
- Academic centers are more expensive than community hospitals in the US
- Higher cost hospitals expected to prove they provide greater benefits that offset the higher costs.
- *Prove the value.*

The NCCN Value Equation

Right Diagnosis, Right Treatment, Right Setting =
Better Outcomes, Enhanced Efficiency



NCCN Guideline concordance and quality measures

Patient experience and satisfaction

Pathology Expertise

- Many publications describe frequency of change in diagnosis with second read by subspecialist pathologists.
- Change of diagnosis affecting treatment choice can be up to 20% depending on type of cancer.
- Errors are most common in CNS, hematologic malignancies, sarcoma, and skin, prostate and breast cancers.
- Changes from benign to malignant or vice versa or from one histology to another or one biologic group to another are significant for patient management.

Multidisciplinary Care Team in Breast Cancer



Multidisciplinary tumor board for treatment planning at NCCN centers

NCCN Multidisciplinary patient care team



- Pathologist
- Oncologist
- Radiation oncologist
- Surgeon
- Plastic surgeon
- Social worker
- PT/OT
- Nutrition
- Other



The patient is at the center of the team's work at all times.

Expert Multidisciplinary Teams and Treatment Planning

- **Multidisciplinary tumor board to review cases**
 - *Ensures that all options are considered*
 - *Accurate and precise pathology – including biomarkers*– guides oncologist in choosing most appropriate and cost-effective treatment option
- **Multidisciplinary patient care team**
 - Ability to confer with subspecialists in real time
 - Facilitates coordinated, *patient-centric* care
 - MD team of experts identify and address problems before they become more costly and difficult to treat

Surgical Outcomes at Comprehensive Cancer Centers

A recent study commissioned by the National Comprehensive Cancer Network determined that patients who have cancer surgery at Comprehensive Cancer Centers have lower mortality and complication rates compared to those who had surgery at other institutions:

| Type of Cancer | Mortality* | Complications* |
|--------------------|--------------------|--------------------|
| All Cancers | 52.7% lower | 19.4% lower |
| Colon | 51.8% lower | 15.9% lower |
| Lung | 50.2% lower | 27.1% lower |
| Ovarian | 57.0% lower | 6.6% lower** |
| Pancreatic | 85.5% lower | 48.6% lower |
| Rectal | 58.1% lower | 10.8% lower** |

MEDTAP International, Inc; "A retrospective database study of quality of care in cancer surgery," 2005.

* Univariate analysis comparing all patients who had surgery at Comprehensive Cancer Centers to those treated at other institutions, regardless of age, gender, race, admission source, and the number of co-morbidities

** Not statistically significant

Comparative Effectiveness Research

- **NCCN developing comparative therapeutic index: Risk vs benefit**
- **Published preliminary concept**
- **Beginning to test reliability and validate scales**
- **Highest efficacy, lowest toxicity for least cost equals value**

Expert Surveillance = Better Efficiency

NCCN recommends against use of PET/CT, imaging except mammography, and markers in routine follow-up

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National Comprehensive Cancer Network®
NCCN Guidelines™ Version 1.2011
Invasive Breast Cancer

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SURVEILLANCE/FOLLOW-UP

RECURRENT WORKUP
 or
INITIAL WORKUP FOR STAGE IV DISEASE

- Interval history and physical exam every 4-6 mo for 5 y, then every 12 mo
- Annual mammography
- Women on tamoxifen: annual gynecologic assessment every 12 mo if uterus present
- Women on an aromatase inhibitor or who experience ovarian failure secondary to treatment should have monitoring of bone health with a bone mineral density determination at baseline and periodically thereafter^c
- Assess and encourage adherence to adjuvant endocrine therapy.
- Evidence suggests that active lifestyle, achieving and maintaining an ideal body weight (20-25 BMI) may lead to optimal breast cancer outcomes.

- History and physical exam
- CBC, platelets
- Liver function tests
- Chest imaging
- Bone scan
- X-rays of symptomatic bones and long and weight-bearing bones abnormal on bone scan
- Consider abdominal CT or MRI^{dd}
- First recurrence of disease should be biopsied
- Consider determination of tumor ER/PR and HER2 status if unknown, originally negative or not over-expressed^b
- Genetic counseling if patient is high risk for hereditary breast cancer^c



[See Treatment of Recurrence/ Stage IV Disease \(BINV-17\)](#)

^bSee Principles of HER2 Testing (BINV-A).

^cSee NCCN Genetics/Familial High-Risk Assessment: Breast and Ovarian Guidelines.

^{cc}The use of estrogen, progesterone, or selective estrogen receptor modulators to treat osteoporosis or osteopenia in women with breast cancer is discouraged. The use of a bisphosphonate is generally the preferred intervention to improve bone mineral density. Optimal duration of bisphosphonate therapy has not been established. Factors to consider for duration of anti-osteoporosis therapy include bone mineral density, response to therapy, and risk factors for continued bone loss or fracture. Women treated with a bisphosphonate should undergo a dental examination with preventive dentistry prior to the initiation of therapy, and should take supplemental calcium and vitamin D.

^{dd}The use of PET or PET/CT scanning should generally be discouraged for the evaluation of metastatic disease except in those clinical situations where other staging studies are equivocal or suspicious. Even in these situations, biopsy of equivocal or suspicious sites is more likely to provide useful information.

Note: All recommendations are category 2A unless otherwise indicated.
 Clinical Trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.

Palliative Care, Hospice, and End of Life Care

- All NCCN Centers have ongoing palliative care programs
- Focus of care shifts gradually from cure to symptom control and quality of life

NCCN Opportunities for Improvement

- Institutions to review patients concordance to category 1 treatment recommendations**
- 85% concordance level**
- Institutions convene group of BCA physicians to review data**
- Baseline report and Follow-up Report**

NCCN Improvement Action Plans

- Continued discussion with the NCCN BCA Guidelines Panel
- Review and present concordance analyses internally at the member institutions
 - Present data to the clinicians at their respective institutions to support efforts for quality improvement
 - Review charts of the patients given non-concordant care on the guidelines that were identified as “opportunities for improvement (OFI)” to understand the reasons for non-concordance.
- Generate reports describing various process measures such as time to definitive surgery, chemo, and other endpoints
- Formalize the process of reviewing unblinded data with all disease-specific databases and auditing non-concordance at institutions

Institutional Expectations

- **Oversight by Institutional PI**
- **Appoint a QI contact for this project**
- **Convene a group of institutional breast cancer providers to review OFI data**
- **QA and QI Review of OFI data for baseline and second reports**
 - QA review “non-concordant” patients for data quality issues
 - QI review of patients where institutional concordance rate is less than 85% and document reasons for non-concordance
- **Maintain up-to-date accrual and follow-up on cohort**

DRAFT

Baseline Report

| Cohort | Recommended Treatment | Institution Requiring Review | NCCN Aggregate Rate |
|--|---|------------------------------|---------------------|
| Stage I/II node negative, HR positive, tumor size 0.6-1.0 cm, moderately and poorly differentiated or unfavorable features | Adjuvant endocrine therapy +/- adjuvant chemotherapy | ~2 Institutions | 90.0% |
| Among < 70 yrs, Stage I/II node negative, HR negative, HER-2 neu not overexpressed, tumor size>1 cm | Adjuvant chemotherapy | ~3 Institutions | 87.6% |
| Stage I/II node negative, HR positive, HER2-neu not overexpressed, tumor size >1 cm | Adjuvant endocrine therapy +/- chemotherapy | ~2 Institutions | 90.9% |
| Among <70 yrs, Stage II, node positive, HR positive, HER2-neu not overexpressed | Adjuvant chemotherapy + endocrine therapy | ~8 Institutions | 75.0% |
| Stage I and II with BCS | ALNS + RT or no RT for age>70, HR positive, clinical node negative, T1 tumor who receive adj ET | ~2 Institutions | 92.0% |
| Cohort: All Stage 0-III with metastatic recurrence with bone disease present | Tx: Bisphosphonate | ~5 Institutions | 79.3% |

International Outcomes Database

- **Nonsmall cell lung cancer first disease site**
 - Number 1 cancer mortality worldwide
 - Relatively short time horizons
 - Active evolution of standard of care
- **Will identify practice patterns and measure concordance with NCCN Guidelines**
- **NCCN is Seeking collaborating hospitals**



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