

Electronic Quality Improvement (e-QuIP) for Breast Cancer

The American College of Surgeons Commission on Cancer (ACoS COC) released this report to the registry in October 2006.

Data Source: 2003-2004 breast cancer cases in the registry and NCDB with the following criteria:

- Female only
- Age 18 or older
- First or only cancer diagnosis: Sequence 00 or 01
- Primary solid tumors of the breast
- Invasive tumors only
- No report clinical or pathological evidence of metastatic disease
- Class of cases 1 or 2 only (all or part of treatment done at hospital)

Purpose: To improve data quality and patient care. In doing this study, the cancer program will also satisfy the following CoC Approvals Standards.

- 2.11 – analysis of process of care leading to patient outcomes
- 8.1 – complete & document studies that measure quality & outcomes
- 8.2 – documented implementation of 2 improvements that directly affect cancer patient care.

The study intends to measure the following for infiltrating carcinoma of breast only without metastatic disease:

- Patients undergoing breast conserving surgery & who are under the age of 70 should receive or be considered for radiation therapy. (BRT)
- Patients with Stage I or Stage II/III ER/PR- tumors should receive or be considered for combination chemotherapy. (MAC)
- Patients with Stage I or Stage II/III ER+ or PR+ tumor should be considered for hormonal therapy (Tamoxifen or third generation Aromatase Inhibitor). (HT)

From the information already sent from this registry to the CoC for 2003 & 2004, there were 145 cases of breast cancer diagnosed in 2003 and 137 in 2004 (this would NOT include class of case 6-diagnosed & treated in the physician office only). Of those, 84 for 2003 and 48 for 2004 met the criteria for this study.

Combining the 2 years the following “estimated performance rates” were found:

BRT – 68.3%

MAC – 80%

HT – 60%

On first pass of the 2003 data, the following was noted:

- 13 cases considered incomplete by CoC due to incomplete tumor characteristic information – 2 actually complete in our registry

- 26 cases considered noncompliant for standard of care – 3 already in the registry as complete and 10 had information found in medical oncology records.

After completing the information in the local registry and on-line study at CoC the following “estimated performance rates” were calculated:

BRT - 78.7%

MAC - 87.5%

HT – 74.4%

St. Joseph Hospital, Bellingham, WA				
Measure	Estimated Performance Rate	Number of Cases by Diagnosis Year		
		2003	2004	Total
BRT - Patients receiving breast conserving surgery who are under age 70 should receive or be considered for radiation therapy.	78.7% (48/61)	46	15	61
MAC - Patients with Stage I (tumor size > 1cm and N0) or Stage II/III (any tumor size and N+), with ER/PR- tumors should receive or be considered for combination chemotherapy.	87.5% (14/16)	12	4	16
HT - Patients with Stage I (tumor size > 1cm and N0) or Stage II/III (any tumor size and N+), with ER+ or PR+ tumors should receive or be considered for hormone therapy (Tamoxifen or third generation Aromatase Inhibitor).	74.4% (64/86)	47	39	86
Incomplete: Cases not assessable due to incomplete tumor characteristic information.		11	3	14
NA: Cases not applicable for measurement by definition.		61	89	150
Grand Total: Total number of cases as submitted to the NCDB. Due to cases falling into one or more measures, this number will not reflect a column sum.		145	137	282

While reviewing the 2004 information against the registry information, a full list of all the breast cases was run. It was noted that the CoC did not have correct information for 2004 cases. There were 27 more cases that seemed to be eligible for this study. The Commission was contacted and the 2004 information was re-submitted to them. The new information from this resubmission will not be available until July 2007. Registry staff did update the information that is on the CoC site.

First pass of the CoC information for 2004 showed the following:

- Of the 3 incomplete cases: 1 patient refused axillary dissection and 1 patient’s tumor was too small to due ER/PR & therefore the cases are considered incomplete; 1 case had unknown information that was corrected.

- 2/15 cases eligible for BRT were entered into the registry correctly & updated on the CoC website.
- 1 case had ER/PR status incorrectly recorded – this was corrected
- 6 had chemo or hormone information that was found and updated upon review of the medical oncology records.
- 2 cases coded as chemo or hormones not recommended but should have been not done due to complication/comorbidities.
- 2 cases had part of treatment done elsewhere – info found and added

After completing the information in the website, the following information was calculated on each measure.

BRT = 85.9%

MAC = 100%

HT = 90.8%

This final review also noted that the compliance with this study parameters showed that we had 100% compliance with chemotherapy & hormone recommendations and 94% compliance with radiation therapy. This is an increase in compliance from 2003 where one local surgeon did not recommend radiation or hormones to some patients.

Conclusion: The information regarding chemotherapy and hormone therapy is usually not dictated into the patient hospital medical record. The information can be obtained from the physician office notes, which are more difficult to obtain. The registry staff also needs to be more aware of the “standards of care” for cancers to more carefully document if treatment was recommended or not and if patient refused or was not given due to patient complications.

This community has become more compliant with the standards of care over time. A quick review of 2005 cases revealed that only 10 cases need to be reviewed for unknown or seemingly incorrect information.