

National Quality Measures for Breast Centers (NQMBC): A Robust Quality Tool

Breast Center Quality Measures

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ABSTRACT

Introduction. Measuring and improving quality of care is of primary interest to patients, clinicians, and payers. The National Consortium of Breast Centers (NCBC) has created a unique program to assess and compare the quality of interdisciplinary breast care provided by breast centers across the country.

Methods. In 2005 the NCBC Quality Initiative Committee formulated their initial series of 37 measurements of breast center quality, eventually called the National Quality Measures for Breast Centers (NQMBC). Measures were derived from published literature as well as expert opinion. An interactive website was created to enter measurement data from individual breast centers and to provide customized comparison reports. Breast centers submit information using data they collect over a single month on consecutive patients. Centers can compare their results with centers of similar size and demographic or compare themselves to all centers who supplied answers for individual measures. New data may be submitted twice yearly. Serially submitted data allow centers to compare themselves over time. NQMBC random audits confirm accuracy of submitted data. Early results on several initial measures are reported here.

Results. Over 200 centers are currently submitting data to the NQMBC via the Internet without charge. These measures provide insight regarding timeliness of care provided by radiologists, surgeons, and pathologists. Results are expressed as the mean average, as well as 25th, 50th, and 75th percentiles for each metric. This sample of seven measures includes data from over 30,000 patients since 2005, representing a powerful database. In addition, comparison results are available every 6 months, recognizing that benchmarks may change over time.

Conclusions. A real-time web-based quality improvement program facilitates breast center input, providing immediate comparisons with other centers and results serially over time. Data may be used by centers to recognize high-quality care they provide or to identify areas for quality improvement. Initial results demonstrate the power and potential of web-based tools for data collection and analysis from hundreds of centers who care for thousands of patients.

In recent years, a renewed focus on quality care assessment has occurred. The Institute of Medicine (IOM) along with the federal government and insurance payers have encouraged the development of methods to assess care, especially in high-cost areas of medicine such as cardiac, pulmonary, and diabetes care.^{1–6} There has been less attention given to breast cancer care because it (1) does not command as much of the healthcare dollar (US \$7 billion/year), (2) primarily involves outpatient care, (3) is often provided by multiple nonaligned facilities and providers, and (4) typically has long survival, making it difficult to connect specific events to outcomes.⁷ These

factors make it particularly difficult to identify, assign, and control components of quality breast care and/or its costs.⁸

The low level of morbidity and mortality in breast care excludes standard definitions of quality care such as 30-day mortality or wound infection rate.^{9,10} The IOM suggests a wider definition of quality care beyond morbidity and survival figures typically recognized by providers as hallmarks of quality healthcare.^{11–15} The six core values of quality care involve care that is safe, effective, efficient, timely, patient-centered, and equitable.

To achieve quality control of this unique segment of healthcare, one must (1) define quality in breast cancer care, (2) suggest methods to accurately assess and measure quality care, and (3) develop tools that will improve breast care. We report the development of an innovative program, called the National Quality Measures for Breast Centers (NQMBC). This program defines quality measures in breast care and offers a new tool to summarize results and provide immediate feedback that may positively impact quality care in breast centers.

METHODS

In 2003 the National Consortium of Breast Centers (NCBC) Board of Trustees adopted a new definition of breast care quality adapted from the Institute of Medicine and identified an interdisciplinary workgroup of breast care specialists to develop a list of quality measures.¹ Starting from The Advisory Board's dashboard of quality measures for breast care, the workgroup utilized evidence-based literature as well as expert opinion to formulate and define measures.¹⁶ The experience of the workgroup was vital since many of the quality issues related to breast cancer care in the outpatient setting had not been studied thoroughly in the past.

By 2005, a list containing 37 measures was developed along with clear definitions of numerators/denominators and other defining details. It was recognized that these were measures, not benchmarks. Some measures would prove valuable while others would be discarded in the future, either (1) because they were so commonly performed that they would not distinguish between levels of quality, or (2) because the answers to the measure would vary greatly without any true impact on quality of care.

Attention was given to promote ease of data collection from medical records, realizing that much would be extracted from paper charts. Several software companies offering mammography reporting systems have incorporated the NQMBC measures in their software to facilitate data collection for some measurements.

To further facilitate data collection while maintaining accuracy, 1 month of data (30 patients minimum) is required for each measurement response. This is a

representative snapshot of the level of care, rather than an exhaustive list of all patients. Some centers may use longer periods of time to derive their data due to the software programs on which they store their information.

To capture the results of the quality measures, and collate and return results, a new web-based data repository and computing tool was developed. This robust program allows the participant to enter data, compares the submitted data with other centers, and instantly returns these results to the participant breast center.

The NQMBC has refined this tool to allow a spectrum of comparative results. The participant center can instantly (1) compare their own results with all other breast centers who have submitted data, (2) compare their results with other similar centers with respect to services offered, geographic location, number of cancers treated or number of mammograms performed, and (3) view their comparative results over multiple time periods. Results for each indicator include mean, median, and mode values as well as 25th, 50th, and 75th percentiles.

To ensure that submitted data are accurate, a data affidavit is signed by the director of the breast center as well as the data collector. Mandatory annual de-identified audits are conducted by NQMBC on chosen data items, to confirm accurate collection and calculations. Any intentional submission of false data is a cause for permanent expulsion from the program. All individual center data are kept confidential by the NQMBC. Statistical calculations for this manuscript are performed using statistical package for the social sciences (SPSS) for Windows, standard version 8.0.0.

RESULTS

The program opened for data collection in 2005, followed by a more user-friendly version in 2007. Initial interest was noted by over 400 breast centers, with over 200 actually submitting data elements. As of this report, centers from 47 of the 50 states of the USA are participating, with as many as 23 centers participating in a single state. Centers were categorized using the NCBC breast center type definitions (Table 1). The majority (86%) of participating centers identified themselves as comprehensive breast centers or breast cancer treatment centers, with the remaining centers being clinical, diagnostic, and screening breast centers.¹⁷

In total, the current group of participating centers annually provides over 2.8 million mammograms and treats over 33,000 breast cancers annually, with the average center volume being 16,500 mammograms provided and 196 breast cancers treated per year.

Centers can prioritize which measurements they answer, so the number of centers answering each indicator varies,

TABLE 1 Breast center types according to services provided (adapted from www.breastcare.org)¹⁷

Service component	Screening	Diagnostic	Clinical	Treatment	Comprehensive
Outreach-education	X	X	X	X	X
Imaging	X	X	M	X	X
Needle biopsy	O	X	X	X	X
Pathology	O	X	X	X	X
Surgical care	O	O	X	X	X
Plastic surgery	O	O	M	X	X
Radiation therapy	O	O	M	X	X
Medical oncology	O	O	M	X	X
Rehabilitation	O	O	M	X	X
High-risk clinic	O	O	M	M	X
Research	M	M	M	M	X

X this type of center must provide this component, *M* this type of center may provide this component but it is optional for that type of breast center, *O* this type of center would not be expected to provide this component

as does the number of patient encounters used to formulate answers. For the measurements reported here, there are over 175 centers actively submitting data, which includes data from a minimum of over 5,000 patient encounters per measurement. Although we ask for a minimum of 1 month of data with at least 30 patients minimum, some centers used up to 6 months of patient encounters to be reviewed to obtain a single measurement result.

The set of 37 measures examine quality breast care according to the six IOM components of health care quality (Table 2). Seven measurements were chosen for this initial report, involving timeliness, efficiency, and effectiveness of breast care.

Timeliness of care was studied at several steps along the breast center journey including both diagnosis and treatment. We counted working days only, excluding weekends, and provide the 50th (25th, 75th) percentile results for each timely measurement (Table 3). The time between abnormal screening mammogram and diagnostic mammogram was 6.5 (4, 10.5) working days, similar to the time between diagnostic mammogram and needle biopsy of 6.0 (3.9, 9) working days. When open surgical biopsy was chosen instead of needle biopsy, it required over twice the time between diagnostic mammogram and surgical biopsy, taking 13.9 (8, 19.8) working days ($p < 0.001$).

The timely treatment of the breast cancer patient was also examined. Initial surgical care was found to take 14 (11, 19.5) working days between needle biopsy and initial cancer surgery. This time period may include time needed to obtain needle biopsy results, surgical consultation, and surgery scheduling. Pathology results from initial cancer surgery took on average 2 (1.7, 3) working days until the pathology report was available. This is similar to previous reports in the literature.^{19,20}

As noted in Table 2, there are several items on the pathology report that are measured for effectiveness. The

effectiveness measurement in this report regards the adequacy of the pathology report. Pathology reports included identification and measurement of the closest surgical margin in 100% (98.5%, 100%) of breast centers. This is similar to previous reports by the College of American Pathologists (CAP).²¹

One efficiency measurement for breast centers included here is the frequency of needle biopsy used as the initial method of diagnosis. This includes diagnostic data from all breast biopsies, both benign and malignant patients. Over 90% (78%, 98%) of biopsies were performed using needle biopsy in this set of breast centers.

Serial review of measurements between 2005 and 2008 was examined as well on the seven measurements reported here. During these initial years when new centers were submitting data to the NQMBC, there was little variation in results for the seven measurements in this report.

DISCUSSION

Spurred by the Institute of Medicine and purchasers of medical care, quality monitoring has matured as an integral part of many segments of health care.^{5,6,22} Payment incentives in some fields have prompted quality assessment to rapidly become a routine of daily patient care.^{23,24} In addition, the classic definitions of quality from the vantage point of the provider have expanded beyond classic objective measurements such as survival rates, and include the other core quality values. A more comprehensive concept of quality care now includes ensuring that care is safe, effective, efficient, patient centered, timely, and equitable.

Quality assessment for interdisciplinary breast center care is more challenging than other more acute specialties. Breast cancer patients typically see a spectrum of specialists, each with different offices and data files. Almost all care is provided as outpatients, seeing different

TABLE 2 NQNBC Measurements according to IOM Core Quality Healthcare Values

Safety
Complications in:
Outpatient surgery (unplanned overnight stay)
Radiation therapy (break-in treatment)
Chemotherapy (hospitalization rate)
Reconstructive surgery (flap complications)
Efficacy
Complete pathology report
Tumor size, margin analysis, margin identification, node analysis, specimen sampling adequacy
Use of therapies
Breast-conservation surgery, radiation therapy, chemotherapy, endocrine therapy
Sentinel node biopsy rate
5-Year survival rates, stage specific
Efficient
Mammography call-back rate
Use of needle biopsy for diagnosis
Breast conservation re-excision rate
Patient centered/equitable
Use of patient satisfaction surveys
Survey development, type of survey, response rate
Shared decision-making for surgical options
Cosmetic results post reconstruction
Satisfaction with breast reconstruction
Timeliness of care
Screening to diagnostic mammogram
Diagnostic mammogram to needle biopsy
Diagnostic mammogram to surgical biopsy
Needle biopsy to initial cancer surgery
Cancer surgery to pathology report results
Chemotherapy within 4 months
Endocrine therapy within 1 year
Radiation therapy within 1 year

The 37 current NQNBC measurements categorized using the IOM quality core values^{1,18}

specialists simultaneously or serially over a many months. Breast centers vary in services offered, with some breast centers providing comprehensive care while others offer only focused services (Table 1). Some centers are located within a single medical complex or building, while others are so-called *centers without walls*, integrating multiple different providers at separate locations into one center. These and other unique qualities of breast centers make the broad capture of breast center quality data formidable, resulting in a paucity of evidence-based quality indicators.

Even if data capture were straightforward, the common metrics used to assess quality care in acute care settings (e.g., wound infection rates, 30-day mortality, hospital

readmission rates, etc.) are not as applicable in the breast care setting. Short-term complication rates are low, while typical breast cancer survival rates are high, and multiple varied providers may influence long-term survival rates, obscuring specific cause-effect relationships.⁹ In addition, the common presence of litigation in breast care negatively influences the willingness of breast centers to submit quality measurement data. These unique qualities of breast cancer care have played a role in the delay in development of validated quality measures for breast centers.

Beyond the classic objective measures of quality care (e.g., 5-year survival rate), there are also structural and process quality measures.²⁵ Structural measures focus on the existence of the elements necessary for a breast center to provide care, such as the presence of board-certified specialists, the existence of an interdisciplinary conference, the availability of specific therapeutic modalities, and the presence of tumor registrars. Process measures focus on the actual level of care delivered by the breast center, such as the percentage of patients receiving preoperative needle biopsy, the percentage of pathology reports including specific data parameters, the average time between diagnosis and surgical care, surgical re-excision rates, and screening mammogram call-back rates. Although there is value in assessing structural measures, we felt that process measures are more closely identified with the actual provision of quality breast care of individual patients.

Development of NQNBC

In 2003, the board of trustees of the National Consortium of Breast Centers (NCBC) addressed the issue of quality breast care by including quality improvement to their NCBC mission statement. Adapting the IOM definition of quality health care, the NCBC defined breast care quality as: "Quality care means providing each patient with accurate evaluation and appropriate services with compassion, in a technically competent and timely manner, with good communication and shared decision making in a culturally sensitive fashion."²⁶

The NCBC was uniquely situated to spearhead quality assessment, since NCBC members included over 800 participating breast center members representing all 50 states of the USA and had active electronic communication with most centers. Thereafter, the NCBC gave a Quality Initiative Panel of Experts the task of developing a set of breast center quality measures with specific requirements.

The measures needed to reflect the continuum of breast center care. Measurement definitions had to be clear, unambiguous, and evidence based. Ease of data collection had to be facilitated. The measurement set had to be dynamic, allowing new measures to be incorporated and nonproductive measures to be discarded. Each center is

TABLE 3 Measurements results from initial set of NQMBC data

Measure	Median	25th % _o	75th % _o	Expected ^a pt. encounters	Actual ^b pt encounters
Time between (in days):					
Screen and Dx	6.5	4.0	10.5	6,500	18,245 (43%)
Dx and Needle Bx ^c	6.0	3.9	9.0	6,000	8,479 (40%)
Dx and Surgical Bx ^c	13.9	8.0	19.8	4,400	7,295 (40%)
Needle Bx and Surg	14.0	11.0	19.5	5,400	7,286 (36%)
Path report available	2.0	1.7	3.0	1,700	n.a.
Path states margin (%)	100	98.5	100	2,000	n.a.
Needle Bx use (%)	90	78	98	5,500	8,927 (41%)
Total patient encounters				31,500	50,232 (40%)

Pt patient, %_o percentile, *n.a.* data not available, *Dx* diagnosis, *Bx* biopsy, *Surg* surgery, *Path* pathology

^a Estimated patient encounters assume each center reviewed 30 patients to submit a data point

^b Actual numbers of patient encounters used to derive data submission. Numbers obtained after request from submitting centers. Numbers in parenthesis are percentages of participating centers submitting this information. As of the time of this report, only 40% of those centers submitting data answered these metrics. Actual number of patient encounters is likely much larger than these values

^c Time difference from diagnostic mammogram to needle versus surgical biopsy significant ($p < 0.001$)

required to submit data annually to remain in the program, although a center may submit data up to twice a year. Using the Advisory Board's Dashboard of breast care as a starting point, 37 measures were eventually produced.¹⁶

Concurrent with the development of measures, a web-based software program was created to house the measures. This program was based on the quality cycle concept where centers that compare themselves with other centers will choose to institute solutions to improve their relative rank (Fig. 1).²⁷ Although pay for performance may produce significant quality improvement results, many clinicians are not currently in a practice situation where they are influenced by financial incentives, while peer comparisons are an effective quality improvement mechanism available to all practice situations.^{24,25,28}

Data from a single measurement may be entered on the web and may immediately be compared with other breast centers that have participated in the program. The center

submitting data would quickly be able to judge whether improvement would be needed. We believed that, when the clinician or clinical center is provided data demonstrating the need for improvement, they will make efforts to improve. Several studies have shown that the collection and comparison of peer data alone leads to quality improvement.²⁹

Comparison filters allow individual centers to be compared with similar centers using demographic characteristics. Filters include the spectrum of services offered, annual mammogram volume, annual cancer volume, and geographic location. This allows comparisons to be more realistic and thus more likely to be acted upon by the submitting center.

The first version of the National Quality Measures for Breast Centers (NQMBC) was beta-tested in 2005 with a few measures. Content and software edits yielded a new version in 2007 with ongoing improvements. Since 2005 there have been over 200 centers from 47 states of the USA actively participating in the NQMBC via the website. These centers cumulatively provide over 2.8 million mammograms per year and see over 33,000 breast cancer patients per year, accounting for one-seventh of all breast cancers seen annually in the USA.

Each NQMBC measurement requires specific data research. The labor required to review data and obtain measurements may be time consuming, so several attempts have been made to lessen the work of data mining. Most measurements ask for 1 month of data with a minimum of 30 consecutive patients. Looking back at the lack of variation of data submitted over time, this snapshot of data appears long enough to get representative results but not too burdensome for data collection. To facilitate imaging-related questions, many mammography reporting software

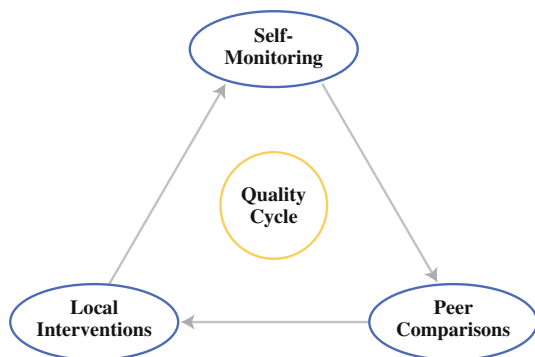


FIG. 1 Quality cycle employing peer comparisons to improve quality care.¹⁴ Peer comparisons spurs focused investigation and intervention, followed by self-examination ending in repeated peer comparisons, adapted from Kaufman with permission²⁷

companies have incorporated the NQMBC imaging metrics into their software. As a result, those centers using any one of several mammography reporting software products can get their data results as a routine report without any added effort.

We recognized the concept that “you can’t improve something that is not under your control.”³⁰ Breast center programs may submit data on measures over which they had quality influence of the care provided. If they did not have access to the data points on a certain metric or if they would not be able to influence the care provided, then they would not be allowed to submit data on that metric. This provides the focused opportunity for quality improvement if the results demonstrate lower-quality care. We found that, although many programs appear to offer a multitude of services, at least 57% of centers function at lower levels of breast care when one defines a center by services that are under their quality influence (Table 1).¹⁷

Interpreting Results of NQMBC

Once data on any measure is collected, we report comparative mean, median, and mode as well as 25th, 50th, and 75th percentile rankings. At this time, we are collecting and reporting measurements results, not establishing benchmarks. Benchmark values have not been established or reported on any measurements. Benchmarks imply a designated threshold level of minimum competence below which unsatisfactory care is provided. Although a measurement may have a specific result, a benchmark provides a standard that should be achieved by most centers. Despite significant participation by breast centers, it is premature to identify any benchmarks at this time within the NQMBC.

There are several reasons why specific benchmark targets should not yet be defined: (1) our current participating centers are those interested in quality care and have a focused desire to measure and compare themselves with others. This energetic group of confident centers may skew the data toward a higher level of care than the “average” breast center, and (2) many of these measurements are not yet fully validated as having significant impact on quality of care.

For example, although timeliness of care is a valuable virtue, it is not clear whether 3 days, 14 days or 28 days between segments of care significantly impacts quality of care.¹¹ Definitions of timely breast care vary from country to country.^{31–34} Timeliness may be improved with patient navigation, attention to ethnic diversity, and other efforts.^{35,36} Without thorough knowledge of the variation between centers, it would be premature to identify a benchmark. After validating these measures as appropriate yardsticks to assess quality breast care, we will keep (or eliminate) these measures and establish benchmarks, as has occurred in other similar quality programs.^{37–42}

Results of an Initial Group of Measurements

Initial results of these seven measurements reveal the value of a large database. Several timeliness-of-care measurements were found to be consistent across many breast centers. Time to schedule procedures within a breast center generally took about 6 working days, and procedures sent to surgeons took about 14 working days. Compared with other studies these results demonstrated timely care.^{33,34,43} It was noted that one breast center performed all needed diagnostic mammograms on the same day as the original screening mammogram. In addition, if needle biopsy was needed, they performed the needle biopsy on the same day as well. Since there were over 200 centers submitting data, this single center did not impact the overall results, though they were remarkable in their dedication to rapid same-day evaluations.

As values are compared within similar centers, outliers below the 10th percentile may easily be identified. These lower-performing centers may warrant a letter from the NQMBC asking the center to identify factors to explain their low results. This allows improvement at the low end of the bell-shaped curve of results. In addition, the provision of comparison results for the bulk of centers will likely shift the overall average in a positive direction, as has occurred in other peer comparison studies.^{24,29,37–42}

It has been demonstrated that preoperative needle biopsy is less costly, avoids excess operations, and expedites interdisciplinary care.^{44,45} In addition, this report notes that it requires less than half the time to obtain a needle biopsy than a surgical biopsy (6.0 versus 13.9 days, $p < 0.001$). Recent studies suggest that those not aligned with breast centers may fail to utilize needle biopsy appropriately.^{46–49} In this report, 90% of patients requiring breast biopsy had a needle biopsy rather than open surgical biopsy. This clearly demonstrates the wide acceptance in these breast centers of minimally invasive biopsy techniques. Despite their acceptance of needle biopsy, there are well-defined reasons why 100% compliance should not be expected.^{49,50}

The uniform compliance with the effectiveness measure of documenting the closest margin was gratifying. Almost all centers were 100% compliant. This implies wide concordance with CAP-approved guidelines, the impact of their direct surveys, and successful pathologist education CAP has accomplished. This may also suggest the lack of value of this particular measurement as a quality measure, since widespread compliance was noted in this group of participants.

In addition to these cumulative static results, changes in submitted responses over time are also available for comparison. When reviewing results over time, it is valuable to note that the average results of the entire group of centers may improve as treatment routines change (e.g., the

proportion of breast cancer patients undergoing sentinel node biopsy has increased over the last several years). Contemporaneous comparisons are made, so that a participant will always be compared with the level of care actually occurring during the time the measurement was taken.

Center participation and repeat submissions every 6 months has been high. Despite serial measurements, there has been little variation over the first couple of years of this project as a whole. This suggests that our sample size of 1 month of data (30 minimum patients) is a reasonable size to achieve consistent data, is not too burdensome for most centers, and more time will be needed to document changes over time.

The numbers of patient encounters used to produce these results are quite large, supporting the data validity. We had required a minimum of 30 patients to be reviewed for each metric, expecting at least 31,500 patient encounters to be reviewed for the seven measurements in this report. Recently, we asked each participating center to specify the specific numbers of patients reviewed for each of the measurements submitted (Table 3). With only 40% of centers responding to our request on just five measurements, we found that over 50,000 patient encounters were used to obtain the results. This large number of patient encounters further supports the accuracy of the submitted data. We originally did not require the number of patient encounters to be entered when a quality measurement was reported. We have since added this requirement for all measurement reporting in the future.

Benefits and Challenges of NQMBC

There are both positive results and challenges to the NQMBC program as it is currently configured. Some benefits include the user-friendly web-based nature of the program, available to every breast center in (and potentially outside) the USA. There is no minimum number of measurements required to participate, so gradual increasing participation is a viable option. The ease of participation encourages all centers to participate in this program, including those with limited resources. There is no charge to the breast center to participate, only a commitment to submit accurate data. This is in stark contrast to most other quality programs.

Use of these quality measures provides the ability to compare a participating breast center with other centers nationally.⁵¹⁻⁵³ Prior to this program, national comparisons might occur from published reports focusing on a few centers. Now, each measurement provides results on thousands of patients from multiple types of breast centers.

A notable benefit of participation is public recognition of quality breast care. When centers have submitted data on

most of the NQMBC measurements, they are eligible to be designated a Certified Quality Breast Center or a Quality Breast Center of Excellence. These designations require both significant participation in multiple measurements and specific percentile ranking. These awards identify those centers performing at a higher level than most other centers.¹⁸

Some have challenged this program due to the lack of direct on-site survey or local inspection of the breast centers to confirm accurate submitted data. To safeguard against willful entry of false data, we have instituted several measures to assure data is as accurate as possible. Upon initial application to participate in NQMBC, validation agreements signed by both the breast center medical director and the data manager are required. When a participant enters a data point that is out of an expected range, an automatic pop-up prompt occurs, questioning the value prior to entering the data point. Submitted data is indelible. Once data is submitted, it cannot be edited or changed by the participant, only by the NQMBC. A requirement of participation in NQMBC includes mandatory audits of submitted data. These audits review de-identified raw data from which the answers to measurements were calculated. Each center is required to maintain the data used to answer each measurement for 5 years after submission. Also, random audits may occur as needed. The penalty of submitting false data is permanent expulsion from the program.

There are several other certification processes that also do not require local visits or direct surveys. The American College of Radiology accredits breast imaging centers using submitted data without an on-site visit. Many surgical certifications require a case-log list and other forms, with occasional written tests but no on-site visit. In addition, most licensures do not require on-site inspections. Other discipline specific quality programs similar to ours have not required on-site review of data.⁵⁴⁻⁵⁷ In view of the changing nature of business, the broad use of the Internet, and the expense of on-site surveys, utilizing a web-based program makes sense. This allows small centers in every corner of the country to participate, especially those in underserved locations who cannot afford to pay for on-site reviews.

Relationship with Other Quality Programs

There are other programs interested in assessing and improving the quality of breast care. The NQMBC has communicated with many of those programs. The National Accreditation Program for Breast Centers (NAPBC) is based on a different model of quality assessment, similar to the Commission on Cancer Approvals Program.⁵⁸ Both the NAPBC and NQMBC are independent stand-alone programs which are complementary, not redundant.^{51,53,59} The

NAPBC has established a set of standards for centers to comply with and makes on-site survey visits to each center to validate these standards. Most of the standards are structural in nature, with very few process measures.^{25,60} Since the NQNBC primarily evaluates process measures, there is little overlap between the NAPBC and the NQNBC. One NAPBC standard requiring ongoing quality studies may be fulfilled by participating in the NQNBC quality program. There is a significant cost for the on-site survey by the NAPBC program, which occurs every 3 years. The first NAPBC accredited program was designated in late 2008.

The NQNBC is exploring opportunities to cooperate and coordinate with other quality improvement initiatives for specific aspects of breast cancer care. These programs include the American Society of Breast Surgeons' Mastery Program, the Breast Pathology Specialist Program from the College of American Pathologists, the American Society of Clinical Oncologists' Quality Oncology Physician Improvement (QOPI) Program, the American Society of Therapeutic Radiation Oncologists' Performance Assessment for the Advancement of Radiation Oncology Treatment (PAAROT) Program, the Programs of the National Committee for Quality Assurance (NCQA), the Advisory Board's Breast Care Quality Programs, and potentially others.^{16,54–56} Formal relationships with these programs may develop in the future.

CONCLUSION

An innovative new program to assess and improve quality breast care provided by breast centers has been introduced and is functional. Utilizing a web-based collection and assessment tool, 37 quality measurements are available to compare a participating breast center with other similar centers across the nation. This no-cost program offers comprehensive quality measures, self-assessment, and the ability to institute indicated quality improvements for all breast centers. Ongoing validation and refinement of breast care measures will be conducted in the future.

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