Developing a Quality Improvement Program for Oncology Services

A Framework for Quality Improvement Activities

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In its 1999 report <u>Ensuring Quality Cancer Care,</u> the Institute of Medicine noted, *"... for many Americans with cancer, there is a wide gulf between what could be construed as the ideal and the reality of their experience with cancer care."*

More than a half-decade later, many oncology program leaders continue to search for a clear framework for developing their local Quality Improvement activities. In 2002, the National Quality Forum convened its Cancer Quality of Care Measures Project. A key purpose of this project is, *"to inform the public, payers, providers, purchasers and researchers about the quality of cancer prevention and treatment activities, including patient experience across healthcare delivery systems, and to identify opportunities to improve these activities in order to reduce death, disability, suffering, and economic burden caused by cancer."*

Rodger Winn, MD, Director of the NQF Cancer Project and Senior Associate with the Oncology Group, has developed a framework to enable community cancer program leaders to evaluate the quality of their oncology services. He has shared this framework with several community cancer programs to assist their leaders in initiating a QI program within their institution.

> "QI should include all professionals who provide cancer-related care (surgeons, radiation oncologists, medical oncologists, nurses, social workers, physical therapists, etc.), as well as consumers, and purchasers."

General Principles & Perspectives

The IOM defines quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." Regardless of which definition one embraces, the word's connotation differs. Physicians focus on the technical aspects of care. Consumers focus on health status, functional status, and access to care. While purchasers focus on employee satisfaction, time out of work, and health care costs. So, a key factor for leaders who contemplate organizing a cancer quality agenda is selecting which aspects of quality care their programs will measure.

In developing community hospital QI programs, it is useful to base any local program on seven (7) general principles.

• **Purpose.** The QI program's major goal is to improve the quality of services, patient experience, and outcomes, in order to reduce death, disability, suffering and the economic burden caused by cancer.

• **Local Base.** Improvement measures, as contrasted with merely data collection and reporting, are most useful when constructed for use at the local level. This involves obtaining political support, as well as financial resources to implement improvement measures.

• **Low-Hanging Fruit.** Leaders should identify areas where the most improvement can be achieved early, to set a stage for accomplishment.

• **Spectrum of Care.** It is important to consider all phases of the cancer trajectory when planning QI projects, from prevention to diagnosis and treatment, through end-of-life.

• **Inclusion.** QI should include all professionals who provide cancer-related care (surgeons, radiation oncologists, medical oncologists, nurses, social workers, physical therapists, etc.), as well as consumers, and purchasers. When involved in regional or national quality studies, QI leaders expect healthcare (managed care) plan representatives, relevant regulatory agencies, and quality improvement organizations to be included in the discussion.

• **Go Beyond Clinical Care:** Assess deficiencies in quality at the patient care, organizational, and community levels.

• **Quality Aims.** Focus on quality aims such as effectiveness, patient-centeredness, and timeliness.

Quality Attributes

The Institute of Medicine has identified six (6) attributes of quality healthcare. These are:

1. Effectiveness. Success in producing the desired or intended result.
2. Patient-centeredness. Emphasis on patient needs -- clinical and psychosocial.
3. Timeliness. Delivering care without undue delay.
4. Safety. Ensuring patients are protected from undue danger, risk, or injury.
5. Efficiency. Achieving the desired medical/clinical result without wasted expense or effort. And,
6. Equitability. Fair and equal care to all citizens.
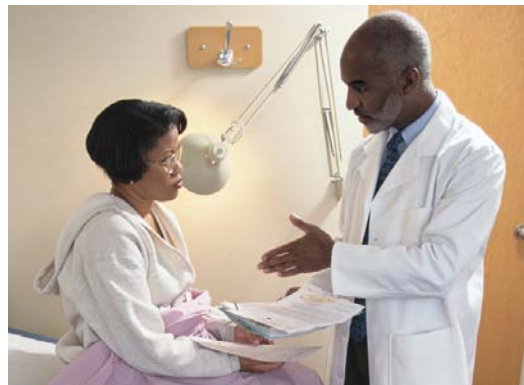
Exhibit I lists these attributes, along with a sample of potential Quality Care initiatives or topics that community cancer program leaders may find useful to investigate within their own programs. The Table offers myriad projects across the spectrum of cancer care services. Each institution would want to select topics of interest or importance to their clinicians, leaders, and/or patient populations.

Exhibit I: Potential Quality of Care Study Topics	
QUALITY ATTRIBUTE	**POTENTIAL CANCER CARE QUALITY STUDY TOPIC**
Effectiveness	• At the Patient Care Level – Prevention: Smoking Cessation efforts & results – Screening: Mammography volumes & results – Treatment: Process measures based on standards (e.g. NCCN guidelines). Focus on the four major sites (breast, lung, colon, prostate) + lymphoma – Palliative Care: Referral to hospice, pain management. • At the Organizational Level – Quality of pathology reporting, staging – Structural: Effectiveness & reach of supportive care services (e.g. post-mastectomy resources) – Referral policies & navigation resources to ensure patients access available services • At the Community Level – Availability of appropriate prevention services (e.g. smoking cessation); diagnostic services (e.g. mammography); palliative care services, etc.
Patient-Centeredness	• Quality of information – available & shared among clinicians; presented to patients • Support provided for patient decision-making • Coordination of care among modalities, sites of service, at natural "hand-off" points • Management of psychosocial distress • Management of treatment –related complications (e.g. post-radical prostatectomy incontinence, impotence) • Satisfaction of families with patient's EOL & bereavement services
Timeliness	• Measures of organizational quality: – Time from symptoms to diagnosis – Time from diagnosis to treatment – Timeliness of referrals • Measures of direct care: – Time from referral to hospice until death
Patient Safety	• Surgical Mortality – following lung resection for example • Febrile Neutropenia Mortality • Central Line Infections
Efficiency	• Over-Utilization of Testing • Length of Stay for major surgical procedures; infections
Equitability	• Assess vulnerable community populations to identify significant variations in care – Rural service areas – Lower socio-economic communities – Ethnic or racial minorities

Recommended Steps

Leaders can follow five (5) steps to set up a Quality Study in a community cancer program.

1. Select several appropriate topics for study. Base the selection on the study topic's importance to the program, to clinicians, and/or to patients.

The list of potential study topics in Table I may assist leaders with identifying appropriate study topics for their programs. Or, this list may provoke investigation of similar study topics more neatly tailored to the institution's key concerns or expressed clinician or patient interests.

In selecting appropriate study topics, ask:
• Have we selected a topic that addresses a key issue or area?
• Is there evidence of variability or a low level of performance in this area?
• Is there reasonable expectation that there are ways to improve deficiencies, should they be found?

Expect this step to take approximately six to nine (6–9) months to accomplish. Furthermore, expect to gather some initial data to determine which topic(s) the team will select for study.

> **Most often, measures of medical quality are process measures that answer the broad question, "Was the right thing done?"**

2. Acquire or develop appropriate study measures (quality standards, quality indicators).

Quality *indicators* are defined as an evidence-based performance standard or criterion against which conformity can be ascertained. The quality indicators chosen to measure any given study topic's data should link the care delivered to the outcomes sought. Quality *measures* are a mechanism to *quantify* the quality of a selected aspect of care by comparing it to a criterion. The quality indicators and measures serve as specifications from which an adherence ratio (a numerator and a denominator) can be calculated.

Four types of measures are most often used in assessing medical care quality – structure, process, outcomes, and patient experience measures. Most often, measures of medical quality are process measures that answer the broad question, "Was the right thing done?"

Most community programs will find it more efficient and timely to use existing quality standards or indicators. The National Comprehensive Cancer Network (NCCN) provides useful quality indicators on its website (www.nccn.org). And NCCN guidelines cover a wide spectrum of clinical/psychosocial services and site/stage-specific clinical interventions. Table II lists a number of institutions which offer various cancer quality measures, some formal, others less so.

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Exhibit II: Organizations Offering Cancer Quality Initiatives

ORGANIZATIONS WITH CANCER QUALITY INITIATIAVES
- **ACCC** – Standards for Oncology Programs
- **ASCO:** National Initiative on Cancer Care Quality –
  Breast & Colon measures piloted in 5 cities
  Quality Oncology Practice Initiative
- **ACoS** Commission on Cancer
- **College of American Pathologists**
- **Kaiser Permanente** - in collaboration with The **Institute for Healthcare Improvement** & **NCQA**
- **NCCN** Outcomes Project
- **National Hospice & Palliative Care Organization –** National Consensus Project
- **National Quality Forum**
- **State Cancer Plans** – Georgia

What is vital for success is that program leaders select measures that have buy-in from the participating stakeholders.

Regardless of the quality indicators' origin, it is important that the measure is designed and "vetted" to ensure that it will accomplish its aim of accurately assessing quality in a way that is meaningful. So, be certain that the selected quality indicators meet the following criteria:
- Importance: Does the indicator address a key leverage point?
- Usability: Will intended audiences be able to understand the results, and will they find them useful for decision-making?
- Feasibility: Simply, how hard will it be to collect the data? Are the data points part of the normal flow of recorded clinical care? Does the responsible data collector have access to the data? Is the process HIPAA adherent?
- Scientific Acceptability: Is the measure soundly constructed – is it precise, reliably, risk-adjusted, adaptable and scientifically valid?

It is at the point of selecting reference criteria that many community programs falter. There are a number of "measurement assessment tensions" that appear at this stage of a community hospital private-practice QI program. And leaders will no doubt encounter difference perceptions and opinions among stakeholders about what represents important quality measurement. What is vital for success is that program leaders select measures that have buy-in from the participating stakeholders.

As an example, Exhibit III shows the 5 quality measures that were recommended for endorsement by the National Quality Forum's Cancer Steering Committee.

Exhibit III: National Quality Forum Breast Cancer Measure Recommendations

NQF BREAST CANCER PROPOSED MEASURES
Recommended by the Steering Committee
1. Needle biopsy to establish diagnosis, prior to surgery – ACoS
2. Radiation therapy following breast-conserving surgery – ACoS
3. Adjuvant combination chemotherapy in node-negative patients – ACoS
4. Lymph node sampling (ALND & SNB) – IMHC

3. Pilot test the institution's ability to use the selected measures to gather relevant data in a timely, cost-effective manner, using the personnel and money resources available to them.

Step 3 is a practical one designed to ensure the metrics and data collection process meets two criteria listed earlier – usability and feasibility of collection, given the institution's resources. In a cancer advocacy workshop, Jon Kerner[1], PhD, Deputy Director Research Dissemination & Diffusion, NCI, emphasized five (5) keys to data use. This presentation included information developed by Magda Peck, ScD from the University of Nebraska Medical Center. These professionals urged leaders to:
1. Focus on data *use* – data alone are just interesting.
2. Learn and act as a *team* – individuals have limited impact.
3. Assure data use *competencies* reside within their "team".
4. Secure necessary and sufficient *institutional* and community support for collaborative data use. And,
5. Align the *political will* necessary to support evidence-based change.

During the pilot test, leaders have an opportunity to ensure the team has the necessary competencies to gather and use collected data, as well as to ensure sufficient local buy-in supports these specific QI efforts. Expect the team to devote three to six (3–6) months to acquire appropriate measures and to conduct a pilot test of the institution's data collection capabilities.

4. Set Up a One Year Cancer Quality Program

In developing a Cancer Quality Program aim to study no more than 1–3 measures for each quality attribute (effectiveness, patient centeredness, timeliness, patient safety, efficiency, and equitability). This represents an ambitious work scope for a community program.

The College of Surgeons requires approved programs to conduct several quality studies each year, based on the program's approval level. Developing a long-term Cancer Quality Program will enable the program to satisfy this ACoS require-

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ment, and to extend this threshold requirement beyond the minimum approval point.

5. Report Quality Study Results to Achieve Improvement

Cancer programs have collected useful data for decades through their cancer registries. In many institutions, little of this data historically escapes the data collection phase, except in past years to appear in the program's Annual Report. Program leaders will find greater success in limiting the *scope* of their quality studies and concentrating on *using* the collected data to persuade key personnel to acknowledge existing variations between an accepted quality criterion and their program's experience (as quantified by the data); and to motivate caregivers to take collaborative action toward improvement. ■
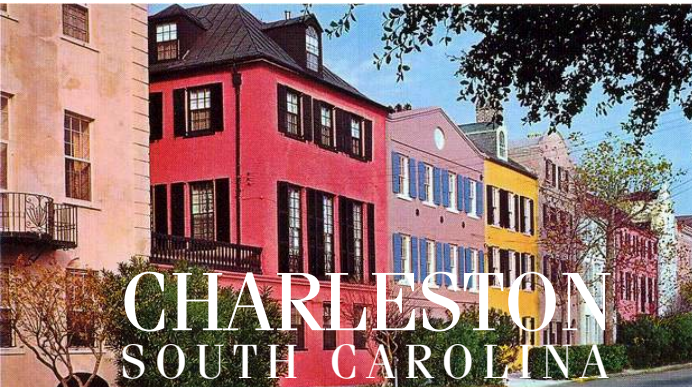
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