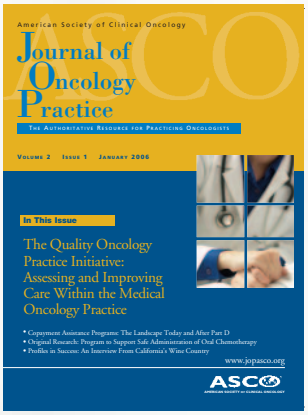


# The Quality Oncology Practice Initiative

## Assessing and Improving Care Within the Medical Oncology Practice

*By Kristen McNiff, MPH*

*My practice has been conducting internal quality improvement for 10 years, but QOPI [the Quality Oncology Practice Initiative] provides advantages well beyond what we were able to accomplish ourselves. To me, the benefits of QOPI are three-fold: (1) The measures are vetted by practicing oncologists and health services researchers. (2) We receive data for comparison, to use to judge our performance. When we can see that we are scoring below the mean on a measure, it forces us to focus on the issue, and to act. (3) QOPI provides a structure and timeline for quality improvement. You can't use the excuse of being too busy for improvement today.*

*-QOPI Pilot Physician*

### Cancer Care Quality

The landmark 1999 Institute of Medicine (IOM) report "Ensuring Quality Cancer" raised concerns about the quality of care provided to cancer patients and the lack of systems to assess quality.[1] Since then, several publications have shown variation in the quality of care provided to cancer patients.[2-4]

In response to the IOM report, ASCO initiated the National Initiative on Cancer Care Quality (NICCQ), a retrospective cohort study of incident breast and colorectal cancer patients in five metropolitan areas.[5] This study found the overall quality of breast and colorectal cancer care to be high, although there was substantial variation for many measures.[6] NICCQ researchers also documented the many challenges of implementing a quality-monitoring system on a national scale.

These studies provide crucial data regarding the quality of cancer care and suggest areas in need of systemic improvement. The direct applicability of the data to the individual medical oncologist or oncology practice, however, is limited. Systems designed for physician and/or practice-level quality assessment are crucial for improvement. Quality-improvement systems also can offer the benefits of rapid implementation, low cost, and strong physician engagement.

### Physician Participation in Quality Improvement

Most physicians have few opportunities to access data specific to their practices. Audet et al[7] recently published results of a national physician study regarding the use of quality-improvement methodology in practice. Only one third of physicians surveyed received any data about the quality of care they provide; for those who did receive data, the most common type was from patient surveys. Physicians practicing in large practices (50 physicians or more) were significantly more likely than solo practitioners to receive quality data (47% *v* 21%), and specialists were significantly less likely than primary care physicians to receive quality data (26% *v* 49%).

Enhancing access to quality data may be especially important in light of a 2005 systematic literature review by Choudhry et al,[8] which indicates that physician knowledge and performance decline over time. Thus, quality-assessment and -improvement interventions may become increasingly important with increasing years in practice.

Audet et al note that physicians require advances in infrastructure, and quality-improvement knowledge and skills, to accelerate their adoption of quality-improvement activities.[7] Unfortunately, there have been limited efforts and tools available to provide this base needed to professionalize quality-improvement work.

### Providing Improvement Tools for Oncologists

Noting the dearth of options for self-assessment within his oncology community, Joseph Simone, MD, proposed that ASCO act quickly to fill the void. He envisioned an oncologist-developed and -led quality-improvement initiative that would provide the tools and resources needed for measurement, peer comparison, and improvement. Working through ASCO, Simone enlisted a small network of oncologists to develop a quality-improvement methodology, measures of quality care within the control of the medical oncologist, and a system for data entry and reporting. The work of this group of oncologists became the Quality Oncology Practice Initiative (QOPI). The initial development of QOPI was described by Neuss et al.[9]

### The QOPI Pilot

The QOPI pilot was launched in 2002, with the assistance of ASCO's Health Services Committee. A set of key principles

guided the development and growth of the pilot: (1) create a feasible process that respects the resources and constraints of a busy practice; (2) select meaningful variables for data collection and analysis, so that time and costs of abstraction are limited and practices receive actionable feedback; (3) respect data confidentiality, by collecting only anonymized patient data and by releasing practice-specific data to only that practice; and (4) ensure that oncologists retain control of the QOPI's development and growth.

Oncology practices were invited to join the QOPI pilot in three phases, with recruitment occurring between 2002 and 2004. Care was taken to include practices that varied in size and location.

## QOPI Pilot Measures

The QOPI physicians discovered a paucity of quality measures related to oncology treatment. The NICCQ study offered the only known, validated measures, and those that were directly applicable to outpatient medical oncology were adapted for use in QOPI.

To expand the measure set, the QOPI pilot physicians looked to ASCO practice guidelines and other standards of care. Guidelines that provided an appropriate level of detail for measurement and described processes of care within the control of the medical oncologist were developed into measures.

Finally, the QOPI physicians developed consensus measures for elements that they agreed were reasonable and important in providing quality cancer care. For example, one QOPI measure assesses whether staging was documented within 1 month of a patient's first office visit, and another assesses whether a chemotherapy flow sheet is in the patient's chart.

QOPI measures focus on processes of care. The numerous factors that contribute to outcomes of care, the span of time needed to collect outcomes data, and the difficulties in case adjustment were some of the arguments against the use of outcomes measures. Process measures, on the other hand, are especially useful for quality improvement because they provide actionable feedback about specific components of care.[10] Also, for ease of data abstraction and analysis, the QOPI physicians used binary responses (yes/no) to advanced measures whenever possible.

## Pilot Methodology

The QOPI methodology reflects a balance of feasibility and sustainability with meaningful, valid data. QOPI data are collected through retrospective chart reviews conducted twice per year. Data collection occurs during a defined time period, during which practices are given several weeks to pull and abstract charts.

### Unit of Analysis

The default unit of analysis for QOPI is the practice setting. Practices with multiple offices may choose to collect data at multiple sites. Also, practices are offered the option of collecting physician-level data, although abstracting a sufficient number of charts per physician is not practical for many groups.

### Abstractors

Data abstractors in the pilot range from administrative staff to physicians (who were instructed not to abstract their own charts). In most practices, data are abstracted by research nurses; however, efforts are taken to define the QOPI measures clearly enough that administrative staff can assist in abstraction. Training is offered for each abstracter before their participation in QOPI, and assistance is available from ASCO staff as needed.

### Chart Selection

To select charts for abstraction, practices are instructed to generate a list of patient visits for the preceding 6 months (back to the date of the previous QOPI data collection). Proceeding sequentially backwards along this list, charts for a total of 85 patients meeting basic criteria (e.g., an invasive cancer diagnosed within the last 5 years) are selected. Because QOPI includes measures specific to breast and colorectal cancers and lymphoma, minimum requirements for the number of charts abstracted are provided for those diagnoses. Also, because QOPI includes measures of end-of-life care, practices pull and abstract charts of patients who died within the previous 6 months.

### Data Entry

To enter data, abstracters log in to a secure online data entry and reporting system developed and hosted by ASCO. Only anonymized data are submitted; practices maintain a key to link the QOPI unique identifier with patient identification information.

The QOPI data entry system leads the abstracter through the process of entering chart data. As the abstracter enters the answer to an initial question, additional items open depending on the response provided. For example, if the abstracter responds "yes" to the question, "Is this patient dead as a consequence of cancer?" an additional question will open automatically: "Is there a practitioner's notation documenting the patient's physical pain or lack thereof on his/her last visit to the office before death?"

Because only relevant questions are visible during abstraction, the abstracter must complete all fields before the chart can be submitted. The data entry system provides a user-friendly interface for the abstracters, and helps ensure data integrity by enforcing the intended skip patterns and eliminating the problem of missing data.

## Analysis, Feedback, and Improvement

QOPI data analysis is programmed into ASCO's online data collection and reporting system, allowing data reports to be generated dynamically on the close of data collection. The QOPI quality reports provide tables and graphs for each QOPI

quality measure, comparing practice-specific data (and office and physician-specific data, if collected) with aggregate data. Because practices participate in multiple rounds, data over time are presented to allow for monitoring of improvement.

Responses from the pilot physicians regarding the usefulness of QOPI data have been overwhelmingly positive. QOPI participants have shared their reports with other clinicians within their practices, both informally and through quality-improvement meetings. For some, QOPI reports have highlighted the need for interventions or in-depth reviews of specific processes of care. QOPI practices have changed office policies or procedures, and instituted new clinical tools, to promote improvements in care.

## Expanding QOPI to ASCO Members

The QOPI pilot group completed the last round of data collection in the pilot phase in September 2005. In total, 23 practices participated in the pilot and more than 6,300 charts were abstracted. The pilot helped hone the QOPI measures and methodology, and resulted in a feasible system that provides meaningful data for quality improvement.[2]

QOPI will remain an iterative process, and participants will be encouraged to provide feedback and suggestions. The system and reports will be enhanced continually to meet the needs of the QOPI participants, and provide the most useful data possible.

The QOPI measures will be updated as new treatments or quality standards evolve. Ongoing attention will be paid to balancing methodologic rigor with feasibility for implementation within diverse oncology practices.

## Criteria for QOPI Participation

To participate in QOPI, registrants are asked to commit to a minimum of two rounds of data collection, although a longer-term commitment is suggested for ongoing quality improvement. Practices also must cover the time for their staff to be trained via an online program, and to pull and abstract charts twice a year. The pilot practices reported an average abstraction time of 20 minutes per chart; for most, collecting data from 85 charts took two employees about one day.

The primary physician contact within each QOPI practice is asked to commit to educate the other clinicians in his/her practice about QOPI, and to widely disseminate the data reports. Also, QOPI practices must agree to allow independent audits of a small sample of the charts abstracted. A full listing of the criteria for QOPI participation can be found at www.asco.org/QOPI.

### QOPI Open to All ASCO Members in 2006

Members who seek a way to assess the care they provide, compare with their peers, and monitor improvements are invited to join the pilot practices in collecting data in March 2006. Registration will remain open for practices that join after that date, and data collection will occur every 6 months.

## QOPI and American Board of Internal Medicine Maintenance of Certification

An additional benefit of QOPI participation will be apparent in 2006. This year, the American Board of Internal Medicine (ABIM) is taking an active step to push quality improvement activities within medical practices. As part of an overall enhancement of the maintenance of certification program, the ABIM has added a 20-point requirement for physicians to evaluate their performance in practice and implement an improvement plan. (For more information, go to www.abim.org.)

QOPI is the only oncology-specific program that has been approved by the ABIM to meet the new practice performance requirements for maintenance of certification. After the first of two requisite QOPI rounds, oncologists seeking recertification can select measures for improvement and submit basic information regarding their planned improvement efforts via an ABIM Web page. Following the second QOPI data collection, oncologists can report to the ABIM regarding their experience in implementing an intervention and success in achieving improvement. This process will earn the oncologist the 20 required points.

## Conclusion

The pilot has demonstrated that QOPI is a feasible and scalable program to measure the quality of cancer in the medical oncology office. ASCO members are invited to join the 23 QOPI pilot practices in realizing the advantages of an oncologist-led, systematic, and structured quality-improvement program. QOPI participants benefit from receiving meaningful data about the quality of care they provide, comparing their data with their peers, and understanding of practice patterns over time. In a time when commitment to quality assessment and improvement is becoming increasingly important, and more often required, QOPI provides a valuable resource for ASCO members.

*Kristen McNiff, MPH, is ASCO's assistant director, Cancer Care Quality, in the Department of Cancer Policy and Clinical Affairs.*

## References

**1.** Hewitt M, Simone JV: Ensuring Quality Cancer Care. Washington, DC, National Academy Press, 1999

**2.** Earle CC, Burstein HJ, Winer EP, et al: Quality of non-breast cancer health maintenance among elderly breast cancer survivors. J Clin Oncol 21:1447-1451, 2003

**3.** McGlynn EA, Asch SM, Adams J, et al: The quality of health care delivered to adults in the United States. N Engl J Med 348:2635-2645, 2003

**4.** White J, Morrow M, Moughan J, et al: Compliance with breast-conservation standards for patients with early-stage breast carcinoma. Cancer 97:893-904, 2003

**5.** Schneider EC, Epstein AM, Malin JL, et al: Developing a system to assess the quality of cancer care: ASCO's national initiative on cancer care quality. J Clin Oncol 15: 2985-2991, 2004

**6.** Khan K: National initiative on cancer care quality: Next steps. Presented at the 41st Annual Meeting of the American Society of Clinical Oncology, Orlando, FL, May 13-17, 2005

**7.** Audet AM, Doty MM, Shamasdin J, et al. Measure, learn and improve: Physicians' involvement in quality improvement. Health Affairs 24:843-853, 2005

**8.** Choudhry NK, Fletcher RH, Soumerai SB: Systematic review: The relationship between clinical experience and quality health care. Ann Intern Med 142:260-273, 2005

**9.** Neuss MN, Desch CE, McNiff KK, et al: A process for measuring the quality of cancer care: The quality oncology practice initiative. J Clin Oncol 23:6233-6239, 2005

**10.** Rubin HR, Pronovost P, Diette GB: The advantages and disadvantages of process-based measures of health care quality. Int J Qual Health Care 13:469-474, 2001

## Seeds and Soil of the Quality Oncology Practice Initiative
### By Joseph Simone, MD

*Joseph Simone, MD*

Quality-improvement activities are not new to medicine, and the Quality Oncology Practice Initiative (QOPI) certainly is not the first to focus on the interface of the patient and medical care provider. However, medicine is a profession to which our society grants wide latitude in deciding on the type or quality of care offered to the patient. Aside from assuring that one has successfully completed a medical education and training, passed certain examinations and, to varying degrees, participated in postgraduate education, the physician is largely free of constraints or regular oversight of the quality of his practice. Attempts to impose quality standards from above—by hospitals, practice leaders—often fail because of a lack of engagement of physicians and of practical tools for reward or punishment. Recognition of this landscape of modern medicine is the first pillar of QOPI: *Engage physicians in the process from day 1.*

Although I initially trained in internal medicine, my career-long experience in pediatric hematology-oncology has shaped my view of the necessary features of high-quality cancer care. Curiosity, inquiry, self-examination, and peer review are embedded features of the vast majority of practices of pediatric oncology. This is a result of several features of such practices; here are two. The longitudinal primary role of the pediatric oncologist from diagnosis onward allows him or her to coordinate the care of subspecialists and be the center of communication for the family. The large proportion of patients enrolled in clinical trials creates a culture of consistency, checks and balances, and multidisciplinary care that pervades all care, whether administered by protocol or not. Pediatric oncology is largely a self-policing, self-examining specialty; it has a *culture of self-examination and improvement.*

The third basis for shaping QOPI came from experience as a health science leader from division head to CEO. A key lesson was to hire the best people available for any task, people likely to be better than me, and give them room to run. So all practices join and participate in QOPI voluntarily; the practices and leaders receive no compensation. Through a combination of instinct and luck, the representatives of the initial practices asked to participate in QOPI are smart, committed, and engaged. They have high ethical standards and are very knowledgeable about the practice of oncology today. They, along with the staff at ASCO, are responsible for QOPI's early success; so *choose those who are willing to work with others to examine, question, and compare how they practice.*

QOPI is at an early stage of its development. The foundation has been laid with 23 practices from around the country. The ASCO Information Services department has developed an excellent online data entry system. But its plans go far beyond collecting data on quality measures. The next steps are to open QOPI to any willing practice (spring 2006), provide online tools for improving care (useful forms, standard orders for pain control, and other resources), develop statistically sound sampling techniques, establish several sets of quality measures, build online educational programs for data abstracters, and establish a method for audit samples to ensure that the data are abstracted correctly.

Although we work at developing rewards for participation in QOPI (e.g., credit toward recertification by the ABIM and possible selection as preferred providers by payers) in the end, the best reward is the satisfaction that one is doing something to improve the care for one's patients, that one is doing the right thing.

## The Quality Oncology Practice Initiative: Frequently Asked Questions

***Q: What is the Quality Oncology Practice Initiative?***

A: The Quality Oncology Practice Initiative (QOPI) is a quality improvement program based on retrospective chart reviews conducted within oncology practices. QOPI includes a set of oncology quality measures, a specified chart selection strategy, a secure system for data entry, automated data analysis and reporting, and a network of resources for improvement.

***Q: What are the QOPI quality measures?***

A: Practicing oncologists and quality experts developed and update the QOPI measures, which are

- derived from clinical guidelines or published standards
- adapted from the National Initiative on Cancer Care Quality (NICCQ)
- consensus based and clinically relevant

Areas addressed by the current QOPI measures include

- end-of-life care
- appropriate chart documentation (e.g., staging, pathology report, chemotherapy consent)
- pain assessment and control
- antiemetic administration
- erythroid growth factor administration
- hormonal therapy administration (breast cancer patients)
- adjuvant chemotherapy administration (breast and colorectal cancer patients)
- granulocyte growth factor administration (lymphoma patients)

***Q: How are data collected for QOPI?***

A: Staff members at participating practices conduct retrospective chart reviews twice each year. Anonymized data are submitted via a secure ASCO Web site, which prompts the data abstracter through the chart abstraction process.

***Q: What kind of data will QOPI practices receive?***

A: Following every data collection period, the QOPI system generates a report for each practice. The report includes tabular and graphic data for each measure that compares the practices' own data with aggregate results, and shows changes in results over time.

***Q: Will practice data be publicly reported?***

A: Practice-specific data are released only to that practice; otherwise, these data are kept strictly confidential. ASCO will provide a data use agreement to practices joining QOPI.

***Q: Will resources for improvement be provided?***

A: An online forum for information exchange, and an online library of clinical tools and other improvement resources, are in development and will be available to QOPI participants.

***Q: How much time does it take to participate in QOPI?***

A: The QOPI pilot study revealed that it takes an average of 20 minutes to abstract each patient chart.

***Q: How much does it cost to join QOPI?***

A: Participating in QOPI is free to ASCO members.

***Q: How do I join QOPI?***

A: To join QOPI, go to www.asco.org/QOPI. More information is provided on this site, as well as a link to an online registration tool.

***Q: What is required of practices joining QOPI?***

A: A complete list of requirements for QOPI participation is available at www.asco.org/QOPI. These include

- participating in a minimum of two rounds of data collection
- covering time for practice staff to select charts and conduct reviews
- following the QOPI methodology when selecting and abstracting the charts
- sharing QOPI results with physicians in your practice

***Q: How can I get more information?***

A: For more information about QOPI, send an e-mail to qopi@asco.org.