

# Improving Quality of Cancer Care by Participating in Quality Oncology Practice Initiative Certification Program

Abdul Rahman Jazieh, MD, MPH<sup>1</sup>; Nafisa Abdelhafiez, MD<sup>1</sup>; Nashmia Al Mutairi, MD<sup>1</sup>; Ahmed Hashem, MD<sup>1</sup>; Mohammad Alkaiyat, BSN<sup>1</sup>; Mona Al Shami, BSN<sup>1</sup>; and Mohammad Jahanzeb, MD<sup>2</sup>

**PURPOSE** ASCO developed the Quality Oncology Practice Initiative (QOPI) to ensure patient safety in oncology outpatient services. We evaluated the impact of participation in QOPI certification on patient care at our institution.

**METHODS** To participate in QOPI, we created a multidisciplinary team, and we chose the required modules and began QOPI participation per program requirement. In the initial round, we scored lower than the required score of 75% to be eligible for QOPI certification. We then implemented multiple measures and interventions, and we conducted multiple Plan, Do, Study, Act cycles (PSDA) cycles to achieve our goal.

**RESULTS** Our score in the initial round was 68%; in the second round, our score remained low at 65%; in the third round, we exceeded the target score by achieving 93%. We completed the certification process with a site visit. In October 2018, we became the first QOPI-certified center in the Middle East and Asia.

**CONCLUSION** We learned many lessons during our journey toward QOPI certification. Essential elements of success included timely assembly of the right multidisciplinary team and clear communication between team members within the institution and with the ASCO QOPI team.

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## INTRODUCTION

Cancer treatment is evolving rapidly, with a new paradigm aiming to transform cancer from being largely fatal to a generally chronic disease.<sup>1</sup> To achieve this goal beyond research, all aspects of cancer care should be delivered at the highest standard through harmonized multidisciplinary approaches to achieve the best possible outcomes. Integration of multiple clinical and supportive services will be required, such as social services, emotional support, and patient education services, among others. Involvement of these services should be coordinated, sequenced, and prioritized according to the patient's needs to achieve high compliance and best outcomes.

Documentation of the whole process of cancer care for each patient is critical to assess its quality. The electronic health record (EHR) system facilitates staff work by making it easy to retrieve patient information promptly; however, having an EHR system does not guarantee efficient retrieval of optimal documentation of general assessment, symptoms, and treatment plan, which is the reason for discrepancy between what is really provided to patients

and what is documented in their records. This is partially related to the complexity of the system, lack of entry of key data into retrievable fields, scanning of documents that appear as pictures to the software rather than intelligible language, staff shortages, an increase in the number of patients with cancer whose care is complex and labor intensive, time shortages, and lack of a standardized process for documentation.

Improving quality of medical practice has been pursued ever since Hippocrates' time.<sup>2</sup> The global movement toward improving the quality of work provided by health care workers started at the end of the last century and has been enhanced during the 21st century.<sup>3</sup> The Joint Commission developed the first quality assurance standards in 1980, which was a problem-focused approach to measure quality, and in 1994, it introduced quality improvement (QI) methodology to improve organizational performance before the actual occurrence of problems. This new QI concept shifted attention from performance of individuals to performance of the whole organization, focusing on its systems and processes. Nowadays, there are specifically designed certification programs used as tools for QI. These institutional certification

Author affiliations and support information (if applicable) appear at the end of this article.

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## CONTEXT

### Key Objective

Does participation in the ASCO Quality Oncology Practice Initiative (QOPI) lead to sustainable improvement in the quality of cancer care in oncology practices?

### Knowledge Generated

Our practice participation in the QOPI certification program (QCP) did improve our compliance with standards, with repeated rapid cycles of improvement and involvement of a multidisciplinary team and clear communication among all stakeholders.

This improvement was sustained by integrating changes into the work process and electronic health records systems.

### Relevance

Oncology practices interested in improving safety and quality of care through the QCP could enhance their performance by applying lessons learned, such as engaging leadership, using health care improvement sciences (quality improvement methodology), coordinating care, and enhancing QOPI team performance.

programs are validating the processes of provision of safe and comprehensive cancer care, augmenting the job of health care providers, and highlighting the scopes of care that need to be improved.

After initial testing phases, in 2010, ASCO launched the Quality Oncology Practice Initiative (QOPI), which is a voluntary certification program developed by expert oncologists, professional groups, and quality experts to help oncologists evaluate and improve their practices by using retrospective methodology at the outpatient level.<sup>1,4-6</sup> Practically, after extracting the required information (required QOPI measures) from patient records and uploading it to the QOPI dashboard, results are given as measurable data for the performance of the practice, benchmarking it against QOPI standards and comparing it with different participating practices. The results will tell if the institution meets the required quality and safety standards and where it ranks compared with its peers in each measure. Once the practice succeeds and achieves the required score, it applies for certification and undergoes an on-site visit by a team of oncology professionals from ASCO. Certification is awarded when a practice meets the QOPI certification program (QCP) standards, which are separate and distinct from QOPI measures and assess the quality and safety of delivery of therapeutics. Certification is awarded to a practice, not to the individual oncologists within the practice.

The QCP was introduced to us by a visiting professor (M.J.) in fall 2016. Although it was only 15 days from closure of the current round, we felt that our participation in the program would give us real-world data for our program and experience on how to prepare for future involvement. We formulated a multidisciplinary team of physicians, nurses, and research coordinators. We managed to submit the required data through the QOPI portal on time. Our score was 68%, which did not meet the required cutoff of 75% to become a candidate for an on-site visit/next step. Our main deficiencies were in documentation of symptoms, creation of

chemotherapy treatment plans, summarization, and documentation of consent. In this report, we describe our journey to achieve QOPI certification and discuss lessons learned.

## METHODS

Our oncology center is part of the King Abdulaziz Medical City, which is a 1,500-bed tertiary hospital providing services to patients from all over Saudi Arabia. Our center provides comprehensive cancer care services, supported by advanced technology in laboratories, radiology, and qualified manpower. The hospital has local and international accreditation certificates (Joint Commission International), and the pathology laboratory is College of American Pathologists accredited. We offer all types of cancer treatments, including diagnostic services, surgery, radiation therapy, systemic therapy, physiotherapy, and palliative care.

After the initial trial round, we decided to participate in the next round in spring 2017, with 2 main goals: first, to assess the practice through comprehensive evaluation, and second, to involve more staff in the process to disseminate knowledge and experience. We expanded the assigned team to involve 2 members from each section of the oncology department (medical oncology, hematology, palliative care, and gynecologic oncology). The team consisted of a consultant physician (team leader), quality specialists, junior oncologists, a research coordinator, and a data manager, with the chairman of the department overseeing the effort. We planned to go forward with round 2 with the following modules: core module, end-of-life care, symptoms and toxicity, Hodgkin lymphoma, and gynecologic malignancies. A certification action plan was drafted early in 2017 after reviewing our first-round results and identifying the areas in which we needed to improve. We decided to test our intervention and assess the improvement of the indicators through rapid change cycles of Plan, Do, Study, Act (PDSA).

## RESULTS

### PDSA Cycle 1

The first PDSA cycle was the QOPI participation round in spring 2017, with the aim of achieving a 75% score to be eligible for QOPI certification (Table 1).

**Plan.** We planned to reformulate our QOPI team, making it multidisciplinary and representative of all oncology sections and involving more physicians in the team for practice change; design an action plan; and participate in more modules to measure the performance of different sections in our department.

**Do.** The team designed an action plan, held regular meetings on a weekly basis to enhance the function of the team, involved more junior physicians who were familiar with the patient care process, and excused physicians involved in the QOPI round from clinical duties to do complete project-related tasks. We participated in the spring 2017 QOPI round with a total of 7 modules. We assigned 2 physicians to each module to abstract data and make entries into the QOPI dashboard.

**Study.** Our spring 2017 QOPI score was 64.77%. A detailed analysis session for each module was completed with QOPI team, and feedback was given by physicians involved in EHR abstraction process. The 2 main concerns were difficulty in finding the required information in our EHR system and lack of a standardized documentation process.

**Act.** We conducted an extensive educational plan for physicians about documentation in the EHR system and about QOPI measures. We modified some of EHR functions based on QOPI measures and applied for the fall 2017 QOPI round.

### PDSA Cycle 2

Our second PDSA cycle was the fall 2017 QOPI participation round, with the aim of improving our practice performance score to achieve 75%.

**Plan.** We applied for the fall 2017 QOPI round with the QCP pathway. We created new documentation forms for outpatients based on QOPI measures and the findings of the previous round, and we conducted an EHR

system orientation and refreshment session for all physicians involved in QOPI. An extensive education plan about documentation in the EHR and processing of data abstraction was implemented. We communicated with the ASCO QOPI team for more clarification and education about the process.

**Do.** We conducted hands-on education sessions about the EHR system to facilitate the data extraction process, with a focus on the reported low-score measures. We educated team members about abstraction of required information from the EHR and the most commonly faced challenges during data entry into the QOPI dashboard. We implemented a double-check process by preventing a file from being submitted before being reviewed by another team member. We generated new documentation forms for first outpatient clinic and follow-up visits.

**Study.** Our QOPI spring 2017 score was 93.23%, making the practice eligible for QOPI certification. The team reviewed the results for each measure and planned to improve the score further.

**Act.** We applied for international QOPI certification and held a teleconference meeting with the ASCO team to finalize the on-site visit and plan for the document review process.

### PDSA Cycle 3

The third PDSA cycle for QOPI certification focused on the site visit in 2018, with the aim of passing the requirements and attaining certification.

**Plan.** We uploaded new documentation forms into the EHR system to address all QOPI measures and completed all logistic requirements for the QOPI team on-site visit. We developed a comprehensive action plan to meet QOPI certification standards and submit required documents to the ASCO QOPI team. Tasks and roles were assigned to QOPI team members per specialty to submit the required documents within the correct timeframe.

**Do.** The new documentation forms were uploaded into the EHR system. QOPI certification standards were entered into an Excel sheet and classified into categories of met and unmet standards; documents with unmet standards were

**TABLE 1.** Compliance With Measures in Different Rounds

Measure: Documentation	Fall 2016 (%)	Spring 2017 (%)	Fall 2017 (%)
Disease stage	77.5	NA	91.76
Performance status assessed at every clinic visit	NA	41.18	100
Pain assessed by second visit	65	54.09	100
Emotional well being	5	16.35	68.60
Chemotherapy plan	NA	83.2	97.37
Chemotherapy intent	NA	68.80	97.37
Overall score	68	64	93

Abbreviation: NA, not applicable.

distributed to oncology sections. A hard-copy file with all required policies was prepared as part of the certification requirement. We also conducted mock surveys and visited areas that the surveyors were planning to visit (eg, pharmacy, chemotherapy suites, and outpatients clinics).

Two oncology professional surveyors from the US QOPI team carried out the on-site visit (1 oncologist and 1 oncology nurse). Staff at the chemotherapy suite and pharmacy were interviewed about the process of chemotherapy ordering, preparation, and administration. Surveyors conducted a document review session to review all required documents (policies, clinical guidelines, and staff qualifications). The surveyors then randomly selected and reviewed the medical records of a few patients. The surveyors interviewed 2 patients and inquired about issues related to standards. At the end of the day, the surveyors delivered their exit report to all department staff and hospital leadership and highlighted selected relevant findings.

**Act.** A correction plan for the unmet standards was submitted to the ASCO QOPI team followed by implementation

of the planned interventions that led to satisfying all the required QOPI standards, resulting in our certification in October of 2018.

**Sustainability.** To sustain our improvements for the future, we integrated the changes into our work processes, especially those regarding documentation in the EHR, making the completion of requirements mandatory. We maintained our QOPI team to monitor performance, prepare for future participation cycles, and incorporate new requirements into the system to ensure we are compliant with the latest QOPI standards. In addition, we included training on these standards in our employee orientation programs.

**DISCUSSION**

Being the first center to attain QOPI certification in the Middle East and Asia was a paramount achievement for our institution, but most importantly, it was a major step forward in our journey to provide comprehensive and high-quality cancer care with maximum use of available resources. Although our practice has participated in various external

**TABLE 2.** Lessons Learned From QOPI Certification Program

What Should Be Done?	How Do We Do It?
Engaging leadership	Educate leader about certification significance for patient care and as testimony of excellence in care
	Explain expectation and requirements
	Arrange to exit report meeting
Using health care improvement sciences (quality improvement methodology)	Root cause analysis
	Process mapping
	Rapid cycles of improvement (PDSA)
Coordinating care	Involving MDT in the process
	Ensure proper communication
	Ensure proper documentation
	Proper management of adverse events
	Provide timely intervention
Enhancing QOPI team performance	Include all relevant disciplines
	Involve as many staff as possible
	Pair team members for double checking
	Train and educate
	Clearly delineate roles and required tasks
Improving staff compliance	Conduct education session for all staff about QOPI standards and requirements
	Educate and conduct orientation about hospital records system capabilities and components
Improving documentation	Create new forms that cover standards and make them mandatory
	Educate staff and share with them performance scores and deficiencies
	Maximize use of EHR system
Improving communications	Improve among all stakeholders (QOPI team members, staff members, leaders)
	Improve between practice QOPI team and ASCO QOPI team

Abbreviations: EHR, electronic health record; MDT, multidisciplinary team; PDSA, Plan, Do, Study, Act; QOPI, Quality Oncology Practice Initiative.

accreditations, both national (Saudi Board for Accreditation of Healthcare Institutions) and international (Joint Commission International), we believe QOPI is a more suitable program for accrediting oncology outpatient practices. Because QOPI was developed by practicing oncology professionals, it focuses on standards relevant to the practice of oncology that have great impact on patient safety and outcomes. Because QOPI is specialty focused, both by design and by its process of accreditation conducted by expert oncology professionals as surveyors, the whole endeavor is more impactful.<sup>6</sup>

Many lessons learned from this experience will be used in our future work to maintain the benefits gained (Table 2). One of these lessons is the importance of involving a functioning multidisciplinary team at the right time to attain successful outcomes. The team was working in congruence, and this spirit facilitated dissemination of knowledge, not only among team members, but also to all the oncology staff. Communication with the ASCO team guided our team to follow the best approaches to achieve results that improve performance.

The experience enabled us to look in depth at our practice to identify areas that needed improvement. We did modify physicians' notes to capture certain required elements, such as detailed pain assessment and management, emotional and psychological assessment, and smoking cessation information. Including treatment plans and documentations of consent in the new notes also substantially enhanced our compliance with QOPI standards.

Proper documentation is an essential component of health care provision, and it is reflected in the quality of care provided to patients with cancer at all stages of their

treatment process. The introduction of an EHR system partially facilitates the process by assisting health care providers to improve documentation, minimize errors, facilitate communication, and maintain large amounts of data that can be retrieved safely and swiftly as required, while simultaneously improving the quality of services. However, an EHR system has some drawbacks, one of which is the negative impact on productivity that can arise from its complexity, adding extra time to the accomplishment of tasks by clinicians. Another challenge of an EHR system is the lack of staff familiarity and comfort with the system, which is commonly exacerbated with system upgrades and changes or the introduction of a new system or new staff. These are some of the reasons for poor documentation that may affect the quality of care.<sup>7</sup> Our EHR system is advanced, comprehensive, and complex, and new physicians and other employees face similar problems, like any other medical facility using an EHR system. The QOPI journey helped us enhance our knowledge about the system by conducting better training courses and orientation sessions for new staff. Stakeholders in every health care organization should work on adopting user-friendly systems and encourage proper and periodic system orientations for the new staff and short refreshment courses for existing staff.

In conclusion, obtaining QOPI certification is an honor and an effective approach to evaluate and improve the quality of care delivered by employing appropriate corrective actions. Our experience highlights the importance of fundamental principles in health care improvement: a coordinated multidisciplinary team approach, effective communication, and proper documentation, which are essential elements of delivering better quality care.

## AFFILIATIONS

<sup>1</sup>Department of Oncology, King Saud bin Abdulaziz University for Health Sciences, King Abdullah International Medical Research Center, Riyadh, Saudi Arabia

<sup>2</sup>Florida Precision Oncology, Boca Raton, FL

## CORRESPONDING AUTHOR

Abdul Rahman Jazieh, MD, MPH, Department of Oncology, Mail Code 1777, King Abdulaziz Medical City, P.O. Box. 22490, Riyadh 11426 Saudi Arabia; e-mail: jazieha@ngha.med.sa.

## AUTHOR CONTRIBUTIONS

**Conception and design:** Abdul Rahman Jazieh, Nafisa Abdelhafiez, Mohammad Alkaiyat, Mohammad Jahanzeb

**Administrative support:** Nafisa Abdelhafiez, Nashmia Al Mutairi, Mohammad Alkaiyat, Mona Al Shami

**Provision of study material or patients:** Nafisa Abdelhafiez, Ahmed Hashem, Mona Al Shami

**Collection and assembly of data:** Abdul Rahman Jazieh, Nafisa Abdelhafiez, Nashmia Al Mutairi, Ahmed Hashem, Mohammad Alkaiyat, Mona Al Shami

**Data analysis and interpretation:** Abdul Rahman Jazieh, Ahmed Hashem, Mohammad Alkaiyat

**Manuscript writing:** All authors

**Final approval of manuscript:** All authors

**Accountable for all aspects of the work:** All authors

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**Abdul Rahman Jazieh**

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**Nashmia Al Mutairi**

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**Mohammad Jahanzeb**

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