The Process of NCCN Guidelines™ Adaptation to the Middle East and North Africa Region

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Abstract
The NCCN developed clinical practice guidelines for oncology that set the standard of care in the United States. Because of wide acceptance of, need for, and interest in standardized treatment practices across the world, NCCN launched initiatives to help international groups adapt these guidelines. This article describes the initiative in the Middle East and North Africa (MENA) region. A group of oncology experts and key opinion leaders were assembled into 7 specific committees to develop treatment guidelines for breast cancer, lung cancer, colon cancer, prostate cancer, hepatobiliary cancer, lymphoma, and palliative care. The committees reviewed the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) to identify any modifications required for them to be more applicable to the MENA region based on available evidence and regional experience. These modifications were discussed with NCCN experts and summarized for each specific area. The development of these guidelines generated a strong interest in the region to develop more evidence-based practice and create further networking and collaboration. (JNCCN 2010;8[Suppl 3]:S5–S7)

The National Comprehensive Cancer Network (NCCN), an alliance of 21 of the leading cancer centers in the United States, has emerged as a leader in setting the standard of care and impacting the practice of oncology in the United States.¹–³ NCCN has established more than 45 multidisciplinary, disease-specific committees and panels and developed more than 100 guidelines that are updated annually and well publicized on the NCCN Web site (www.NCCN.org), in JNCCN–The Journal of the National Comprehensive Cancer Network, and at various national and international events.⁴ The process of developing these guidelines is elaborate and well described, using the expertise of physicians from these leading institutions.

The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) became a global phenomenon, with various groups and regions around the world expressing interest in adapting these guidelines. In response, NCCN launched outreach programs to share their extensive experience and resources with interested entities. These efforts were translated into regional guidelines in Korea, Japan, and China, and recently the Middle East and North Africa (MENA) region,⁵ including countries extending from Morocco to India (West–East) and Turkey to Yemen (North–South). The region spans a wide geographic area, has diverse social and economic profiles, and has significant heterogeneity in health care delivery and infrastructure. This diversity is not only across countries but also among regions within the same country. Therefore, the current standard of oncology care also varies greatly within the region.

Developing uniform guidelines that will be widely accepted by practicing oncologists in the region may help
close the gap in the region, or at least will help delineate these variations so that a systemic approach to remedy them can be established.

Readers should note that the guidelines referenced during this initiative and discussed throughout this document were the 2009 versions. The most recent versions of the NCCN Guidelines are available on the NCCN Web site at www.NCCN.org.

Methods

Committee Formations
Seven disease committees were formed for breast cancer, lung cancer, colon cancer, prostate cancer, hepatocellular carcinoma, lymphoma, and palliative care. These committees included multidisciplinary expertise from different countries in the MENA region.

Each committee comprised a chair and individual members with expertise in that area of oncology care, in addition to a United States–based NCCN expert from the applicable NCCN panel. The NCCN panel member helped explain the process and thoughts behind certain NCCN guideline recommendations and served as an external advisor with whom to discuss certain issues raised by committee members. The panel of committee chairs was led by a regional chair who coordinated the efforts of the whole group centrally. NCCN staff and leadership provided support and advice to the committees based on the NCCN experience.

A launch meeting was held at which the objectives and details of the initiative were presented to the committee members. Thereafter, the committees held meetings separately at convenient times and locations, and members corresponded frequently via e-mail. A large regional symposium was held at the conclusion of the first year activities to provide education for the oncologists in the region regarding NCCN guidelines, review the status of care in the MENA region, and finalize the recommendations in person among the committee members, experts in the United States, and NCCN staff.

Adaption Process
The committee members reviewed the 2009 versions of the NCCN guidelines specific to their area of expertise to determine what areas required modification for use in the MENA region. Recommendations to modify an item were requested to be evidence-based and derived from experience and publications relevant to the region, to avoid having substandard guidelines because of the stark variations in health care delivery among these countries.

All modifications and suggestions were listed according to the NCCN guidelines flow. The justification and references were put forth using a set format (Table 1). Committee members discussed these suggestions in group meetings and then with the NCCN experts. A final version of the recommendations were compiled and submitted as a manuscript for publication. During the process, committee members were asked to compile a list of potential research projects that they believed important to the region to help fill the gap in knowledge and address vital issues related to cancer care.

Results
Each committee developed lists of suggested modifications with justification and references. The status of care of the particular disease in the region was presented in a general meeting, and then the suggestions were discussed with the respective NCCN expert to address any ambiguous or controversial issues. A final version was then drafted and 7 manuscripts were written and submitted for publication. The committee members also identified various research projects required to address certain gaps in knowledge regarding the management of the diseases.

Discussion
The NCCN–MENA initiative was an enriching experience and a good learning opportunity that had a positive impact on involved parties and participants. This initiative was the first in the MENA region

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with the goal of creating guidelines for standardizing cancer care across the countries. Although local guidelines for certain diseases are available, collaboration across countries had not previously occurred in the region.\(^6\)

The credibility and experience of NCCN helped move the process forward, in addition to strong interest from practicing oncologists in the region for improving the standard of care and the realization of the need for a collaborative approach. Having NCCN experience and guidance coupled with the diverse backgrounds and a high level of expertise from the committee members was very complementary and productive. The interaction facilitated the exchange of thoughts and ideas on how to approach certain issues, and the experience was both educational and professionally stimulating.

Participants learned first-hand about the process of guidelines adaptation and gained better insight into the process of guideline development. During the process, participants realized that regional evidence is lacking for many of the recommendations, highlighting the need for future studies to address the issue. Therefore, identifying top priority research projects is a step in the right direction. The initiative generated obvious interest and enthusiasm, and the hope is that further actions will materialize in future meetings.

However, this initiative encountered challenges related to the diversity of the participants’ backgrounds. Countries in the region have diverse socioeconomic and health care infrastructures, and span a wide geographic area, presenting a logistic challenge in getting members connected for group discussion. This problem was minimized by using electronic communication more frequently and giving each committee chair the flexibility to select the timing and venue of their committee meeting. The entire group, including all the committees, convened in person only once. The diversity in health care practices, resources, and infrastructures (e.g., access to care and medications) also presented challenges to implementation of standardized guidelines.

To maintain NCCN standards, the best available evidence was adopted irrespective of cost-effectiveness or availability of resources. This approach was adopted so that standards were not lowered to meet the situation in deprived areas; the group avoided making “convenience guidelines.” To improve the standard of care, the group decided to include an ideal target and allow each country or even each institution to decide what practice is suitable for them. This initiative was not intended to develop guidelines for countries with limited resources, as had others.\(^7\)

Notably, many countries in the region are not among those with limited resources.

**Conclusions**

This initiative is still in its infancy. However, as with any large-scale pioneer projects that face many challenges, the positive impact that it will have on the thousands of cancer patients will serve as motivation to the participants who already demonstrated enthusiasm and commitment.

**References**