# The American Society of Clinical Oncology's Efforts to Support Global Cancer Medicine

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# A B S T R A C T

Despite much progress in the management of malignant diseases, the number of new cases and cancer-related deaths continues to rise around the world. More than half of new cases occur in economically developing countries, where more than two thirds of cancer deaths are expected. However, implementation of all necessary steps to accomplish the dissemination of state-of-the-art prevention, diagnosis, and management will require increased allocation of resources, and, more importantly, harmonization of the efforts of hundreds of national and international public health agencies, policy-setting bodies, governments, pharmaceutical companies, and philanthropic organizations. More than 30% of the members of the American Society of Clinical Oncology (ASCO) reside and practice outside US borders, and more than half of attendees at all of the scientific congresses and symposia organized by ASCO are international. As cancer has become an increasingly global disease, ASCO has evolved as a global organization. The ASCO Board of Directors currently includes members from France, Brazil, and Canada. In 2013, the ASCO Board of Directors identified a number of strategic priorities for the future. Recognizing the importance of non-US members to the society, their first strategic priority was improving the society's service to non-US members and defining these members' identity in the international oncology community. This article reviews current ASCO activities in the international arena and its future plans in global oncology.

J Clin Oncol 34:76-82. @ 2015 by American Society of Clinical Oncology

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Published online ahead of print at www.jco.org on November 17, 2015.

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Authors' disclosures of potential conflicts of interest are found in the article online at <a href="https://www.jco.org">www.jco.org</a>. Author contributions are found at the end of this article.

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0732-183X/16/3401w-76w/\$20.00 DOI: 10.1200/JCO.2015.61.7696

#### **INTRODUCTION**

Much progress has been made in controlling major infectious diseases, such as malaria, tuberculosis, and AIDS; mortality from these diseases has dropped substantially. Despite much progress in managing malignant diseases, the number of new cases and cancer-related deaths continues to rise. In 2008, the International Agency for Research on Cancer estimated 12.7 million new cases and 7.6 million cancer-related deaths worldwide<sup>2</sup>; by 2012, the estimates had risen to 14.1 million and 8.2 million, respectively.<sup>3</sup> If current trends continue, by 2030 there will be 21.4 million new cases and 13.2 million deaths. Such massive increase is the result of a growing and aging population and increased longevity. Migration to urban areas is also an important component of this expanding picture, as is the adoption of unhealthy lifestyle habits, such as smoking, alcohol use, decreased physical activity, and poor diet. More than one half of new cases and more than two thirds of cancer deaths occur in economically developing countries.3

The burden of cancer is distributed unevenly around the world, <sup>4</sup> and access to and quality of

cancer care varies widely. Uniform application of state-of-the-art practices for prevention, early diagnosis and treatment around the world would dramatically decrease new cases and deaths from malignant diseases. Improved dietary habits, prevention of obesity, reduction in tobacco and alcohol use, application of vaccines against human papilloma virus and hepatitis B, and increased physical activity would markedly reduce incidence and mortality rates. Finally, making modern diagnostic methods, surgical techniques, radiation therapy, and anticancer drugs broadly available would increase the cure rate and reduce mortality resulting from established malignant disease.

Declining deaths from infectious diseases, migration to urban areas, and aging of the population is helping to fuel the growing burden of cancer in low- and middle-income countries (LMCs). Data from LMCs indicate that, in a substantial percentage of patients, cancer is diagnosed at a younger age than it is in high-income countries,<sup>6</sup> and cancer mortality occurs mostly in people younger than 70 years.<sup>7</sup>

Implementation of state-of-the-art prevention, diagnosis, and management will require increased allocation of resources, as well as harmonization of the efforts of many national and international public health agencies, policy-setting bodies, governments, pharmaceutical companies, and philanthropic organizations.

The American Society of Clinical Oncology (ASCO) is committed to promoting lifelong learning for oncology professionals. More than 30% of its members practice outside US borders, and more than one half of attendees at the scientific congresses organized by ASCO are international.<sup>8</sup> International members contribute substantially to ASCO's missions: they serve on committees, including the Board of Directors and the International Affairs Committee (IAC), and they submit a high proportion of abstracts to ASCO meetings. International members bring to ASCO knowledge about their health care systems, and they are intimately familiar with the obstacles, challenges, and opportunities to improve the quality and quantity of cancer care. Working together, we have the talent to consider challenges, work out solutions, and develop optimal educational approaches to disseminate information and improve the quality of care by implementing culturally sensitive methods of communication on the basis of an understanding of local realities. In the following pages, we will summarize ASCO's international activities.

## **ASCO'S INTERNATIONAL ACTIVITIES**

The role of ASCO as a global forum for oncology started early. ASCO's earliest members included physicians from Canada, Spain, and Japan. By ASCO's 50th anniversary, more than 32% of ASCO's members were practicing outside the United States, as were most of the attendees of the 2014 Annual Meeting. The ASCO Board of Directors currently includes members from France, Brazil, and Canada. Twenty members serve on the Board, including Officers and the Chief Executive Officer. Two seats are designated for international members. However, international members may also fill other Board seats. For example, Paulo Hoff, MD, of Brazil, currently sits in the undesignated-specialty Board seat. The ASCO Leadership Development Program includes recent recipients from India and the Philippines.

ASCO has evolved as a global organization. A continued rise in cancer rates in LMCs has been recorded: In 2012, the International Agency for Research on Cancer estimated that two thirds of cancer deaths and nearly 60% of new cancer cases occur in LMCs.<sup>2,3</sup> Years of advocacy work from ASCO and many organizations around the world culminated in the historic United Nations Meeting on Non-Communicable Diseases in September 2011.<sup>9</sup>

In concert with these developments, during the presidency of Sandra Swain, MD, ASCO launched ASCO International on February 4, 2013, World Cancer Day; thus, it committed itself to address the rising cancer burden by means of an integrated strategy and dedicated ASCO resources. <sup>10</sup> The programs of ASCO International share common elements of linking member volunteers with members and organizations around the world to deliver carefully designed programs that harness ASCO's knowledge of cancer care and control adapted to local needs and realities. ASCO International programs focus on three main pillars, which are described in this article:

- Professional development: Development of future oncology leaders,
- II. Quality improvement: Improvement of cancer prevention and care delivery through knowledge sharing and implementation, and

III. Innovation: Support and advancement of cancer research, particularly relevant to LMC practice settings.

Each pillar is designed to support the others: Oncology leaders in LMCs work with ASCO to improve quality in their practice settings by organizing ASCO training courses and implementing ASCO programs in conjunction with national society partners. These practices, in turn, are enhancing research skills and applying for ASCO research awards to test new cancer-control ideas. For the development, implementation, and expansion of its international portfolio, ASCO relies on the collaborative interaction of volunteer members from the United States and other high-income countries, as well as of members who work in LMCs.

## PROFESSIONAL DEVELOPMENT

Although countries and individual practices encounter a variety of challenges in delivering cancer care, all share a need for effective leadership, which is a critical success factor for improving access to cancer care in LMCs. <sup>11</sup> Effective leaders in LMCs can be transformative by fostering the development of cancer treatments to meet the needs of patients in LMCs, by advocating for national and international anticancer policies, and by developing and leading national and regional organizations that can advance cancer control.

Through its Conquer Cancer Foundation, ASCO offers an International Development and Education Award (IDEA) that promotes the professional development of young oncologists from LMCs who have shown an aptitude to be agents of change. <sup>12</sup> Recipients of the IDEA award are matched with a senior ASCO mentor, they attend the ASCO Annual Meeting, and they visit their mentor's institution in the United States or Canada. The emphasis is on their developing long-term relationships with ASCO and with ASCO mentors.

Since its inception, the IDEA program has selected 261 individuals from 51 countries for participation in the program. IDEA alumni serve as agents of communication and catalysts in their communities of practice, leading or starting national oncology societies and helping to link their colleagues with ASCO programs. In 2014 alone, past IDEA recipients from India, Honduras, the Philippines, and Vietnam worked with ASCO staff to organize training courses in their countries.

The success of the IDEA program led ASCO and the Conquer Cancer Foundation to create the International Development and Education Award in Palliative Care, <sup>12</sup> which helps oncologists in LMCs integrate palliative medicine in their countries' cancer care, and the Long-Term International Fellowship, <sup>13</sup> which provides early-career oncologists in LMCs the resources needed to advance their research interests by spending a year with a mentor in North America. ASCO is also piloting a Virtual Mentors program which, like IDEA, pairs members from around the world in mentoring relationships, using communication technologies, such as Skype, instead of in-person interactions.

In 2013, eligibility for ASCO's prestigious Leadership Development Program<sup>14</sup> was extended to international members. Launched in 2009, the Leadership Development Program provides midcareer-level oncologists with training, tools, and networking to serve leadership roles within ASCO and other organizations. In 2013 and 2014, past IDEA recipients from India and the Philippines, respectively, were admitted to this program.

## **QUALITY IMPROVEMENT**

ASCO has been a pioneer in advancing quality cancer care, launching programs like the Quality Oncology Practice Initiative (QOPI)<sup>15</sup> and the Quality Care Symposium.<sup>16</sup> The Society is an energetic advocate for quality cancer care internationally, with active programs at the global, regional, and hospital levels. Each of these programs relies on ASCO member volunteers. For instance, in 2014, ASCO engaged 158 volunteers in its international programs. The volunteers are linked with in-country ASCO members and collaborating organizations.

ASCO's in-country efforts, which in 2014 included programs in more than 50 countries, begin and end with a network of more than 150 oncology societies, nongovernmental organizations (NGOs), and governmental agencies that provide essential capacity, insights, and follow-up. These collaborators include the World Health Organization, the Union for International Cancer Control, and the European Society for Medical Oncology (ESMO) that work closely with ASCO on key international cancer policy issues. Examples of such issues are a robust United Nations response to the rise of cancer and other noncommunicable diseases, updating the World Health Organization Essential Medicines List to include key anticancer regimens, and promotion of national cancer-control plans.

ASCO also works with national and regional medical organizations in the Americas, Asia, Africa, Europe, and the Middle East to train doctors, nurses, and other clinicians on topics deemed to be critical to improving cancer outcomes in their countries. These programs include ASCO courses in multidisciplinary cancer management (MCMC), palliative care, and cancer control for primary care.

# **MCMC**

ASCO's MCMC course trains physicians and other health workers in LMCs regarding the care of the patient with cancer, with a multidisciplinary emphasis.<sup>17</sup> Each course focuses on the management of cancers most prevalent in the region, covering the roles of each member of the care team by means of an interactive combination of lectures, queries using audience-response systems, and mock tumor boards or case discussions. The incountry collaborating organization serves a key role in defining training goals, adapting training content to the practice environment, and providing local faculty who partner with ASCO faculty to deliver each course.

Begun in 2004, MCMC courses have been conducted in 22 countries, training about 4,500 clinicians. The course is assessed by using a postcourse evaluation and an online survey distributed to attendees a year later. Past attendees have reported changes in their practice as a result of the course, with 80% of respondents reporting changes such as creating a local tumor board to discuss cancer cases with other medical specialists and improving communication with patients and their families. A recent Train the Trainer add-on to the MCMC curriculum aims to increase the quantity and quality of MCMC trainers around the world by teaching a select group of trainers concepts in adult learning and best practices in course implementation.

## **PALLIATIVE CARE**

ASCO's International Palliative Care Workshop trains health care professionals in palliative care and integration of palliative care into cancer care. <sup>18</sup> ASCO collaborates with international and incountry partner organizations to conduct these workshops. Faculty members consist of international and local experts who create a program that teaches palliative-care principles and skills adapted to the local environment. Attendees include physicians, nurses, pharmacists, medical students, and social workers. As a result of the course, 88% of past attendees have reported changes to their practice, including improved pain management and improved communication with patients and families.

# **CANCER CONTROL FOR PRIMARY CARE**

With the rise of cancer in countries where the oncology community is limited, it is critical that cancer control and cancer-care collaboration be exercised in all sectors of the healthcare system. ASCO International's Cancer Control in Primary Care course provides the primary healthcare provider with practical and specific knowledge that can be incorporated into their daily practice. <sup>19</sup> The course covers topics such as cancer etiology, cancer prevention, early warning signs of cancer, early detection, resources available in their country for cancer diagnosis and treatment, and how to help their patients cope with the diagnosis of cancer. The first courses will be held in 2015 in Georgia and India, with more courses anticipated in 2016.

# **INTERNATIONAL CANCER CORPS**

ASCO's international courses have historically been conducted on a national or regional level, attracting attendees from a wide geographic area. However, since 2009, ASCO has also been working at specific hospitals in LMCs through its International Cancer Corps (ICC) program<sup>20</sup> with Health Volunteers Overseas (HVO), an international medical education organization.<sup>21</sup>

Hospitals apply to HVO and ASCO to participate, and they are selected on the basis of a range of factors, including their population of patients with cancer, their role in the country, their capacity to host medical volunteers, and the fit between their needs and the assistance that ASCO and HVO can provide. After a site is selected, an ASCO member volunteer with previous experience in the country or region conducts a 2-week site assessment at the hospital. The assessment covers personnel, access to medications, facilities and equipment, policies and systems, registries, and epidemiologic data. On the basis of this assessment, a set of objectives is established for that specific site. Care is taken to set objectives that fall within the scope of clinical training, that are achievable within several years, and that lead to sustainable change.

Since the program started in 2009, nearly 150 volunteers have served in the ICC, with onsite visits lasting 1 to 4 weeks. ICC sites are a focal point for a range of ASCO programs and services. Hospital staff include past IDEA recipients. ASCO has held MCMC and palliative care courses at ICC sites, and ASCO provides guidelines and other practice resources to advance the goals of each site. Some sample achievements from the ICC program are provided in Table 1.

Hospital	Country	Topic	Achievement		
Black Lion Hospital	Ethiopia	Specialty training	Helped establish residency program in clinical oncology		
Hospital Escuela	Honduras	Palliative and supportive care	Staff more willing to prescribe pain medications		
Hue University	Vietnam	Chemotherapy administration	Improved safety procedures, such as compliance with use of gloves and gown when mixing chemotherapy		
Instituto Nacional del Cancer	Paraguay	Diagnostic and treatment pathways	Established a multidisciplinary clinic for the diagnosis and treatment of uterine cervical cancer		
Jigme Dorji Wangchuck National Referral Hospital	Bhutan	Nursing training	Nursing staff now follow standard protocols for commonly occurring malignancies and related antiemetic regimens		

# **GLOBALIZING QUALITY TOOLS: GUIDELINES AND QOPI**

With the launch of ASCO International in 2013, ASCO embarked on a concerted effort to make its programs and products more accessible to medical practitioners outside the United States. Two key quality tools that are being distributed globally include ASCO's clinical practice guidelines<sup>22</sup> and ASCO's QOPI.<sup>13</sup> Both have substantial potential internationally to serve stand-alone initiatives and also to inform ASCO's international training interventions described earlier.

Although ASCO's clinical practice guidelines have been used outside the United States for many years, they have generally applied to a limited, highly-resourced practice setting. The development and implementation of clinical cancer-practice guidelines that are relevant to varying levels of resources has been cited as a key element for improving cancer care in LMCs.<sup>23</sup> The Breast Health Global Initiative pioneered the development of resource-stratified guidelines for breast cancer management, and ASCO was a supporter and collaborator in these efforts.<sup>24,25</sup> In 2014, ASCO's IAC and Clinical Practice Guidelines Committee started developing resource-stratified guidelines, beginning with cervical cancer, and they anticipate publishing these guidelines in late 2015. The potential for these guidelines to inform the content of training initiatives and other ASCO programs in LMCs is substantial.

Although initially offered only to oncology practices in the United States, the QOPI has generated substantial interest internationally, and ASCO is actively evaluating QOPI for potential international applications. ASCO developed OOPI to provide tools needed for quality measurement and improvement of the care of patients with cancer. The process includes retrospective chart abstraction, data analyses, confidential practice reporting, and collection of practicespecific and aggregate comparison data for data-driven quality improvement. QOPI Core Measures include care documentation, such as pathology reports and staging, pain assessment and management, use of antiemetics according to guidelines, chemotherapy planning, smoking cessation, and many other measures. ASCO is now piloting QOPI with practices in Europe and Brazil, with positive initial results and with additional locations expected. In addition, ASCO is considering the potential for QOPI measures to be used for baseline assessment and impact measurement at participating ICC sites.

# **GLOBAL STANDARDS IN SPECIALTY TRAINING**

Specialty training that meets a global standard is critical to achieving and maintaining quality cancer care around the world. ASCO advances

professional standards and supports professional training internationally by using a range of resources, including the ESMO-ASCO Global Curriculum<sup>26</sup> and ASCO's In-Training Examination (ITE).<sup>27</sup>

First published in 2004, the ESMO-ASCO Global Curriculum offers a set of learning objectives and skills with a global perspective for the clinical training required for physicians to qualify as medical oncologists.<sup>28</sup> The curriculum has been formally adopted in whole or in part as the framework for the training of medical oncology specialists in at least 10 countries. In addition, it has been credited as a key factor in the recognition by the European Union in 2011 of medical oncology as a specialty.<sup>29</sup>

The ASCO Medical Oncology ITE is a valuable adjunct to the Global Curriculum and now has broad international participation. The ITE is a Web-based examination that fellows take at their home institutions in a formal, proctored environment. For program directors, the ITE provides an objective measure of their fellows' knowledge, it helps establish consistency in educational standards across training programs, it serves as a benchmark and a tool to improve training, and it helps in identifying areas of strength and weakness in their program. For fellows, the ITE allows them to evaluate their progress in their training program and to compare their results against national outcomes. In 2014, 30 oncology training programs in 11 countries participated in the ITE.

# **INNOVATION**

Patient populations and practice settings vary substantially between and within countries, and a one-size-fits-all approach to cancer care and care delivery is not effective. Discovery of innovative solutions, particularly for LMCs, is critical, and it is a major reason why cancer research is considered a key element of national cancer control.<sup>30</sup> ASCO supports international research and innovation by supporting the development of research skills of current and future investigators, and by providing seed funding for the development of innovative approaches in LMCs. Soon, it will offer a journal dedicated to publishing and disseminating innovative discoveries emanating from international cancer research.

# INTERNATIONAL CLINICAL TRIALS WORKSHOP

In economically emerging countries, the amount of clinical cancer research, as measured on the basis of numbers of trials, numbers of

Principal Investigator Country		Subject		
Olutosin Alaba Awolude	Nigeria	Community-level intervention strategies to prevent, detect, and treat cervical cancer		
Tanuj Chawla	India	Use of short-message-service, or text, alerts to improve compliance with chemotherapy protocols and reduce toxicity in patients with cancer		
Alexandru Eniu	Romania	Web-based telemedicine platform to enable breast tumor board case reviews to improve outcomes in remote cancer centers		
Yanin Chavarri Guerra	Mexico	Breast-health educational program for rural adolescents		
Noleb Mugume Mugisha	Uganda	Integrated cervical cancer screening program in a high-volume HIV clinic in Kampala		

patients enrolled in trials, and research funding, has increased dramatically over the past decade. However, this change is mainly a result of a marked increase in the number of industrydriven drug development trials, whereas investigator-initiated academic research remains rare in developing countries. With a growing cancer burden, it is of the utmost importance for LMCs to focus their cancer research on malignancies relevant to their environment and their existing resources to maximize the benefit from research to their patients. Many organizations, including ASCO, have raised concerns about growing barriers that hinder academic clinical cancer research worldwide. A 2007 ASCO member survey and discussions with ASCO society partners indicated that the level of research training provided to investigators in emerging countries has not kept pace with the growth of research and corresponding research capacity requirements.

To help address this need for clinical research skills and standards, ASCO collaborates with national or regional medical organizations around the world to periodically conduct a 2-day intensive workshop. The workshop includes topics such as roles and responsibilities of the research team, patient-accrual strategies, ethical considerations, promotion of clinical trials, and local regulatory issues. The overall goal of the International Clinical Trials Workshop (ICTW)<sup>31</sup> is to improve the abilities of investigators to improve cancer research worldwide through education and training. During the last 5 years, 10 successful ICTWs have been conducted worldwide. One year after participating in an ICTW, 70% of respondents report changing their research practices as a result of the workshop. Changes include improved compliance with regulatory requirements and more effective collaboration with other members of the research team.

## **INTERNATIONAL INNOVATION GRANTS**

The International Innovation Grant<sup>32</sup> provides research funding in support of novel and innovative projects that can have a significant impact on cancer control in LMCs. The grant provides up to \$20,000 that is paid directly to a nonprofit organization or governmental agency in an LMC for hypothesis-driven research that may result in new knowledge about how to advance cancer control in a low- or middle-income setting. Grantee organizations and principal investigators are expected to share and disseminate the knowledge gained during their research project. A list of projects most recently funded by this granting mechanism is presented in Table 2.

## JOURNAL OF GLOBAL ONCOLOGY

Aligned with the goals of ASCO International programs, ASCO launched the Journal of Global Oncology (JGO) this year. JGO is an online-only, open-access journal focusing on cancer care, research, and care-delivery issues unique to resourceconstrained settings. A high-quality journal dedicated to publishing research in this area is an important new scholarly forum for advancing the care of patients with cancer in resourceconstrained settings and for reducing health disparities worldwide. David Kerr at the University of Oxford will serve as IGO's founding Editor-in-Chief and has assembled an editorial leadership team and board comprising multidisciplinary thought leaders in global cancer medicine and health-disparities research. By publishing high-quality original research, reviews, editorials, commentaries, policy and position statements, clinical guidelines, and case reports, JGO will be expected to grow into a prime contributor to global oncology information and data dissemination.

# **BEST OF ASCO**

With the ASCO Annual Meeting, the Best of ASCO International program<sup>33</sup> is now an established channel for disseminating practice-changing research in a local context. Best of ASCO Meetings license presentations of selected high-rated abstracts from the ASCO Annual Meeting. Best of ASCO Meetings are mostly attended by physicians who cannot travel to ASCO Annual Meetings. Full presentation of research and clinical-trials results improves the conduct of research and optimizes patient care. In 2014, 24 official Best of ASCO Meetings were held by oncology societies around the world (Table 3).

## **FUTURE DIRECTIONS**

In 2013, the ASCO Board of Directors identified several strategic priorities. Recognizing the importance of non-US members to the society, their first strategic priority was improving the Society's service to non-US members and defining these members' identity in the international oncology community. At the March 2014 Board Meeting that focused on the future of the Society, consensus was reached suggesting that ASCO should identify and pursue international growth opportunities in the context of a broader view of the Society's constituencies. As a result, President Yu formed the Global Oncology Leadership Task Force to discuss ASCO's international roles and to

Host Organization	City	Country	Dates
Association Française des Cancerologues	Paris	France	June 10-11
OncologyEducation.com	Montreal	Canada	June 13
Deutsche Krebsgesellschaft	Berlin	Germany	June 13-14
Medical Pharma Research Latam	Mexico City	Mexico	June 18-21
Croatian Society of Oncology	Opatija	Croatia	June 18-21
OncologyEducation.com	Toronto	Canada	June 20
Lebanese Society of Medical Oncology	Beirut	Lebanon	June 21-22
Turkish Society of Medical Oncology	Istanbul	Turkey	June 21-22
Indian Cooperative Oncology Network	Hyderabad	India	June 27-29
Japanese Society of Medical Oncology	Kobe	Japan	July 5-6
Chinese Society of Clinical Oncology	Guangzhou	China	July 10-13
Oncology Society of Ecuador	Manta	Ecuador	July 18-19
Sociedad Panameña De Oncologia	Panama City	Panama	July 25-26
Medical Oncology Group of Australia, Inc.	Sydney	Australia	August 9
Thai Society of Clinical Oncology	Bangkok	Thailand	August 22-23
Latin American Cooperative Oncology Group and Sociedade Brasileira de Oncologia Clínica	Salvador	Brazil	August 29-30
King Fahad Specialist Hospital-Dammam	Jeddah	Saudi Arabia	September 6-7
Egyptian Cancer Society	Cairo	Egypt	September 11-
Sociedad Latinoamericana y del Caribe de Oncologia Medica	Porto Alegre	Brazil	September 13
Hellenic Oncology Research Group	Eretria	Greece	September 19-
Instituto Nacional De Cancerologia	Cancun	Mexico	September 19-
Slovak Oncology Society	Bratislava	Slovakia	October 11
Peruvian Society of Medical Oncology	Lima	Peru	October 11-12
Caribbean Oncology Associates	San Juan	Puerto Rico	October 16-19

recommend to the ASCO Board of Directors the most important approaches to enhance ASCO's international position, foster international growth in membership, and address unmet needs in oncology communities outside the United States. It was also envisioned that the Task Force will identify unmet needs that existing oncology professional societies, NGOs, and governments are not fully addressing in the international cancer community, and that it will seek opportunities to collaborate with ASCO's sister societies in other countries. The Board envisioned that the Task Force will be complementary to and work in collaboration with the IAC to evaluate ASCO resources and identify potential linkages between the IAC, ASCO Committees, and ASCO components. Members of the Task Force were selected from those who have recently served on the Board of Directors and/or various ASCO committees.

The Task Force has met by conference call on several occasions, and the current and potential future role of the Society were discussed at length. Given ASCO's strengths in education, communication, training, and organization, the Task Force recommended that an initial Global Oncology Symposium be organized at the 2015 Annual Meeting. Because of the high incidence of gastric cancer in regions of low or intermediate resources, gastric cancer was selected as the initial focus for discussion. Part of the symposium will be dedicated to convene international leaders in oncology to discuss those opportunities where ASCO is best positioned to influence improvement in quality of cancer care around the world.

The Task Force discussed a number of areas of opportunity. The shortage of well-trained oncology professionals and midlevel providers was highlighted. This was thought to be particularly critical in the area of pathology, and the ongoing interaction between the College of American Pathologists and ASCO provides great

opportunities for innovative approaches to train personnel to fill this gap.

Enhanced dissemination of up-to-date oncology information to professionals providing oncology services around the world would build on ASCO's communication and education skills. Similarly, enhanced public education about cancer, cancer prevention, and treatment in regions of limited or intermediate resources was considered of major importance to enhance earlier diagnosis, break cultural barriers, and contribute to the demand for improved access and cancer care services. ASCO's educational activities during the annual meeting, the subspecialty meetings, and, more recently, the Best of ASCO Meetings in North America and around the world provide a clear model for developing regional oncology meetings in close collaboration with local, national, or regional oncology societies worldwide.

Although genomics is revolutionizing medicine in developed countries, developing countries are not reaping its medical benefits. Most research studies take place in the developed world. The corresponding paucity of clinical trials in LMCs results in treatment recommendations that may not reflect genetic or ethnic, environmental, cultural, and social differences among developed and developing countries. More collaborative partnership between researchers and sponsors in developed countries and researchers, policy makers, and communities in LMCs may be transformative.

Important progress has been made in the area of cancer prevention. Discussions in the Task Force emphasized the importance to move forward with programs that build on such progress: tobacco cessation; control of alcohol intake; cultural changes that emphasize regular physical activity; prevention and control of obesity; and broad utilization of vaccines known to reduce the risk of certain cancers, such

as those related to hepatitis B and human papillomavirus; and strategies to eradicate *Helicobacter pylori*.<sup>5</sup>

Other areas of importance for ASCO's global role include continued updating of the Global Oncology curriculum and clinical guidelines; developing or improving resource-stratified guidelines; enhancing training of midlevel personnel to provide oncology services; and working with governments, NGOs, and industry to enhance access to high-quality care while emphasizing the practice of effective and cost-effective care.

As an organization, ASCO and its membership at large are in a unique position to influence the continued improvement of cancer care around the world by focusing on effective and timely dissemination of information, enhancing training of all levels of health care personnel, and providing the best evidence-based information for optimal cancer prevention, diagnosis, and treatment.

# AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Disclosures provided by the authors are available with this article at www.jco.org.

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Final approval of manuscript: All authors

#### **REFERENCES**

- 1. World Health Organization: 10 facts on malaria. http://www.who.int/features/factfiles/malaria/en/
- 2. World Health Organization: International Agency for Research on Cancer: GLOBOCAN 2008—Cancer incidence and mortality worldwide. http://www.iarc.fr/en/media-centre/iarcnews/2010/globocan2008.php
- **3.** World Health Organization: International Agency for Research on Cancer: GLOBOCAN 2012—Estimated cancer incidence, mortality and prevalence worldwide in 2012. http://globocan.iarc.fr/Pages/fact\_sheets\_cancer.aspx
- **4.** Ferlay J, Soerjomataram I, Ervik M, et al: Globocan 2012 version 1.0: Cancer incidence and mortality worldwide—IARC CancerBase No. 11. Lyon, France, International Agency for Research on Cancer. http://globocan.iarc.fr
- **5.** Frazer IH, Lowy DR, Schiller JT: Prevention of cancer through immunization: Prospects and challenges for the 21st century. Eur J Immunol 37: S148-S155, 2007 (suppl 1)
- **6.** El Saghir, Khalil M, Eid T, et al: Trends in epidemiology and management of breast cancer in developing Arab countries: A literature and registry analysis. Int J Surg 5:225-233, 2007
- Mallath MK, Taylor DG, Badwe RA, et al: The growing burden of cancer in India: Epidemiology and social context. Lancet Oncol 15:e205-e212, 2014
- 8. American Society of Clinical Oncology: Membership Records. American Society of Clinical Oncology, Alexandria, VA, 2015
- **9.** United Nations: 2011 high level meeting on prevention and control onf non-communicable diseases. http://www.un.org/en/ga/ncdmeeting2011/
- **10.** American Society of Clinical Oncology: Newly launched ASCO International to double ASCO programs in global cancer care. http://connection.asco.org/magazine/features/newly-launched-asco-international-double-asco-programs-global-cancer-care

- 11. Knaul FM, Bhadelia A, Cahill K, et al: Closing the cancer divide: A blueprint to expand access in low and middle income countries—A report of the Global Task Force on Expanded Access to Cancer Care and Control. Harvard Global Equity Initiative, Boston, MA, November 2011
- **12.** Conquer Cancer Foundation: International Development and Education Award. http://www.conquercancerfoundation.org/cancer-professionals/funding-opportunities/international-development-and-education-award
- **13.** Conquer Cancer Foundation: Long-Term International Fellowship. http://www.conquercancerfoundation.org/long-term-international-fellowship
- 14. American Society of Clinical Oncology: Leadership Development Program. http://www.asco.org/professional-development/leadership-development-program
- **15.** ASCO Institute for Quality: Quality Oncology Practice Initiative (QOPI) and the QOPI Certification Program (QCP). http://qopi.asco.org/program.html
- **16.** American Society of Clinical Oncology: Quality Care Symposium. http://quality.asco.org/
- **17.** American Society of Clinical Oncology: Multidisciplinary Cancer Management Courses. http://www.asco.org/international-programs/multidisciplinary-cancer-management-courses
- **18.** American Society of Clinical Oncology: International Palliative Care Workshops. http://www.asco.org/international-programs/international-palliative-careworkshops
- **19.** American Society of Clinical Oncology: Cancer Control in Primary Care courses. http://www.asco.org/international-programs/cancer-control-primary-care-courses
- **20.** American Society of Clinical Oncology: International Cancer Corps. http://www.asco.org/international-programs/international-cancer-corps
  - 21. Health Volunteers Overseas. https://hvousa.org/
- **22.** ASCO Institute for Quality: Practice guidelines. http://www.instituteforquality.org/practice-guidelines

- 23. Sloan FA, Gelband H (eds): Cancer Control Opportunities in Low- and Middle-Income Countries. Washington DC, National Academies Press, 2007
- **24.** Anderson BO, Distelhorst SR: Guidelines for international breast health and cancer control: implementation. Cancer 113:2215-2216, 2008 (suppl 8)
- **25.** Anderson BO, Cazap E, El Saghir NS, et al: Optimisation of breast cancer management in low-resource and middle-resource countries: Executive summary of the Breast Health Global Initiative consensus, 2010, Lancet Oncol 12:387-398, 2011
- **26.** ESMO-ASCO: Recommendations for a global curriculum in medical oncology: 2010 update. http://www.esmo.org/content/download/8171/168764/file/ESMO-ASCO-Revised-Recommendations-fora-Global-Curriculum-in-Medical-Oncology.pdf
- 27. American Society of Clinical Oncology: Medical Oncology In-Training Examination. http://www.asco.org/professional-development/medical-oncology-training-examination
- **28.** Hansen HH, Bajorin DF, Muss HB, et al: for the ESMO/ASCO Task Force on Global Curriculum in Medical Oncology: Recommendations for a global core curriculum in medical oncology. Ann Oncol 15:1603-1612, 2004
- **29.** Casali PG: Medical oncology: The long-awaited prize of recognition, Ann Oncol 22:1695-1697, 2011
- **30.** World Health Organization: 58th World Health Assembly approved resolution on cancer prevention and control WHA55.22, 2005. http://www.who.int/cancer/eb1143/en/
- **31.** American Society of Clinical Oncology: International Clinical Trials Workshops. http://www.asco.org/international-programs/international-clinical-trials-workshops
- **32.** Conquer Cancer Foundation: International Innovation Grant. http://www.conquercancerfoundation.org/cancer-professionals/funding-opportunities/international-innovation-grant
- **33.** Best of ASCO: 2015 Annual Meeting. http://boa.asco.org/

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#### **AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

#### The American Society of Clinical Oncology's Efforts to Support Global Cancer Medicine

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Consulting or Advisory Role: Pfizer, Antigen Express, Novartis, Peregrine Pharmaceuticals, Bayer AG, MetaStat, Celgene

Research Funding: Novartis (Inst)

Travel, Accommodations, Expenses: Novartis

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No relationship to disclose

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No relationship to disclose