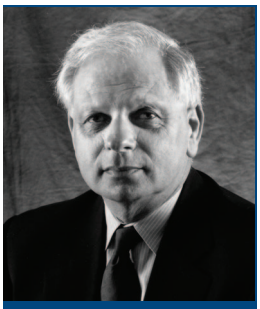
Future Supply of and Demand for Oncologists

Workforce Advisory Group Addresses Likely Shortages

In March 2007, *Journal of Oncology Practice* published an article by Erikson et al[1] that reported the results of a study commissioned by the ASCO Board of Directors on the supply of and demand for oncology services through the year 2020. Data for the study were collected by the Association of American Medical Colleges Center for Workforce Studies in collaboration with the ASCO Workforce in Oncology Task Force, which was chaired by Michael Goldstein, MD, of the Beth Israel Deaconess Medical Center, Boston, Massachusetts.



Michael Goldstein, MD

Dean Bajorin, MD

The study found that the United States will likely face a 48% increase in demand for oncologist services by 2020—in large part because of the expected 81% increase in cancer survivorship and the 48% increase in cancer incidence caused by the aging of the population. The anticipated 14% increase in the number of oncologists over that same time period will not meet the growing demand. Thus, there is likely to be a shortfall of 2,550 to 4,080 oncologists—roughly one fourth to one third of the 2005 supply. Dean Bajorin, MD, Memorial Sloan-Kettering Cancer Center, New York, New York, one of the study advisors, noted that the study is likely conservative in its prediction because it used today's service use as the baseline for demand. "The baby boom generation is likely to seek more health care services than those who are currently over the age of 65. In addition, improved cancer treatments mean that people are living longer and facing other cancer diagnoses and chronic illnesses."

The authors of the article concluded that "ASCO, policy makers, and the public have major challenges ahead of them to forestall likely shortages in the capacity to meet future demand for oncology services. A multifaceted strategy will be needed to ensure that Americans have access to oncology services in 2020, as no single action will fill the likely gap between supply and demand. Among the options to consider are increasing the number of oncology fellowship positions, increasing use of nonphysician clinicians, increasing the role of primary care physicians in the care of patients in remission, and redesigning service delivery."

Workforce Strategic Plan

In response to this study, the ASCO Board of Directors has approved the 5-year Workforce Strategic Plan developed by ASCO's Workforce Implementation Group (WIG). The original report prompted the formation of the WIG in January 2007. The Workforce Strategic Plan was submitted to and approved by the ASCO Board of Directors in May 2008. As part of the strategic plan, the board has now supplanted the WIG with the smaller Workforce Advisory Group (WAG). "We envision the WAG will operate as a unit for the 5-year implementation phase," said Goldstein, observing that ASCO committees have 3-year memberships, so there is more turnover. The WAG will be cochaired by Goldstein and Bajorin; a complete list of WAG members is included with this article. The WAG will focus on workforce issues, advise the board, implement or support initiatives, conduct outreach to other professional societies, analyze workforce data, and provide guidance to ASCO.

One overall goal of the Workforce Strategic Plan is to ensure that patients with cancer continue to have access to high-quality cancer care. This includes patients in active treatment, patients at end of life, and cancer survivors. The plan also directs the WAG to consider how to train the next generation of oncologists to practice in a time of shortage, as well as how to increase the number of oncologists who are trained.

Factors Influencing the Future Supply of Oncologists

"The projected oncologist workforce shortage reflects, in part, the limited plans by oncology fellowship programs to expand," Bajorin noted. Although expanding the number of trainees is a logical conclusion, a recent survey of program directors found that a lack of financial resources is the single largest impediment to increasing trainee slots. On the other hand, WAG member Michael Kosty believes that the other resources needed to increase the number of trainees could be available. The training programs at major cancer centers that already train 12 to 15 fellows per year cannot grow much. However, those that train only two to four fellows per year might be able to double their size, because those programs already have the necessary educational resources in place, including the patient population and faculty.

Michael Kosty

"This could provide a modest increase in the number of trainees, but it still doesn't solve the whole problem," he said.

Another obstacle to increasing the number of oncology fellows is the shortage of internal medicine residents. "Oncology pulls from the same internal medicine pool as other specialties (eg, primary care, cardiology, pulmonology, gastroenterology, and other fields), and that limits the number of qualified applicants to oncology programs." Goldstein said that it will take a generation to increase the number of oncologists, and most existing fellowship programs have minimal plans for expansion.

Hurdles on the Path and Possible Solutions

Amy Hanley, workforce and health policy specialist at ASCO, observed that there is a long list of things that could be done to address the workforce shortage, and no single solution will work. Therefore, it is important to prioritize the projects that ASCO can do. "We want to select those that are within ASCO's reach and will have the most significant impact," she said. "For example, doubling the number of fellows we train would have the largest effect, but ASCO is not in a position to do that, and fellowship programs do not report that degree of expansion."

ASCO is exploring a number of solutions to address the oncology workforce shortage, including:

- Increasing the use of nonphysician practitioners (NPPs) in oncology practices
- Coordinating care with nononcologists for patients whose active treatment is complete
- Researching how to improve the efficiency of care delivery
- Supporting program directors in their efforts to train oncologists to practice in an era of shortage, and helping them make the case for an increase in the number of training slots

NPPs include nurse practitioners (NPs) and physician assistants (PAs). The ASCO study found that 54% of oncologists already work with NPPs, but only half of the NPPs are performing advanced activities, such as assisting with new patient consults, ordering routine chemotherapy, or performing invasive procedures. "In order to involve nonphysician clinicians," said Goldstein, "oncologists will have to be team leaders and will need a different skill set and [need to] function in a less traditional way." He noted that a lack of oncology experience and a lack of training are challenges. Many NPPs are trained in family practice or adult medicine and have little formal oncology training. One approach might be to develop educational materials that could be used to reduce the length of the on-the-job training period for new hires. Kosty suggested that one way to increase the amount of oncology training would be for NPs and PAs to interact with professional societies. In addition to adding more oncology care to curricula, he suggested the use of

R. Steven Paulson, MD

"outside courses for those who have graduated to bring their skill set up to speed." R. Steven Paulson, MD, member of the WAG, noted that although the use of nonphysician clinicians is already taking place, there will likely be a gradual evolution because many older physicians do not feel comfortable handing patients over to NPs or PAs.

A related concern is that although much of the monitoring and follow-up of patients does not need to be done by physicians, the downside of handing such work over to nonphysicians is that the oncologists will likely focus more and more on high-acuity patients, that is, very sick patients with many problems. A lack of respite from these patients could result in lower job satisfaction and an increased burnout rate, two factors that could lead to further reductions in the workforce.

Transferring care back to primary care physicians when patients' cancers are in remission and they have finished active treatment is another possible strategy. This will require ensuring that primary care providers are comfortable caring for patients with special health needs. This approach is compromised by the current shortage of primary care physicians. However, Kosty noted that in some health care systems, patients routinely return to their primary care physicians for ongoing care after their active treatment is complete. Paulson added that when patients might want to return to their primary care physicians, the physicians' practices may be full.

"Survivorship clinics"—clinics for patients who can be monitored and treated for ongoing complications once their active therapy has ended—are another development that the WAG is studying. Some practices have implemented such clinics with NPPs providing care as an innovative approach to ensure their patients have ongoing oncologic care. This approach, like others, requires coordination and support from oncologists and other health care providers alike, as well as sensitivity to patients' perceptions. Ultimately, oncology care requires a more interdisciplinary approach to care, and this will be even more the case in the future. Survivorship care in particular may benefit from a team approach, in which a group including oncologists, oncology nurses, NPs, PAs, and social workers develops a coordinated plan to provide comprehensive care and a seamless transition for cancer survivors.

Publication Plans and Future Directions

A workforce study of program directors, completed in the fall of 2007, analyzing the type and quality of oncology fellowship applicants is slated for publication in *JOP* in early

2009. With the ongoing help of the Association of American Medical Colleges Center for Workforce Studies, ASCO will generate an information database to track real-time trends in the workforce supply. This will be supplemented by continuing targeted surveys of ASCO members so that a larger survey will not need to be conducted. These "snapshot" surveys could include a couple of questions tacked onto exiting surveys or questionnaires, such as those aimed at retirees who are changing their membership status or at entry-level applicants, or questions could be added to the training examination. The first report from this effort is expected by the end of 2009. The results from ongoing data collection can be compared with benchmarks established by the 2007 workforce study.

By the beginning of 2009, ASCO's WAG hopes to have a contractor to administer grants for the study of a subset of practices using collaborative care approaches involving oncologists and NPPs in the care of patients with cancer. ASCO believes that although the literature contains anecdotal reports that NPPs increase the productivity of oncologists, this must be studied formally. Other strategies to increase productivity and efficiency may be studied in the future as well.

ASCO is also considering a survey of ASCO members who are nearing retirement or have just retired to define the factors affecting their retirement decisions. Similarly, oncologists with young children may be asked about factors that would encourage them to return to practice after maternity/paternity leave and keep them in practice while their children are young. This will allow ASCO to determine how the society can support practices and institutions aimed at keeping these groups in the workforce.

Solutions will have to take into account women or men who want to take time off to have or raise families at what could be the most productive time of their careers. Quality-of-life issues are increasingly a concern of oncologists as both men and women are becoming unwilling to have all-consuming jobs. Paulson noted that although the expectation of working shorter hours is "not a bad thing, this limits the volume of patients that can be seen." "The limit on work hours in training programs has changed the culture of medicine," Kosty observed. "It's not all bad but has consequences, many of which were foreseeable but only some of which were foreseen."

ASCO, policy makers, and the public have major challenges ahead of them to forestall likely shortages in the capacity to meet the future demand for oncology services. A multifaceted strategy will be needed to ensure that Americans have access to oncology services in 2020 and beyond.

DOI: 10.1200/JOP.0863001

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ASCO's Workforce Strategic Plan is available online at www.asco.org/workforce

Reference

1. Erikson C, Salsberg E, Forte G, et al: Future supply and demand of oncologists: Challenges to assuring access to oncology services. J Oncol Pract 3:79-86, 2007