The Changing Oncology Landscape: Evolution or Revolution?

Presented by Roy Beveridge, MD; John Fox, MD, MHA; Susan A. Higgins, MD, MS; Martin Kohn, MD, MS; John J. Mahoney, MD, MPH; Lee N. Newcomer, MD, MHA; and Andrew von Eschenbach, MD; moderated by Clifford Goodman, PhD

Abstract

Complex challenges face all players in the oncology landscape, from health care policy leaders and third-party payers, to practicing physicians and nurses, to patients and their families. In these unsteady economic times, possible answers proposed by some may represent part of the problem to others. A distinguished panel assembled at the NCCN 18th Annual Conference: Advancing the Standard of Cancer Care to explore the changing oncology landscape. This article is the synopsis of that discussion, with panelists shedding light on such issues as the astronomic cost of medical care, the need for clinicians to think outside the formulary, and the therapeutic decision-making process in the new world of “big data.” (*JNCCN* 2013;11:636–638)

One of the questions discussed at the NCCN 18th Annual Conference was, “is quality care at an affordable price for all people with cancer a pipe dream or a realistic goal?” To clarify the issues at stake, Clifford Goodman, PhD, Senior Vice President at The Lewin Group, moderated a roundtable on the changing oncology landscape, tackling such topics as the implications of the wide socioeconomic divide for cancer care, the shifting focus from quantity of survival to quality of survival, and the best way to use “big data”—relatively large amounts of data that require machine-based systems and techniques to be fully analyzed—to improve clinical decision-making. Health care policy leaders, third-party payers, and practicing physicians voiced their often diverse perspectives on these complex challenges, admitting that things may get worse before they get better.

Separate Landscapes: The “Haves” Versus the “Have-Nots”

Although health care reform has broadened access to care, the cost of that care has become unaffordable for many people in the United States. “In 3 years, the per-

son who makes an average US salary will have to spend 50% of it to cover his out-of-pocket expenses and health care premium,” predicted Lee N. Newcomer, MD, MHA, Senior Vice President at UnitedHealth Group. Echoing this sentiment was John Fox, MD, MHA, Senior Medical Director and Associate Vice President of Medical Affairs for Priority Health: “In the future, the middle class may be squeezed with up to \$6,000 individual out-of-pocket expenses a year and \$12,000 for a family.” In truth, added John J. “Jack” Mahoney, MD, MPH, Consultant to Pitney Bowes, the insurance plans offered through exchanges are not as rich as in the past. As a result, as these costs shift to patients, their expectations about care may change.

“In economic downturns, people bypass preventive care and screening,” continued Dr. Mahoney. Subsequently, many people now have a higher risk profile than perhaps in the past, with more advanced stages of chronic diseases such as hypertension, diabetes, and even some types of cancer. Moreover, socioeconomic class may be tied to the type of disease and the stage at presentation,” noted Susan A. Higgins, MD, MS, Associate Professor in the Department of Therapeutic Radiology and the Division of Obstetrics and Gynecology at Yale University School of Medicine. “I work in the land of the ‘haves’ and ‘have-nots,’” she explained. “We still see stage IV cervical cancer in our underprivileged patients, which is a third-world country disease.”

Patients may not be the only ones concerned about their insurance status. A new paradigm is emerging in which insurance status may change the thought process of how a patient will be treated, according to Roy Beveridge, MD, Chief Medical Officer for McKesson Specialty Health. “As physicians, we have been trained to take care of everyone in the same way,” he said, with treatment pathways being “agnostic” to whether a patient is on Medicare, Medicaid, or commercial insurance. “This is going to change.”

Another evolving disparity between the haves and

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Meet the Panel

Clifford Goodman, PhD, moderator: Senior Vice President at The Lewin Group, a health care policy consulting firm based in Falls Church, Virginia. With more than 25 years of experience in health care evaluation, Dr. Goodman is also Director of the Evidence-based Practice Centers Coordinating Center at The Lewin Group.

Roy Beveridge, MD: Chief Medical Officer for McKesson Specialty Health. Dr. Beveridge was Executive Vice President and Medical Director of US Oncology before its purchase by McKesson. He served as a medical oncologist at Virginia Cancer Specialists in Northern Virginia within The US Oncology Network.

John Fox, MD, MHA: Senior Medical Director and Associate Vice President of Medical Affairs for Priority Health, a provider-sponsored health plan with 640,000 members headquartered in Grand Rapids, Michigan. Dr. Fox is engaged in new program development, including physician profiling, pay-for-performance programs, and value-based benefit designs.

Susan A. Higgins, MD, MS: Associate Professor in the Department of Therapeutic Radiology and the Division of Obstetrics and Gynecology at Yale University School of Medicine. A leader of the Multidisciplinary Gynecologic Disease Team Unit at the Smilow Cancer Hospital, Dr. Higgins is also Associate Director of the Therapeutic Radiology Residency Training Program.

Martin Kohn, MD, MS: Chief Medical Scientist for Care Delivery Systems in IBM Research. An emergency physician with more than 30 years of hospital-based practice and management experience, Dr. Kohn is a leader in IBM's support for the transformation of health care, including development of personalized care, outcomes-based models, and payment reform.

John J. "Jack" Mahoney, MD, MPH: Consultant to Pitney Bowes, where he was formerly the company's Global Health Strategy Director, Chief Medical Officer, and a key team leader for its health care programs. During Dr. Mahoney's tenure at Pitney Bowes, the company became the first in the country to fully implement the value-based insurance design.

Lee N. Newcomer, MD, MHA: Senior Vice President at UnitedHealth Group, with strategic responsibility for oncology, genetics, and women's health. Dr. Newcomer is the former Chairman of the Park Nicollet Health Services, now known as Health Partners, in Minneapolis, Minnesota.

Andrew von Eschenbach, MD: President of Samaritan Health Initiatives, Inc., in Montgomery, Texas, where he leads a consulting firm in the field of health care policy and practice. Dr. von Eschenbach is the former Commissioner for the US FDA and former Director of the NCI.

the have-nots is the digital divide. "An emerging new cultural demographic is the digital elite versus the digital disadvantaged," declared Andrew von Eschenbach, MD, President of Samaritan Health Initiatives, Inc. Digital access is becoming a part of the oncology landscape, with issues centering on compliance and other treatment strategies. Those without such access and knowledge may find it increasingly difficult to navigate the entire oncology landscape, he added.

Thinking Outside the Formulary: Rebalancing Care

Improving outcomes in cancer care clearly hinges on the question of what outcomes are valuable, according to several members of the panel. For patients, "life expectancy or overall survival may not be the most valuable thing," revealed Dr. Fox. The true wishes of patients in terms of the quality of their survival must be reprioritized in clinical decision-making. The care provided to patients should be consistent with what they want, added Dr. Fox, "and the only way to know that is to ask them." Dr. Mahoney weighed in on this issue as well: "Over the past few years, there has been a push among major employers to heavily subsidize things like health care directives and living wills." He also noted the importance of addressing issues beyond just treatment choices and financial decisions. "Patients need to grapple with time off from work, who will care for the kids, and psychological stress," added Dr. Mahoney.

Although most panel members agreed with Dr. Higgins that communicating with patients about their wishes, particularly at the end of life, is an important part of what physicians do, many mentioned the challenges in reaching this objective. Although physicians are trained in performance-based tasks, they receive little guidance on the palliative care side of the treatment equation. Acknowledging this complicated cultural dynamic between physicians and their patients, Dr. Beveridge believes that "the manpower is not there, and it will take years to train physicians for this." He added that a nurse practitioner or social worker may help to bridge these discussions between physicians and patients.

Another contributor to the problem may be a philosophical barrier, suggested Dr. Newcomer. "Americans still think death isn't an option. We have a whole culture that says it is wrong to stop [treatment]," he explained. This perspective may make it

Roundtable

difficult to broach such conversations with patients. Tools to help initiate these discussions are becoming more widely available, such as the Choosing Wisely form. “I used that tool with my parents and was amazed at what I learned from that conversation,” shared Dr. Newcomer. “It does not require an army of palliative care specialists, but rather a cultural commitment.”

Regardless of the obstacles, Drs. Higgins and von Eschenbach firmly believe that rebalancing care to include quality-of-life issues along with clinical treatment decisions should be a routine part of a physician’s job description. “Being an oncologist brings you into the conversation to help patients make choices,” added Dr. von Eschenbach.

Big Data: Personalizing Medicine in the Real World

One way to channel big data to better streamline therapeutic decision-making in the era of personalized medicine is through the power of tools like Watson, explained Martin Kohn, MD, MS, Chief Medical Scientist for Care Delivery Systems in IBM Research. For those unfamiliar with its popularity on the television show *Jeopardy!*, Watson is an artificial intelligence computer learning system that self-corrects and self-improves with little human input. “Watson can read and comprehend thousands of articles in a few seconds,” revealed Dr. Kohn.

Dr. Kohn briefly explained the role of Watson in cancer care decision-making. In a joint venture between Memorial Sloan-Kettering Cancer Center and the health insurance company WellPoint, “Watson is being taught to understand the critical attributes of a history of a patient with cancer and then look through the literature [including the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines)] and make personalized suggestions for the oncologist and patient to consider,” announced Dr. Kohn. “The 4 Vs of big data are volume, velocity, variety, and variability,” he added. “And it’s unique to be able to deal with all 4 of those Vs if you’re going to do anything useful with the information.”

Another application of big data in the real world was illustrated by Dr. Newcomer. UnitedHealthcare, he explained, has access to data about 70 to 80 million people per year that reaches back as far as a decade. In collaboration with the Mayo Clinic, “we are trying to create a cancer registry that combines clinical data

from state tumor registries with our claims data,” he explained. In this way, longitudinal records can be created for individual patients. In the next few years, predicted Dr. Newcomer, “we plan to start profiling chemotherapy regimens to calculate real-world progression-free survivals for a given chemotherapy regimen.” In his experience, real-world patients do not do as well as trial patients. Furthermore, armed with this information, third-party payers may make decisions on what they will cover and will not cover, Dr. Newcomer predicted.

The panel suggested that many health care professionals are becoming fans of big data, and Dr. von Eschenbach is one of them. “By capturing these data, we can do more sophisticated data analyses that move us from information to real knowledge; then with physician engagement and interpretation, we get to wisdom,” he added. Furthermore, more important than the big data operation, according to Dr. von Eschenbach, is to get the right treatment for the right patient for the right reason. “That is the difference between rational medicine and rationed medicine.”

Dr. Beveridge, Dr. Fox, and Dr. Newcomer offered some words of caution about the concept of big data in cancer care, however. “The trick is not to acquire data alone,” noted Dr. Beveridge, “The integrity of the data is remarkably important.” Along this line of thinking, Dr. Newcomer mentioned that evidence of causality is needed, as well. Furthermore, although big data may be able to show the options available, Dr. Fox warned about using these data “in a vacuum” and reminded attendees that at the heart of the matter remain patient preferences (including no active intervention).

How Brave the New World: Competitive Collaboration

A reformed ecosystem may be the future for not only general health care but for cancer-specific care as well. “The treatment of complex chronic diseases requires the integration of components in a multidisciplinary approach,” said Dr. von Eschenbach. “And cancer is a pioneer in this approach.” Dr. Higgins agreed that multidisciplinary care is extremely valuable for cancer patients. Moving forward, creating solutions will rely on competitive collaboration. “The game is no longer golf, but basketball,” quipped Dr. von Eschenbach. It no longer is centered on individual excellence of the physician, but rather on interoperable performance and working together, he concluded.