Cancer continues to be a major clinical area attracting investment in research and development for new therapeutics and new diagnostics, as well as a significant driver for innovation in care delivery and a patient-focused, value-based approach to care. Immunotherapies are rapidly becoming an enhanced focus for research, as better understanding of the biology of cancer is increasing the pool of patients who can benefit from these new developments. In tandem, patient navigation and survivorship programs are providing opportunities for improved quality of life for patients with cancer, as many now live longer through improved therapies, and as tumor remission and extended periods of disease-free survival are becoming a reality for an ever-growing number of patients.

The rapid discovery of new biomarkers and advancements in molecular sequencing and diagnostic modalities are gradually encouraging cancer researchers to focus on subpopulations of patients, charting a clear pathway for personalized medicine, despite ongoing doubts about the applicability of this approach in the real world.

But all this new energy and increased innovations do not come “cheap.” The cost of cancer care continues to be a top concern for patients, payers, and policymakers, while reimbursement issues are taking center stage for the entire cancer care team. The growing economic challenges in the face of great strides in oncology management might have led the American Society of Clinical Oncology (ASCO) to issue its first-ever comprehensive report on the current state of cancer to the nation in a publication titled “The State of Cancer Care in America, 2014.”

In addition to its “recommendations for addressing the cancer care delivery system’s most pressing concerns, this landmark ASCO report also examines the rapid expansion of health information technology and the growing emphasis on quality measurement and value.”

The present annual oncology/hematology theme issue from American Health & Drug Benefits highlights some of these top concerns, addressing issues facing the oncology community in 2014 from a variety of perspectives.

The rapid approvals of new therapies and novel diagnostics for cancer by the US Food and Drug Administration (FDA)—as evidenced by the growing number of so-called breakthrough therapies for cancer approved by the FDA, and the agency’s frequent use of the priority review process to accelerate patient access to new and improved drugs—have shifted the focus of cancer drug management from traditional pharmacy benefit management to specialty pharmacy, where the majority of new oncolytics are increasingly being managed. This growth in oncology specialty pharmaceuticals has created a significant management challenge for health plans and an opportunity for innovation, says James T. Kenney, Jr, RPh, MBA, in his perspective in this issue.

Innovation is also the focus of the article by Jeffrey D. Miller, MS, and his team of health economics researchers. They issue a call to action for the health economics community, noting that as innovative, yet high-cost, therapies for cancer continue to come to market, the need for economic modeling is growing as a way of providing better insight into the meaning of “value”—perhaps the most prevalent word in 2014 used to define the current focus on quality and cost in cancer care. However, Mr Miller and his colleagues suggest that serious methodologic and policy challenges are facing modeling-based analyses as a decision-making tool in oncology; the team is inviting researchers and other members of the oncology community to take part in this discussion and to help promote these complex pharmacoeconomic concerns in an attempt to chart new directions toward improved decision-making based on cost, quality, and value considerations.

Saurabh Ray, PhD, and colleagues offer insight into the treatment and cost of glioblastoma multiforme—the most common and malignant brain tumor in adults—a malignancy associated with challenging treatment issues and poor survival, leaving much room for innovation and further research. The authors raise questions about the cost-effectiveness of the current standard of therapy for this disease, which involves radiotherapy in combination with temozolomide. As can be expected, the use of this expensive drug in the treatment regimen adds significant costs, but, as Dr Saurabh and colleagues show, the median survival time is highest in patients who receive neither temozolomide nor radiation therapy. Additional cost-effectiveness and quality-of-life analyses, the authors suggest, are critical to better understand the role of temozolomide in this patient population and to improve outcomes.

Cancer Care in 2014: Continuing Challenges, New Opportunities

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Kirk J. Wojno, MD, and colleagues discuss the issue of repeated biopsies that are often used in connection with the diagnosis of prostate cancer. As an invasive procedure, a prostate biopsy places the patient at risk for complications and is subject to significant sampling errors. Dr Wojno and his team provide data from a small study in a real-world setting investigating the use of an epigenetic test—which is currently being used in clinical practice—as a means to assess the need for repeated biopsy in men with no history of prostate cancer. Based on the data from several urology groups in the United States, men who had a negative result on the epigenetic test had a <5% rate of repeated prostate biopsies, suggesting a potential 10-fold reduction in repeated biopsies compared with the current rates. This type of epigenetic testing, the authors conclude, can help to reduce the number of unnecessary repeated biopsies for the diagnosis of prostate cancer, the most common type of cancer in men.

Finally, Michael S. Broder, MD, MSHS, and his colleagues conducted the first systematic review of the published literature to investigate the economic burden of prophylactic therapy for chemotherapy-induced nausea and vomiting (CINV), an ongoing topic of concern with any type of chemotherapy, despite new developments in oncology drugs. The risk for CINV continues even with new therapies, and proper management is key to improved patient quality of life and the control of significant side effects associated with current chemotherapy. Based on the data from clinical studies, Dr Broder and colleagues suggest that significant differences exist among the different therapies available for the prevention and management of CINV.

Furthermore, the costs of these therapies vary significantly, but cost alone cannot determine the selection of the prophylactic agent, because a more expensive therapy may actually result in lower overall costs when considering the cost of uncontrolled CINV side effects. This first systematic analysis of the impact of prophylactic therapy with 5-hydroxytryptamine receptor antagonists (5-HT3RAs) for CINV on cost and utilization shows that the use of palonosetron for CINV prophylaxis is indeed associated with higher total acquisition costs but also with lower use of rescue medications and lower outpatient and inpatient utilization compared with other 5-HT3RAs in the United States. In addition, they note that the use of palonosetron is recommended as the preferred 5-HT3RA agent by the majority of oncology societies and organizations in the United States and Europe, reflecting its superior outcomes, which therefore result in reduced utilization and lower costs overall.

This sample of articles offers insight into the type of challenges, some old and some new, facing the oncology team today—all indicating a need for innovation in the search for new solutions. Applying the results and implications of health economics research in oncology into everyday patient care can provide new opportunities to improve patient outcomes and reduce healthcare costs.

We invite your comments, perspectives, and letters related to this collection of articles. Submit your correspondence at www.AHDBonline.com.

References