Assessing Value in Oncology: Models & Perspectives from Payers and Oncologists

In the United States (US), costs related to the treatment of cancer are expected to rise to at least $157.8 billion in 2020, representing a 27% increase from 2010 numbers (Mariotto 2011). This cost escalation is causing major trepidation for patient access as many are already experiencing financial distress or “financial toxicity”. The financial toxicity is akin to physical toxicity as it places enormous burden on patients and their families. With more and more of the financial risk being shifted from payers to healthcare providers and patients, efforts have increased to provide these key stakeholders with tools to assess the value of therapies. These tools facilitate more informed evaluations when deciding on the best therapy to use. The early contributors in the current value environment are Memorial Sloan Kettering Cancer Center (MSKCC), the American Society of Clinical Oncology (ASCO), and the National Comprehensive Cancer Network (NCCN). Most recently, the Institute for Clinical and Economic Review (ICER) Value Assessment Framework was developed that also incorporates value components linked to affordability for the healthcare system.

In this issue brief, we recap 3 value assessment models currently at the forefront of discussions in the US and provide some perspectives from payers and oncologists.
MSKCC DrugAbacus

![DrugAbacus](https://example.com)

**MSKCC DrugAbacus**

Drug Value

Actual price versus the DrugAbacus price for a month’s worth of selected drugs. DrugAbacus prices are adjusted by dollars per life year, or the monetary value assigned to an additional year of life.

**Drug Value**

<table>
<thead>
<tr>
<th>Actual price</th>
<th>$48,000</th>
<th>$56,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAC:__________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Payment:_____</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ASCO Value Framework

**ASCOPulse** - Advanced Disease Framework

<table>
<thead>
<tr>
<th>Clinical Benefit</th>
<th>Toxicity</th>
<th>Bonus Points</th>
<th>Net Health Benefit</th>
<th>Cost (per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>/80</td>
<td>/20</td>
<td>/30</td>
<td>/130</td>
<td>DAC:__________</td>
</tr>
<tr>
<td>Patient Payment:_____</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NCCN Evidence Blocks™

![NCCN Evidence Blocks](https://example.com)

**NCCN Evidence Blocks Categories and Definitions**

- E = Efficacy of Regimen/Agent
- S = Safety of Regimen/Agent
- Q = Quality of Evidence
- C = Consistency of Evidence
- A = Affordability of Regimen/Agent

© 2015 National Comprehensive Cancer Network®

MSKCC has created an interactive calculator called the DrugAbacus to compare the cost of more than 50 cancer drugs (Loftus 2015, DrugAbacus 2015). The calculator is depicted in the form of an abacus with 2 beads on each wire corresponding to 2 different prices. The actual price is an immovable bead, and “abacus” price is a bead that moves based on a range of factors chosen by a user. These factors include efficacy, toxicity, rarity, population burden, novelty, and research and development (R&D).

In a similar effort, ASCO has published a conceptual framework for assessing the value of new cancer treatment options (the ASCO Value Framework) as compared with established treatments according to clinical benefit, side effects, and cost (Schnipper 2015). Clinical benefit and toxicity (and bonus points in advanced cancers) are calculated to generate a net health benefit (NHB) score, which is then concurrently displayed with the direct cost of the treatment to show an overall value story.

Driven by the premise that adherence to clinical pathways has been proven to be a cost-effective strategy resulting in a more succinct list of treatment choices that drive value (Hoverman 2011, Neubauer 2014), NCCN introduced its initiative called NCCN Evidence Blocks™. NCCN Evidence Blocks consist of 5 key measures: efficacy, safety, quality and quantity of evidence, consistency of evidence, and affordability. Similar to the ASCO Value Framework, the main goal of the NCCN Evidence Blocks is to supply providers and patients with the information to make knowledgeable choices when deciding on systemic therapies. However, specific prices of various treatments are not listed in the guidelines. Instead, the “evidence blocks” are visual tools in which shaded boxes correspond to levels of evidence within the NCCN Guidelines to show which treatments are more affordable, effective, and tolerable compared with treatments tested in like clinical trials.

Overall, the development of these value initiatives denotes significant momentum for all oncology stakeholders in recognizing the financial implications as well as the access barriers for their patients to cancer therapies. The assessments used by the ASCO, MSKCC, and NCCN value initiatives are all focused on bringing value into the discussion. Despite some limitations of these value tools, most of them consist of shared components such as efficacy and toxicity in the context of cost. It is important to emphasize that these various tools offer an initial foundation of how technology assessment could be realized in the US and might contribute to further improving the value of cancer care. Additionally, these tools may aid in conducting multidisciplinary research in clinical trial design, comparative effectiveness, patient preferences, health outcomes, and economic data captured through analysis of data generated in clinical trials and real-world clinical practice. Perhaps this is not yet conceivable in the US, but ESMO already plans to employ its value tool prospectively for the incorporation of new anti-cancer drugs into the ESMO Clinical Practice Guidelines with the desire that they will be approved more quickly by health authorities across the European Union.

To get a sense of what payers and oncologists think about value in oncology in general and the various models specifically, Xcenda conducted a ProviderPulse® survey of 50 oncologists and a PayerPulse® survey of 55 payers (ie, medical and pharmacy directors). When asked about the potential impact of various initiatives on driving value in oncology, payers and oncologists both agreed new payment and delivery models have the most...
Potential Impact of Value in Oncology Initiatives

New Payment and Delivery Models
Both payer and oncologist respondents rated “new payment and delivery models” as the variable that will have the highest impact in improving value in cancer care over the next several years. Payers and oncologists rated “new payment and delivery models” as the variable that will have the highest impact in improving value in cancer care over the next several years.

Payers
63%
60%
67%
Generics
Outcomes-based Pricing
Biosimilars
65%
60%
74%
76%
68%
44%
30%

Oncologists
76%
42%
44%
76%
30%
68%
30%
68%
44%

Figure 2: Potential Impact of Value in Oncology Initiatives

Impact of New Payment and Delivery Models
Both sets of respondents rated “new payment and delivery models” as having the greatest potential impact in improving value in cancer care. When asked which specific payment and delivery models could have the most impact, bundled payments was the clear first choice of both groups (Figure 3). When asked about the need for tools to assess value, both groups agreed there is a need, but oncologists were somewhat less enthusiastic (Figure 4). Furthermore, when asked if the ASCO Value Framework criteria provided enough information, both groups expressed a substantial lack of confidence in the tool. The primary reason given was that the framework is limited to direct comparisons within clinical trials and does not allow for any comparison of available treatment options across clinical trials. The majority of payers and oncologists believe cost should be factored into ASCO’s NHB score. However, the groups disagree on the importance of additional factors: payers would like to see population burden and rarity of disease included, while oncologists desire inclusion of R&D and novelty of the drug (Figure 5).

Figure 4: Value Comparison

Figure 5: Cost and Net Health Benefit (NHB) Score

The limited ability to compare the value of available treatment options within the ASCO Value Framework is of concern to both groups of respondents. The primary reason given was that the framework is limited to direct comparisons within clinical trials and does not allow for any comparison of available treatment options across clinical trials. The majority of payers and oncologists believe cost should be factored into ASCO’s NHB score. However, the groups disagree on the importance of additional factors: payers would like to see population burden and rarity of disease included, while oncologists desire inclusion of R&D and novelty of the drug (Figure 5).
Considerations for Manufacturers

Since value assessments are impacting the way in which oncology agents are being viewed—whether they be pipeline products or ones that have already hit the market—manufacturers must be prepared to commercialize their products within the dynamic setting of these evolving value framework tools and a cost-constrained global market. The following should be considered given this market dynamic:

• Manufacturers must be willing to broaden their thinking to include this young field of value assessments and health outcomes research into their planning in addition to cost-effectiveness methodologies that have traditionally been used
• As payers and providers begin to use these frameworks in their decision making for reimbursement and prescribing, it will be essential for manufacturers to understand the nuances of each tool and the impact of their variations on their product value story
• Amassing real-world data will become increasingly important for demonstrating the value of oncology agents early in the development process. Manufacturers must then continually adapt their value story after product launch, particularly given evolving standards of care
• Clinical trial strategy along with comprehensive HEOR plans should be used to increase value in this changing healthcare landscape from volume to value and quantity to quality
• Frameworks will continue to evolve and so will their adaptation by various stakeholders. Manufacturers need to stay on top of trends in payer, provider, and patient behavior and identify what key drivers of these value assessment tools impact the treatment selection so they can proactively adjust their strategic plans
• To more easily assess product value and see where products might be positioned in the competitive landscape, manufacturers can consider using digital tools that automate product scoring using the conceptual framework criteria. Multiple pipeline and marketed products could be evaluated in a consistent and timely manner using these kinds of applications

Given the impact new and evolving models could have on product evaluation, Xcenda will continue to monitor these tools and stay knowledgeable of the perspectives from providers, payers, and patients on this topic. Our HEOR, value messaging, health policy, and market access teams are available to assist manufacturers on how to position your oncology products in the new age of value.

Let Xcenda help you leverage these frameworks and ensure the value of your product is fully recognized.

Start a conversation:
800.320.6497 or www.xcenda.com/contact-us

References:
Loftus P. How much should cancer drugs cost? Memorial Sloan Kettering doctors create pricing calculator that weighs factors such as side effects, extra years of life. Wall Street Journal. June 18, 2015.