



Symmetry Oncology Analytics

# Leverage the power of analytics to measure the cost and quality of cancer care

Significant strides in cancer treatment have been made in the last few decades, with an associated decline in death rates for certain types of cancer including of the breast, colon and prostate.<sup>1</sup> In fact, approximately 3.2 million fewer deaths attributed to cancer were reported in 2018, compared to 1991.<sup>1</sup>

Mortality rates are an important parameter in treatment success as they are minimally impacted by detection statistics as compared to new diagnoses.<sup>1</sup> However, despite progress in treatment, cancer remains the second leading cause of death in the U.S., with associated implications for health care spending and utilization.<sup>2</sup>

Cancer-related health care spending accounts for a significant proportion of all health care expenditures in the U.S., comprising 5.65% of total costs in 2018.<sup>3</sup> Furthermore, cancer accounted for the fourth highest per-person costs among major disease categories for patients with insurance coverage in 2015.<sup>3,4</sup>

The cost of cancer care nationally was \$183 billion in 2015, a number projected to increase to \$246 billion by 2030. This represents an increase of 34% based on population aging and growth alone.<sup>5</sup> These numbers account only for direct medical costs, without consideration of the indirect costs of cancer including lost earnings from missed work.<sup>1</sup>



Cancer care comprises a significant portion of health care expenditures, and costs are continuing to increase.

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Notably, recent findings reveal that the mean health care expenditures for cancer patients are nearly four times higher per person compared to patients without cancer, with lung cancer the most expensive type.<sup>6</sup> These financial costs are paid by employers, insurers and tax-funded payers, as well as by cancer patients and their families.

Meanwhile, the indirect costs of cancer care are also significant, encompassing loss of productivity, lost wages, lost leisure time and decreased quality of life.<sup>1</sup> Families of cancer patients are also impacted. They provide informal caregiving, financial support, emotional support, transportation or assistance with managing the home and family.

As the cost of cancer care continues to rise, it has become increasingly important to understand cost drivers related to cancer care and identify opportunities for improvement in care quality. Accurate oncology cost analysis is an important component, but claims-based tools are hindered by the lack of cancer-specific prognostic information, such as cancer stage.

For example, cancer costs are highest among patients with advanced disease,<sup>5</sup> but it is not possible to stratify patients by stage using claims data alone. The absence of this cancer-specific information in claims data also limits the ability to develop quality measures to assess if cancer care aligns with national guidelines. This makes quality assessment challenging in many cases.

Research findings confirm that the quality of cancer care varies.<sup>7</sup> Analysis of the quality of cancer care is important, including areas related to care improvement, such as identification of gaps in care and opportunities to improve end-of-life care. Recognizing overuse, low-value care or potentially avoidable complications is important to improve both the quality and cost of cancer care. However, gaps in oncology quality measures persist, including, for example, those related to:<sup>8</sup>

- Clinical outcomes
- Adherence to oral oncology medications
- Unexpected hospitalizations or emergency department (ED) visit rates

Health insurance plans frequently recognize high-performing providers in their networks based on cost efficiency as well as quality metrics. However, provider-level metrics are challenging for oncology. A minimum number of patients with a specific cancer type is typically required to allow statistically meaningful comparisons between providers, but many providers do not have enough patients with one specific cancer type to meet these minimum criteria. As a result, payers are often unable to perform peer comparisons for oncologists.

In addition, provider comparisons are difficult because cancer is not one disease. Even within the same cancer type, tremendous variation exists based on factors such as stage and biomarker status, which directly impact treatment. However, limited information about stage and essentially no information about biomarkers is available through claims data. This makes it difficult to develop episodes of care that are suitable for cost comparison and quality analysis. More comprehensive data sources could help to obtain the clinical information necessary to support accurate and meaningful metrics.

Symmetry<sup>®</sup> Episode Treatment Groups<sup>®</sup> (ETG) and Symmetry<sup>®</sup> EBM Connect<sup>®</sup> are software applications designed to analyze the cost and quality, respectively, of medical care. In response to the challenges surrounding accurate metrics and peer comparisons, we have made enhancements to Symmetry ETG and Symmetry EBM Connect to improve oncology analytic capabilities: software known as ETG Oncology and EBM Connect Oncology, respectively.

Standard ETG is required to run the optional new add-on ETG Oncology software. On the other hand, EBM Connect Oncology is a separate licensable software application that does not require the purchase of EBM Connect. ETG Oncology and EBM Connect Oncology are standalone software applications and do not depend on each other to run, but for ease of use they share the same input specifications.

ETG, ETG Oncology, EBM Connect and EBM Connect Oncology are part of the Symmetry® suite of information products from Optum that support a wide array of business needs, leveraging a single methodological platform. This common platform allows organizations to apply industry-accepted measurement and assessment standards across several dimensions, including cost of care, risk of incurring health care costs, health risk and quality of care.

To allow for more homogenous grouping and comparison of medically necessary costs, severity modeling in ETG Oncology for five oncology ETGs will be enhanced by use of specific clinical data. These include cancer stage and, when relevant, biomarker information, addition of new claims-based markers and the addition of utilization-based markers for receipt of various categories of oral or injectable cancer treatments. Enhanced severity modeling in ETG Oncology will account for a much larger fraction of the variation in cost between episodes, and will be available for these ETGs:

- Breast cancer
- Rectal cancer
- Prostate cancer
- Colon cancer
- Lung cancer

The initial five cancer types chosen for ETG Oncology were selected due to their common prevalence, large portion of total cancer care costs and associations with significant morbidity and mortality.

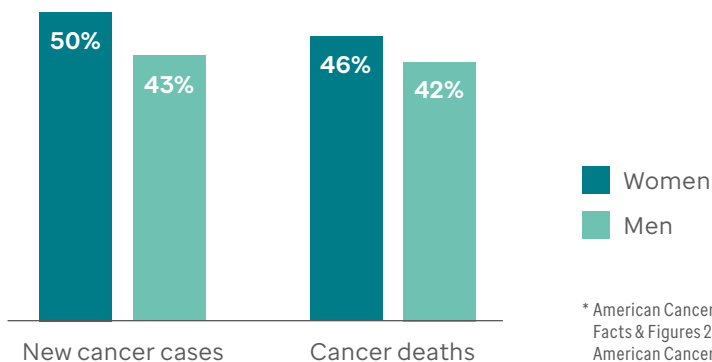
National Cancer Institute statistics indicate that these five cancers account for 48% of national cancer expenditures.<sup>9</sup> Similarly, ETG 10.0 benchmark data show that these same cancers account for about 50% of total cancer episodes and costs. In the next release of ETG Oncology, up to 15 additional cancer ETGs will be added, accounting for approximately 90% of cancer care expenditures.

We are strengthening oncology quality analysis in EBM Connect Oncology by expanding the available claims-based oncology quality measures developed by Optum, including those based on national standards. To cover as many members and providers as possible, the quality measures range from cancer specific to cross-cutting. In addition, they address appropriateness of care, overuse of non-recommended care, medication adherence and outcomes.



Enhanced severity models in ETG Oncology provide significantly improved severity adjustment.

**Breast, colon, rectal, lung and prostate cancer account for...**



\* American Cancer Society. Cancer Facts & Figures 2020. Atlanta: American Cancer Society; 2020.

## Symmetry ETG

Symmetry ETG is a software application that uses member and medical claims data to create clinically meaningful, homogenous episodes of medical care. This forms the basis for analysis and valid comparison of the cost and quality of health care services, including over 500 acute and chronic conditions as well as preventive services. Episodes are created by assigning all inpatient, outpatient, pharmacy and ancillary services to mutually exclusive and exhaustive categories. At the member level, ETG recognizes comorbidities, complications and treatments that influence a member's clinical profile, enabling accurate case mix adjustment.

For ETG base classes having wider cost distributions, and with sufficiently large episode prevalence, severity models are developed to facilitate more homogenous comparison between episodes. The goal of severity modeling is to recognize the medically necessary differences in episode cost that are driven by patient-specific factors independent of provider discretion. Severity models account for member demographics as well as clinical factors such as the presence of complications and comorbidities.

**For more information about Symmetry ETG, please see the Optum Symmetry Episode Treatment Groups white paper.<sup>10</sup>**

## Challenges in evaluation of the cost of cancer care

The use of ETG to analyze the cost of cancer care is hindered by lack of clinical information in claims data. Cancer treatment varies based on factors such as stage and biomarker status, with associated differences in treatment costs. For example, median insurance payments for breast cancer patients receiving a trastuzumab-containing chemotherapy regimen for human epidermal growth factor receptor 2 (HER2) positive breast cancer were \$160,590. Whereas for patients who received a chemotherapy regimen that did not include trastuzumab (HER2 negative breast cancer), median insurance payments were \$82,260.<sup>11</sup> However, claims data cannot distinguish between HER2 positive and HER2 negative breast cancer.

The cost of treating breast cancer also increases by stage, with the cost of treating stage II, III and IV breast cancer being 32%, 95% and 109% higher, respectively, than the cost of treating stage I breast cancer.<sup>12</sup> Nevertheless, aside from diagnosis codes for sites of distant metastases, information about cancer stage is not available in claims data. Similarly, other than codes indicating estrogen receptor positive or negative status, claims data does not contain information about biomarker status. Without this clinical data it is difficult for ETG to create truly homogenous episodes related to cancer care, reducing its utility for comparison of costs of cancer care.

## Symmetry ETG Oncology

Symmetry ETG Oncology more accurately categorizes oncology episodes based on medically necessary total episode costs. The result is more homogenous groups of episodes within a severity level and more accurate severity scores and levels. This allows more fair and accurate comparison of episode costs between health care groups or providers.



ETG Oncology allows for more fair and accurate comparison of episode costs between health care groups or providers.

Improved categorization was accomplished through several enhancements, including:

- Incorporation of specific clinical data elements
- Inclusion of new claims-based markers
- Addition of utilization-based markers for receipt of various categories of oral or injectable cancer treatments

Clinical data incorporated into ETG Oncology includes cancer stage and relevant biomarker results. Inclusion of this clinical information allows for more homogenous clinical subcategorization within a cancer type and more accurate severity adjustment.

In terms of clinical subcategorization, new condition status codes, derived from clinical information, allow for parsing episodes based on clinical features which cannot be distinguished in medical claims alone.

For example, lung cancer episodes can now be subdivided into small cell lung cancer and non-small cell lung cancer. This data may be sourced directly from an electronic health record (EHR). In addition, clinical information obtained as part of a prior authorization process for cancer treatment, to guide selection and obtain approval of guideline-concordant therapy, may also be used.

 **See the sidebar for a list of the clinical data elements being incorporated into ETG Oncology.**

Clinical data may contain inconsistencies that could hamper performance of severity modeling. Consequently, prior to being used by ETG Oncology, clinical data will be processed through a new and innovative, patent-pending software utility, Symmetry Data Engine (SDE). SDE is designed to curate clinical data for each member based on a series of clinical and data validation rules. Records that are inconsistent or clinically invalid are eliminated to provide a standardized data set to serve as input to ETG Oncology for severity modeling.

Examples of situations in which data records may be removed by SDE include:

- Records that fall outside the defined date range for analysis
- Duplicative records on the same date
- Records with clinical conflicts

As an illustration of a clinical conflict, if both estrogen receptor positive and estrogen receptor negative results are present on the same day, there is no way to confirm which value is correct. Consequently, both results are excluded for that day.

In addition, if there are changes in results over time that are clinically invalid or the correct value cannot be confirmed, those results are excluded. For instance, if multiple stage results are present over time for the same member and none are stage IV, then all stage values for that member are excluded since the true stage of disease is unclear. However, if there are multiple stage values for a member over time and one of them is stage IV, the member's claims data are queried to determine if diagnosis codes for sites of distant metastases are present. If these codes are present, stage IV is confirmed and retained and other stage data for that member are excluded. If there are no diagnosis codes for sites of distant metastases, indicating that the correct stage cannot be confirmed, then all stage data for that member are excluded.

### **Clinical data elements incorporated into ETG Oncology**

- Cancer stage (all)
- Lung cancer type (small cell, non-small cell)
- Hormone receptor status (breast)
- HER2 status (breast)
- Microsatellite instability/ DNA mismatch repair (MSI/MMR) status (colon, rectal)
- Rat sarcoma (RAS) mutation status (colon, rectal)
- Epidermal growth factor receptor (EGFR) mutation status (lung)
- Anaplastic lymphoma kinase (ALK) rearrangement status (lung)
- v-Raf murine sarcoma viral oncogene homolog B (BRAF) mutation status (lung)

Using SDE, which is included with ETG Oncology, to perform data cleansing and validation will simplify data input significantly. This avoids the need for clients to conduct data authentication and purging prior to input.

ETG Oncology severity adjustment will utilize a series of new claims-based markers not currently used by the standard ETG severity adjustment model. These include markers related to:

- Body mass index
- Estrogen receptor status
- Social determinants of health
- Abnormal tumor markers
- Family history of malignancy
- Genetic susceptibility to malignancy
- Personal history of malignancy
- And others

 **See the sidebar for a complete list of the categories of new claims-based markers into ETG Oncology.**

The standard ETG severity adjustment model purposely excludes all information related to treatment choices as they may reflect provider practice differences rather than medically necessary care. For most specialties this assumption is helpful as it allows provider discretion to be isolated as a measured variable in episode cost comparisons.

However, the clinical practice of oncology is constrained more than other specialties by external factors that limit a provider's discretion in cancer-specific treatment choices. These factors include national clinical guidelines, such as the National Comprehensive Cancer Network®, as well as care pathways and strict prior authorization programs.

As such, treatment decisions, such as chemotherapy, to a large part reflect medically necessary care, with differences in provider practices playing a lesser role than in other specialties. Consequently, the two new severity models in ETG Oncology will incorporate utilization-based markers to reflect receipt of various categories of oral and injectable cancer treatments.

 **See the sidebar for a list of the utilization-based treatment markers being incorporated into ETG Oncology.**

ETG Oncology will be available for the top five cancer ETGs. These cancers account for 48% of all cancer care costs<sup>9</sup> as well as significant morbidity and mortality. For each of these ETGs, up to three severity models will be available depending on whether clinical data is input by the user.

### Categories of new claims-based markers incorporated into ETG Oncology

- BMI
- Abnormal tumor marker
- Ventilator dependence
- Estrogen receptor status
- Family history of malignancy
- Genetic susceptibility to malignancy
- History of colon polyps
- Organ transplant status
- Personal history of in situ or benign malignancy
- Personal history of malignancy
- Social determinants of health

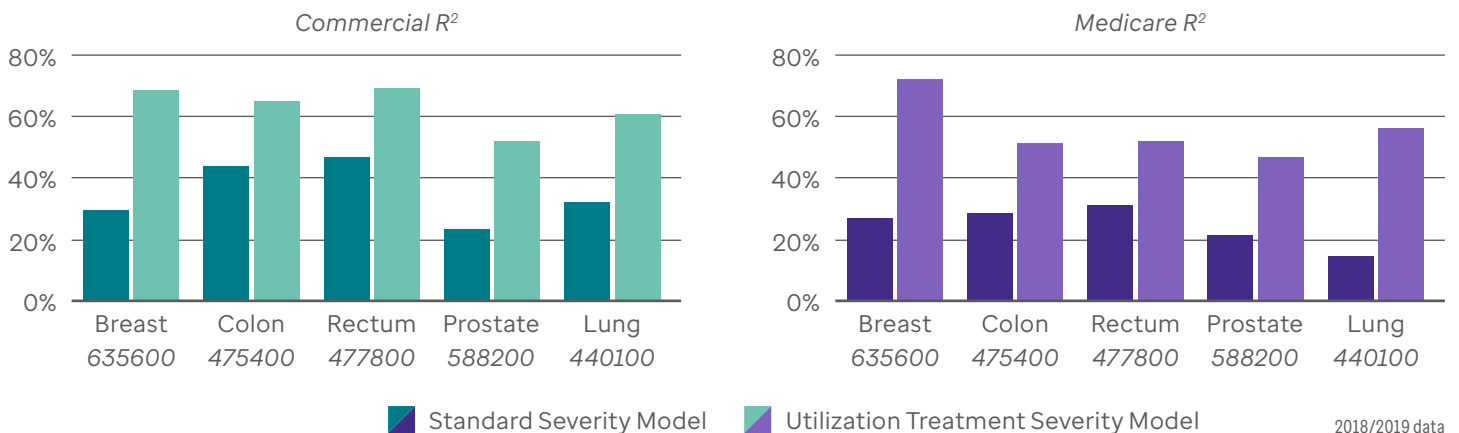
### Categories of utilization-based markers in ETG Oncology

- Injectable chemotherapy
- Injectable hormonal therapy (prostate cancer)
- Injectable hormonal therapy (breast cancer)
- Injectable biologic
- Injectable radiopharmaceutical
- Injectable intrathecal therapy
- Oral chemotherapy
- Oral hormonal therapy
- Oral biologic
- Oral radiopharmaceutical

ETG Oncology Severity Model	Characteristics	Clinical data needed	Commercial	Medicare Advantage
<b>Standard Severity</b>	<ul style="list-style-type: none"> <li>Informed only by diagnostic and demographic information from claims</li> <li>Purposely excludes treatment decisions to make the model blind to utilization</li> <li>Assumes that all utilization reflects provider judgment in efficient implementation of sound clinical practice</li> </ul>	N	Y	Y
<b>Utilization Treatment Severity</b>	<ul style="list-style-type: none"> <li>Extracts markers only from data that is traditionally available in medical claims</li> <li>Varies from the standard model by allowing limited, high-level treatment decisions to be considered as independent variables in the model</li> <li>Assumes that clinical practice and treatment choices related to cancer care are uniformly constrained by factors such as clinical guidelines, prior authorization practices, and professional standards</li> </ul>	N	Y	Y
<b>Utilization Treatment and Clinical Severity</b>	<ul style="list-style-type: none"> <li>Incorporates more granular clinical information such as cancer stage and biomarker status</li> <li>Requires use of a new clinical observation input file</li> <li>Also allows limited, high-level treatment decisions to be considered as independent variables</li> <li>Assumes that such treatment choices are uniformly constrained by clinical guidelines, prior authorization practices, and professional standards</li> </ul>	Y	Y <sup>a</sup>	N <sup>b</sup>

The ability to incorporate claims-based utilization treatment markers in ETG Oncology due to the unique constraints on oncology practice results in enhanced severity models that improve performance beyond the robust baseline provided in standard ETG severity models. There is significant improvement in R2 across all ETG Oncology models compared to standard models run using ETG 10.0 methodology.

### Utilization Treatment Severity Models, Claims only



<sup>a</sup> Currently available for members with injectable treatment.

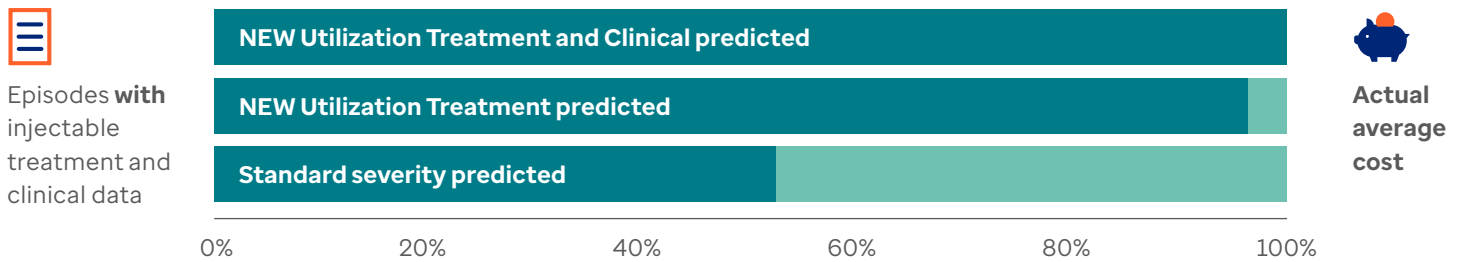
<sup>b</sup> The Utilization Treatment and Clinical Severity Model will be available for Medicare Advantage in a future release of ETG Oncology.

The two new severity models available in ETG Oncology account for a much larger share of the variability between episodes compared to standard severity models. Across all five cancer ETGs, even if clinical data is not available, the expanded clinical markers used in the claims-based Utilization Treatment Severity Model allow the model to more completely recognize sources of variation in average episode cost compared to the Standard ETG Severity Model. There is further incremental gain with the addition of clinical data in the Utilization Treatment and Clinical Severity Model.

When adjusting retrospective measures of episode cost, the Standard ETG Severity Model significantly underpredicts average episode cost for episodes with injectable treatment because it is not designed to account for treatment choice as an independent variable. The new Utilization Treatment Model accurately predicts average episode cost for these episodes. Including clinical information in the Utilization Treatment and Clinical Model provides further improvement.

**ETG 635600 malignant neoplasm of breast (commercial only)**

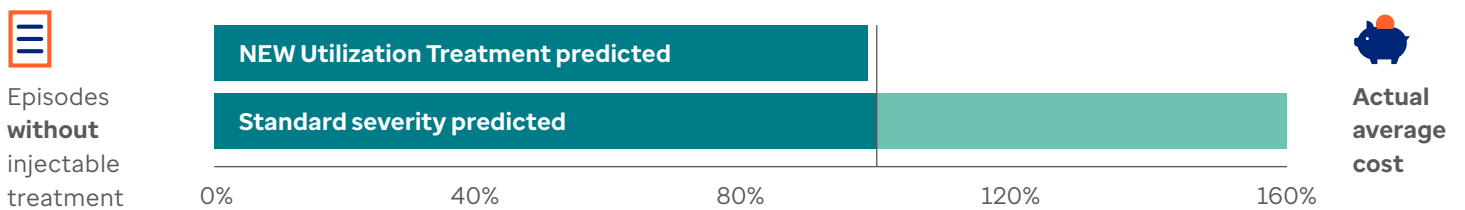
*Average predicted cost*



Similarly, standard ETG severity significantly overestimates average episode cost for episodes without injectable treatment, while the new Utilization Treatment Severity Model minimally underestimates average episode cost.

**ETG 635600 malignant neoplasm of breast (commercial only)**

*Average predicted cost*



We evaluated potential bias in our models through a variety of methods, including an open-source toolkit from Aequitas. For more information about this topic, please email [empower@optum.com](mailto:empower@optum.com) or call 1-800-765-6807 and reference this white paper.

The new, next-generation severity models available in ETG Oncology provide a new level of accuracy and significantly advance the ability to analyze costs of oncology care.



## Symmetry EBM Connect

Symmetry EBM Connect is a software application using administrative data and laboratory results to identify members with selected clinical conditions or needs for preventive health care. The software identifies members using criteria such as gender, age, diagnoses, and duration of medical and pharmacy coverage. Importantly, exclusion criteria are applied where appropriate to avoid measuring members with certain contraindications or comorbidities.

Once the appropriate set of members is identified, the EBM Connect product assesses each one's medical care by applying a series of clinical rule-based measures that define whether care was consistent with clinical guidelines and recommendations.

Quality measures developed by Optum are produced with the assistance of a clinical expert panel to ensure they represent the most current treatment guidelines. Optum reviews all measures on a regular basis with input of the clinical expert panel to ensure they continue to reflect current literature and guidelines.

All measures undergo a testing and validation process after measure development and again if changes are made to the measures during routine measure review. Optum fully documents measure enhancements to provide up-to-date information on which to base measures and to share with members and physician groups.

For additional information about Symmetry EBM Connect, refer to the Optum Symmetry EBM Connect white paper.<sup>13</sup>

## Challenges in evaluation of the quality of cancer care

As the cost of cancer care continues to rise, the need for measures to evaluate quality of care has become urgent, to ensure that cancer care aligns with national treatment standards. However, developing quality measures for oncology faces several limitations.

Appropriateness of cancer care is typically determined by multiple factors. These include patient factors such as the presence of comorbidities and functional status, as well as cancer-specific factors like stage and biomarker status. However, much of this information is unavailable in claims data. This makes it difficult to ascertain using claims data alone whether care provided was appropriate. In turn, this limits the ability to build quality measures and promote quality improvement.

In addition to clinical guidelines, other quality improvement efforts in oncology include the use of care pathways and prior authorization systems for radiation therapy, chemotherapy and other medical cancer treatments, to ensure patients are receiving appropriate care. Clinical data is often collected during this process to guide selection and approval of appropriate therapy.

Incorporating clinical information into cost and quality analysis, whether obtained through a prior authorization process or directly from an EHR, would provide valuable information not present in claims data. Incorporating this additional data would facilitate development of quality measures around cancer care, particularly measures addressing appropriateness of care.

Effectiveness of oncology treatment may not be evident for some time,<sup>14</sup> which further complicates quality measurement around oncology outcomes. For example, the effectiveness of adjuvant treatment for cancer may not be apparent until years after completion of treatment, but clients may not have access to data covering a sufficient period to measure long-term results.

Symmetry Meanwhile, oncology outcomes are impacted not just by the quality and appropriateness of treatment, but also by patient factors such as age, gender, performance status, presence of comorbidities and socioeconomic factors. To assure that comparison of performance across health care organizations or between providers is fair and accurate, risk adjustment is necessary to control for differences in patient characteristics. The need for risk-adjusted models adds another level of complexity to the development of fair and meaningful outcome measures. Finally, the multidisciplinary nature of cancer care, involving many different specialties, also complicates quality assessment and makes it more difficult to ensure accurate attribution.

## **Symmetry EBM Connect Oncology**

Symmetry EBM Connect Oncology is a library of claims-based oncology-specific quality measures, all available in one location. These quality measures were developed by an expert panel of board-certified medical and radiation oncologists, pharmacologists, coding specialists and medical analysts. All measures undergo regular review and maintenance, with the assistance of the clinical expert panel, to ensure they remain aligned with the latest evidence and standards of care. Specifications for the oncology measures are completely transparent, which should provide confidence when sharing results with providers.

The wide variety of quality measures includes those based on national standard measures as well as those developed by Optum. They range from cancer-specific measures for common cancers to cross-cutting measures not limited to a particular type of cancer. Quality measures in EBM Connect Oncology also cover a spectrum, including process measures, medication adherence and end-of-life care measures, and risk-adjusted outcome measures.

Offering a complement of measures covering a wide range of cancer care increases the number of patients who meet criteria for one or more measures. This in turn allows a greater number of assessable providers and oncology groups.

Selection of quality measures for EBM Connect Oncology involved several steps, starting with a review of existing oncology quality measures. This included a review of measures endorsed by the National Quality Forum and professional societies such as the American Society of Clinical Oncology, American Society for Radiation Oncology and the American College of Surgeons, as well as measures in use by programs such as the Center for Medicare & Medicaid Innovation Oncology Care Model.

Quality measures related to common cancers were prioritized to align with the focus of ETG Oncology, with concentration on breast cancer, colon cancer and prostate cancer. These cases include measures assessing appropriateness of care and overuse of testing. The breast cancer case also has measures evaluating adherence to medications.

In addition to cancer-specific measures, clients desire cross-cutting measures, which are those not limited to a particular cancer type. Inclusion of cross-cutting measures allows more patients to meet measure criteria. This increases the number of providers and provider groups who may be evaluated, a past limitation clients have expressed about measures focused on specific types of cancer

Multiple cross-cutting measures are part of the panel of oncology quality measures in Symmetry EBM Connect Oncology, including measures assessing:

- Appropriate use of antiemetics
- Adherence to oncology medications
- End-of-life measures
- Risk-adjusted measures assessing admissions and ED visits in patients receiving outpatient chemotherapy, including all-cause visits as well as visits for chemotherapy-related symptoms

Also prioritized were measures that can drive change, including measures that identify:

- Gaps in care
- Overuse of care
- Appropriate use of expensive care
- Opportunities for cost improvement
- Low-value care

Recognition of gaps in care, such as lapses in recommended cancer screening, provides an opportunity for care managers to reach out to patients and provide education about the importance of compliance with recommended screening. Delays in screening may result in diagnosis of cancer at more advanced stages, which is likely to be more expensive to treat and associated with poorer outcomes. Patients not adhering to prescribed medications could also benefit from outreach and discussion of the importance of taking medications as prescribed.

Quality measures that identify testing, procedures or treatments that are unnecessary or potentially harmful provide an opportunity to identify areas for cost improvement without adversely affecting quality of care. Identification of potentially preventable events, such as ED visits and inpatient admissions during cancer therapy, can highlight opportunities for care and cost improvement.

For a complete list of cases in EBM Connect Oncology, please email [empower@optum.com](mailto:empower@optum.com) or call **1-800-765-6807**.

## Application and use

Building on the solid foundation of the standard ETG and EBM Connect solutions, ETG Oncology and EBM Connect Oncology provide powerful tools to drive improvements in cost and quality of cancer care.

ETG Oncology can be used to support a variety of initiatives. More accurate severity adjustment of episodes enhances capabilities for valid measurement and comparison of performance among oncology providers and oncology groups based on cost of care, even if clinical data is not available. This information can be useful to payers in setting up networks, as well as tracking plan performance and trends around these cancers and episodes.



EBM Connect Oncology is a collection of claims based quality measures addressing a wide range of cancer care.



Improved severity adjustment in ETG Oncology facilitates more accurate provider comparisons as well as a number of other use cases.

Oncology providers will be better able to assess their individual cost efficiency, and oncology groups will have more accurate information for monitoring provider performance. In addition, improved understanding of disease-specific risks can be used for member identification and stratification, support for care management, and targeted outreach to select patient populations, while substantially more accurate severity scores and levels will serve as markers in risk prediction.

EBM Connect Oncology supports reporting at the plan, provider or member level. Reports of measure compliance can identify gaps in care, insufficient compliance with care, overuse of care and potentially avoidable complications. Identifying areas of lowest measure compliance can highlight opportunities for quality and cost improvement, which is important information for payers, health care organizations, providers and provider groups. This information can also be valuable for care managers to identify care opportunities, detect low medication adherence, and provide valuable insight for member education.

When used independently, ETG Oncology and EBM Connect Oncology provide valuable information about the cost and quality of cancer care, respectively. However, maximum benefit is achieved when the two are applied together. For example, it is important to take both cost and quality of care into consideration when setting up networks and comparing performance for oncology providers. A practitioner could be providing inexpensive care but not providing appropriate care, such as not performing recommended cancer screening. Ultimately this could lead to adverse outcomes and more expensive care. Together EBM Connect Oncology and ETG Oncology will identify oncology providers who do the best job of delivering high-quality care in a cost-efficient manner.

Coupling EBM Connect Oncology and ETG Oncology will not only identify overuse of care or potentially avoidable complications, but also quantify possible cost savings associated with initiatives to reduce these events. Furthermore, measurement is a key step to focus resources and drive quality improvement efforts.

ETG Oncology and EBM Connect Oncology together provide a robust and more complete oncology analytic which will allow clients the opportunity to measure both cost and quality related to cancer care, critical information needed to support a variety of measurement programs.



Identifying areas of lowest measure compliance through EBM Connect Oncology provides important information to guide quality improvement programs.

## Summary

Cancer care is a significant driver of health care costs. As costs continue to rise, health plans are focusing more on the total cost of cancer care, with increased emphasis on ensuring that cancer care aligns with national treatment standards. A tremendous opportunity exists to improve clinical outcomes, decrease cancer care costs and positively impact member health and quality of life by improving compliance with evidence-based medicine and other standards.

Valid and actionable approaches to measurement and accurate cost analysis are critical to improve cancer care. Health care organizations can only make progress where they identify improvement opportunities, develop interventions to target those opportunities, and gauge success using accurate metrics. ETG Oncology and EBM Connect Oncology support this process by more effectively and accurately predicting costs and efficiently using health care data to assess compliance with a robust set of oncology quality measures.

**Together, ETG Oncology and EBM Connect Oncology provide an important and powerful tool that will generate a comprehensive understanding of cost and quality related to cancer care.**



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