Lung Cancer Measures

WHAT IS THE PROJECT?
Lung cancer is the second-most common cancer in the United States and the leading cause of cancer death. Non-small cell lung cancer (NSCLC) is the most common type of lung cancer, while small cell lung cancer (SCLC) comprises less than 20 percent of lung cancers. Due to its high disease burden, lung cancer can have a profound effect on patients’ day-to-day lives, including a high financial burden. Screening and treatment advances are leading to improved patient outcomes and longer survival. However, disparities in the quality of cancer care along with variations in access to care and survival outcomes persist, and there are no nationally adopted survival measures for lung cancer. Establishing disease-specific, patient-centered measures that examine survival and patient-reported outcomes (PRO) in lung cancer will address high-priority gaps in oncology measurement.

This NQF Measure Incubator® project will facilitate the development of needed performance measures that capture the “patient voice” (i.e., patient-reported outcomes or PROs) and evaluate survival outcomes in lung cancer.

PHASE 1: STRATEGY SESSIONS
NQF convened a Measure Incubator strategy session with a multistakeholder Expert Panel in September 2017. At this meeting, panelists identified extensive disease SCLC as an area under-represented in performance measurement and explored a range of measures focused on overall survival, improving quality of life, and goal-concordant care for this population. The Panel emphasized that quality of life is as important as quantity of life and that survival measures alone do not provide a comprehensive view of quality. The Expert Panel identified three measure concepts that could become performance measures for SCLC. Panelists recommended a national focus to improve data collection and address persistent data issues, including the availability of structured data and vital status, in particular, such as through collaboration with electronic health record vendors.

At a second strategy session in April 2018, panelists explored measures for NSCLC, including survival and patient-reported outcome performance measures (PRO-PM), focused on treatment toxicities and health-related quality of life. The Panel noted that measures should account for symptom fluctuation and incorporate individual patient goals and preferences. The Expert Panel identified four measure concepts that could become performance measures for NSCLC, including patient-reported measures, and the Panel recommended further exploration of data challenges around attribution and timeliness of data as well.

NQF engaged a broad-based stakeholder group in this Measure Incubator project, including patients and caregivers, patient advocates, specialty society representatives, measure developers, health services researchers, and oncologists.

PHASE 2: MEASURE INCUBATION
Building on the recommendations from the NQF-convened strategy sessions, NQF prioritized three measure concepts for initial development. One will be a PRO-PM (patient-reported symptom burden measure among NSCLC patients receiving chemotherapy), and the other measures will address overall survival rates, stratified by stage, for NSCLC and SCLC. Substantial upfront effort focused on investigating various data sources to support measure development (particularly...
for the survival measures). KM Healthcare Consulting led initial development of these measure concepts, along with a melanoma survival measure, into fully specified performance measures, gathering input from expert panelists and other clinical experts to develop pre-testing specifications. Experts were enthusiastic to see progress in establishing national measures for lung cancer survival and a PRO-PM focused on chemotherapy-related side effects. Experts suggested that this work could meaningfully contribute to cancer survival measurement by exploring persistent measurement challenges related to small population sizes and the definition of care teams for purposes of accountability.

Now in the testing phase, Mathematica will test the three lung cancer measures along with the melanoma survival measure. Mathematica will test the survival measures using a combination of national and state cancer registry data and registry-linked databases. The PRO-PM will be tested using data from diverse clinical practices that use validated patient-reported outcome measures (PROM) to assess symptom burden in patients with NSCLC receiving chemotherapy. Through testing, Mathematica will explore various risk stratification and adjustment approaches along with questions identified during the development phase (e.g., minimum sample for accountability).

WHAT IS THE ENVISIONED OUTCOME?
At the NQF-convened strategy sessions, panelists emphasized the need for measures that help patients navigate the complex and evolving cancer care system and support patient/provider partnership to guide care. Mathematica will test all measures in parallel, and future use of the measures will be explored through the testing phase.

This project will be completed in March 2022.

The resulting measures will improve quality of care in lung cancer by evaluating actionable, patient-centered outcomes that matter most to individuals with lung cancer.

NQF is delivering this project through the Measure Incubator with financial support from Bristol-Myers Squibb (BMS). In accordance with the NQF Measure Incubator Conflict of Interest Principles, BMS has not influenced the outcomes and activities associated with this project. NQF is conducting this project in parallel with a melanoma survival measures project to maximize efficiencies in measure development and testing.