It is estimated that there will be more than 1.66 million people diagnosed with cancer during 2014 in the US, with nearly 30,000 new cases estimated in Minnesota. The highest estimates of new cases by cancer type include:

<table>
<thead>
<tr>
<th>Est # of New Cases, 2014</th>
<th>United States</th>
<th>Minnesota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>233,000</td>
<td>3,870</td>
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<tr>
<td>Female Breast</td>
<td>232,670</td>
<td>3,820</td>
</tr>
<tr>
<td>Lung &amp; Bronchus</td>
<td>224,210</td>
<td>3,070</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>136,830</td>
<td>2,240</td>
</tr>
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</table>

The 5-year survival rate for all cancers diagnosed between 2003 and 2009 is 68%; however, survival statistics vary greatly by cancer type and stage at diagnosis. In 2014, an estimated 585,720 people in the US will die from cancer, including 9,750 people in Minnesota.

Survival has improved substantially over the past decades for individuals diagnosed with certain types of cancer, in part due to advances in chemotherapy and radiation therapy.

The National Institutes of Health (NIH) estimates that the over-all costs of cancer in 2009 were $216.6 billion: $86.6 billion for direct medical costs and $130.0 billion for indirect mortality costs. (American Cancer Society, 2014)

Annually, over 1.1 million individuals in the US are estimated to receive chemotherapy and/or radiation therapy for cancer. Of these individuals, approximately 650,000 receive chemotherapy, 643,000 receive radiation, and 180,000 receive both during a year. (Halpern & Yabroff, 2008)

Based on existing research, inclusion of patient reporting in routine cancer care improves symptom detection and management. Patient reported outcomes (PRO) provide essential clinical information and when integrated into clinical practice, PROs have been found to improve symptom control, communication and patient satisfaction.

A substantial body of evidence shows that without patient reporting, clinicians miss or underestimate many symptoms. Clinician assessment of symptoms has low reliability; whereas patient reporting is substantially more reliable and has been shown to be feasible. (Basch, MD, MSc, 2014)
The below figure from The New England Journal of Medicine shows the cumulative incidence of clinician-reported (bottom line, blue) vs. patient reported (top line, gold) symptoms of successive office visits for 850 patients with advanced and metastatic cancers. (Basch, 2010)

Studies also demonstrate that when PROs are collected well, patient completion/capture can exceed 80% in “real-world” routine care settings. (Basch, MD, MSc, 2014)
| Degree of Inclusiveness | The risk of being diagnosed with cancer increases with age, with most cases occurring in adults who are middle aged or older. Approximately 77 percent of all cancers are diagnosed in people 55 years of age and older. In the US, men have slightly less than a 1 in 2 lifetime risk of developing cancer over the course of a lifetime and women have a little more than a 1 in 3 risk. (American Cancer Society, 2014)  
Annually, over 1.1 million individuals in the US are estimated to receive chemotherapy and/or radiation therapy for cancer. Of those patients being treated, there is fairly even distribution by gender and the following age groups: <55 years, 55-64 years, 65-74 years and 75 years and older. The majority of treated patients are non-Hispanic white, which reflects the prevalence estimates. Other racial/ethnic groups identified in the treatment estimates include Blacks and Hispanics, representing 10% and 6% respectively. (Halpern & Yabroff, 2008) |
| --- | --- |
| Fit with National, Regional, and Local Priorities | The Measure Applications Partnership lists cancer care and PROs specifically, as a current gap in measurement. Additionally, within the 20 high-impact Medicare conditions prioritized by an HHS funded project, five types of cancer were included and ranked by priority: breast cancer (7th), colorectal cancer (10th), prostate cancer (13th), lung cancer (16th) and endometrial cancer (20th). (National Quality Forum, 2013)  
The National Quality Strategy (NQS) is guided by three aims, one of which is Better Care by improving the quality of care by making health care more patient-centered, reliable, accessible and safe. To achieve the Strategy’s aims, ensuring that each person and family is engaged as partners in their care is one of the six identified priorities. Building on the aims and priorities of the NQS, the Measure Applications Partnership seeks to accelerate the next generation of measures, including Patient Reported Outcomes Performance Measures (PRO-PMs).  
Additionally, local and national measurement activity focused on specialty care is limited and there exists a high potential for impact. |
| Performance Variation | Is really unknown but has a high degree of focus on it with activity underway by the American Society of Clinical Oncology (ASCO) to identify priorities for PRO-PM development for potential use in its Quality Oncology Practice Initiative. Initial PROs of interest include nausea and pain among patients with advanced cancers. (Basch, MD, MSc, 2014)  
Recent development and testing of patient reported chemotherapy indicators of symptoms published in Cancer Nursing demonstrate substantial variability between the centers studied that was unexplained after case mix adjustment, suggesting that differences may be “real” rather than caused by population differences. (Armes, et al., 2014) |

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1 www.qualityform.org/map/  
2 www.ahrq.gov/workingforquality/
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<tr>
<th>Existing Measures at a National and Local Level</th>
<th>Search of existing measures at the national level reveals few measures relevant to symptom management and/or patient reported outcomes during chemotherapy and/or radiation therapy for cancer patients, none of which are outcome measures. <strong>Outcome Measures</strong> None <strong>Process Measures</strong> NQF#0384 – Oncology: Pain Intensity Quantified – Medical Oncology and Radiation Oncology (paired with #0383) NQF#0383 – Oncology: Plan of Care for Pain – Medical Oncology and Radiation Oncology (paired with #0384) NQF#1628 – Patients with Advanced Cancer Screened for Pain at Outpatient Visits <strong>Current Activity</strong> In addition to the above measures, ASCO is currently undertaking PRO measure development and has expressed enthusiastic support for the development, testing and potential implementation of PRO-PM’s in Minnesota.</th>
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<tbody>
<tr>
<td><strong>Enhance the patient/provider relationship</strong></td>
<td>Using patient reported outcomes can serve many purposes – symptom management, quality assessment/improvement/reporting, and clinical effectiveness research. Integrating PROs into routine practice allows an opportunity to make cancer care more patient-centered and enhance communication between patients and providers. Patient self-reports have been found to prompt clinicians to intensify symptom management and have led to improved communication, satisfaction and well-being. (Basch, MD, MSc, 2014)</td>
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<tr>
<td><strong>Considerations for Recommendation Feasibility (resources, barriers, culture)</strong></td>
<td>Patient reported outcomes are commonly measured in clinical trials. Recent interest has grown in collecting PROs during clinical care and the rationale is gaining acceptance. While implementation of the collection of PROs may have inherent barriers, evidence shows that strategies and solutions for integrating PROs into usual care settings without adding to workload, clinic visit times, or phone call burden exist. Well-designed questionnaires and software platforms already exist, as do strategies for engaging patients to optimize compliance rates. The major remaining barrier into practice may be the historic status quo. (Basch, MD, MSc, 2014)</td>
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</table>
Measure development activities may follow any number of approaches, including:

- Full development from concept, to definition, to detailed specification and its subsequent testing of a measure or measure set,
- Adaption of an already defined and (partially) specified measure or measure set,
- Testing of a completely defined measure or measure set.

Coordination of MNCM’s measurement development activity with other organizations’ efforts may leverage momentum among providers and align the resulting reporting and use of the measure/s.


