The goal of the WVU Cancer Institute (WVUCI) Bridge Program is to improve the overall coordination of care, increase quality of life, and decrease the consequences of treatment for patients treated for stage I-II lung cancer with curative intent. The Bridge Program uses a multidisciplinary team approach to increase the emphasis on patient centered care and the long-term survivorship needs of patients.

The Program’s intention is to improve patient quality of life in physical, social, psychological, and spiritual domains. It ultimately bridges patients from active cancer care into the next step on their journey in life. Using a multidisciplinary team approach creates an opportunity for collaboration and information sharing that leads to the development of an enhanced survivorship care plan.

There is limited data on survivorship program outcomes and associated healthcare resource utilization as well as costs. Methods and results of similar comprehensive survivorship programs developed in the United States and Europe provide some benchmark data. However, the limited data points to unmet needs of patients that are not currently being addressed.

The potential revenue from Bridge patient post-treatment referrals and the quantity and type of referrals from nineteen patients during the March 2017 to December 2017 timeframe was used for revenue generation assessment. The potential revenue was estimated using CPT codes recommended by the institution with a frequency of visits assumed. Using an estimated number of one initial visit and type of referrals from nineteen patients during the March 2017 to December 2017 timeframe at the WVUCI were tallied. In total, there were 6 behavioral medicine, 22 occupational therapy, and 1 pulmonary referrals generated. Using these referral numbers, the 2019 CMS Physician Fee Schedule rates were applied to the assumed number of visits to get total revenue.

For new patient assessments, the code 99205 (new patient, highest complexity, outpatient) was used as well as 99214 (established patient, high complexity, outpatient) and 99215 (established patient, low complexity, outpatient). High complexity was assumed due to their cancer diagnosis and potential for other comorbidities. The specific rates for each code were gathered from the Centers for Medicare and Medicaid Services Physician Fee Schedule Search tool. By using the Non-Fee services performed in an office setting.

The frequency of visits were assumed to range from 5 to 10 visits for physical therapy and occupational therapy and 10 to 20 visits for mental health visits. A rounded average number of visits was used for each type (i.e., 1, 8, and 10).

For the revenue generation calculations it should be noted that WVUCI does not have a dedicated therapy team, which could be limiting the number of referrals generated. Additionally, there were patients who did not report issues but later were found to have unmet needs after meeting with mid-level practitioners as part of the Program. These factors suggest variability in the estimated number of referrals and unmet needs, suggesting an underestimation of healthcare resource use and revenue generated.

The cost calculations for patient reimbursed visits to provide a standardization, but actual payment rates could vary, along with the visit assumptions that were made. Codes used, as well as frequency and calculations of reimbursements are as estimates, and may not be generalizable to other institutions. Additional costs incurred, such as overhead, administration, and personnel were not included in this analysis.

The objective of this analysis is to summarize the program outcomes and provide a health system economic perspective on impact and sustainability.

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While this analysis focuses on the economic perspective of implementing a survivorship program, it is important to highlight the immense opportunity of such a program to move the cancer treatment paradigm towards a more patient-centered approach. In the current era of value and quality improvement focused health care, this analysis exemplifies the feasibility of adopting a patient-centered approach for post-treatment lung cancer patients and the apparent economic sustainability for the institution.

Bridge to Good Living: Outcomes and Financial Implications of a Lung Cancer Survivorship Program in West Virginia

Lung cancer is the leading cause of cancer related deaths in West Virginia. Half of all people with a lung cancer diagnosis also have distant metastases. Because of this, many people in West Virginia die of lung cancer than colorectal, prostate, and breast cancers combined.

The Bridge Program uncovered a clear unmet need for cancer patients in the long-term. It helped highlight potential areas for improvement in terms of patient satisfaction and quality, and is highly applicable across the WVUCI system. Implementation within a smaller cohort of lung cancer patients allows the team to expand survivorship care across cancer tumor types to reach even more patients currently being treated at the institution.

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Acknowledgements & References


3. Rea, EdD.