

## Oncology care model cost data for breast, lung, and multiple myeloma: Influence of outpatient rehabilitation therapy services.

Mackenzi Pergolotti, Kelley C. Wood, Siraje Mahmud, Justin Adams, Shumeye Mamo, Tiffany Kendig, Ashley N. Lightner, Stacye Mayo, Sabrina Q. Mikan, Kathryn Elizabeth Hudson, Terry Lynn Jensen; Select Medical, Mechanicsburg, PA; Texas Oncology, Dallas, TX; Select Medical, Mechanicsburg, PA; Texas Oncology, Austin, TX

**Background:** High value cancer care is defined by access to coordinated, appropriate healthcare services that achieve optimal outcomes at a reasonable cost. Evidence supports outpatient cancer rehabilitation (physical, occupational or speech therapy) as a mechanism to improve outcomes such as health-related quality of life, suggesting that integration of these services is beneficial for cancer survivors. However, the impact of outpatient rehabilitation services on healthcare costs is unknown. We aimed to compare cost segments between those who attended community-based outpatient rehabilitation therapy services (Rehab) versus those who did not (Non-rehab). We hypothesized that healthcare costs would be lower for the Rehab group in the following cost segments: emergency department (ED), part D drugs, home health services, skilled nursing facility services (SNF), inpatient rehabilitation facilities (IRF), and hospice.

**Methods:** This is a retrospective cohort study of Medicare beneficiaries who received chemotherapy at a large community oncology practice that participated in the oncology care model (OCM) program from 2018 to 2021. Two data sources were linked, OCM cost data and the rehabilitation medical record. This yielded sufficient sample sizes for analysis of breast, lung, or multiple myeloma (MM) cancer types. Rehab cases were then matched to Non-rehab cases 3:1 based on cancer type, stage, and sex. Cost variables included total cost of care (TCOC) and cost segments using OCM methodology. Mann-Whitney-Wilcoxon statistic ( $p < .05$ ) was used for analysis. **Results:** Cases ( $N=3,033$ ) primarily had early-stage cancer (0 to 2, 74.8%) and were  $70.4 \pm 7.3$  (Rehab) or  $71.6 \pm 8.5$  years old at diagnosis (Non-rehab). Most had breast cancer (81.2%), followed by lung cancer (11.7%) and MM (7.2%). TCOC was \$32,387 and \$26,257 for the Rehab and Non-rehab groups, respectively. Costs were significantly lower for the Rehab group in five of the six segments analyzed; IRF costs were lower, but not statistically significant (Table). **Conclusions:** To our knowledge, this is the first study to explore the influence of real-world, outpatient cancer rehabilitation therapy services on the cost of cancer care. Community-based therapy services were associated with significantly lower costs in ED, part D drugs, home health, SNF, and hospice segments. Future studies examining rehabilitation services as a relatively low-cost supportive care option to meet patient needs and enhance high-value care are warranted. Research Sponsor: None.

Healthcare segment costs for rehab vs. non-rehab cases.

	Rehab	Non-rehab	Between-group Difference
	Mean, (SD)	Mean (SD)	p-value
ED	\$85 (260)	\$104 (372)	.019
Part D drugs	\$4,813 (18,221)	\$5,675 (18,797)	<.001
Home health	\$433 (1,600)	\$705 (2,118)	<.001
SNF	\$160 (1,988)	\$386 (3,943)	.046
Hospice	\$75 (770)	\$198 (1,529)	<.001
IRF	\$245 (2,275)	\$384 (3,277)	.434