

Does Substandard Cancer Care Adversely Impact Patient Financial Well Being?

An analysis of cancer registry, claims, and credit report scores

PCR19

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Background

Substandard cancer care can harm patients and is costly to insurers, but the impact on patients' financial well-being is unknown.

We hypothesized that patients experiencing substandard care are more likely to experience adverse financial outcomes following the event.

Methods

Database

Washington State cancer registry records linked with claims records from two large commercial insurers and Medicare, and anonymized Equifax credit reporting data.

Population

Solid tumor and lymphoma cancer patients diagnosed 2017-2022

Quality Measures

M1: Receipt of recommended initial treatments: Breast, lung, and colorectal cancer

M2: Emergency department visit or unplanned hospitalization during chemotherapy: All solid tumor cancers

M3: Cancer tumor marker monitoring (not recommended): Breast Cancer, non-metastatic

M4: Germline susceptibility testing (recommended): Breast and Ovarian Cancer

Analysis

Models: Separate logistic regressions for quality measures M1-M4

Outcome: Decline in credit score (≥50 points) 12 or more months following the care episode or event (index date)

Key independent variable: nonadherence to the quality metric

Results

Patient Demographics Included in Regression Models		
	Category	%
Gender	Total Population	21,172
	Male	26.62%
Age	Female	73.38%
	<40	4.29%
	40-49	12.33%
	50-64	22.60%
Race	65+	60.77%
	White	88.80%
	Black	2.06%
	AIAN	0.73%
	Asian/PI	6.83%
AJCC Stage	Multi/Unknown	1.58%
	Stage 0	29.75%
	Stage 1	22.52%
	Stage 2	14.22%
	Stage 3	12.49%
	Stage 4	12.72%
ADI	Unknown	8.31%
	1-3	43.98%
	4-7	42.31%
Insurance	8-10	13.71%
	Commercial	41.02%
	Medicare	46.05%
Marital Status	Multiple	12.93%
	Living w/o partner	28.83%
	Living w/ partner	64.24%
NCI Comorbidity Score	Unknown	6.93%
	0	59.88%
	1	16.65%
	2+	15.80%
Cancer Group	Unknown	7.67%
	Bladder	5.72%
	Breast	50.94%
	Colorectal	7.47%
	Gynecologic	4.24%
	Lung	7.83%
	Lymphoma	4.83%
	Melanoma	1.93%
	Myeloma	1.73%
	Oral	2.07%
	Other	9.81%
Pancreas	2.10%	
Prostate	1.33%	

Results (continued)

	Baseline Credit Score Group			
	M1	M2	M3	M4
Exceptional/Excellent: 800–850	45.22%	49.73%	55.61%	44.96%
Very Good: 740–799	26.36%	25.45%	24.73%	28.08%
Good: 670–739	15.82%	13.35%	11.75%	15.86%
Fair: 580–669	9.55%	8.88%	6.34%	8.26%
Poor: 300–579	3.05%	2.58%	1.57%	2.84%

Primary Findings

1. Patients who had emergency department visits or hospitalizations during treatment were significantly more likely to have a 50+ point decline in credit scores (OR 1.54, 95% CI 1.36 - 1.75).
2. Patients who received germline susceptibility testing were less likely to experience a credit score decline of >50 points (OR 0.69, 95% CI 0.50 - 0.94).

Quality Measures	Average Credit Score Change (sd)	Odds Ratio	Confidence Interval
M1	0.62 (46.8)	0.90	0.66 – 1.24
M2	-3.05 (47.6)	1.54	1.36 - 1.75
M3	1.76 (42.3)	1.13	0.86 – 1.48
M4	3.38 (53.2)	0.69	0.50 - 0.94

Conclusions

In general, substandard cancer care as measured by several widely recognized quality metrics did not adversely impact patient financial outcomes. Cancer patients who had **emergency department visits or unplanned hospital stays were more likely to incur adverse financial events** manifested as a substantial credit score decline.

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