Abstract #12318

CREATING AN OPTIMAL CARE COORDINATION MODEL TO IMPROVE MULTIDISCIPLINARY CARE FOR LUNG CANCER PATIENTS ON MEDICAID

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INTRODUCTION

Estimated rates for lung cancer in the United States in 2018 are approximately 234,000 new cases, and over 154,000 deaths [1]. These dismal statistics are worse for minorities and those who are socioeconomically disadvantaged, who not only have a higher incidence of lung cancer but also higher mortality rates [2]. The reasons for these outcome disparities are the subject of much research and debate. Socioeconomically disadvantaged patients are more likely to be diagnosed with later-stage cancer and less likely to receive any treatment, surgery, and chemotherapy for lung cancer [3]. These patients may also have poorer overall health, a higher prevalence of comorbid conditions, and greater life stress. The disparate outcomes may also be a function of the challenges they face navigating the healthcare system, including the financial and logistical barriers they encounter when accessing care and historic distrust of a system that is not designed around their needs. They are also less likely to have a usual source of primary care and may face more problems in gaining access to oncology subspecialty providers.

In the United States, Medicaid is a social assistance program that covers healthcare costs for low-income individuals, regardless of age. It is a federal-state program, and eligibility requirements vary by state. Once a patient is eligible, patients may pay a small amount for their medical and pharmacy expenses [4].

The Association of Community Cancer Centers (ACCC) created an Optimal Care Coordination Model (OCCM), that addresses access to high quality cancer care for patients with lung cancer on Medicaid. The overarching goal of this study is to provide patients, healthcare providers, and payers a scalable plan for outreach and treatment to serve as a pilot for cancer programs nationwide.

PURPOSE

The purpose of the OCCM is to provide practical guidance to cancer programs in their efforts to achieve patient-centered, multidisciplinary, coordinated care for patients with lung cancer on Medicaid across the care continuum. The OCCM is a comprehensive self-assessment tool designed to orient cancer programs to the range of activities and tasks available to improve care for this target population.

The OCCM is beneficial to all cancer programs, regardless of size, resources, or location, to improve lung cancer care for patients with Medicaid. It was tailored to specifically evaluate areas of high impact, optimal care for lung cancer patients on Medicaid. Although there are clinical pathways for lung cancer, many tend to focus on the treatment within the disease specialty, and do not consider critical supportive care elements of the care pathway, such as distress screening and financial advocacy.

METHODS

An environmental scan was produced by ACCC in early 2016. A key finding showed the financial and social barriers that Medicaid beneficiaries face in pursuing lung cancer treatment are significant, detrimental to outcomes, and largely unaddressed.

Five US cancer programs that are ACCC member programs were then identified as research sites to explore current care models for lung cancer and Medicaid patients. During mid-2016, each site hosted the ACCC team for a two-day site visit during which interview sessions were conducted with multidisciplinary cancer center staff working across the continuum of care as well as with patients and referring practices.

Four individuals who participated in the NCI Community Cancer Centers Program (NCCCP) were appointed to the project's Technical Expert Panel. Using an NCCCP resource, the Multidisciplinary Care (MDC) Assessment Tool, this group expanded the MDC Assessment Tool from 7 Assessment Areas to 13 (Table 1), still utilizing the MDC Tool's evaluation matrix (Table 2).

TABLE 1
OCCM ASSESSMENT AREAS

1. **Patient Access to Care**	8. **Survivorship Care**
2. **Prospective Multidisciplinary Case Planning**	9. **Supportive Care**
3. **Financial, Transportation, and Housing**	10. **Tobacco Cessation**
4. **Management of Comorbid Conditions**	11. **Clinical Trials**
5. **Care Coordination**	12. **Physician Engagement**
6. **Treatment Team Integration**	13. **Quality Measurement and Improvement**
7. **Electronic Health Records and Patient Access to Information**	

TABLE 2
EVALUATION CRITERIA

Level 1	Optimal care coordination for lung cancer care has a low priority as evidenced by fragmented care
Level 2	Early progress in coordinating care is underway
Level 3	Reflects average or typical care coordination
Level 4	Exceeds the average and reflects a cancer program's ongoing commitment to the pursuit of optimal care coordination
Level 5	Defined by optimal care coordination with a patient-centered focus. Depending on the assessment area, achieving Level 5 performance will require significant time, effort, and resources

RESULTS

To assess the feasibility of the OCCM, a competitive application process among ACCC's membership used a comprehensive institutional quantitative and qualitative questionnaire. Applicants completed a self-assessment using the OCCM and then developed quality improvement projects designed to move their OCCM-scored care delivery performance from baseline to a higher level over a 12-month implementation period. Seven US community cancer centers that are ACCC member programs were selected as Testing Sites. Quantifiable outcome measures were identified for each site, standardized across sites, and collected by a centralized data coordinating center.

Table 3 highlights the Assessment Areas each Testing Site is focused on, as well as patient demographic information accrued through May 2018.

TABLE 3
TESTING SITE ACCRUAL DEMOGRAPHICS

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	TOTAL
Project # 1 Selected Assessment Area(s)	#2	#7	#10	#2	#1	#5 & #9	#1	
Project # 2 Selected Assessment Area	#8	#11	n/a	#10	n/a	n/a	#2	8 of 13 Assessment Areas being validated
	N=50	N=29	N=77	N=53	N=76	N=101	N=35	N=421
Age								
Median (IQR)	70 (57-76)	74 (63-76)	71 (57-76)	65 (60-71)	68 (61-75)	61 (55-65)	66 (60-73)	68 (61-74)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Sex								
Male	29 (58)	14 (48)	40 (52)	27 (51)	49 (64)	48 (48)	18 (51)	225 (53)
Female	21 (42)	15 (52)	37 (48)	26 (49)	27 (36)	52 (51)	17 (49)	195 (46)
Race								
Caucasian	46 (92)	23 (79)	76 (99)	51 (96)	73 (96)	47 (47)	27 (77)	343 (81)
African American	4 (8)	1 (3)		2 (4)		5 (5)	6 (17)	18 (4)
Asian		4 (14)				8 (8)		12 (3)
Other/ Unknown			1(1)		1 (1)	8(8)	2 (6)	12 (3)
Not reported		1 (3)			2 (3)	29 (29)		32 (8)
Insurance								
Commercial	7 (14)	7 (24)	13 (17)	8 (15)	29 (38)	8 (8)	9 (26)	81 (19)
Medicare	38 (76)	20 (69)	55 (71)	37 (70)	40 (53)	28 (28)	21 (60)	239 (57)
Medicaid	4 (8)	2 (7)	6 (8)	8 (15)	6 (8)	63 (62)	4 (11)	93 (22)
None/Self-Pay			2 (3)		1 (1)			3 (1)
Smoking Status								
Active Smoker	14 (28)	10 (34)	27 (35)	17 (32)	38 (50)	34 (34)	11 (31)	151 (36)
Former Smoker	20 (40)	15 (52)	44 (57)	34 (64)	28 (37)	51 (50)	23 (66)	215 (51)
Never Smoker	7 (14)	3 (10)	2 (3)	2 (4)	7 (9)	9 (9)		30 (7)
Not reported					2 (3)	1 (1)		3 (1)
Stage at Diagnosis								
Stage 0			2 (3)					2 (<1)
Stage I	9 (18)	4 (14)	21 (27)	1 (2)	9 (12)	9 (9)	2 (6)	55 (13)
Stage II	1 (2)	2 (7)	10 (13)	5 (9)	3 (4)	7 (7)		28 (7)
Stage III	6 (12)	5 (17)	11 (14)	3 (6)	4 (5)	13 (13)	2 (6)	44 (10)
Stage IV	6 (12)	3 (10)	8 (10)	14 (26)	13 (17)	18 (18)	4 (11)	66 (16)
Not reported/ Missing	28 (56)	15 (52)	25 (32)	30 (57)	47 (62)	54 (53)	27 (77)	226 (54)

*Percentages may not add to 100 due to missing data

CONCLUSIONS

Data collection by the 7 Testing Sites is ongoing and will conclude at the end of September 2018. However, most the of the Testing Sites have anecdotally seen improvement in care coordination for not only their Medicaid patients, but lung cancer patients in general.

Final data analysis will be available in early 2019.

FUTURE WORK

This model should be viewed as a living document, with updates being made to it as care coordination standards continue to improve across the United States.

Future models may involve other cancer sites, additional vulnerable populations, and/or different spectrums of the care continuum.

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