

Poster 34: Primacy of geography-based social determinants of health among barriers to outpatient specialty palliative care referrals for patients with gynecologic cancers.

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Topic

Financial Toxicity and Disparities

Objectives

We determined the prevalence of geography-related social determinants of health (SDOH) in a cohort of patients with gynecologic cancers eligible for outpatient specialty palliative care based on American Society for Clinical Oncology (ASCO) criteria. Then, we evaluated the effect of exposure to multiple geography-related SDOH on placement of indicated palliative care referrals.

Methods

We conducted a single institution retrospective cohort quality improvement study. Patients with gynecologic cancers evaluated between 2019 – 2022 who met ASCO referral criteria were identified. SDOH measured included (1) distance from institution (≥ 50 miles versus < 50 miles), (2) rurality (rural versus urban residency based on Rural-Urban Continuum Codes), (3) area-level deprivation [Area Deprivation Index (ADI) ≥ 70 th percentile versus < 70 th percentile], and (4) having a primary care provider [(PCP), yes versus no]. The outcome of interest was referral to palliative care. Binary logistic regression evaluated the impact of each SDOH and the number of SDOH on referral.

Results

432 patients with gynecologic cancers meeting ASCO criteria for outpatient specialty palliative care referral were identified, of which 191 (44%) patients were referred to palliative care. Patients living in rural areas (OR 0.25, 95% CI 0.16-0.39), block groups characterized by higher levels of deprivation (OR 0.65, 95% CI 0.46-0.97), or at an increasing distance from the cancer center (OR 0.99, 95% CI 0.89-0.99) were less likely to have a palliative care referral. Patients with a PCP were also less likely to be referred (OR 0.40, 95% CI 0.26-0.64). Rurality and distance from hospital were co-linear; rurality was prioritized in subsequent analysis. A dose-response relationship was observed between the number of geography-based SDOH barriers and palliative care referral, with decreasing likelihood of referral as the number of barriers increased (Table 1).

Conclusions

Experiencing multiple geography-related SDOH was associated with lesser likelihood of outpatient specialty palliative care referral among patients with gynecologic cancers. Education and outreach directed toward PCPs and oncologists serving rural patients may increase uptake of specialty palliative care.

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Abstract Table or Graph

Table 1. Binary logistic regression model results evaluating geography-related social determinants of health (SDOH)

SDOH	Total sample (n=432) n (%)	Referred to Palliative Care (n=191) n (%)	Not Referred to Palliative Care (n=241) n (%)	OR (95% CI)
Rurality ¹				
Rural	155 (35.9)	37 (23.9)	118 (76.1)	0.25 (0.16-0.39)
Urban (ref)	277 (64.1)	154 (55.6)	123 (44.4)	1.0
ADI ²				
≥70 th percentile	158 (37.3)	60 (38.0)	98 (62.0)	0.65 (0.44-0.97)
<70 th percentile (ref)	266 (62.7)	129 (48.5)	137 (51.5)	1.0
Distance ³				
≥50 miles	149 (34.5)	35 (23.5)	114 (76.5)	0.25 (0.16-0.39)
<50 miles (ref)	283 (65.5)	156 (55.1)	127 (44.9)	1.0
PCP ⁴				
Yes	329 (76.2)	128 (38.9)	201 (61.0)	0.40 (0.26-0.64)
No (ref)	103 (23.8)	63 (61.2)	40 (38.8)	1.0
Total number of barriers ⁵				
3	5 (1.2)	1 (20.0)	4 (80.0)	0.25 (0.03-2.30)
2	106 (24.5)	33 (31.1)	73 (68.9)	0.45 (0.27-0.77)
1	189 (43.8)	91 (48.2)	98 (51.9)	0.93 (0.60-1.45)
0 (ref)	132 (30.6)	66 (50.0)	66 (50.0)	1.0
Footnotes:				
<ol style="list-style-type: none"> Rurality defined by Rural-Urban Continuum Codes Area Deprivation Index (ADI) was calculated based on 2022 ADI National Percentiles Distance was calculated based on distance from patients' home address listed in the electronic medical record from our institution in miles Having a primary care provider (PCP) was based on patient self-reporting or link to a known provider in a corresponding electronic medical record demographic field Total number of barriers indicates the sum of the following answers for each patient (rurality = rural, ADI = ≥70th percentile, PCP = no). Distance was not included due to collinearity with rurality 				