

# Capacity for Cancer Care Delivery Research in Gynecologic Oncology within the National Cancer Institute Community Oncology Research Program (NCORP)

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The National Cancer Institute (NCI) Community Oncology Research Program (NCORP) was developed as a platform to study care delivery for cancer patients at 23 community sites and 14 minority/underserved sites, encompassing 943 care delivery locations nationwide. We describe the capacity of the NCORP network to conduct cancer care delivery research for gynecologic cancers. We also characterize community practices where patients are treated for gynecologic cancers without an affiliated gynecologic oncologist, as these patients may be at higher risk for outcomes disparities related to access to care. The 2017 Landscape Capacity Assessment (LCA) was designed by the NCI's Division of Cancer Prevention and administered to 943 NCORP locations. This survey included elements related to clinical setting (e.g., size, location, and characteristics of patients), staffing (e.g., number/types of care providers), and cancer care practices (e.g., genetic testing and patient navigation). Primary populations of interest were practices identified as providing gynecologic cancer services, and the subgroup of practices providing gynecologic cancer services without an affiliated gynecologic oncologist. Chi-Square tests were used to test for differences in categorical variables. 504/943 locations (54%), representing 227 practices completed the LCA; 17 practices solely providing pediatric care were excluded. 46% of responding practices serve >1000 patients per year, 23% report at least 30% of new patients represent minority populations. 41% and 11% of practices report >10% of patients are insured through Medicaid, or are uninsured, respectively. 36% of practices are independently owned while 54% are owned by a larger health system. 22% of practices are embedded in Critical Access hospitals. 29% participate in the Oncology Care Model through the Centers for Medicare and Medicaid Services. 84% record patient data in an EHR. 30% of sites utilize telemedicine for cancer care and 51% of these practices can adapt telemedicine for research purposes. 93% of practices provide survivorship care. 129 groups (56%) reported GYN cancer services; 48% of all practices have an affiliated gynecologic oncologist (median 0; range 1-48). Practices evaluating >1000 patients annually were significantly more likely to offer GYN cancer services. However, no association was seen between availability of GYN cancer services and insurance mix, proportion of minority patients, use of telemedicine, or availability of community outreach staff. Of practices providing GYN cancer services, practices without an affiliated gynecologic oncologist were less likely to evaluate >1000 new patients annually (35% vs 76%;  $p < 0.001$ ), to have a genetic counselor on site (83% vs 49%,  $p < 0.001$ ), and to have support services available such as social workers, pharmacists, dieticians, and psychologists. However, no significant difference was seen in insurance mix, proportion of minority patients, use of EHR or telemedicine, or availability of community outreach staff between practices with and without an affiliated gynecologic oncologist (Table 1). NCORP offers a unique opportunity to study cancer care delivery in community settings, including in underserved minority populations. This platform should be considered for the study of interventional trials aimed at ensuring that patients receive high-quality gynecologic cancer care, especially in the high-risk population of patients who are treated in practices without an affiliated gynecologic oncologist.

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<b>Table 1: Practice groups with services to support CCDR NCORP studies for gynecologic oncology</b>	<b>GO+ (N=91) N (%)</b>	<b>GO- (N=37) N (%)</b>	<b>Odds Ratio</b>	<b>P- value</b>
Total # of new cancer cases ≥1000	68 (76)	13 (35)	5.7	<0.0001
Insurance mix	29 (33)	14 (39)	1.3	NS
>10% Medicaid/Medicaid eligible	9 (10)	2 (6)	0.5	NS
>10% Uninsured/Charity care				
Percentage of new patients comprising minority groups ≥ 30%	20 (23)	9 (24)	1.1	NS
Outpatient health information systems for cancer patients	89 (98)	36 (97)	1.2	NS
EHR	85 (94)	36 (97)	0.5	NS
Patient portal	31 (34)	10 (27)	1.4	NS
Telemedicine				
Staff dedicated to community outreach with the goal of recruiting non-white/low-income patients	23 (25)	5 (14)	2.2	NS
Services for cancer patients who have or may have a genetic predisposition	67 (76)	26 (72)	1.2	NS
Genetic testing available on site	73 (83)	18 (49)	5.1	<0.0001
Genetic counseling available on site, in person				
Outpatient services available for cancer patients	80 (88)	31 (84)	1.4	NS
Nurse navigators	84 (92)	28 (76)	3.9	0.01
Social workers	81 (89)	26 (70)	3.4	0.01
Clinical pharmacists	77 (86)	26 (70)	2.5	0.05
Registered dietician/Nutritionist	48 (52)	12 (32)	2.3	0.04
Psychologist				

GO = Affiliated gynecologic oncologist or gynecologic oncology practice